



CITY of YORBA LINDA

TRAFFIC COMMISSION MEETING AGENDA

Thursday, June 23, 2022, 6:30 p.m.

Council Chambers

4845 Casa Loma Avenue

Pages

1. **CALL TO ORDER**

The Yorba Linda Traffic Commission will convene at 6:30 p.m. in the Council Chambers at 4845 Casa Loma Avenue, Yorba Linda, California.

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

Traffic Commissioners: Behura, Cugini, Equitz, Johnson, Phayakapong

4. **APPROVAL OF MINUTES**

4.a. Approval of the May 26, 2022 Traffic Commission meeting minutes.

3

5. **PUBLIC COMMENTS**

There is a five (5) minute maximum time limit for each individual addressing the Traffic Commission during Public Comments and on all other items listed on the Agenda. Public Comment is the time reserved on each regular meeting Agenda to provide an opportunity for members of the public to directly address the Traffic Commission on matters of interest that are not already scheduled for consideration on this Agenda. Although the Traffic Commission values your comments, pursuant to the Brown Act, the Traffic Commission cannot take any action on items not listed on the posted Agenda but may refer the matter to staff or a subsequent meeting.

All remarks shall be addressed to the Traffic Commission as a body through the presiding officer and not directly to any member thereof. The Traffic Commission desires its meetings to be conducted in a professional manner respectful of all participants; therefore, the Chairman may ask that speakers refrain from engaging in personal attacks and name-calling during their allotted time. However, public criticism of the policies, procedures, programs or services of the City, or of the acts or omissions of the Traffic Commission as a body shall not be prohibited.

The Chair may use his or her discretion to select the order of speakers in a manner that ensures that a variety of issues and concerns can be presented during the initial time and he or she may allow for additional comments to be made past the time allotted. As a result, in situations where there are multiple speakers wishing to speak on a single topic not on the agenda, the Chair may ask that one speaker generally describe the issue or matter and then will provide additional speakers the opportunity to speak later on this topic.

6. NEW BUSINESS

6.a. 2021-2029 HOUSING ELEMENT IMPLEMENTATION 9

7. OLD BUSINESS

8. INFORMATIONAL ITEMS

8.a. May 2022 Traffic Reports (Statistics and Accidents) 1248

9. COMMISSIONER ITEMS

10. COMMISSIONER COMMENTS

11. ADJOURNMENT

The next regularly scheduled Traffic Commission Meeting is July 28, 2022.

NOTE: ALL STAFF REPORTS AND RELATED ATTACHMENTS FOR ITEMS ON THIS AGENDA ARE ON FILE IN THE ENGINEERING DEPARTMENT. AS AN ADDITIONAL SERVICE, THE CITY NOW PROVIDES THE STAFF REPORTS AND RELATED ATTACHMENTS ON THE CITY'S WEBSITE. PLEASE NOTE THAT IT IS NOT ALWAYS POSSIBLE TO EMBED ALL ATTACHMENTS AND MAPS. THUS, IF YOU REQUIRE A FULL AND COMPLETE COPY OF THE AGENDA PACKET, YOU SHOULD NOT RELY UPON THE WEBSITE MATERIALS ALONE.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), THE CITY WILL MAKE EVERY REASONABLE ATTEMPT TO ACCOMMODATE ANY ATTENDEE OR PARTICIPANT AT THIS MEETING NEEDING SPECIAL ASSISTANCE BEYOND WHAT IS NORMALLY PROVIDED. PLEASE CONTACT THE ENGINEERING DEPARTMENT AT (714) 961-7170 AT LEAST 48 HOURS PRIOR TO THIS MEETING TO INFORM US OF YOUR PARTICULAR NEEDS AND TO DETERMINE IF ACCOMMODATION IS FEASIBLE. PLEASE ADVISE US AT THE TIME YOU CALL IF SPECIAL ASSISTANCE IS REQUIRED TO ATTEND OR PARTICIPATE IN MEETINGS ON A REGULAR BASIS.

THE TRAFFIC COMMISSION IS AN ADVISORY COMMISSION TO THE CITY COUNCIL. RECOMMENDATIONS ARE FORWARDED TO THE CITY COUNCIL FOR FINAL DECISION.



CITY of YORBA LINDA

TRAFFIC COMMISSION MEETING

MINUTES

May 26, 2022, 6:30 p.m.
Council Chambers
4845 Casa Loma Avenue

Commissioners Present: Behura, Cugini, Equitz, Johnson, Phayakapong

Staff Present: Monse Garcia, Jamie Lai

1. **CALL TO ORDER**

The Yorba Linda Traffic Commission convened at 6:30p.m. in the Council Chambers at 4845 Casa Loma Avenue, Yorba Linda, California.

Commissioner Behura to arrive a few minutes late.

2. **PLEDGE OF ALLEGIANCE**

Ms. Monse Garcia, Traffic Commission Secretary led the flag salute.

3. **ROLL CALL**

4. **APPROVAL OF MINUTES**

4.a Approval of the April 28, 2022 Traffic Commission meeting minutes.

Commissioner Johnson asked for two corrections to the April 28th Traffic Commission meeting minutes.

Pg.7, second paragraph of the minutes, change from left turn to site, to right turn to site.

Pg. 10, middle paragraph of the minutes, change from left turn pocket to right turn pocket.

Moved by Cugini

Seconded by Phayakapong

That the Commission approve the April 28, 2022 Traffic Commission meeting minutes.

AYES (4): Cugini, Equitz, Johnson, and Phayakapong

ABSENT (1): Behura

CARRIED (4 to 0)

5. PUBLIC COMMENTS

Chairman Equitz opened the public comment portion of the agenda, seeing none, closed public comments.

6. NEW BUSINESS

6.a Title IX - 5K Run / Walk for Richard Nixon Library

Jamie Lai, Director of Public Works/City Engineer, introduced Shirjeel Muhammad, Traffic Engineering Consultant for the City of Yorba Linda.

Consultant Muhammad gave an oral presentation recommending that the Traffic Commission provide input to the Title IX - 5K Run/Walk event, which will involve lane closures and traffic delays at several El Cajon Trail crossings.

Chairman Equitz opened the Commissioner comment portion of the agenda.

Commissioner Johnson asked regarding the discussion portion of the staff report, it states that the Chamber will pay for all traffic control costs where the traffic control costs will actually be paid by the Nixon Library will be covering those costs.

Commissioner Johnson asked for clarification on the title of the Traffic Control Plan (TCP) is titled "Yorba Days" instead of the Title IX - 5K Run/Walk event. Consultant Muhammad indicated that the TCP was presented to the Traffic Commission to meet the staff report deadline and

is very similar to the Title IX - 5K Run/Walk event, but the updated TCP plan will be submitted to the Traffic Commission.

Commissioner Johnson clarified that it was stated during the oral presentation that LDS Temple was across Friends Church where Friends Church is actually across the street from the Richard Nixon Library not near the LDS Temple.

Commissioner Johnson asked if the Orange County Sheriff's Department (OCSD) will need to be present at the intersections that will be closed off during the event. Will the traffic control company be present as well during the event? Consultant Muhammad indicated that OCSD will be present at the closed intersections, and the traffic control company will have some staff available to OCSD.

Commissioner Johnson asked why it is necessary to have closures at Imperial Highway and Casa Loma Avenue.

Commissioner Johnson clarified that during the oral presentation, it was indicated that there is a south bound right turn lane on Imperial Highway that will be closed. Commissioner Johnson indicated that there is no south bound right turn, it is just a through lane.

Commissioner Johnson asked why it is necessary to have closures on north bound left turn lane on Imperial Highway and Valley View.

Commissioner Johnson asked if there will be electronic messaging boards required for the event. Consultant Muhammad indicated that there is no additional electronic signage required beyond what is stipulated on the TCP to be provided to the Traffic Commission.

Chairman Equitz asked the Richard Nixon representative to introduce herself.

Anne Brown, External Affairs Manager, for the Richard Nixon Library introduced herself and introduced Drake Traffic Control Services who provided the TCP for the event.

Rick Devinney, Drake Control Services representative, addressed questions (stated above) regarding the TCP for the Commission.

Chairman Equitz asked the Commission Secretary to note that Commissioner Behura arrived at the meeting.

Commissioner Behura arrived to the meeting at 7:02PM.

Chairman Equitz asked the Commission for any further comments on this portion of the agenda, seeing none, closed Commission comments.

7. **OLD BUSINESS**

8. **INFORMATIONAL ITEMS**

8.a Local Roadway Safety Plan (LRSP) Update

Jamie Lai, Director of Public Works/City Engineer gave an oral update on the Local Roadway Safety Plan (LRSP).

Director Lai indicated that staff and chosen members of the Traffic Commission attended the second Stake Holders meeting for the LRSP that is being put together by TJKM (consultant). Director Lai indicated that the LRSP is fully funded by Caltrans and is being created as a requirement for federal funding; Highway Safety Improvement Project (HSIP) in particular. Director Lai indicated that they are nearing the completion of creating the LRSP.

Director Lai provided an overview of the LRSP which consists of observing five years of collision data throughout the City, analyzing it, and prioritizing improvements at the high impact intersections.

Commissioner Behura asked Director Lai to share the presentation from the Stake Holders meeting with the rest of the Commission. Director Lai indicated that staff would provide the Commission with the presentation.

Chair Pro Tem Phayakapong asked if minutes were available from the Stake Holders meeting if the Commission could be provided those.

Commissioner Behura indicated that they could answer any questions from the Commission.

Commissioner Behura stated that as a consultant for other cities, he has observed that the City is in a very good shape and safe in comparison to other cities traffic issues.

8.b April 2022 Traffic Reports (Statistics and Accidents)

Chairman Equitz opened the Commissioner comment portion of the agenda.

Commissioner Behura asked staff for data regarding DUI's. Director Lai indicated that staff could provide the data to the Commission.

Commissioner Behura indicated that data helps and allows for funds to request improvements in those areas. This will allow for additional education and prevention.

Commissioner Johnson asked staff if outreach programs can help with requesting grant funds for improvements. Director Lai indicated that as part of grant applications there is an aspect of Community Outreach.

Chairman Equitz closed the Commissioner comment portion of the agenda.

Moved by Phayakapong
Seconded by Johnson

AYES (5): Behura, Cugini, Equitz, Johnson, and Phayakapong

CARRIED (5 to 0)

9. COMMISSIONER ITEMS

Commissioner Cugini asked staff review the Valley View left turn pocket to west-bound Imperial Highway there is a green arrow as part of the cycle after the green portion. Drivers are not expecting the green arrow at the end of the cycle. Consultant Muhammad indicated that the signal is on a lag phase.

Commissioner Behura added that this tool allows for the best timing on this intersection. Drivers will need to get used to it.

Director Lai added that staff will still look into it.

Consultant Muhammed added that if you change the lag phase to lead phase, there is a waste of green time.

Commissioner Johnson asked staff regarding the trails off Lakeview. Are there signs directing patrons (Lakeview south of Yorba Linda Blvd) to go underneath Lakeview as patrons have been crossing Lakeview to get to the other side of the trail instead of going underneath. Director Lai indicated that staff would look at the signage.

10. COMMISSIONER COMMENTS

11. ADJOURNMENT

The next scheduled Traffic Commission Meeting is June 23, 2022.

Moved by Behura
Seconded by Cugini

That the Commission adjourn the meeting.

AYES (5): Behura, Cugini, Equitz, Johnson, and Phayakapong

CARRIED (5 to 0)

Recording Secretary



STAFF REPORT

CITY of YORBA LINDA

COMMUNITY DEVELOPMENT DEPARTMENT

DATE: JUNE 23, 2022

TO: HONORABLE CHAIRMAN AND MEMBERS OF THE TRAFFIC COMMISSION

FROM: PREPARED BY: NATE FARNSWORTH, PLANNING MANAGER

SUBJECT: 2021-2029 HOUSING ELEMENT IMPLEMENTATION

RECOMMENDATION

It is recommended that the Traffic Commission provide the Planning Commission with its comments and recommendations on the 2021-2029 Housing Element Implementation, primarily focused on the traffic impacts described within the draft Program Environmental Impact Report (PEIR).

BACKGROUND

State housing law requires that the City's Housing Element be updated every eight years. On October 20, 2020, the City Council and Planning Commission held a joint Housing Element Update kickoff public workshop. Although the City invited members of the public and key stakeholders to attend the meeting, there were no public comments at this meeting. City staff provided the City Council and Planning Commission with a general overview of the Housing Element Update process, and staff from the State Department of Housing and Community Development (HCD) provided an overview of new state housing requirements.

On February 24, 2021, the Planning Commission conducted a Housing Element Workshop where staff presented the results of the City's community outreach survey, introduced its draft housing sites inventory, and discussed recommended land use and rezoning strategies to achieve its state mandated RHNA obligation of 2,415 housing units. The Planning Commission also received comments from the public and requested that staff provide them with an opportunity to provide a detailed review of the draft housing sites inventory. Some of these land use strategies included the promotion of constructing ADUs and an affordable housing overlay opportunity zone for properties used for religious purposes.

Since this Planning Commission workshop, staff has met several times with HCD to discuss various land use strategies. Based on the feedback from HCD, staff has further refined the draft housing sites inventory and released a community survey focused on outreach to senior citizens. The senior survey demonstrated that the majority of the senior citizen sector of the population is interested in learning more about senior housing opportunities in the City. Staff has also analyzed a couple lower resource areas on the west side of the City identified by HCD as needing more in-depth review for purposes of complying with state housing law to

“affirmatively further fair housing.” The purpose of this analysis is to “identify areas in every region of the state whose characteristics have been shown by research to support positive economic, educational, and health outcomes for low-income families—particularly long-term outcomes for children.”

On March 24, 2021, staff provided the Planning Commission with a brief update on the Housing Element status. The Planning Commission provided general feedback on the draft housing sites inventory and directed staff to further refine the inventory based on eligibility requirements from HCD and return with more details on the “candidate” housing sites.

On April 22, 2021, staff presented an update to the City’s Traffic Commission on the Housing Element. The Traffic Commission is primarily interested in learning which housing sites will be identified in order to determine the traffic impacts of those housing opportunities.

On April 28, 2021, staff presented an updated draft “candidate” housing sites inventory and solicited additional comments from the Planning Commission and the public on the proposed sites. The Planning Commission provided additional comments and directed staff to begin the process of reaching out to property owners to educate and solicit feedback on their level of interest in potentially being considered as a housing site. Staff also provided updates on the strategy to utilize ADUs and the religious housing overlay zone.

On June 2, 2021, staff conducted a property owner stakeholder meeting to explain the purpose of the Housing Element, RHNA, and the housing sites inventory to property owners of all previously identified “candidate” housing sites. Over 250 invitations were sent out and nearly 100 individuals participated in the meeting. Staff invited all the property owners to reach out individually to staff to share their level of interest in participating as a candidate housing site. To date, staff has held dozens of individual meetings with property owners to discuss their specific situation and gauge their level of interest as a potential “candidate” housing site. Staff has also continued to research various constraints and eligibility with HCD’s strict standards for each of the properties.

On June 9, 2021, the Planning Commission received an update on the property owner stakeholder meeting and provided the public with another opportunity to comment on the Housing Element Update. The Planning Commission provided general feedback to staff to return with a refined draft “candidate” housing sites inventory with recommended rankings of each site.

On July 14, 2021, staff presented the Planning Commission with a refined draft “candidate” housing sites inventory and presented the highest ranked properties based on site eligibility, known constraints, property owner interest, and other factors. Staff also provided the public with another opportunity to comment on the Housing Element Update and the draft housing sites inventory. The Planning Commission requested that staff provide additional time for the Planning Commission to provide comments and one more opportunity for public comment prior to making a recommendation to the City Council.

On July 28, 2021, staff presented the final draft housing sites inventory to the Planning Commission. The Planning Commission provided staff with refinements to the sites inventory and supported ensuring that property owners are informed and supportive of the rezone

efforts. Staff has been making efforts to reach all property owners by all means available and will continue that effort and refine the draft Housing Sites Inventory as necessary. The public was also given another opportunity to comment on the plan. Staff has further refined the draft housing sites inventory into the document based on comments from the public, the Planning Commission, and staff's continued property owner outreach efforts.

On August 3, 2021, staff presented the final draft housing sites inventory to the City Council. After receiving input from the public, the City Council provided comments and directed staff to release the draft Housing Element to HCD for their review.

On August 27, 2021, staff submitted the draft Housing Element to HCD for their formal 60-day review. On October 26, 2021, HCD provided comments on the City's draft Housing Element, which mostly requested that the City provide additional information and details on various components of the Housing Element as required by numerous state housing laws.

On September 23, 2021, staff presented an update to the City's Traffic Commission on the Housing Element.

On October 27, 2021, the Planning Commission conducted a public workshop to receive an update from staff on the comments received from HCD, to receive additional public input, and to provide recommendations on how to proceed with addressing the comments from HCD.

After multiple meetings with HCD to address questions and concerns raised in their letter, staff received direction from the City Council to release the revised draft Housing Element to HCD for review on December 8, 2021.

On January 12, 2022, the Planning Commission conducted a public hearing and recommended that the City Council adopt the Housing Element under review by HCD. On February 4, 2022, the City received a comment letter from HCD, which requested that the City make minor revisions to the Housing Element.

On February 9, 2022, the City Council conducted a public hearing and approved the Housing Element with the revisions required by HCD. On February 10, 2022, the City submitted its adopted Housing Element to HCD for final review in advance of the February 11, 2022, deadline. On April 8, 2022, the City received approval from HCD and is now required to implement the rezoning programs included in Programs 8 – 11 for the 27 housing opportunity sites within the adopted Housing Element by October 15, 2022.

On April 29, 2022, the City released a Notice of Preparation for a Draft Program Environmental Impact Report (PEIR), which was made available for 30 days, and concluded on May 30, 2022. A public scoping meeting was conducted on May 23, 2022, at which approximately 50 residents attended and provided public comments. Those comments, in addition to all written comments received during this period of time, have been included as Appendix A of the draft PEIR.

Several comments were made during the public scoping period and PEIR scoping meeting on May 23, 2022, expressing concerns regarding housing opportunity sites S4-053, S4-201, S4-060, S5-008 in relation to traffic, traffic near an elementary school, and pedestrian safety

due to the increase in traffic. Two comments were received related to transportation from the Santa Ana Office of California Highway Patrol (CHP) on May 23, 2022, and California Department of Transportation (Caltrans) on May 25, 2022. The CHP expressed concern on the potential impact on departmental operations, with emphasis on increased traffic and changes in traffic congestion patterns during the construction stage and that increased traffic congestion would necessitate the need for additional traffic control measures to mitigate the potential increase in traffic collisions. Caltrans requested that new development from the Project provide a Vehicle Miles Traveled (VMT) study; that the PEIR must include a traffic study to address potential impacts to the State Highway System; to consider a discussion on equity; to provide discussion of multimodal transportation mobility options of the current transit services and regional rail services and look for opportunities and connectivity to safe and convenient access; and to consider discussing the potential impacts to bicycle and pedestrian facilities.

On June 1, 2022, the City released the draft PEIR for a 45-day public review period, which will end on July 15, 2022. At the end of the public review period, the City will prepare a written response to all comments received. The Planning Commission will be conducting a public hearing on June 29, 2022, to consider the proposed General Plan and Zoning Code Amendments associated with the Housing Element. On July 27, 2022, the Planning Commission will consider the draft PEIR. At this time the Traffic Commission is being requested to consider the traffic impacts outlined in the draft PEIR and the Traffic Impact Analysis included within the draft PEIR.

Since the release of the draft PEIR, the City has continued to receive a large number of public comments related to housing opportunity sites S4-053, S4-201, and S4-060, within the Grandview Avenue/South Ohio Street neighborhood, in regards to traffic, traffic near Linda Vista elementary school, and pedestrian safety due to increase in traffic in a “semi-rural” neighborhood without formal improvements (i.e., no sidewalks, curbs or gutters), and which has two schools in proximity to the referenced housing opportunity sites. On June 7, 2022, a large number of public speakers addressed the City Council during public comments and cited these same concerns related to these sites. Since there was no item on the agenda, the City Council could not legally take any action; however, the City Manager explained that this is part of a process that will include public hearings with the Planning Commission and City Council and recommended that the residents participate in the public process.

On June 9, 2022, the City released a public notice to all property owners within 2,000 feet of all 27 Housing Element rezone sites in accordance with Municipal Code requirements for projects of community-wide significance and Measure B. Since that time, the City has received numerous comments, both traffic and non-traffic related, for the Traffic Commission to consider. All comments received to date have been forwarded to the Traffic Commission. It is important to understand that ~~that~~ the Traffic Commission’s purview regarding the Housing Element is limited to review of the Traffic Impact Analysis (TIA) prepared for the project in order to provide advisory comments to the Planning Commission and City Council for consideration during upcoming public hearings on the project before each of those bodies. Given the narrow role of the Traffic Commission in this case, they will not be able to consider comments unrelated to traffic matters. However, comments related to the overall project may be submitted directly to the Planning Commission and/or City Council for

consideration at their upcoming public hearings on June 29th and July 27th (Planning Commission) and August 2nd and August 9th (City Council).

DISCUSSION

The draft PEIR and Traffic Impact Analysis considers the transportation impacts resulting from implementation of the Housing Element. Pursuant to Senate Bill 743, changes to CEQA Guidelines were adopted in December 2018, which require all lead agencies to adopt a vehicle miles traveled (VMT) metric as a replacement for automobile delay-based “level of service” (LOS) as the measure for identifying transportation impacts for land use projects. Automobile delay, as measured by “LOS” and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts. This statewide mandate went into effect July 1, 2020. CEQA Guidelines Section 15064.3, effective January 1, 2019, “describes specific considerations for evaluating a project’s transportation impacts” and provides that, except for roadway capacity projects, “a project’s effect on automobile delay (or LOS) shall not constitute a significant environmental impact.”

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City of Yorba Linda. The traffic analysis determined that the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Cumulative development projects would be reviewed for consistency with adopted programs, plans, ordinances, or policies, including but not limited to SCAG’s *2016 RTP/SCS* and *Connect SoCal* and City of Yorba Linda General Plan, as applicable. Even if cumulative development projects are in conflict, the Project would not contribute to a cumulative impact and thus would not be cumulatively-considerable because the Project does not conflict with a program, plan, ordinance, or policy addressing the circulation system.

Consistent with City Guidelines, in addition to evaluating the project VMT per service population (i.e., Population and Employees), the analysis must also evaluate the cumulative effects of the Project on VMT. To complete this cumulative analysis, the analysis must compare the citywide VMT per service population “With project” with “no project” VMT per service population. This analysis is performed using the boundary method, which includes all vehicle trips with one or both trip-ends within a specific geographic area of interest, i.e., the City of Yorba Linda boundary. Once the areawide VMT value is calculated, it is then normalized by dividing by the number of population and employees in the City of Yorba Linda (based on the OCTAM model). Baseline and Cumulative link-level boundary VMT per service population (City) is calculated for both “No Project” and “With Project” conditions. If an increase occurs for the “With Project” condition as compared to “No Project” condition, then the impact is considered significant. As shown in the table below, citywide VMT per service population was found to decrease under cumulative conditions and would also have a less than significant impact.

Citywide VMT Per Service Population

	Baseline No Project	Baseline With Project	Cumulative No Project	Cumulative With Project
Service Population	91,267	98,352	97,814	104,899
VMT	1,446,176	1,495,953	1,673,239	1,703,753
VMT/SP	15.85	15.21	17.11	16.24
Change in VMT	-0.64		-0.86	

The Project’s VMT analysis findings for project generated VMT per service population was found to not exceed the City’s threshold. In addition, the Project’s cumulative effect to citywide VMT per service population was found also to decrease with the inclusion of the proposed housing element changes as compared to without changes. Therefore, the Project’s cumulative impact on VMT is presumed to be less than significant.

In addition to the VMT analysis, the City of Yorba Linda has vehicle Level of Service (LOS) guidance that set standards for which local infrastructure will strive to maintain. Not subject to CEQA approval, a “program level” Traffic Impact Analysis (TIA) has also been prepared to evaluate the proposed development intensities expected for the 27 housing element sites and assess the potential traffic deficiencies that result from the implementation of the rezoning and changes to land use. However, given the number of Housing Element sites and lack of detailed site plans available, it is anticipated that implementing projects on each of the Housing Element sites will need to conduct focused traffic analyses that meet the City’s standards which will provide a review of potential intersection operational deficiencies in conjunction with a detailed review of site access. Based upon the TIA results, improvements have been recommended at the study area intersections which are anticipated to operate at a deficient LOS. Improvements identified can be constructed by the proposed development or funded through a combination of project mitigation, development impact fee programs or fair share contributions, such as the City of Yorba Linda Traffic Impact Fee (TIF) program.

Furthermore, Implementation of the Project would not result in hazardous conditions or conflict with emergency access. Impacts on a cumulative level would also be less than significant.

Next Steps

On June 29, 2022, the Planning Commission will conduct a public hearing to consider the General Plan and Zoning Code Amendments associated with the implementation of the adopted 2021-2029 Housing Element. On July 27, 2022, the Planning Commission will consider the draft PEIR and make a recommendation to the City Council. It is anticipated that the City Council will be considering these General Plan and Zoning Code Amendments on August 2, 2022, and August 9, 2022. Any action by the City Council to approve the proposed General Plan and Zoning Code Amendments would be subject to voter approval through the Yorba Linda Right-to-Vote Amendment (commonly referred to as Measure B).

FISCAL IMPACT

None.

ATTACHMENTS

- 1) Draft Program Environmental Impact Report
 - 2) Traffic Impact Analysis
 - 3) Vehicle Miles Traveled (VMT) Analysis
-



Draft Program Environmental Impact Report
SCH No. 2022040574

2021-2029 Housing Element Implementation Programs



Lead Agency:

City of Yorba Linda
4845 Casa Loma Avenue
Yorba Linda, CA 92886

June 2022

City of Yorba Linda 2021-2029 Housing Element Implementation Programs

City of Yorba Linda, California

Lead Agency

City of Yorba Linda
4845 Casa Loma Avenue
Yorba Linda, CA 92886

CEQA Consultant

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Lead Agency Discretionary Permits

General Plan Amendment
Zoning Code Amendment

June 2022



TABLE OF CONTENTS

<u>Section Name and Number</u>	<u>Page</u>
1.0 Executive Summary	1
1.1 Introduction.....	1
1.2 Proposed Project	2
1.2.1 Location and Regional Setting	2
1.2.2 Project Objectives	2
1.2.3 Project Description Summary	3
1.3 Areas of Controversy and Issues to be Resolved.....	3
1.3.1 Public Scoping Meeting.....	3
1.4 Alternatives to the Proposed Project – Reduced Density Alternative	4
1.5 Summary of Impact, Mitigation, and Levels of Impact.....	4
1.6 Mitigation Monitoring	4
2.0 Introduction And Purpose	2-1
2.1 Measure B	2-2
2.2 Document Format	2-2
2.3 Purposes of CEQA and this PEIR.....	2-6
2.4 Regionally Significant Project	2-8
2.5 Incorporation by Reference.....	2-8
2.6 Technical Reports	2-9
2.7 Responsible and Trustee Agencies	2-9
2.8 Public Review of the Draft Environmental Impact Report.....	2-10
2.9 Notice of Preparation and Public Scoping Meeting.....	2-10
2.10 Mitigation Monitoring and Reporting Program.....	2-15
2.11 Potential Impacts of the Project Discussed in the PEIR	2-15
2.12 Effects Found Not to be Significant.....	2-15
3.0 Project Description.....	3-1
3.1 Project Location	3-1
3.2 Environmental Setting	3-1
3.2.2 Existing Land Uses.....	3-4
3.2.3 Geological Setting	3-4
3.3 Demographic Profile	3-4
3.4 Project Objectives	3-5
3.5 Project Characteristics	3-5
3.5.1 Project Background.....	3-5
3.5.2 2021-2029 Housing Element.....	3-6
3.6 City of Yorba Linda General Plan Goals and Policies.....	3-16
3.6.1 Land Use Element.....	3-16



3.6.2 *Circulation Element*.....3-18

3.6.3 *Historic Resources Element*3-19

3.6.4 *Open Space and Recreation Element*3-19

3.6.5 *Conservation Element*3-20

3.6.6 *Public Health and Safety Element*.....3-21

3.6.7 *Public Services and Utilities Element*3-23

3.6.8 *Noise Element*.....3-25

3.6.9 *Growth Management Element*.....3-26

3.6.10 *General Plan EIR Mitigation Measures*.....3-26

3.7 Summary of Requested Actions.....3-27

4.0 Environmental Analysis.....1

4.0.1 *Summary of PEIR Scope*..... 1

4.0.2 *Organization of Environmental Analysis* 2

4.0.3 *Terminology Used In This PEIR*..... 2

4.0.4 *Scope of Cumulative Effects Analysis*..... 3

4.1 Air Quality4.1-1

4.1.1 *Existing Conditions*4.1-1

4.1.2 *NOP/Scoping Comments*4.1-7

4.1.3 *Applicable Regulatory Requirements*.....4.1-7

4.1.4 *Methodology*.....4.1-11

4.1.5 *Basis for Determining Significance*.....4.1-14

4.1.6 *Impact Analysis*4.1-15

4.1.7 *Cumulative Impact Analysis*.....4.1-19

4.1.8 *Significance of Impacts Before Mitigation*.....4.1-20

4.1.9 *Mitigation Measures*.....4.1-20

4.1.10 *Significance of Impacts After Mitigation*.....4.1-23

4.2 Biological Resources4.2-1

4.2.1 *Existing Conditions*4.2-1

4.2.1 *NOP/Scoping Comments*4.2-2

4.2.2 *Applicable Regulatory Requirements*.....4.2-3

4.2.3 *Basis for Determining Significance*.....4.2-9

4.2.4 *Impact Analysis*4.2-9

4.2.5 *Cumulative Impact Analysis*.....4.2-13

4.2.6 *Significance of Impacts Before Mitigation*.....4.2-13

4.2.7 *Mitigation Measures*.....4.2-14

4.2.8 *Significance of Impacts After Mitigation*.....4.2-15

4.3 Energy4.3-1

4.3.1 *Existing Conditions*4.3-1

4.3.2 *NOP/Scoping Comments*4.3-9

4.3.3 *Applicable Regulatory Requirements*.....4.3-9



4.3.4 *Basis for Determining Significance*.....4.3-12

4.3.5 *Methodology*.....4.3-12

4.3.6 *Impact Analysis*4.3-13

4.3.7 *Cumulative Impact Analysis*.....4.3-17

4.3.8 *Significance of Impacts Before Mitigation*.....4.3-17

4.3.9 *Mitigation Measures*.....4.3-17

4.3.10 *Level of Significance After Mitigation*.....4.3-18

4.4 Greenhouse Gas Emissions.....4.4-1

4.4.1 *Existing Conditions*4.4-1

4.4.2 *NOP/Scoping Comments*4.4-8

4.4.3 *Applicable Regulatory Requirements*.....4.4-8

4.4.4 *Methodology*.....4.4-18

4.4.5 *Basis for Determining Significance*.....4.4-20

4.4.6 *Impact Analysis*4.4-21

4.4.7 *Cumulative Impact Analysis*.....4.4-28

4.4.8 *Significance of Impacts Before Mitigation*.....4.4-28

4.4.9 *Mitigation Measures*.....4.4-28

4.4.10 *Significance of Impacts After Mitigation*.....4.4-28

4.5 Land Use and Planning4.5-1

4.5.1 *Existing Conditions*4.5-1

4.5.2 *NOP/Scoping Comments*4.5-4

4.5.3 *Applicable Regulatory Requirements*.....4.5-4

4.5.4 *Basis for Determining Significance*.....4.5-6

4.5.5 *Impact Analysis*4.5-6

4.5.6 *Cumulative Impact Analysis*.....4.5-31

4.5.7 *Significance of Impacts Before Mitigation*.....4.5-31

4.5.8 *Mitigation Measures*.....4.5-32

4.5.9 *Significance of Impacts After Mitigation*.....4.5-32

4.6 Noise.....4.6-1

4.6.1 *Noise and Vibration Fundamentals*.....4.6-1

4.6.2 *Existing Conditions*4.6-2

4.6.3 *NOP/Scoping Comments*4.6-4

4.6.1 *Applicable Regulatory Requirements*.....4.6-4

4.6.2 *Methodology*.....4.6-8

4.6.3 *Basis for Determining Significance*.....4.6-12

4.6.4 *General Plan EIR Mitigation Measure*4.6-15

4.6.5 *Impact Analysis*4.6-15

4.6.6 *Cumulative Impact Analysis*.....4.6-20

4.6.7 *Significance of Impacts Before Mitigation*.....4.6-21

4.6.8 *Mitigation Measures*.....4.6-22

4.6.9 *Significance of Impacts After Mitigation*.....4.6-23



4.7 Public Services.....4.7-1

4.7.1 Existing Conditions4.7-1

4.7.2 NOP/Scoping Comments4.7-7

4.7.3 Applicable Regulatory Requirements.....4.7-7

4.7.4 Basis for Determining Significance.....4.7-12

4.7.5 Impact Analysis4.7-13

4.7.6 Cumulative Impact Analysis.....4.7-16

4.7.7 Significance of Impacts Before Mitigation.....4.7-18

4.7.8 Mitigation Measures.....4.7-19

4.7.9 Significance of Impacts After Mitigation.....4.7-19

4.8 Recreation4.8-1

4.8.1 Existing Conditions4.8-1

4.8.2 NOP/Scoping Comments4.8-6

4.8.1 Applicable Regulatory Requirements.....4.8-6

4.8.2 Basis for Determining Significance.....4.8-7

4.8.3 Impact Analysis4.8-8

4.8.4 Cumulative Impact Analysis.....4.8-9

4.8.5 Significance of Impacts Before Mitigation.....4.8-9

4.8.6 Mitigation Measures.....4.8-9

4.8.7 Significance of Impacts After Mitigation.....4.8-10

4.9 Transportation.....4.9-1

4.9.1 Existing Conditions4.9-1

4.9.2 NOP/Scoping Comments4.9-3

4.9.3 Applicable Regulatory Requirements.....4.9-6

4.9.4 Basis for Determining Significance.....4.9-8

4.9.5 Impact Analysis4.9-9

4.9.6 Cumulative Impact Analysis.....4.9-13

4.9.7 Significance of Impacts Before Mitigation.....4.9-14

4.9.8 Mitigation Measures.....4.9-15

4.9.9 Significance of Impacts After Mitigation.....4.9-15

4.10 Tribal Cultural Resources4.10-1

4.10.1 Existing Conditions4.10-1

4.10.2 NOP/Scoping Comments and Tribal Outreach.....4.10-1

4.10.3 Applicable Regulatory Requirements.....4.10-2

4.10.4 Basis for Determining Significance.....4.10-6

4.10.5 Impact Analysis4.10-7

4.10.6 Cumulative Impact Analysis.....4.10-8

4.10.7 Significance of Impacts Before Mitigation.....4.10-8

4.10.8 Mitigation Measures.....4.10-8

4.10.9 Significance of Impacts After Mitigation.....4.10-9

4.11 Wildfire.....4.11-1



4.11.1	<i>Existing Conditions</i>	4.11-1
4.11.2	<i>NOP/Scoping Comments</i>	4.11-2
4.11.3	<i>Applicable Regulatory Requirements</i>	4.11-4
4.11.4	<i>Basis for Determining Significance</i>	4.11-6
4.11.5	<i>General Plan EIR Mitigation Measures</i>	4.11-6
4.11.6	<i>Impact Analysis</i>	4.11-7
4.11.7	<i>Cumulative Impact Analysis</i>	4.11-14
4.11.8	<i>Significance of Impacts Before Mitigation</i>	4.11-14
4.11.9	<i>Mitigation Measures</i>	4.11-15
4.11.10	<i>Significance of Impacts After Mitigation</i>	4.11-16
6.0	Alternatives	6-1
6.1	Purpose.....	6-1
6.2	Introduction.....	6-1
6.3	Alternatives Considered and Rejected During the Scoping/Project Planning Process	6-2
	6.3.1 <i>Alternative Development Areas</i>	6-2
	6.3.2 <i>No Project Alternatives</i>	6-2
6.4	Reduced Density Alternative	6-4
	6.4.1 <i>Air Quality</i>	6-6
	6.4.2 <i>Biological Resources</i>	6-6
	6.4.3 <i>Energy</i>	6-6
	6.4.4 <i>Greenhouse Gas Emissions</i>	6-6
	6.4.5 <i>Land Use and Planning</i>	6-7
	6.4.6 <i>Noise</i>	6-7
	6.4.7 <i>Public Services</i>	6-7
	6.4.8 <i>Recreation</i>	6-8
	6.4.9 <i>Transportation</i>	6-8
	6.4.10 <i>Tribal Cultural Resources</i>	6-8
	6.4.11 <i>Wildfire</i>	6-8
	6.4.12 <i>Conclusion of Environmental Analyses</i>	6-9
	6.4.13 <i>Analysis of Project Objectives</i>	6-9
6.5	Environmentally Superior Alternative	6-9
7.0	References	7-1
7.1	Persons Contributing to EIR Preparation.....	7-1
	7.1.1 <i>City of Yorba Linda</i>	7-1
	7.1.2 <i>T&B Planning, Inc.</i>	7-1
	7.1.3 <i>Urban Crossroads</i>	7-1
7.2	Documents Incorporated by Reference.....	7-2
7.3	Persons Consulted/Written or Verbal Communication.....	7-9



LIST OF FIGURES

<u>Figure Number and Name</u>	<u>Page</u>
Figure 3-1 Regional and Vicinity Map.....	3-2
Figure 3-2 Aerial Photograph	3-3
Figure 3-3 Housing Opportunity Sites.....	3-12
Figure 4.5-1 Existing Land Use Designations	4.5-2
Figure 4.5-2 Existing Zoning Designations.....	4.5-3
Figure 4.6-1 Noise Measurement Locations.....	4.6-3
Figure 4.7-1 Existing Public Service Facilities	4.7-5
Figure 4.7-2 Existing PYLUSD Schools	4.7-6
Figure 4.8-1 Existing Parks and Recreational Facilities.....	4.8-2
Figure 4.8-2 Existing Trail Network	4.8-5
Figure 4.9-1 Existing Bikeways	4.9-4
Figure 4.9-2 Existing Transit Routes.....	4.9-5
Figure 4.11-1 Fire Hazards Severity Zones within the City.....	4.11-3
Figure 4.11-2 Flood Hazards Zone	4.11-11
Figure 4.11-3 Flood Hazard Zone - S4-053.....	4.11-12
Figure 4.11-4 Flood Hazards Zone - S6-015, S6-020 and S7-001	4.11-13



LIST OF TABLES

<u>Table Number and Name</u>	<u>Page</u>
Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation	7
Table 2-1 Location of CEQA Required Topics in this PEIR	2-3
Table 2-2 Summary of NOP Comments	2-11
Table 3-1 City of Yorba Linda 2021-2029 RHNA Allocation.....	3-6
Table 3-2 Housing Opportunity Sites for Rezoning.....	3-9
Table 3-3 Project-Related Approvals/Permits.....	3-28
Table 4.1-1 Ambient Air Quality Standards	4.1-3
Table 4.1-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin	4.1-5
Table 4.1-3 Project Area Air Quality Monitoring Summary 2018-2020	4.1-6
Table 4.1-4 Maximum Daily Regional Emission Thresholds	4.1-14
Table 4.1-5 Summary of Peak Operation Emissions.....	4.1-17
Table 4.3-1 Total Electricity System Power (California 2020).....	4.3-2
Table 4.3-2 SCE 2019 Power Content Mix.....	4.3-5
Table 4.3-3 Total Project-Generated Traffic Annual Fuel Consumption.....	4.3-14
Table 4.3-4 Project Annual Operational Natural Gas Demand Summary	4.3-15
Table 4.4-1 GWP and Atmospheric Lifetime of Select GHGs	4.4-2
Table 4.4-2 Top GHG-Producing Countries and the European Union	4.4-5
Table 4.4-3 Project Scenario GHG Emissions	4.4-22
Table 4.4-4 2017 Scoping Plan Consistency Summary	4.4-23
Table 4.5-1 General Plan Consistency Analysis	4.5-7
Table 4.5-2 SCAG Connect SoCal Consistency Analysis	4.5-29
Table 4.6-1 24-Hour Ambient Noise Level Measurements	4.6-2
Table 4.6-2 Stationary Source Noise Level Standards.....	4.6-7
Table 4.6-3 Roadway Parameters.....	4.6-11
Table 4.6-4 Vibration Source Levels for Construction Equipment.....	4.6-12
Table 4.6-5 Summary of Noise Significance Criteria	4.6-13
Table 4.6-6 Project Stationary Source Noise Level Compliance	4.6-16
Table 4.6-7 Existing with Project Traffic Noise Level Increases	4.6-17
Table 4.6-8 Horizon Year (2045) Traffic Noise Levels.....	4.6-18
Table 4.6-9 Construction Equipment Vibration Levels	4.6-19
Table 4.7-1 Orange County Fire Authority Stations	4.7-1
Table 4.7-2 PYLUSD Schools	4.7-2
Table 4.7-3 PYLUSD School Capacity and Enrollment.....	4.7-4
Table 4.7-4 Projected Student Population.....	4.7-16
Table 4.8-1 Existing and Planned Parks and Recreational Facilities	4.8-3



Table 4.8-2	Joint-Use Facilities.....	4.8-4
Table 4.9-1	Population Estimates.....	4.9-10
Table 4.9-2	Population Changes by TAZ.....	4.9-11
Table 4.9-3	“Plus Project” VMT Per Service Population	4.9-11
Table 4.9-4	“With Project” Comparison to City Threshold.....	4.9-12
Table 4.9-5	SCAG Growth Forecast for the City of Yorba Linda	4.9-12
Table 4.9-6	Citywide VMT Per Service Population	4.9-14
Table 6-1	Reduced Density Alternative	6-4



APPENDICES (PROVIDED ON FLASH DRIVE)

Appendix A Notice of Preparation and Written Comments on NOP
Appendix B Air Quality Impact Analysis
Appendix C Energy Impact Analysis
Appendix D Greenhouse Gas Emissions Analysis
Appendix E Noise Impact Analysis
Appendix F Public Service Correspondence
Appendix G Traffic Impact Analysis
Appendix H Vehicle Miles Traveled Analysis



ACRONYMS AND ABBREVIATIONS

<u>Acronym</u>	<u>Definition</u>
§	Section
°F	Fahrenheit
°C	Celsius
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 52	Native Americans: California Environmental Quality Act
AB 2595	California Clean Air Act
AB 1493	Pavley Fuel Efficiency Standards
ADT	Average Daily Traffic
ADU	Accessory Dwelling Units
ADWF	average dry weather flow
AFFH	Affirmatively Furthering Fair Housing
AHO	Affordable Housing Overlay
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BAU	Business as Usual
BMPs	Best Management Practices
BTS	Backbone Transmission Systems
BTU	British Thermal Unit
C ₂ F ₆	Hexafluoroethane
C ₂ H ₆	Ethane
C ₂ H ₃ Cl	Vinyl Chloride
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation



Calveno	California Vehicle Noise
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
C ₂ F ₆	Hexaflouroethane
CF ₄	Tetraflouromethane
CGS	California Geological Survey
CH ₄	Methane
City	City of Yorba Linda
CIWMP	Countywide Integrated Management Plan
CLO	Congregational Land Overlay
CLOMR	Conditional Letter of Map Revision
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
COG	Council of Governments
ConnectSoCal	2020-2045 Regional Transportation Plan/Sustainable Communities Strategy
CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
COP	Conference of the Parties
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	Decibel
dBA	A-weighted Decibels
DIF	Development Impact Fee
DMV	California Department of Motor Vehicles
DOC	California Department of Conservation
DOE	California Department of Energy
DOF	California Department of Finance
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report



ELI	Extremely low-income
EMS	Emergency Medical Services
EOP	Emergency Response Plan
EPA	Environmental Protection Agency
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FTA	Federal Transit Association
FTE	Full-Time Equivalent
GCC	Global Climate Change
Gg	Gigagrams
GHG	Greenhouse Gas
GT&S	Gas Transmission and Storage
GWP	Global Warming Potential
H ₂ S	Hydrogen Sulfide
HCD	State Department of Housing and Community Development
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HSC	Health and Safety Code
IEPR	Integrated Energy Policy Report
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
kBTU	kilo-British thermal units
kWh	kilowatt-hour
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-cycle analysis



LCFS	low carbon fuel standard
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MET	Metropolitan Water District of Southern California
MERV	Maximum Efficiency Rating Value
MMcfd	million cubic feet per day
MMRP	Mitigation Monitoring and Reporting Program
MPO	Metropolitan Planning Organizations
MT/yr	metric tons per year
MTCO _{2e}	Metric Tons of Carbon Dioxide Equivalent
MUO	Mixed-Use Housing Overlay
MUTCD	Manual on Uniform Traffic Control Devices
MWDOC	Municipal Water District of Orange County
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NCCP	Natural Communities Conservation Plan
NDC	Nationally Determined Contributions
NF ₃	Nitrogen Trifluoride
NOC	Notice of Completion
NOA	Notice of Availability
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
N ₂ O	Nitrous Oxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₂	Oxygen
O ₃	Ozone
OCCOG	Orange County Council of Governments
OCFA	Orange County Fire Authority
OCSD	Orange County Sheriff's Department



OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
Pb	Lead
PEIR	Program Environmental Impact Report
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric
PM	Particulate Matter
PM _{2.5}	Fine Particulate Matter (2.5 microns or smaller)
PM ₁₀	Fine Particulate Matter (10 microns or smaller)
PPV	peak particle velocity
PRC	Public Resources Code
Project	Yorba Linda 2021-2029 Housing Element Implementation Programs
PYLUSD	Placentia-Yorba Linda Unified School District
RECLAIM	Regional Clean Air Incentives Market
REMEL	Reference Mean Emission Level
RHNA	Regional Housing Needs Allocation
ROGs	Reactive Organic Gasses
RPS	Renewable Portfolio Standards
RTAC	Regional Targets Advisory Committee
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SB 350	Clean Energy and Pollution Reduction Act of 2015
SB 375	California Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008
SCAB	South Coast Air Basin
SCAG	Sothern California Association of Governments
SCAQMD	Southern Coast Air Quality Management District
SCE	Southern California Edison
SCH	California State Clearinghouse (Office of Planning and Research)
SFHA	Special Flood Hazard Area



SF ₆	Sulfur Hexafluoride
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SO ₄	Sulfates
SoCalGas	Southern California Gas Company
SP	service population
SR	State Route
SRA	Source Receptor Area
SRA	State Responsibility Areas
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAZ	Traffic Analysis Zone
TEA-21	Transportation Equality Act for 21st Century
TIF	Traffic Impact Fee
TNM	Traffic Noise Model
U.N.	United Nations
UNFCCC	United Nations' Framework Convention on Climate Change
U.S.	United States
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WQMP	Water Quality Management Plan
WUI	Wildland Urban Interface
YLPL	Yorba Linda Public Library
YLWD	Yorba Linda Water District
ZE/NZE	Zero- and near-zero-emission



1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

As stated by California Environmental Quality Act (CEQA) Guidelines §15002, the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities involving discretionary government actions (including the approval of development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An Environmental Impact Report (EIR) is an informational document prepared in compliance with CEQA that informs government decision-makers and the public in general about potentially significant environmental impacts that could result from a project. A Program EIR (PEIR) is prepared for a series of actions that are characterized as one large project through reasons of geography, similar rules or regulations, or where individual activities will occur under the same regulatory process with similar environmental impacts that can be mitigated in similar ways. This PEIR represents the independent judgment of the City of Yorba Linda (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from constructing and operating the proposed Yorba Linda 2021-2029 Housing Element Implementation Programs (the “Project”).

Hereafter when the term “Project” is used in this PEIR with the initial letter capitalized, the term shall mean all aspects of the Yorba Linda 2021-2029 Housing Element Implementation Programs Project’s planning, construction, and operation; and all associated legislative, discretionary, and administrative approvals and permits required by law of public agencies.

Governmental approvals requested from the City of Yorba Linda to implement the Project include a general plan amendment and zone change. All other related discretionary and administrative actions that are required of the City of Yorba Linda and other public agencies and entities to construct and operate the Project described in this PEIR also are considered part of the Project evaluated herein. Approvals and permits required of other agencies that are currently known to be needed in order to implement the Project are listed in Section 3.0, *Project Description*.



The City of Yorba Linda has determined that a EIR is required for this Project. Pursuant to CEQA Guidelines § 15063(a), when a lead agency can determine that an EIR will be required for a project, an Initial Study is not required. An Initial Study was not prepared for this Project, however, the City of Yorba Linda has determined that implementation of the Project has the potential to result in significant environmental effects, and a Program EIR, as defined by CEQA Guidelines §15168, is required. As stated in CEQA Guidelines §15168, a Program EIR is prepared for “a series of actions that are characterized as one large project through reasons of geography, similar rules or regulations, or where individual activities will occur under the same regulatory process with similar environmental impacts that can be mitigated in similar ways.”

Accordingly, and in conformance with CEQA Guidelines §15121(a), the purposes of this PEIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 PROPOSED PROJECT

1.2.1 LOCATION AND REGIONAL SETTING

The City of Yorba Linda 2021-2029 Housing Element Implementation Programs (Project) encompasses the entire City of Yorba Linda, which is located in northeast portion of Orange County, California. The City is located approximately 38 miles southeast of City of Los Angeles and 12 miles north of City of Santa Ana. It is bounded by the cities of Corona to the east, Brea to the north, Placentia to the west and southwest, and Anaheim to the south. Chino Hills State Park is located to the north. Regional access to the City is provided by primarily via State Routes 90 (SR-90), which runs north-south through the center of the City, and 91 (SR-91), which runs east-west along the southern boundary of the City. Local access is provided by various arterial highways that intersect the City, including Yorba Linda Boulevard and Bastanchury Road. See Figure 3-1, *Regional and Vicinity Map*, and Figure 3-2, *Aerial Photograph*.

Refer to PEIR Section 3.0, *Project Description*, for more information related to the regional and local setting of the Project area.

1.2.2 PROJECT OBJECTIVES

The fundamental purpose and goal of the Project is to ensure compliance with State housing law and implementation of the City of Yorba Linda 2021-2029 Housing Element. The project objectives for the proposed Project are listed below:

1. Implementation of the 2021-2029 Housing Element Implementation Programs to provide adequate housing sites and assist in the provision of affordable housing.



2. Allow the City of Yorba Linda to comply with State housing laws including compliance with the Regional Housing Needs Assessment (RHNA) targets.
3. Remove governmental constraints to housing investment.
4. Promote fair and equal housing opportunities.

1.2.3 PROJECT DESCRIPTION SUMMARY

To fulfill its share of regional housing needs, the Project requires a General Plan Amendment and Amendments to the Zoning Code and Zoning Map to implement the Project. The General Plan Amendment would revise the Land Use Element to update the text and maps consistent with the proposed zoning. Amendments to the Zoning Code include modification to the text and maps to rezone 27 opportunity sites, including applicable planned development zones, and adoption of housing overlay zones (Affordable Housing Overlay, a Congregational Land Overlay, and a Mixed-Use Housing Overlay) consistent with the Housing Element. The Project is intended to cover all implementation programs outlined in the Housing Element Section V (C), Housing Programs 1–23. Future housing development facilitated by the Project would be subject to discretionary permits and would occur as market conditions allow or at the discretion of the individual property owners.

1.3 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency (City of Yorba Linda) be identified in the Executive Summary. After considering all comments received in response to the NOP, the City has identified that areas of controversy in the following topics: traffic, biological resources, hydrology and water quality, geology and soils, noise, air quality, wildfire, and aesthetics.

Regarding issues to be resolved, this PEIR addresses the environmental issues associated with the Project that are known by the City, that are identified in the comment letters that the City of Yorba Linda received on this PEIR's NOP which was circulated for a 30-day public review period from April 29, 2022 to May 30, 2022 (refer to *Technical Appendix A*). Environmental topics raised in written comments to the NOP are summarized in Section 2.0, *Introduction and Purpose*, Table 2-2, *Summary of NOP Comments*, and include but are not limited to the topics of Air Quality, Biological Resources, Energy, Geology and Soils, Land Use and Planning, Hydrology and Water Quality, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire.

1.3.1 PUBLIC SCOPING MEETING

A NOP for the Project was released for public review on April 29, 2022, and a PEIR Scoping Meeting was held on May 23, 2022 at the Community Center located at 4501 Casa Loma Avenue, Yorba Linda. The PEIR Scoping Meeting was attended by approximately 49 residents. Written comments received at the Scoping Meeting are provided in *Technical Appendix A* of this PEIR. Environmental topics raised in Scoping Meeting are summarized in Section 2.9, *Notice of Preparation and Public Scoping Meeting*.



1.4 ALTERNATIVES TO THE PROPOSED PROJECT – REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative would result in a 15% reduction of housing units on all of the housing opportunity sites with the exception of the Congregational Land Overlay (CLO) sites (see Table 6-1). This unit count also represents the realistic unit potential shown in Table 3-2 of this PEIR. This alternative would reduce the proposed residential units from 2,410 dwelling units to 2,100 dwelling units, and result in a population growth of 6,174 residents. This represents an approximate 13% reduction in growth as compared to the Project.

1.5 SUMMARY OF IMPACT, MITIGATION, AND LEVELS OF IMPACT

Table 1-1, *Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*, presents a summary of the environmental impacts resulting from the Project, including each of the environmental topics identified in the NOP as having potentially significant impacts and applicable General Plan goals and policies.

The environmental topics identified for further study in this EIR include: Air Quality, Biological Resources, Energy, Greenhouse Gas (GHG) Emissions, Land Use and Planning, Noise, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Wildfire. The potential direct and indirect impacts and cumulative impacts for these topical issues are addressed in Sections 4.1 through 4.11 of this PEIR. Environmental impacts that were found to be less than significant after application of mandatory regulatory requirements are discussed in Section 5.0, *Other CEQA Considerations*. Growth-inducing impacts and significant irreversible environmental changes are addressed in Section 5.0, *Other CEQA Considerations*.

For each environmental topic, Table 1-1 identifies mitigation measures that are applicable to the Project. Project-specific mitigation measures are required to reduce potentially significant impacts for the following topical issues: Air Quality, Biological Resources, Greenhouse Gas Emissions, Noise, Tribal Cultural Resources, and Wildfire. All feasible mitigation measures have been incorporated to reduce these potentially significant impacts. However, the following impacts would remain significant and unavoidable following implementation of mitigation measures: Air Quality, GHG Emissions, and Noise.

1.6 MITIGATION MONITORING

State law requires the preparation of a mitigation monitoring and reporting program (MMRP) to ensure that measures that would avoid or lessen significant environmental effects of the project are adopted as conditions of approval for the project. The mitigation measures identified in this PEIR have been described in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation, when the mitigation will be implemented, and why the mitigation has been required. An MMRP would be adopted by the City at the time of Project approval.



Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 AIR QUALITY				
<p>Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?</p>	<p>Goal LU-3, Policy LU-3.1, Goal CR-3, Policies CR-3.7, CR-3.8</p>	<p>Potentially Significant Impact</p>	<p>MM 4.1-1 Prior to issuance of grading permits, project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts (regional and localized) to the City for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City shall require that applicants for new development projects incorporate all feasible mitigation measures to reduce air pollutant emissions below the significant threshold during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City.</p>	<p>Significant and Unavoidable Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>Mitigation measures to reduce construction-related emissions could include, but are not limited to:</p> <ul style="list-style-type: none"> • Require construction equipment that meets or exceeds CARB Certified Tier 3 or Tier 4 engine standards. • Limit the idling time of diesel off-road construction equipment to no more than five (5) minutes. • Require the use of “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by South Coast AQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Alternatively, projects may utilize building materials that do not require the use of architectural coatings. • The Construction Contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if 	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>available rather than electrical generators powered by internal combustion engines.</p> <ul style="list-style-type: none"> • The Construction Contractor shall require the use of alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment. • The Construction Contractor shall require that construction equipment be maintained in good operation condition to reduce emissions. The Construction Contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer’s specification. Maintenance records shall be available at the construction site for City verification. <p>MM 4.1-2 Prior to issuance of a grading permit, project applicants shall prepare and submit a technical assessment</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>evaluating potential project operation air quality impacts (regional and localized) to the City for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City shall require that applicants for new development projects incorporate all feasible mitigation measures to reduce air pollutant emissions below significance thresholds during operational activities. The identified measures shall be included as part of the conditions of approval.</p> <p>Possible mitigation measures to reduce operational emissions could include, but are not limited to the following:</p> <ul style="list-style-type: none">• Increase in insulation such that heat transfer and thermal bridging is minimized;• Limit air leakage through the structure and/or within the heating	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>and cooling distribution system;</p> <ul style="list-style-type: none">• Use of energy-efficient space heating and cooling equipment;• Installation of electrical hook-ups at loading dock areas;• Installation of dual-paned or other energy efficient windows;• Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards;• Installation of automatic devices to turn off lights where they are not needed;• Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;• Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<ul style="list-style-type: none">• Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems;• Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.• Landscaping palette emphasizing drought tolerant plants;• Use of water-efficient irrigation techniques;• U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.• Applicants for residential within 1,000 feet of a major sources of TACs (e.g., warehouses, industrial areas, freeways, roadways, and rail lines with traffic volumes over 10,000 vehicle per day), as	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Yorba Linda prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of CEQA and the South Coast AQMD. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM10 concentrations exceed 2.5 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), PM2.5 concentrations exceed 2.5 $\mu\text{g}/\text{m}^3$, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:</p> <ul style="list-style-type: none"> ○ Air intakes located away from 	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>high volume roadways and/or truck loading zones.</p> <ul style="list-style-type: none"> o Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters (e.g., MERV 13 or better). 	
Threshold b: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Goal LU-3, Policy LU-3.1, Goal CR-3, Policies CR-3.7, CR-3.8	Potentially Significant Impact	MM 4.1-1 and MM 4.1-2 would apply.	Significant and Unavoidable Impact
Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Goal LU-3, Policy LU-3.1	Potentially Significant Impact	MM 4.1-1 and MM 4.1-2 would apply.	Significant and Unavoidable Impact
Threshold d: Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.2 BIOLOGICAL RESOURCES				
Threshold a: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Goal CN-2, Policies CN-2.1, CN-2.2, CN-2.6,	Potentially Significant Impact	MM 4.2-1 The City of Yorba Linda shall require applicants of future development projects on housing opportunity sites S5-008, S7-005, S3-203, and S4-053 to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall be a reconnaissance level field survey of the	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>sites for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, special status species or their habitat, sensitive habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the sites and adjacent lands potentially affected by the future development, the biologist shall submit a written report substantiating such to the City of Yorba Linda before issuance of a grading permit by the City, and the project may proceed without any further biological investigation. If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, implementation of Mitigation Measure MM 4.2-2 shall be required.</p> <p>MM 4.2-2 A qualified biologist shall evaluate impacts to sensitive or protected biological resources from development. The impact assessment may require focused surveys that determine absence or presence and distribution of biological resources on the site. These surveys may include, but</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>are not limited to: 1) focused special status animal surveys if suitable habitat is present; 2) appropriately timed focused special status plant surveys that will maximize detection and accurate identification of target plant species; and 3) a delineation of jurisdictional boundaries around potential wetlands, riparian habitat, and waters of the United States or State.</p> <p>MM 4.2-3 The results of these surveys will assess project impacts and develop site specific mitigation measures to avoid impacts to sensitive or protected biological resources. Depending on the resources potentially present on the project site, avoidance may include: 1) establishing appropriate no-disturbance buffers around onsite or adjacent resources, and/or 2) initiating construction at a time when special status or protected animal species will not be vulnerable to project-related mortality (e.g., outside the avian nesting season or bat maternal or wintering roosting season). Consultation with relevant regulatory agencies may be required in order to establish suitable buffer areas. The qualified biologist shall substantiate the</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>impact evaluation or the assumed presence of special-status species in all suitable habitats onsite in a written report submitted to the City of Yorba Linda before issuance of a grading permit by the City. If the project avoids all sensitive or protected biological resources, no further action is required. If avoidance of all significant impacts to sensitive or protected biological resources is not feasible, the project shall implement Mitigation Measure MM 4.2-4.</p> <p>MM 4.2-4 The City of Yorba Linda shall require applicants to design development projects to minimize potential impacts to sensitive or protected biological resources to the greatest extent feasible, in consultation with a qualified biologist and/or appropriate regulatory agency staff. Minimization measures may include 1) exclusion and/or silt fencing, 2) relocation of impacted resources, 3) construction monitoring by a qualified biologist, and 4) an informative training program conducted by a qualified biologist for construction personnel on sensitive biological resources that may be impacted by project construction. If</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>minimization of all significant impacts to sensitive or protected biological resources is infeasible, the project shall implement Mitigation Measure MM 4.2-5.</p>	
<p>Threshold b: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	<p>Goal CN-2, Policies CN-2.1, CN-2.2, CN-2.6</p>	<p>Potentially Significant Impact</p>	<p>MM 4.2-1 through MM 4.2-4 would apply.</p> <p>MM 4.2-5 A qualified biologist will develop appropriate mitigations that will reduce project impacts to sensitive or protected biological resources to a less than significant level. The type and amount of mitigation will depend on the resources impacted, the extent of the impacts, and the quality of habitats to be impacted. Mitigations may include, but are not limited to: 1) compensation for lost habitat or waters in the form of preservation or creation of in-kind habitat or waters, either onsite or offsite, protected by conservation easement; 2) purchase of appropriate credits from an approved mitigation bank servicing the Yorba Linda area; and 3) payment of in-lieu fees. Furthermore, project applicants shall obtain appropriate permit authorization(s) for impacts to jurisdictional waters, wetlands, and/or riparian habitats. The types of permits potentially required for impacts to</p>	<p>Less than Significant Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			jurisdictional waters are a Clean Water Act (Section 404) permit issued by the US Army Corps of Engineers, a California Water Certificate or Waste Discharge Order issued by the Regional Water Quality Control Board, and a Stream Alteration Agreement issued by the California Department of Fish and Wildlife.	
Threshold c: Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Goal CN-2, Policies CN-2.1, CN-2.2, CN-2.6	Potentially Significant Impact	MM 4.2-1 through MM 4.2-5 would apply.	Less than Significant Impact
Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Goal CN-2, Policies CN-2.1, CN-2.2, CN-2.6	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Goal CN-2, Policies CN-2.1, CN-2.2, CN-2.6	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold f: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Goal LU-1, Policies LU-1.2, LU-1.3, Goal LU-3, Policies LU-3.1, LU-3.4, Goal-4, Policies LU-4.1, LU-4.3,	No Impact	No mitigation is required.	No Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
	LU-4.4, Goal LU-5, Policy LU-5.1			
4.3 ENERGY				
Threshold a: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.4 GREENHOUSE GAS EMISSIONS				
Threshold a: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Goal LU-3, Policy LU-3.1, Goal CR-3, Policies CR-3.7, CR-3.8	Potentially Significant Impact	MM 4.1-1 and MM 4.1-2 would apply.	Significant and Unavoidable Impact
Threshold b: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Goal LU-3, Policies LU-3.1, Goal LU-4, Policy LU-4.3, Goal LU-9, Goal LU-11, Policy LU-11.2, Goal CR-3, Policies CR-3.3, CR-3.4, CR-3.7, CR-3.8, Goal CR-5, Policy CR-5.2, Goal CR-6, Policies CR-6.1, CR-6.2, Goal GM-2.	Potentially Significant Impact	MM 4.1-1 and MM 4.1-2 would apply.	Significant and Unavoidable Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.5 LAND USE AND PLANNING				
Threshold a: Would the Project physically divide an established community	Goal LU-1, Policies LU-1.2, LU-1.3, Goal LU-3, Policies LU-3.1, LU-3.4, Goal-4, Policies LU-4.1, LU-4.3, LU-4.4, Goal LU-5, Policy LU-5.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Goal LU-1, Policies LU-1.2, LU-1.3, Goal LU-3, Policies LU-3.1, LU-3.4, Goal-4, Policies LU-4.1, LU-4.3, LU-4.4, Goal LU-5, Policy LU-5.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.6 NOISE				
Threshold a: Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Goal N-1, Policy N-1.4, Goal N-2, Policies N-2.1, N-2.2, N-2.3, Goal N-4, Policies N-4.1, N-4.3, N-4.5, Goal CR-3, Policy CR-3.8, Goal CR-6, Policy CR-6.1	Potentially Significant Impact	MM 4.6-1 Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, and all stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive use nearest the construction activity. MM 4.6-2 The construction contractor shall locate equipment staging in areas	Significant and Unavoidable Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>that will create the greatest distance between construction-related noise sources and noise-sensitive receiver nearest to the construction activity.</p> <p>MM 4.6-3 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment Section 8.32.090[D] of the City of Yorba Linda Municipal Code. The contractor shall design delivery routes to minimize the exposure of sensitive land uses to delivery truck noise.</p> <p>MM 4.6-5 Prior to issuance of any construction permits, applicants for individual projects that are within 50 feet of a sensitive receptor, shall prepare and submit to the City of Yorba Linda Planning Department a study to evaluate potential operational-related stationary source noise impacts. The noise report shall be prepared by an acoustical engineer using the ISO 9613-2 protocol in the CadnaA (Computer Aided Noise Abatement) computer program. If the study determines a potential exceedance of the City's thresholds</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			(55 dBA Leq daytime, or 50 dBA Leq nighttime), measures shall be identified that ensure noise levels are reduced to below the thresholds. Identified measures shall be included on all construction and building documents and submitted for verification to the City of Yorba Linda Planning Department.	
<p>Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?</p>	<p>Goal N-3, Policies N-3.1, LU-3, LU-3.4</p>	<p>Potentially Significant Impact</p>	<p>MM 4.6-4 Prior to issuance of any construction permits, applicants for individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, within 25 feet of sensitive receptors (e.g., residences and fragile structures), shall prepare and submit to the City of Yorba Linda Planning Department a study to evaluate potential construction-related vibration impacts. The vibration assessment shall be prepared by an acoustical engineer and be based on recognized vibration-induced architectural damage criterion. If the study determines a potential exceedance of the thresholds, measures shall be identified that ensure vibration levels are reduced to below the thresholds. Identified measures shall be included on all construction and</p>	<p>Less than Significant Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			building documents and submitted for verification to the City of Yorba Linda Planning Department.	
<p>Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?</p>	<p>Goal N-1, Policy N-1.4, Goal N-2, Policies N-2.1, N-2.2, N-2.3, Goal N-4, Policies N-4.1, N-4.3, N-4.5, Goal CR-3, Policy CR-3.8, Goal CR-6, Policy CR-6.1</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p>4.7 PUBLIC SERVICES</p>				
<p>Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</p> <ul style="list-style-type: none"> i. Fire Protection Services; ii. Police Protection Services; iii. School Services; iv. Parks; or v. Other Public Facilities 	<p>Goal PSU-1, Policies PSU-1.1, PSU-1.3, Goal PSU-2, Policies PSU-2.1, PSU-2.3, PSU-2.4, Goal PSU-3, Policies PSU-3.1, PSU-3.2, , Goal PSU-4, Policy PSU-4.2, Policy GM-1.1</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p>4.8 RECREATION</p>				
<p>Threshold a: Would the Project increase the use of existing neighborhood and regional parks or</p>	<p>Goal OR-1, Goal OR-3, Policy OR-</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	3.1, Goal OR-5, Policies OR-5.1, OR-5.8			
Threshold b: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Goal OR-1, Goal OR-3, Policy OR-3.1, Goal OR-5, Policies OR-5.1, OR-5.8	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.9 TRANSPORTATION				
Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Policies CR-3.7, CR-6.1, CR-6.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Goal CR-8, Policy CR-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project result in inadequate emergency access?	Goal CR-8, Policy CR-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.10 TRIBAL CULTURAL RESOURCES				
Threshold a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with	N/A	Potentially Significant Impact	MM 4.10-1 Prior to the commencement of any ground disturbing activity at the Project sites, the Project Applicant shall retain a Native American Monitor approved by the NAHC. A copy of the executed contract shall be submitted to the City of Yorba Linda Planning Department prior to the issuance of any permit	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>cultural value to a California Native American tribe, and that is:</p> <ol style="list-style-type: none"> 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? 			<p>necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities into areas of undisturbed soils. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources.</p> <p>Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native</p>	



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			<p>American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources.</p>	
<p>4.11 WILDFIRE</p>				
<p>Threshold a: Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?</p> <p>Threshold f: Would the Project impair implementation of or physically interfere with an</p>	<p>Goal CR-8, Policies CR-8.2, LU-3.1, Goal PS-1, Policy PS-1.3, Goal PS-8, Policies PS-8.1, PS-8.2</p>	<p>Potentially Significant Impact</p>	<p>MM 4.11-1 Prior to issuance of a grading permit for sites within or adjacent to a Very High FHSZ, the project applicant shall prepare a Fire Evacuation Analysis. The Fire Evacuation Analysis shall assess the time required for emergency evacuation under Existing and Existing</p>	<p>Less than Significant Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>adopted emergency response plan or emergency evacuation plan?</p>			<p>with Project Conditions, assuming a worst case, wind-driven fire. The Fire Evacuation Analysis shall also identify how much the project would increase evacuation times by; how long it would take residents to evacuate; and how emergency response times would be affected by a mass evacuation under multiple scenarios. The Fire Evacuation Analysis shall be subject to the review and approval from the City of Yorba Linda and OCFA. The analysis shall demonstrate how the Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.</p>	
<p>Threshold b: Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildlife risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</p> <p>Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</p>	<p>Goal PS-5, Policies PS-5.1, PS-5.2, Goal PS-6, Policy PS-6.1, PS-6.2, PS-6.3, PS-6.5, PS-6.6</p>	<p>Potentially Significant Impact</p>	<p>MM 4.11-2 Prior to issuance of a grading permit for sites within or adjacent to a Very High FHSZ, the project applicant shall prepare a Fire Protection Plan (FPP). Prior to preparation of an FPP, the Project proponent shall coordinate with OCFA to ensure that modeling of the FPP and design of the project is appropriate to meet the requirements and standards of the OCFA. The FPP shall be subject to the review and approval from the City of Yorba Linda and OCFA. The FPP shall assess a project's compliance with current</p>	<p>Less than Significant Impact</p>



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
			regulatory codes and ensure that impacts resulting from wildland fire hazards have been adequately mitigated. The FPP shall also specifically identify the need for fire systems, water availability, construction requirements, and fire-resistant landscaping i.e. fuel modification zones), and appropriate defensible space around structures.	
Threshold c: Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Goal PS-5, Policies PS-5.1, PS-5.2, Goal PS-6, Policy PS-6.1, PS-6.2, PS-6.3, PS-6.5, PS-6.6	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability or drainage change?	Goal PS-3, Policy PS-3.3; PS-3.5; Goal PS-4, Policy PS-4.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.1 AESTHETICS				
Threshold a: Would the Project have a substantial adverse effect on a scenic vista?	Goal CN-1; Policies CN-1.1, Goal CN-3; Policies CN-3.1, CN-3.2, Goal LU-4, Policy LU-4.1, Goal LU-8, Policies LU-8.1, LU-8.2, Goal LU-9, Policies LU-9.1, LU-9.2, LU-9.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Goal CN-1; Policies CN-1.1, Goal CN-3; Policies CN-3.1, CN-3.2, Goal LU-4, Policy LU-4.1, Goal LU-8, Policies LU-8.1, LU- 8.2, Goal LU-9, Policies LU-9.1, LU-9.2, LU-9.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Goal CN-1; Policies CN-1.1, Goal CN-3; Policies CN-3.1, CN-3.2, Goal LU-4, Policy LU-4.1, Goal LU-8, Policies LU-8.1, LU- 8.2, Goal LU-9, Policies LU-9.1, LU-9.2, LU-9.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	N/A			Less than Significant Impact
5.4.2 AGRICULTURE AND FORESTRY RESOURCES				
Threshold a: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold b: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold e: Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Goal LU-3, Policy LU-3.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.3 CULTURAL RESOURCES				
Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource in pursuant to § 15064.5?	Goal HR-2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Goal HR-2, Policy HR-2.5	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.4.4 GEOLOGY AND SOILS				
Threshold a: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides?	Goal PS-3, Policies PS-3.1, PS-3.3, PS-3.4, PS-3.5, PS-3.6, PS-3.7, CN-3.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?	Policy CN-3.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Goal PS-3, Policies PS-3.1, PS-3.3, PS-3.4, PS-3.5, PS-3.6, PS-3.7, CN-3.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Goal PS-3, Policies PS-3.1, PS-3.3, PS-3.4, PS-3.5, PS-3.6, PS-3.7, CN-3.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold e: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Goal PS-3, PS-3.1, PS-3.3, PS-3.4, PS-3.5, PS-3.6, PS-3.7, CN-3.3	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Goal HR-2, Policy HR-2.5	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.5 HAZARDS AND HAZARDOUS MATERIALS				
Threshold a: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Goal CR-8, Policies CR-8.2, LU-3.1, Goal PS-1, Policy PS-1.3, Goal PS-8, Policies PS-8.1, PS-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Goal CR-8, Policies CR-8.2, LU-3.1, Goal PS-1, Policy PS-1.3, Goal PS-8, Policies PS-8.1, PS-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Goal CR-8, Policies CR-8.2, LU-3.1, Goal PS-1, Policy PS-1.3, Goal PS-8, Policies PS-8.1, PS-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Goal CR-8, Policies CR-8.2, LU-3.1, Goal PS-1, Policy PS-1.3, Goal PS-8, Policies PS-8.1, PS-8.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?				
5.4.6 HYDROLOGY AND WATER QUALITY				
Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Goal CN-4, Policies CN-4.2, CN-4.3, CN-4.4, CN-4.6, PSU-5.4, Goal PSU-6, Policies PSU-6.3, PSU-6.4, Goal GM-1, Policies GM-1.1, Goal PS-4, Policy PS-4.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Goal CN-4, Policies CN-4.2, CN-4.6, Goal PSU-6, Policies PSU-6.3, PSU-6.4	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or	Goal CN-4, Policies CN-4.2, CN-4.3, CN-4.4, CN-4.6, PSU-5.4, Goal PSU-6, Policies PSU-6.3, PSU-6.4, Goal GM-1, Policies GM-1.1, Goal PS-4, Policy PS-4.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
provide substantial additional sources of polluted runoff; or impeded or redirect flood flows?				
Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Goal CN-4, Policies CN-4.2, CN-4.3, CN-4.4, CN-4.6, PSU-5.4, Goal PSU-6, Policies PSU-6.3, PSU-6.4, Goal GM-1, Policies GM-1.1, Goal PS-4, Policy PS-4.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.7 MINERAL RESOURCES				
Threshold a: Would the Project result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.8 POPULATION AND HOUSING				
Threshold a: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
and businesses) or indirectly (for example, through extension of roads or other infrastructure?				
Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	N/A	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
5.4.9 UTILITIES AND SERVICE SYSTEMS				
Threshold a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Goal PSU-5, Policies PSU-5.1, PSU-5.2, PSU-5.4	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Goal PSU-5, Policies PSU-5.1, PSU-5.2, Goal PSU-6, PSU-6.3, PSU-6.4	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Goal PSU-5, Policies PSU-5.1, PSU-5.2	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Goal PSU-5, Policy PSU-5.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



Potential Impacts	General Plan Policies	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Goal PSU-5, Policy PSU-5.1	Less than Significant Impact	No mitigation is required.	Less than Significant Impact



2.0 INTRODUCTION AND PURPOSE

This Program Environmental Impact Report (PEIR) has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code § 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, § 15000 et seq.).

Pursuant to CEQA Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City of Yorba Linda is the Lead Agency under whose authority this PEIR has been prepared. “Lead Agency” refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before considering action to approve the Project, the City of Yorba Linda has the obligations to: (1) ensure that this PEIR has been completed in accordance with CEQA; (2) review and consider the information contained in this PEIR as part of its decision making process; (3) make a statement that this PEIR reflects the City of Yorba Linda’s independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary, (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this PEIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§ 15090 through 15093).

Pursuant to CEQA Guidelines Section 15040 through Section 15043, and upon completion of the CEQA review process, the City of Yorba Linda has the legal authority to do any of the following:

- Approve the proposed Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Disapprove the Project; or
- Approve the Project even though the Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This PEIR fulfills the CEQA environmental review requirements for the Project and all other governmental discretionary and administrative actions related to the Project. This PEIR will also be used as an informational document by other public agencies in connection with any approvals or permits necessary for future development that occurs consistent with the City of Yorba Linda 2021-2029 Housing Element Implementation Programs (Project).



2.1 MEASURE B

Measure B, also known as the Yorba Linda Right-to-Vote Amendment, amended the Yorba Linda Zoning Code to require voter approval, by a majority vote of the electorate, for a Major Amendment to a Planning Policy Document. The phrase “Planning Policy Document” is defined to mean the Land Use Element of the Yorba Linda General Plan, the Land Use Policy Map, the Yorba Linda Zoning Code, the Zoning Map, any specific plan, or any development agreement.

The term “Major Amendment” is defined as any amendment that modifies a Planning Policy Document, which results in any of the following:

1. Increases the number of residential units which may be constructed on a parcel designated for residential uses;
2. Increases the number of separate parcels which may be created from an existing parcel;
3. Changes any residential land use to allow any other land use;
4. Changes non-residential land use to allow any residential land use greater than 10 net dwelling units per acre or allow a mix of commercial and residential uses;
5. Increases the allowed maximum height of development;
6. Provides for private development of land owned by a government entity within five years of the date of the approval to develop the land; or
7. Repeals any Planning Policy Documents.

The initiative imposes a citywide height limit of 35 feet for all buildings and structures, except for church steeples, public schools, and other structures exempt by state or federal law. As described, the City’s Housing Element and Implementation Programs is subject to the requirements of Measure B. The initiative requires Major Amendments to Planning Policy Documents to be adopted by ordinance after a public hearing before the Planning Commission and the City Council. The initiative imposes more stringent noticing requirements than otherwise required by state law. Public hearing notices would be required to be sent 20 days prior to the public hearing to the record owner and the occupant of each parcel of land that is located within 300 feet from the boundaries of the parcel of land that is the subject of the Major Amendment. State law mandates that the notice be sent 10 days prior to the public hearing and does not require that occupants be provided such notice.

2.2 DOCUMENT FORMAT

This PEIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, § 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified



content. Table 2-1, *Location of CEQA Required Topics in this PEIR*, provides a quick reference in locating the CEQA-required content within this document. Following a 45-day public review period of the Draft PEIR, a Final PEIR will be prepared which includes public comments and responses to the Draft PEIR and Draft PEIR revisions, as necessary.

Table 2-1 Location of CEQA Required Topics in this PEIR

CEQA Required Topic	CEQA Guidelines Reference	Location in this PEIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section 1.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Sections 4.1 through 4.11
Consideration and Discussion of Environmental Impacts	§ 15126; 15126.2(a)	Sections 4.1 through 4.11 and Section 5.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2 (a), (b),(c)	Sections 4.1 through 4.11 and Section 5.0
Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented	§ 15126.2(d)	Section 5.0
Growth-Inducing Impact of the Proposed Project	§ 15126.2(e)	Subsection 5.3
Analysis of the Project’s Energy Conservation Measures	§ 15126.4(a)(1)(C)	Section 4.5 and Subsection 5.4
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Sections 4.1 through 4.11 and Section 5.0
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Section 5.0
Organizations and Persons Consulted	§ 15129	Section 8.0
Discussion of Cumulative Impacts	§ 15130	Sections 4.1 through 4.11

In summary, the content and format of this PEIR is as follows:

- **Section 1.0, Executive Summary**, includes a Project introduction, a brief description of the Project; a summary of the areas of controversy/issues to be resolved; a description of the Project alternatives; and a summary of the Project’s environmental impacts; significance of impacts following mandatory compliancy with applicable plans, policies, and programs; mitigation measures; and significance of impacts following the application of mitigation measures.



- **Section 2.0, Introduction and Purpose**, provides introductory information about the CEQA process and the responsibilities of the City of Yorba Linda, serving as the Lead Agency of this PEIR. This section identifies the Project’s potential environmental impacts and effects found not to be significant. This section also includes a description of the NOP comments received, a description of the document format, as well as the purpose of CEQA and this PEIR.
- **Section 3.0, Project Description**, serves as the PEIR’s Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines Section 15123. This section also describes the environmental setting, including descriptions of the Project site’s physical conditions and surrounding context used as the baseline for analysis in this PEIR.
- **Section 4.0, Environmental Analysis**, provides an analysis of potential direct, indirect, and cumulatively considerable impacts that may occur with implementation of the Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this PEIR are referred to as “effects” or “impacts” interchangeably. The CEQA Guidelines also identify the terms “effects” and “impacts” as being synonymous (CEQA Guidelines § 15358). In the environmental analysis subsections of Section 4.0, the existing and historical baseline conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementation of the Project. The analyses are based in part upon technical reports that are appended to this PEIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the Project and are cited in Section 7.0, *References*.

Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation after compliance with mandatory federal, State, and local laws and regulations, feasible mitigation measures are recommended to reduce or avoid the significant effect. In most cases, mandatory compliance with regulatory requirements and/or the implementation of the identified mitigation measures would reduce the Project’s adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a statement of overriding considerations would need to be adopted by the City of Yorba Linda pursuant to CEQA Guidelines Section 15093, prior to Project approval.

Section 4.0 is organized by 10 environmental topical areas (Subsections 4.1 through 4.11) with each following the below framework:

- **Environmental Setting.** Describes the environmental setting, including descriptions of the Project site’s physical conditions, surrounding context, and applicable regulatory



requirements, plans, and policies. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this PEIR's NOP was released for public review on April 29, 2022.

- **Notice of Preparation/Scoping Comments.** Includes public comments received based on this PEIR's NOP and Scoping Meeting.
- **Applicable Regulatory Requirements.** This section describes the existing federal, state, regional, and local plans, programs, and regulations pertinent to the Project for the environmental issue area addressed.
- **Basis for Determining Significance.** In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Yorba Linda adopted local CEQA Guidelines. The City's local CEQA Guidelines are based on the CEQA checklist included in Appendix G of the State CEQA Guidelines and may have been modified to address specific conditions in Yorba Linda.
- **Impact Analysis.** As required by CEQA Guidelines Section 15126.2(a), this PEIR identifies direct, indirect, cumulatively-considerable, short-term, long-term, on-site, and/or off-site impacts of the Project. A summarized "impact statement" is provided in each subsection following the analysis.
- **Cumulative Impact Analysis.** CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed Project. As noted in CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." Cumulatively considerable is defined to mean "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines § 15065.) A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines § 15130(a)(1)). This section analyzes the Project's cumulative impacts.
- **Significance before Mitigation.** This section provides a conclusion of the level of significance before mitigation.
- **Mitigation Measures.** These include the measures proposed to mitigate any potentially significant Project impacts.



- **Level of Significance after Mitigation.** Concludes whether or not the Project’s direct impacts and cumulatively considerable impacts would be reduced to less than significant levels with implementation of mitigation.
- **Section 5.0, Additional Topics Required by CEQA,** includes specific topics that are required by CEQA. These include a summary of the Project’s significant and unavoidable environmental effects, a discussion of the significant environmental effects which cannot be avoided if the Project is implemented, significant irreversible environmental changes, and potential growth-inducing impacts of the proposed Project. Additionally, this section also includes impacts that were determined to be “less than significant” or “no impact,” after mandatory compliance with regulatory requirements, including but limited to City General Plan policies, General Plan EIR mitigation measures, Municipal Code requirements, and other State, regional and local agency regulations.
- **Section 6.0, Project Alternatives,** describes and evaluates alternatives to the Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A total of four alternatives were considered for analysis and the Reduced Density Alternative was analyzed and presented as a reasonable range of alternatives in Section 6.0.
- **Section 7.0, References,** cites all reference sources used in preparing this PEIR and lists the persons who authored or participated in preparing this PEIR, including agencies and persons consulted.
- **Technical Appendices.** CEQA Guidelines Section 15147 states that the “information contained in an EIR shall include summarized information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,” and that the “placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided.” Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this PEIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Yorba Linda Community Development Department, 4845 Casa Loma Avenue, Yorba Linda, California 92886, during the City’s regular business hours or can be requested in electronic form by contacting the City’s Planning Department or are available on the City’s website at <https://www.yorbalindaca.gov/341/Environmental-Documents>. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are listed below in Section 2.5, *Technical Reports*.

2.3 **PURPOSES OF CEQA AND THIS PEIR**

As stated by the CEQA Guidelines Section 15002(a), the basic purposes of CEQA are to:



- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed development activities involving discretionary government approvals (including the approval of private development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why the governmental agency approved the project in the manner the agency chose (if the project involves significant environmental effects).

This PEIR is an informational document that represents the independent judgment of the City of Yorba Linda regarding the physical environmental effects that could result from the construction and operation of the Project. On February 9, 2022, the City Council of City of Yorba Linda (hereafter “City”) adopted the Final 2021-2029 Housing Element.

Pursuant to CEQA Guidelines Section 15168, a Program EIR is “an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either (1) Geographically; (2) a logical parts in the chain of contemplated actions; (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigation in similar ways.” This PEIR will evaluate the broad-scale impacts of the 2021-2029 Housing Element Implementation Programs and may evaluate project-level impacts where more detail is available at this time.

In a PEIR, CEQA allows the general analysis of broad environmental effects of the program with the acknowledgement that subsequent project-specific environmental review may be required for particular aspects or portions of the program at the time of project implementation in accordance with CEQA Guidelines Section 15162. The PEIR would serve as the first-tier environmental analysis and can be incorporated by reference into subsequently prepared environmental documentation to address issues such as cumulative impacts and growth-inducing impacts, allowing the subsequent documents to focus on new or site-specific impacts pursuant to CEQA Guidelines Section 15168(d). In order to assess the potential broad-scale environmental impacts that may result from implementation of the Project, development assumptions have been made at this time and are described in Section 3.0, *Project Description*.

As the first step in the CEQA compliance process, the City of Yorba Linda prepared an NOP pursuant to CEQA Guidelines Section 15082. When the Lead Agency determines that an EIR will clearly be required for the project, an Initial Study is not required (CEQA Guidelines Section 15063). Since it was determined that the Project could have a significant effect on the environment, the Lead Agency



determined that an EIR was required and an Initial Study was not prepared. Public comments were received on the NOP, and the PEIR will address the environmental topics listed below in Section 2.8, *Notice of Preparation and Public Scoping Meeting*, in the PEIR.

Accordingly, and in conformance with CEQA Guidelines Section 15121(a), the purpose of this PEIR is to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, (3) describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects, and (4) disclose to the public the reasons why the City is approving or disapproving the Project involving significant environmental effects.

2.4 REGIONALLY SIGNIFICANT PROJECT

When an EIR is prepared for any project that is considered to be of statewide, regional, or area-wide significance, as defined by CEQA Guidelines Section 15206, then the Draft EIR must be submitted to the State Clearinghouse and the appropriate metropolitan area council of governments for review and comment. A project is considered to be of statewide, regional, or area-wide significance if, among other criteria, it consists of a proposed local general plan, element, or amendment thereof for which an EIR was prepared.

Therefore, the Project is considered a Regionally Significant Project under CEQA Guidelines Section 15206, as it proposes an amendment to the City of Yorba Linda General Plan for which a PEIR is being prepared. Therefore, in compliance with CEQA Guidelines Section 15206, this Draft PEIR will be submitted to the State Clearinghouse (SCH) for distribution to State agencies, the Southern California Association of Governments (SCAG), and Orange County Council of Governments (OCCOG) for review and comment.

2.5 INCORPORATION BY REFERENCE

CEQA Guidelines Section 15150 allows for the incorporation “by reference, [of] all or portions of another document ... [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand.” Documents, analyses, and reports that are incorporated into this PEIR by reference are listed below and are also found in Section 7.0, *References*, of this PEIR. The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of an EIR. Where this PEIR incorporates a document by reference, the document is identified in the body of the PEIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this PEIR. All references cited in this PEIR are available at the website addresses provided in Section 7.0, *References*, and/or at the City of Yorba Linda City Hall, Community Development Department, 4845 Casa Loma Avenue, Yorba Linda, California 92886.

The following documents are incorporated by reference and cited in this PEIR as appropriate:



- City of Yorba Linda 2021-2029 Housing Element, adopted by the City Council on February, 2022. On April 8, 2022, the California Department of Housing and Community Development (HCD) found the adopted Housing Element to be in full compliance with State Housing Element Law (Article 10.6 of the Gov. Code).
- City of Yorba Linda General Plan, adopted by the City Council on October, 2016.
- City of Yorba Linda Zoning Map, updated concurrently as of the time of this writing.
- City of Yorba Linda Municipal Code (various chapters)
- The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (Connect SoCal), adopted on September 3, 2020.

2.6 TECHNICAL REPORTS

As stated above, this PEIR contains detailed technical studies, reports, and supporting documentation summarized herein and bound separately in Technical Appendices in accordance with CEQA Guidelines Section 15147. The Technical Appendices are available for review at the City of Yorba Linda City Hall, Community Development Department, 4845 Casa Loma Avenue, Yorba Linda, California 92886 during the City's regular business hours or can be requested in electronic form by contacting the City's Planning Division or are available on the City's website at <https://www.yorbalindaca.gov/341/Environmental-Documents>. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

- A. Notice of Preparation and Written Comments on the NOP
- B. Air Quality Impact Analysis
- C. Energy Impact Analysis
- D. Greenhouse Gas Emissions Analysis
- E. Noise Impact Analysis
- F. Public Service Correspondence
- G. Traffic Impact Analysis
- H. Vehicle Miles Traveled Analysis

2.7 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (§ 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency that have discretionary approval power over the project." A "Trustee Agency" is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."



Refer to Section 3.0, Project Description, Table 3-3 of this PEIR for an identification of the Responsible and Trustee Agencies and various actions needed by these agencies to implement the Project.

2.8 PUBLIC REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

This PEIR is being distributed to responsible and trustee agencies, other affected agencies, and interested parties. Additionally, in accordance with Public Resources Code Section 21092(b)(3), the PEIR is being provided to all parties who have previously requested copies. The Notice of Completion (NOC) and Notice of Availability (NOA) of the PEIR will be distributed as required by CEQA. During the 45-day public review period, this, PEIR its technical appendices, and all documents incorporated by reference, will be made available for review.

After the 45-day public review period, the City will issue written responses to all environmental issues raised. The Final PEIR (which includes the Draft PEIR, the public comments and responses to the Draft EIR, and findings) will be included as part of the environmental record for consideration by the City Council.

2.9 NOTICE OF PREPARATION AND PUBLIC SCOPING MEETING

The City held a PEIR Scoping Meeting on May 23, 2022 to provide a summary of the Project, explain the CEQA process, and solicit input from the public on the scope of the PEIR and environmental areas of concern. The PEIR Scoping Meeting was attended by approximately 49 residents. Written comments received at the Scoping Meeting are provided in *Technical Appendix A* of this PEIR. During the PEIR Scoping Meeting, comments were received regarding the following environmental topics:

- Fire hazards and development within a Wildfire Urban Interface, including wildfire evacuation and safety for residents and livestock;
- Emergency vehicle access;
- Traffic impacts where roadways are not fully improved or areas of one-way traffic;
- Development within fault zones, landslide areas, and hillside development;
- Stormwater drainage issues near hillside areas;
- Traffic near Linda Vista Elementary School and associated pedestrian safety and off-site parking; lack of sidewalks, cross-walks, and street lights in the area;
- Equestrian and bicycle safety due to increased traffic;
- Potential air quality and noise impacts;
- Lack of adequate notice of the Project;



- Freeway right-of-way weed abatement and fuel modification;
- Biological resources impacts, including hawks;
- All impact categories should be considered;
- Construction management plan to address: vectors, staging of construction equipment, noise, air quality, and weed abatement.

Table 2-2, *Summary of NOP Comments*, summarizes the substantive comments received regarding this PEIR’s NOP. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public during the NOP review period. The table is not intended to list every comment received by the City during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in response to the NOP and at the Scoping Meeting are addressed in this PEIR. The NOP and all comment letters received by the City in response to the NOP are included in *Technical Appendix A* of this PEIR.

Table 2-2 Summary of NOP Comments

Agency/ Organization/ Individual	Date	Comments	Location in this Draft PEIR Where Comment is Addressed
State Agencies			
Native American Heritage Commission (NAHC)	May 9, 2022	<ul style="list-style-type: none"> • Request to provide consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project, in compliance with AB 52 and SB 18. 	Section 4.10, <i>Tribal Cultural Resources</i>
Santa Ana Office of California Highway Patrol (CHP)	May 23, 2022	<ul style="list-style-type: none"> • Expressed concern on the potential impact on departmental operations, with emphasis on increased traffic and changes in traffic congestion patterns during the construction stage. • Increase traffic congestion would necessitate the need for additional traffic control measures to mitigate the potential increase in traffic collisions. 	Section 4.9, <i>Transportation</i>
California Department of Transportation (Caltrans)	May 25, 2022	<ul style="list-style-type: none"> • Request that new development from the Project to provide a Vehicle Miles Traveled (VMT) study • Request that the PEIR must include traffic study to address potential impacts to the State Highway System • Considered a discussion on equity 	Section 4.9, <i>Transportation</i>



Agency/ Organization/ Individual	Date	Comments	Location in this Draft PEIR Where Comment is Addressed
		<ul style="list-style-type: none"> • Provide discussion of multimodal transportation mobility options of the current transit services and regional rail services and look for opportunities and connectivity to safe and convenient access • consider discussing the potential impacts to bicycle and pedestrian facilities 	
California Department of Fish and Wildlife (CDFW)	May 26, 2022	<ul style="list-style-type: none"> • Recommend providing a complete assessment and impact analysis of the native/naturalized vegetation communities, flora, and fauna within and adjacent to the Project area, with emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species • Recommend providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. • Recommend that measures be taken to avoid Project impacts to nesting birds • include information as to how the Project or adjacent land may be affected by fuel modification requirements 	Section 4.2, <i>Biological Resources</i>
Southern California Association of Governments (SCAG)	May 26, 2022	<ul style="list-style-type: none"> • Request that the City use a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency, or non-applicability of the goals and supportive analysis in a table format. • Provided information regarding jurisdictional level growth estimates for years 2016 and 2045. • Request that the City review the Final Program Environmental Impact Report for Connect SoCal guidance, as appropriate, which includes a list of project-level performance standards-based mitigation measures which may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. 	Section 4.5, <i>Land Use and Planning</i>
Organizations			



Agency/ Organization/ Individual	Date	Comments	Location in this Draft PEIR Where Comment is Addressed
Yorba Linda Country Riders	May 17, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity sites S4-201 and S4-060 in regards to traffic 	Section 4.9, <i>Transportation</i>
Hills for Everyone	May 25. 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to biological resources, land use and planning, hydrology and water quality, and wildfire. 	Section 4.2, <i>Biological Resources</i> ; Section 4.5, <i>Land Use and Planning</i> ; Section 4.11, <i>Wildfire & Section 5.0, Other CEQA Considerations</i>
Individuals			
Paulina Rodriguez	May 9, 11, 12, 24, and 25 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to wildfire, landslide, earthquake, biological resources, hydrology and water quality, flooding, density, traffic, access to the Chino Hills State Park and Quarter Horse Staging area, and public safety 	Section 4.2, <i>Biological Resources</i> , Section 4.7, <i>Public Safety</i> , Section 4.11, <i>Wildfire & Section 5.0, Other CEQA Considerations</i>
David Debruhl	May 11, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to aesthetics to traffic 	Section 4.9, <i>Transportation & Section 5.0, Other CEQA Considerations</i>
Margaret Thurston	May 12, 2022	<ul style="list-style-type: none"> Questioned about Measure B and the Adopted Housing Element 	N/A
Kimberly Racette	May 13, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to traffic, emergency access during fires 	Section 4.9, <i>Transportation & Section 4.11, Wildfire</i>
Steve Davey	May 17, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity sites S4-201 and S4-060 in regards to traffic, air quality, and noise 	Section 4.1, <i>Air Quality</i> , Section 4.6, <i>Noise & Section 4.9, Transportation</i>
Robert Gaudette	May 18, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity sites S4-201 and S4-060 in regards to traffic and aesthetics 	Section 4.9, <i>Transportation & Section 5.0, Other CEQA Considerations</i>
Gary Poage	May 23, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to surface runoff 	Section 5.0, <i>Other CEQA Considerations</i>
Daniel Garibay	May 24, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S4-053 in regards to density, traffic, 	Section 4.6, <i>Noise & Section 4.9, Transportation</i>



Agency/ Organization/ Individual	Date	Comments	Location in this Draft PEIR Where Comment is Addressed
		noise, pedestrian safety, privacy concern, and parking	
Dave Nichols	May 24, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S4-053 in regards to air quality, traffic, parking, hazards and geology, soils, population, wildfire, and land use 	Section 4.1, <i>Air Quality</i> , 4.4, <i>Land Use and Planning</i> , Section 4.9, <i>Transportation</i> , Section 4.11, <i>Wildfire</i> & Section 5.0, <i>Other CEQA Considerations</i>
Steven and Linda Reyes	May 24, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S4-053, S4-201 and S4-060 in regards to traffic, pollution, children safety, and crime 	Section 4.1, <i>Air Quality</i> , Section 4.7, <i>Public Safety</i> , & Section 4.9, <i>Transportation</i>
Eugene Hernandez	May 25, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S5-008 in regards to geological and drainage issues 	Section 5.0, <i>Other CEQA Considerations</i>
Stephanie Nichols	May 25, 2022 & May 29, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity site S4-053 in regards to traffic, parking, noise, children safety, and geology 	Section 4.6, <i>Noise</i> , Section 4.7, <i>Public Safety</i> , Section 4.9, <i>Transportation</i> & Section 5.0, <i>Other CEQA Considerations</i>
Luanne and Michael Sinclair	May 27, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity sites S4-053, S4-201 and S4-060 in regards to children safety, emergency access, traffic, equestrian safety, noise, and air quality 	Section 4.1, <i>Air Quality</i> , Section 4.6, <i>Noise</i> , Section 4.7, <i>Public Safety</i> , Section 4.9, <i>Transportation</i> & Section 4.11, <i>Wildfire</i>
Arron and Leslie Poling	May 30, 2022	<ul style="list-style-type: none"> Expressed concern on housing opportunity sites S4-201 and S4-060 in regards to aesthetics, equestrian culture, traffic, noise, utilities/service systems, and energy 	Section 4.3, <i>Energy</i> , Section 4.6, <i>Noise</i> , Section 4.9, <i>Transportation</i> & Section 5.0, <i>Other CEQA Considerations</i>



2.10 MITIGATION MONITORING AND REPORTING PROGRAM

In compliance with Public Resources Code Section 21081.6 a Mitigation Monitoring and Reporting Program (MMRP) will be prepared for this PEIR. Per CEQA Section 15091(d),

When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

An MMRP would be adopted by the City at the time of Project approval.

2.11 POTENTIAL IMPACTS OF THE PROJECT DISCUSSED IN THE PEIR

In compliance with the procedural requirements of CEQA, the City of Yorba Linda prepared a Notice of Preparation (*Technical Appendix A*) to determine the scope of environmental analysis for this PEIR. Public comment on the scope of this PEIR consisted of written comments received by the City of Yorba Linda in response to the NOP; the City received several comments from members of the public at the PEIR scoping meeting held on May 23, 2022, which are summarized in Section 2.9, above.

Taking all known information and public comments into consideration, eleven (11) primary environmental subject areas are evaluated in this Section 4.0, as listed below, and an additional nine (9) primary environmental subject areas are evaluated in Section 5.0. Each subsection of this Section 4.0 evaluates several specific subject matters related to the general topic of the subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein. Environmental issues and their corresponding sections are:

- | | |
|------------------------------|--------------------------------|
| 4.1 Air Quality | 4.7 Public Services |
| 4.2 Biological Resources | 4.8 Recreation |
| 4.3 Energy | 4.9 Transportation |
| 4.4 Greenhouse Gas Emissions | 4.10 Tribal Cultural Resources |
| 4.5 Land Use and Planning | 4.11 Wildfire |
| 4.6 Noise | |

2.12 EFFECTS FOUND NOT TO BE SIGNIFICANT

In compliance with CEQA Guidelines Section 15128, an EIR is required to contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.



Based on review of the Project and supporting technical studies, it was determined that the following environmental topics, have been determined to pose no potentially significant impacts following mandatory compliance with regulatory requirements:

1. Aesthetics
2. Agriculture and Forestry Resources
3. Cultural Resources
4. Geology and Soils
5. Hazards and Hazardous Materials
6. Hydrology and Water Quality
7. Mineral Resources
8. Population and Housing
9. Utilities and Service Systems

Section 5.0 of this PEIR includes a discussion as to why these environmental topics have been determined to be not significant.



3.0 PROJECT DESCRIPTION

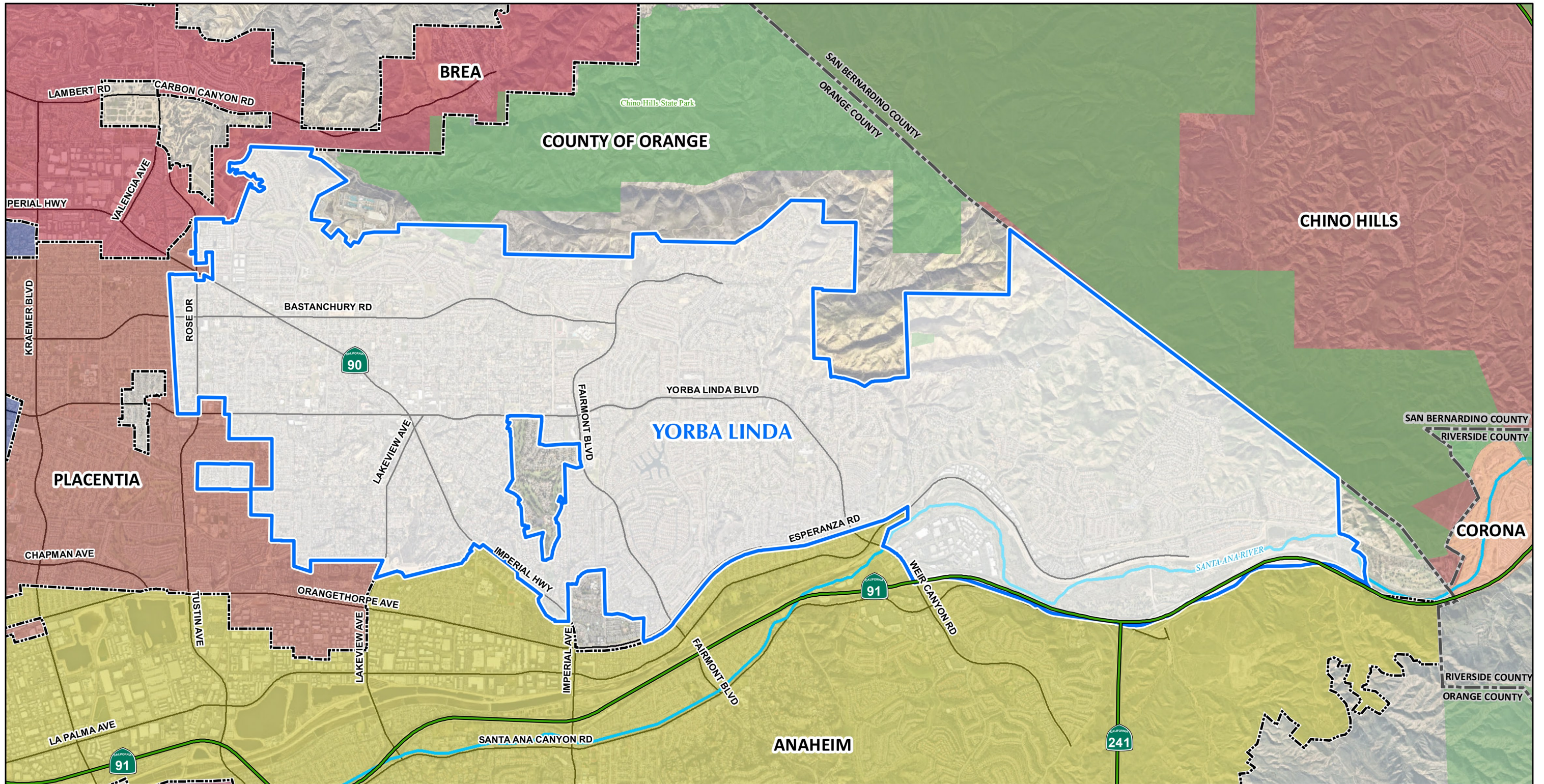
This section provides all of the information required of a Program Environmental Impact Report (PEIR) Project Description pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15124, including a description of the Project’s precise location and boundaries; a statement of the Project’s objectives; a general description of the Project’s technical, economic, and environmental characteristics; and a description of the intended uses of this PEIR, including a list of the government agencies that are expected to use this PEIR in their decision-making processes; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

3.1 PROJECT LOCATION

The City of Yorba Linda 2021-2029 Housing Element Implementation Programs (Project) encompasses the entire City of Yorba Linda, which is located in northeast portion of Orange County, California. The City is located approximately 38 miles southeast of City of Los Angeles and 12 miles north of City of Santa Ana. It is bounded by the cities of Corona to the east, Brea to the north, Placentia to the west and southwest, and Anaheim to the south. Chino Hills State Park is located to the north. Regional access to the City is provided by primarily via State Routes 90 (SR-90), which runs north-south through the center of the City, and 91 (SR-91), which runs east-west along the southern boundary of the City. Local access is provided by various arterial highways that intersect the City, including Yorba Linda Boulevard and Bastanchury Road. See Figure 3-1, *Regional and Vicinity Map*, and Figure 3-2, *Aerial Photograph*.

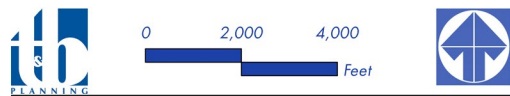
3.2 ENVIRONMENTAL SETTING

The environmental setting, including descriptions of the Project site’s physical conditions, surrounding context, and applicable plans and policies applicable to the environmental issue area are provided in each environmental topical area analyzed in Section 4.0, *Environmental Analysis*, of this PEIR. Pursuant to CEQA Guidelines Section 15125, the baseline environmental conditions for purposes of establishing the setting of an EIR is normally the environment as it existed at the time the EIR’s Notice of Preparation (NOP) was circulated for public review. Therefore, the existing setting is defined as the condition of the Project site and surrounding area at the approximate date this PEIR’s NOP was released for public review on April 29, 2022.

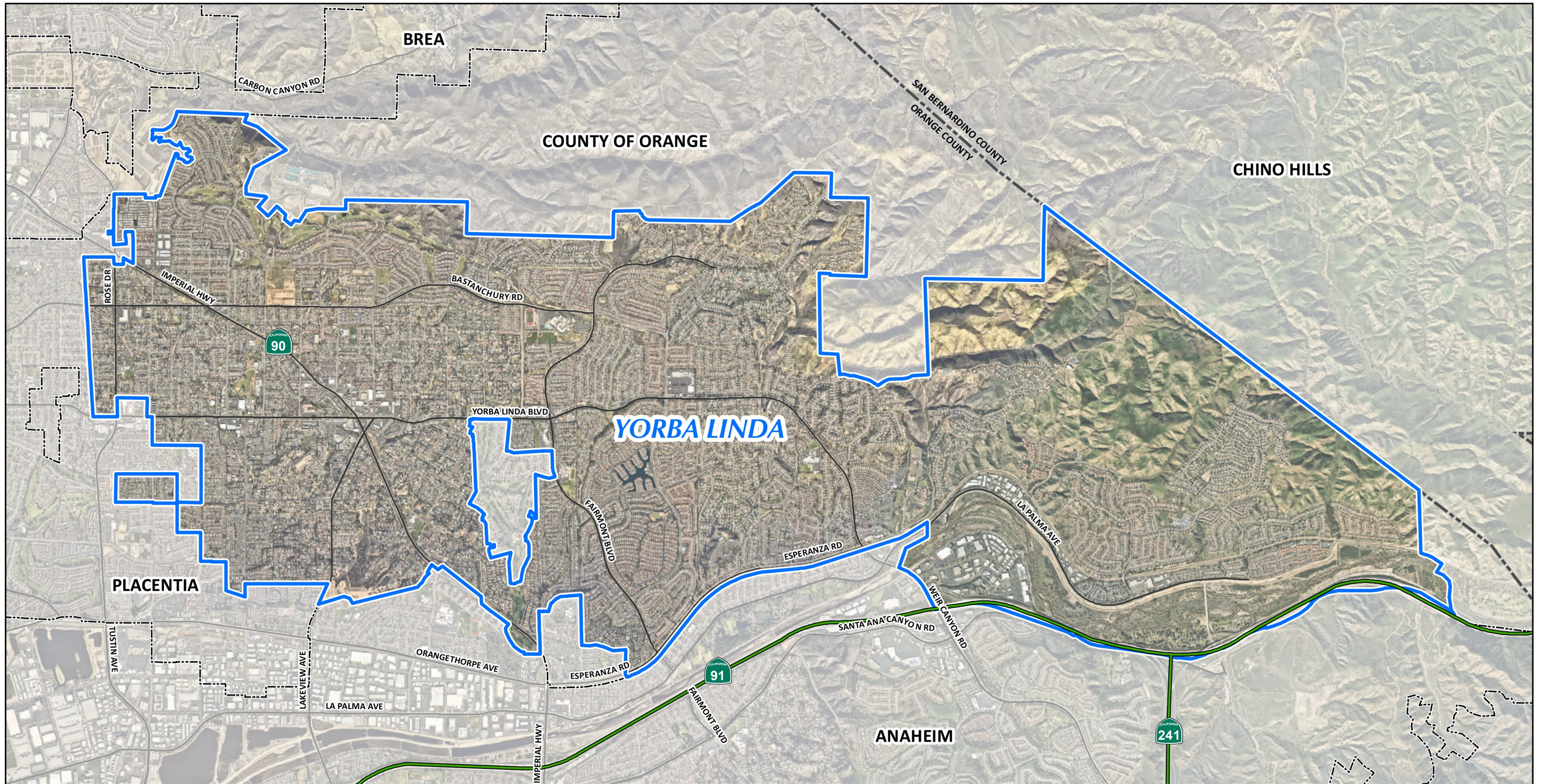


Source(s): ESRI, OC Landbase (2022), SB County (2022), RCTLMA (2022), Nearmap (2022)

Figure 3-1

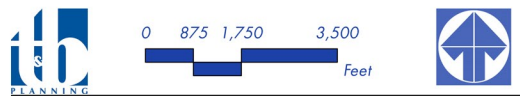


REGIONAL AND VICINITY MAP



Source(s): ESRI, OC Landbase (2022), SB County (2022) Nearmap (2022)

Figure 3-2



AERIAL PHOTOGRAPH



3.2.2 EXISTING LAND USES

Incorporated in 1967, the City of Yorba Linda is predominately a suburban, low-density community. The City consists predominately of residential and open space uses. Residential uses comprise over 46 percent of the total acreage in the City, and open space and recreation uses comprise over 27 percent of the total acreage in the City. Open space is predominately located along the northern boundary of the City. Less than six percent of the land in the City is in public/institutional, commercial, office and industrial uses. Commercial corridors are focused along Imperial Highway, Yorba Linda Boulevard, and Savi Ranch. The majority of industrial uses are located in the Savi Ranch area in the southeastern portion of the City. Additionally, approximately 2,586 acres of vacant land is interspersed throughout the City (City of Yorba Linda, 2016b).

3.2.3 GEOLOGICAL SETTING

The City is located within the central, northernmost portion of the Santa Ana Mountains, which are part of the Peninsular Ranges Geomorphic Province. It is located in Santa Ana Canyon on a low rolling plain formed by streams that drain the Puente Hills. The Puente Hills extend beyond the City to the north and east while the Santa Ana River forms a natural southern boundary. Yorba Linda can be divided into three terrain provinces: the eroded plain, the Santa Ana River floodplain, and the Puente Hills.

The eroded plain area covers the majority of the City, extending from the edge of the Puente Hills to the Santa Ana River, and is characterized by low rounded ridges and knolls, separated by generally northeast-and southeast trending gullies and ravines. The Santa Ana floodplain is the relatively flat area between the Santa Ana Mountains and the floodplain to the north and is covered by relatively recent deposits of course-grained sand and gravel. The Puente Hills area is characterized by semi-to-well-rounded hills with rather deeply gashed drainage channels. The Puente Hills are mostly underlain by Cenozoic sedimentary bedrock formations consisting of sand stone, silt-stone, and shale. The eastern Puente Hills are made up of marine sedimentary rock units overlain in some areas by terrestrial sediments. Reviews of geologic maps indicate that sediments from the Late Miocene Yorba and Sycamore Canyon Members of the Puente Formation, Quaternary landslides, and older and younger Quaternary Alluvium underlie the eastern Puente Hills. (City of Yorba Linda, 2016b)

3.3 DEMOGRAPHIC PROFILE

As of 2020, the City had a population of 68,650. From 2010, the City has experienced a 7 percent increase in population. (City of Yorba Linda, 2022, pp. II-1) The Southern California Association of Governments (SCAG) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) projects a 4.1 percent increase from 2016 to 2045 in population in the City with a total population of 70,600 in 2045 (SCAG, 2020b).

While Yorba Linda is primarily a residential community, SCAG indicated that the City has a growing business community with an estimated 17,384 jobs in 2016, and projected 18,762 jobs by 2030. The



US Census documents that 93 percent of persons employed within the City commute in from outside the City limits, indicative of the shortage of local affordable housing opportunities for the community's workforce. (City of Yorba Linda, 2022, pp. II-4)

Moreover, the California Department of Finance estimates 23,696 households in the City in 2021. The City's average household size is 2.94, which is a decrease from the year 2000 and is higher than the County's household size of 2.9. (DOF, 2021) This decrease in household size reflects the decline in family households with children, and increase in senior citizens over the past two decades. (City of Yorba Linda, 2022, pp. II-6)

3.4 PROJECT OBJECTIVES

The fundamental purpose and goal of the Project is to ensure compliance with State housing law and implementation of the City of Yorba Linda 2021-2029 Housing Element. The project objectives for the proposed Project are listed below:

1. Implementation of the 2021-2029 Housing Element Implementation Programs to provide adequate housing sites and assist in the provision of affordable housing.
2. Allow the City of Yorba Linda to comply with State housing laws including compliance with the Regional Housing Needs Assessment (RHNA) targets.
3. Remove governmental constraints to housing investment.
4. Promote fair and equal housing opportunities.

3.5 PROJECT CHARACTERISTICS

3.5.1 PROJECT BACKGROUND

State law recognizes the vital role local governments play in the availability, adequacy and affordability of housing. Every jurisdiction in California is required to adopt a long-range General Plan to guide its physical development; the Housing Element is one of the seven mandated elements of the General Plan. Housing Element law mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain housing production. Housing element statutes also require the State Department of Housing and Community Development (HCD) to review local housing elements for compliance with State law and to report their findings to the local government.

The City adopted the 2021–2029 Housing Element (Housing Element; Project) on February 9, 2022. On April 8, 2022, HCD approved the City's Housing Element and found it to be in full compliance



with State Housing Element Law (Government Code Article 10.6). Following HCD approval, the City is required to ensure the continued and effective implementation of the Housing Element Programs.

A. Regional Housing Needs Allocation

California’s Housing Element law requires that each city and county develop local housing programs to meet its “fair share” of existing and future housing needs for all income groups. This “fair share” allocation concept seeks to ensure that each jurisdiction accepts responsibility for the housing needs of not only its resident population, but also for the jurisdiction’s projected share of regional housing growth across all income categories. SCAG is responsible for developing and assigning these regional needs, or “RHNA”, to Southern California jurisdictions. The RHNA represents the minimum number of housing units each community is required to provide (adequate sites) through zoning and is one of the primary threshold criteria necessary to achieve State approval of the Housing Element. As the RHNA represents a planning target for new residential growth and not a building quota, so long as a jurisdiction provides sufficient sites and does not impose constraints to development, it is not penalized for falling short of its RHNA target.

On March 4, 2021, SCAG’s Regional Council adopted the final RHNA allocation, resulting in a final RHNA of 2,415 housing units for the City of Yorba Linda broken down into the following income categories as shown in Table 3-1, *City of Yorba Linda 2021-2029 RHNA Allocation*.

Table 3-1 City of Yorba Linda 2021-2029 RHNA Allocation

Income Level	Dwelling Units	Percent
Very Low Income (0-50% of AMI)*	765	32%
Very Low Income (51-80% of AMI)	451	19%
Moderate Income (81-120% of AMI)	457	19%
Above Moderate (>120% of AMI)	742	30%
Total	2,415	100%

Note: Local jurisdictions must consider Extremely Low income households as part of the Very Low income allocation. The Yorba Linda Housing Element assumes 50% of City’s Very Low income housing needs are for Extremely Low income households (382 units) earning less than 30% Area Median Income (AMI) varies by household size.

Source: (City of Yorba Linda, 2022, Table II-28)

3.5.2 2021-2029 HOUSING ELEMENT

To fulfill its share of regional housing needs, the Project requires a General Plan Amendment and Amendments to the Zoning Code and Zoning Map to implement the Project. The General Plan Amendment would revise the Land Use Element to update the text and maps consistent with the proposed zoning. Amendments to the Zoning Code include modification to the text and maps to rezone 27 opportunity sites, including applicable planned development zones, and adoption of housing overlay zones (Affordable Housing Overlay, a Congregational Land Overlay, and a Mixed-Use Housing Overlay) consistent with the Housing Element. The Project is intended to cover all implementation programs outlined in the Housing Element Section V (C), Housing Programs 1–23. Future housing



development facilitated by the Project would be subject to discretionary permits and would occur as market conditions allow or at the discretion of the individual property owners.

A. General Plan Amendment

The General Plan Amendments consist of amending the Land Use Element of the General Plan to increase the total residential capacity in the Community Core/Downtown Historical District Area Plan by 181 dwelling units to account for housing opportunity sites S3-024, S3-074, S3-082, and S4-075; in the West Bastanchury Area Plan by 228 dwelling units to account for Site S3-203; amendments to General Plan land use designations as shown in Table 3-2, *Housing Opportunity Sites for Rezoning*; and creation of overlay descriptions as land use categories and how each interact with the underlying zones.

B. Zoning Amendment

Amendments to the Zoning Code consist of amending the Yorba Linda Hills Planned Development to modify Area E from Church to RM standards and allowing 230 dwelling units; amending the West Bastanchury Planned Development to modify sites from RM zone and allowing 228 dwelling units; increasing height limit in RM-20 to 40 feet and three stories; zoning designation changes as shown in Table 3-2; and creation of a new Chapter 18.11 or Chapter 18.17 with the three overlays (Affordable Housing Overlay, a Congregational Land Overlay, and a Mixed-Use Housing Overlay) with all the development standards consistent with the Housing Element.

C. Housing Opportunity Sites

To specifically address the need for housing for lower income households, Housing Opportunity Sites recommended for re-zoning were selected based on several factors: existing land use and feasibility for redevelopment within the planning period; property owner interest; neighborhood compatibility and community context; and an overriding goal to disperse affordable housing opportunities throughout the community. Table 3-2, *Housing Opportunity Sites for Rezoning*, shows the sites inventory through rezoning for this RHNA cycle. Through rezoning, the City would provide the maximum capacity for meeting the City's RHNA obligation. Figure 3-3, *Housing Opportunity Sites*, depicts the locations of each housing opportunity site within the City. Future housing development facilitated by the Project would result in a total net potential of 2,410 dwelling units.

Assuming an average household size of 2.94 residents per unit, the additional dwelling units would result in the population growth of approximately 7,085 residents. This is a conservative assumption because a portion of the City's RHNA allocation was due to overcrowding. Therefore, a portion of the RHNA obligation was derived to meet an existing housing demand rather than projected growth within the City. The State defines an overcrowded housing unit as one occupied by more than 1.01 persons per room (excluding kitchens, porches, and hallways). A unit with more than 1.51 occupants per room is considered severely overcrowded. The incidence of overcrowded housing is a general measure of whether there is an available supply of adequately sized housing units. As shown in Table II-27 of the 2021-2029 Housing Element, the City's renters experienced more overcrowding conditions than



owners (7% for renters versus 1% for owners). Furthermore, as indicated in Section C of the Housing Element, a vacancy rate of five percent for rental housing and two percent for ownership housing is generally considered healthy and suggests that there is a balance between the supply and demand of housing. Although the City's residential vacancy rate for rental units (five percent) indicates a healthy market, the vacancy rate for ownership units was 0.4 percent, highlighting a pent-up demand for ownership housing.

By using a conservative population growth factor, the environmental impacts analyzed herein are also conservative.

D. Affordable Housing Overlay

As part of the Housing Element sites inventory, the City has identified six sites for rezoning to RM-20, and one to maintain its Planned Development zoning, and designation with an Affordable Housing Overlay (AHO). The overlay would layer on top of the base zoning regulations, leaving in place the option to develop under the base zoning, but providing the opportunity to develop to a greater intensity, and in the case of the commercial and industrial sites, the opportunity to develop with a higher value residential use, without a General Plan amendment or zone change.

The AHO would provide the following incentives in exchange for providing 20% affordable units (10% very low and 10% low income) on these sites:

- Ministerial review
- Increased densities
- Increased height limits
- Increased floor area ratios
- Reduced project-specific open space standards

As an additional incentive, developers can access state density bonus law, including by right alternative parking standards, in addition to using the densities allowed in the Overlay. In order to encourage lot consolidation for sites with multiple parcels, the City will structure the Overlay with tiered incentives for larger lot sizes. (City of Yorba Linda, 2022, pp. IV-9)



Table 3-2 Housing Opportunity Sites for Rezoning

Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Total Net Unit Potential	Realistic Unit Potential
Affordable Housing Overlay (AHO) Sites – up to 35 units/acre								
S1-200	SEC Rose Dr/Blake Rd	5.94	RE (1.8 du/ac)	RM-20 with AHO	RML	RH	208	178
S3-207	5300-5392 Richfield Rd	9.7	RU (4.0 du/ac)	RM-20 with AHO	RM	RH	340	291
S3-074	Yorba Linda Preschool 18132 Yorba Linda Blvd	0.42	CG	RM-20 with AHO	AP	AP	15	13
S3-082	4791 and 4811 Eureka Ave	1.75	CG	RM-20 with AHO	AP	AP	61	53
S4-075	4742 Plumosa Drive	1.62	CG	RM-20 with AHO	AP	AP	57	48
S6-015	Prior John Force Racing 22722 Old Canal Road	2.56	PD/Industrial R & D	PD with AHO	IM	IM	89	77
S6-020	Extended Stay America 22711 Oak Crest Circle	10.35	PD/Office-Commercial	RM-20 with AHO	IM	IM	143	122
							<i>Realistic Unit Potential on AHO Sites:</i>	782
							<i>Total Net Unit Potential on AHO Sites:</i>	913
Congregational Land Overlay (CLO) Sites – up to 35 units/acre								
S2-008	Friendship Baptist Church 17151 Bastanchury Rd	4.92 (2.01)	RE (1.8 du/ac)	RE with CLO	RML	RML	60	60
S3-012	Richfield Community Church 5320 Richfield Rd	9.48 (3.7)	RU (4.0 du/ac)	RU with CLO	RM	RM	55	55
S2-013	Messiah Lutheran Church 486 Liverpool St	6.2 (2.03)	RU (4.0 du/ac)	RU with CLO	RMH	RMH	40	40
S3-024	Friends Church Overflow Parking	17.45 (1.61)	RE (1.8 du/ac)	RE with CLO	AP	AP	48	48
S4-204A	Chabad Center 19045 Yorba Linda Blvd	1.85 (0.93)	RE (1.8 du/ac)	RE with CLO	RML	RML	17	17
S3-033	Islamic Center of Yorba Linda 4382 Eureka Ave	3.88 (1.58)	RS (3.0 du/ac)	RS with CLO	RM	RM	30	30
S3-210	Shinnyo-En USA 18021-18111 Bastanchury Rd	9.23 (4.09)	PD/RA Standards	PD-26 with CLO	AP	AP	105	105
							<i>Realistic Unit Potential on CLO Sites:</i>	355
							<i>Total Net Unit Potential on CLO Sites:</i>	355



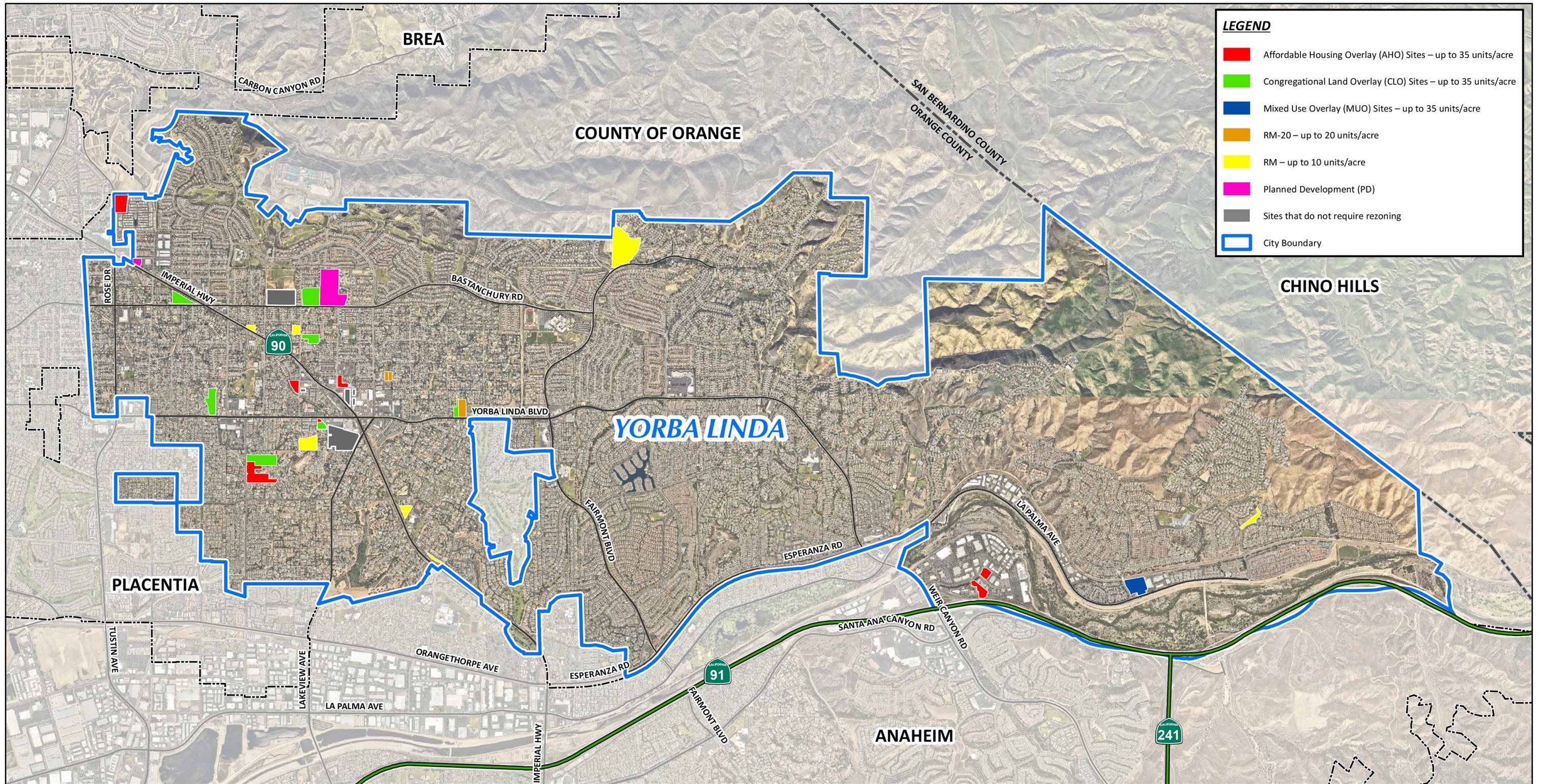
Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Total Net Unit Potential	Realistic Unit Potential
Mixed Use Overlay (MUO) Sites – up to 35 units/acre								
S1-021	Vacant Parcel (W of 16951 Imperial Hwy) APN 322-121-07	1.76	CG-(I)	CG-(I) with MUO	C	C	62	53
S7-001	Bryant Ranch Shopping Center 23611-23801 La Palma Ave	9.15	CG	CG with MUO	C	C	320	272
							<i>Realistic Unit Potential on MUO Sites:</i>	325
							<i>Total Net Unit Potential on MUO Sites:</i>	382
RM-20 – up to 20 units/acre								
S4-200	18597-18602 Altrudy Lane	2.0	RS (3.0 du/ac)	RM-20	RM	RH	40	40
S4-204B	19081-19111 Yorba Linda Blvd	3.90	RE (1.8 du/ac)	RM-20	RML	RH	78	66
							<i>Realistic Unit Potential on RM-20 Sites:</i>	106
							<i>Total Net Unit Potential on RM-20 Sites:</i>	118
RM – up to 10 units/acre								
S3-034	4341 Eureka Avenue	2.19	RS (3.0 du/ac)	RM	RM	RH	22	19
S3-205A	5225-5227 Highland Ave	7.08	RE (1.8 du/ac)	RM	RML	RH	71	60
S3-211	17651 Imperial Highway	2.32	RS (3.0 du/ac)	RM	RM	RH	23	20
S4-053	SWC Kellogg Dr/ Grandview Ave	0.98	RE (1.8 du/ac)	RM	RML	RH	10	9
S4-060	5541 South Ohio St	0.96	RE (1.8 du/ac)	RM	RML	RH	10	9
S4-201	5531 South Ohio St	1.82	RE (1.8 du/ac)	RM	RML	RH	18	15
S5-008	Fairmont Blvd	23.01	PD/Church	Amend Yorba Linda Hills PD	RM/OS	RH/OS	230	196
S7-005	NWC Camino de Bryant/ Meadowland	3.06	RU (4.0 du/ac)	RM	RH	RH	30	10
							<i>Realistic Unit Potential on RM Sites:</i>	338
							<i>Total Net Unit Potential on RM Sites:</i>	414
Planned Development (PD)								



Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Total Net Unit Potential	Realistic Unit Potential
S3-203	18101-19251 Bastanchury	22.83	PD/RA Standards	Amend West Bastanchury PD	AP	AP	228	194
<i>Realistic Unit Potential on PD Sites:</i>								194
<i>Total Net Unit Potential on PD Sites:</i>								228
Realistic Potential on all Opportunity Sites:								2,100
Total Net Unit Potential on all Opportunity Sites:								2,410¹

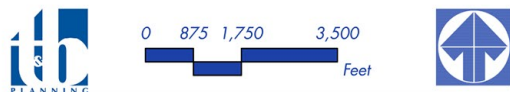
¹ There are also additional dwelling units from residential projects with development entitlements and sites with zoning in place that will contribute to the City’s RHNA requirement. These units have been previously analyzed in other environmental documents and do not require rezoning; thus, they are not included in this Project. With the inclusion of the additional units, the City will adequately meet the RHNA requirement of 2,415 units.

Source: (City of Yorba Linda, 2022, Table IV-2)



Source(s): ESRI, Nearmap (2022), OC Landbase (2022), SB County (2022), City of Yorba Linda (2022)

Figure 3-3



HOUSING OPPORTUNITY SITES

SCH No. 2022040574



E. Congregational Land Overlay

The City has identified seven religious congregations as most viable for development within the planning period. The City's urban design consultant determined the potential development area on each of the City's religious congregations based on development of half the parking area (or the entire parking area for congregations smaller than 2.5 acres), along with any available vacant land. Development potential was calculated using a base density of 30 units/acre (though up to 35 units/acre will be permitted), with densities and building heights tapering down based on the adjacency of single-family zoned parcels. Key features of the Congregational Land Overlay (CLO) will include:

- Allowing congregations to decrease on-site parking and remove nonessential buildings in order to accommodate housing
- Requiring a minimum percentage and level of deed-restricted affordable housing
- Ensuring that conversion of auxiliary congregational areas such as parking lots to housing will not require a discretionary approval process to amend the religious institution's existing Conditional Use Permit
- Allowing congregations, in certain circumstances, to transfer their development rights under the CLO to adjacent properties which have a lower density zoning. (City of Yorba Linda, 2022, pp. IV-11)

F. Mixed-Use Housing Overlay

The Mixed-Use Housing Overlay (MUO) is designed to apply to two commercial properties where housing could benefit the existing or future retail use. It is currently being proposed for the nine-acre Bryant Ranch Shopping Center that has been struggling to maintain tenants and contains large areas of underutilized parking. The concept is to allow for a predominately residential development on this site, with a requirement to integrate a minimum of 10,000 square feet of neighborhood-serving commercial uses to service nearby neighborhoods. The MUO is also being proposed for a 1.75 acre vacant commercially zoned property on Imperial Highway. The overlay will allow development of at least three stories in height and 35 dwelling units per acre, and similar to the AHO, will require at least 20 percent affordable units. The commercial floor area ratio (FAR) will be separately regulated from residential density, so that the permitted residential density is not impacted by the inclusion of commercial square footage. In terms of the likelihood of predominately commercial development occurring on these two Mixed Use Sites, the MUO will also require at least 50 percent of the square footage be dedicated to residential use. (City of Yorba Linda, 2022, pp. IV-13)

G. Housing Programs

The City's Housing Element programs encompass existing programs; programs revised in response to the review of program accomplishments; and several new programs added to address unmet housing needs. Housing programs define the specific actions the City will undertake to achieve the goals and



policies of the Housing Element. The City will continue timely and effective implementation of all programs including:

- **Program 1 - Residential Rehabilitation Program.** The City’s program assists lower income home owners, including senior and disabled households, with funding for necessary materials and supplies for home repairs and improvements.
- **Program 2 - Housing Community Preservation and Abatement.** The City’s Community Preservation program is designed to bring substandard housing units into compliance with City codes.
- **Program 3 - Multifamily Acquisition and Improvement.** A key program in Yorba Linda’s overall strategy to provide affordable housing to lower income households has been through the acquisition and rehabilitation of aging and/or deteriorating apartment complexes.
- **Program 4 - Section 8 Rental Assistance.** The Section 8 rental assistance program extends rental subsidies to extremely low and very low income households, including families, seniors and the disabled.
- **Program 5 - Affordable Housing Development Assistance.** The City can play an important role in facilitating the development of quality, affordable and mixed-income housing through the provision of regulatory incentives and direct financial assistance.
- **Program 6 - Mortgage Assistance Program.** The City has re-initiated the Mortgage Assistance Program (MAP) to assist low and moderate-income first-time homebuyers (earning up to 120% AMI) through the provision of “silent second” loans.
- **Program 7 - Sustainability and Green Building.** Green buildings are structures that are designed, renovated, re-used or operated in a manner that enhances resource efficiency and sustainability.
- **Program 8 - Housing Opportunity Sites & Rezone Program.** This program commits the City to rezoning to accommodate its regional housing needs allocation (RHNA), including all by-right provisions and a detailed account of the City’s timeline for obtaining voter support for the rezone.
- **Program 8a – Lot Consolidation Program.** Within one year of Housing Element adoption, the City will develop a Lot Consolidation Ordinance to include specific incentives such as flexible development standards, reduced fees, and streamlined permit processing through administrative staff review.
- **Program 9 - Affordable Housing Overlay.** Details are discussed in Section 3.5.2D, above.



- **Program 10 - Commercial Mixed-Use Overlay.** Details are discussed in Section 3.5.2F, above.
- **Program 11 - Congregational Land Overlay.** Details are discussed in Section 3.5.2D, above.
- **Program 12 - Promote Accessory Dwelling Units.** This program commits the City to waiving ADU plan check and permit fees, providing pre-approved ADU construction plans, and other promotional actions.
- **Program 13 - Annexation of Areas in Sphere of Influence.** Future, lower density housing growth can be accommodated through annexation of undeveloped land within Yorba Linda's northern Sphere of Influence.
- **Program 14 - Measure B.** The City will evaluate various options to mitigate the constraints of Measure B by providing City Council with explicit authority to rezone to higher densities and approve affordable housing projects and comply with all requirements in State Housing Element law without further ballot initiative.
- **Program 15 - Multi-family Development Standards and Processing Procedures.** The City established development standards for its R-M-20 and R-M-30 multi-family zones in consultation with an urban design professional to ensure their cumulative impact did not constrain the ability to achieve maximum zoned densities.
- **Program 16 - Affordable Housing Density Bonus.** Zoning Code Chapter 18.19 sets forth the City's density bonus incentives consistent with State law (Government Code Section 65915).
- **Program 17 - Administrative Adjustment Process.** The Administrative Adjustment Process provides flexibility in residential development standards, improves feasibility and reduces development costs.
- **Program 18 - Zoning Text Amendments for Special Needs Housing.** The City will amend the Yorba Linda's Zoning Code to better facilitate the provision of a variety of housing types.
- **Program 19 - SB 35 Streamlining.** The City will create an SB 35 checklist and written procedures for processing SB 35 applications.
- **Program 20 - Fair Housing/Affirmatively Furthering Fair Housing.** The new Affirmatively Furthering Fair Housing (AFFH) component of the Housing Element connects these fair housing issues with programs in the Housing Element, as well as additional meaningful actions that the City will undertake to help address them



- **Program 21 - Housing Opportunities for Persons Living with Disabilities.** The City will amend the Zoning Code to ensure requirements for community care facilities of more than six persons are consistent with State law and fair housing requirements, including replacing or modifying the CUP requirement to provide greater objectivity and certainty.
- **Program 22 - Housing Unit Replacement Program.** Pursuant to Government Code 65583.2(g)(3), the Housing Element must include a program requiring the replacement of units affordable to the same or lower income level as a condition of any development on a nonvacant site consistent with those requirements set forth in Density Bonus Law (Government Code 65915(c)(3)).
- **Program 23 - Housing for Extremely Low Income Households.** The City will support the development of housing for extremely low-income (ELI) households through a variety of activities such as coordinating with potential housing developers, providing financial assistance or land write-downs, providing expedited processing, identifying grant and funding opportunities, applying for or supporting applications for funding on an ongoing basis, and/or offering additional incentives beyond the density bonus.

3.6 CITY OF YORBA LINDA GENERAL PLAN GOALS AND POLICIES

The City of Yorba Linda General Plan contains goals, policies, and implementation measures which reflect the identified aspirations and values of Yorba Linda’s residents and their elected representatives. (City of Yorba Linda, 2016b) The City’s goals and policies that are designed to avoid or mitigate an environmental effect and are applicable to this Project are listed below. These goals and policies are incorporated into the Project and are intended to reduce environmental related impacts.

3.6.1 LAND USE ELEMENT

Goal LU-1: A well planned community with sufficient land uses and intensities to meet the needs of anticipated growth and achieve the community’s vision.

- **Policy LU 1.2:** Identify appropriate locations for residential and non-residential development to accommodate growth through the year 2035 as shown on the General Plan Land Use Diagram.
- **Policy LU 1.3:** Promote future patterns of development and land use that reduce infrastructure construction costs and make better use of existing and planned public facilities.

Goal LU-3: Land use compatibility.

- **Policy LU 3.1:** Consider and mitigate the impacts on surrounding land uses and infrastructure when reviewing proposals for new development.



- **Policy LU 3.4:** Support the review of uses characterized by high levels of noise, nighttime patronage, and safety concerns by local law enforcement to prevent impact on adjacent residences, schools, religious facilities and similar sensitive uses.

Goal LU-4: Community design that contributes to the preservation and enhancement of character and identity in Yorba Linda.

- **Policy LU 4.1:** Utilize the City’s design review process to address community design concerns.
- **Policy LU 4.3:** Promote the establishment of physical and functional connections between various land uses, while preserving parkland and designated open space.
- **Policy LU 4.4:** Promote standards and provisions that further enhance overall community design when reviewing existing City policies and regulations.

Goal LU-5: Existing and future development coordinated with future infrastructure capacity.

- **Policy LU 5.1:** Coordinate future infrastructure improvements through the City’s Capital Improvement Program to ensure facilities meet the needs of existing and future land uses.

Goal LU-8: Hillside development that preserves and protects the unique natural and topographic features of the community.

- **Policy LU 8.1:** Promote development within hillside areas that take into account density based on slope severity and stability, topographic conditions, and natural resource protection and other environmental conditions.
- **Policy LU 8.2:** Continue to uphold current development standards for determination of density and regulation of quality within hillside areas similar to the density of surrounding developed properties.

Goal LU-9: Preservation and enhancement of the natural landscape and topography of the City.

- **Policy LU 9.1:** Preserve areas within the City that provide scenic, cultural, natural, or biological significance.
- **Policy LU 9.2:** Ensure that land uses within designated and proposed scenic corridors are compatible with scenic enhancement and preservation.
- **Policy LU 9.3:** Protect the scenic and visual qualities of hillside areas and ridgelines.



Goal LU-10: Provision of adequate school facilities to meet the needs of current and future students.

- **Policy LU 10.1:** Ensure future development is coordinated with School District needs to serve the present and projected student population.
- **Policy LU 10.2:** Support School District efforts to address current and future needs of the City's student population.
- **Policy LU 10.3:** Ensure future development addresses impacts on school facilities and contributes its fair share towards expanding, upgrading, or providing school facilities.

Goal LU-11: Protection of water quality in the land use decision making process.

- **Policy LU 11.1:** Ensure urban/stormwater runoff and water quality protection principles are properly considered in the land use decision making process.
- **Policy LU 11.2:** Preserve wetlands, riparian corridors, and buffer zones to establish reasonable limits on the clearing of vegetation from the project site.
- **Policy LU 11.3:** Promote the use of technology and design that maintain water quality and reduces stormwater pollutants from the development site.

3.6.2 CIRCULATION ELEMENT

Goal CR-3: An efficient circulation system that utilizes transportation system management and demand management strategies.

- **Policy CR-3.2:** Provide for safe and efficient traffic operations, by maintaining City standards for the installation and operations of traffic control devices.
- **Policy CR-3.3:** Continue to adhere to OCTA's Congestion Management Program.
- **Policy CR-3.5:** Effectively operate and maintain transportation facilities and infrastructure to improve system capacity and meet traffic demand.
- **Policy CR-3.7:** Ensure the circulation system promotes a wide variety of travel modes to serve the greatest cross section of residents, employees and businesses.
- **Policy CR-3.8:** Encourage new development to provide access to transit, bicycle, pedestrians, and other non-vehicular modes of transportation.

Goal CR-5: A safe, integrated, and efficient public transportation system.



- **Policy CR-5.2:** Encourage public and private shuttle services to provide greater transit choices.

Goal CR-6: An efficient non-motorized transportation system.

- **Policy CR-6.1:** Promote the development and maintenance, where feasible, of safe and convenient non-motorized transportation and multi-purpose trails throughout the City.
- **Policy CR-6.2:** Provide for safe pedestrian, bicycle, and equestrian access throughout the City.

Goal CR-8: Limited transport of hazardous materials through the City of Yorba Linda in conformance with the State and county HAZMAT program.

- **Policy CR-8.2:** Require that the transportation of hazardous materials generated within the City be accomplished through the most direct route to the designated HAZMAT routes, the nearest designated HAZMAT Freeway, and the nearest appropriate HAZMAT disposal facility, as discussed in the Safety Element of the General Plan.

3.6.3 HISTORIC RESOURCES ELEMENT

Goal HR-2: Protect Yorba Linda's significant historic and cultural resources.

- **Policy HR-2.5:** Avoid adversely affecting significant archeological and paleontological resources.

3.6.4 OPEN SPACE AND RECREATION ELEMENT

Goal OR-1: Preservation and maintenance of open space resources. Policy OR-1.1 Mitigate the impacts of development on sensitive lands such as steep slopes, cultural resources and sensitive habitats through the development review process.

- **Policy OR-1.2:** Preserve and protect the scenic and visual quality of canyon and hillside areas as a resource of public importance.

Goal OR-3: Adequate provision of parks and open space as part of new development.

- **Policy OR-3.1:** Ensure developers of new residential projects contribute to a citywide minimum park- to-population ratio per City standards or pay in-lieu fees as appropriate.

Goal OR-5: A comprehensive multi-purpose trail system.

- **Policy OR-5.1:** Establish the dedication of right-of-way and construction of public trails or payment of in-lieu fees as a condition of approval on appropriate development projects.



- **Policy OR-5.8:** Promote commercial, office, industrial and multi-family residential developers to provide local bicycle trails and rack facilities within their projects as conditions of development, where appropriate.

Goal OR-6: Valued and preserved cultural, paleontological, and historical buildings, sites, and features.

- **Policy OR-6.1:** Protect significant areas of historical, archaeological, educational or paleontological resources.
- **Policy OR-6.2:** Ensure the implementation of effective mitigation measures where development may affect historical, archaeological or paleontological resources.
- **Policy OR-6.3:** Continue to require preparation of archaeological or paleontological reports in areas where there is potential to impact cultural resources.
- **Policy OR-6.4:** Continue to require an archaeologist be retained to observe grading activities in areas where the probable presence of archaeological or paleontological resources is indicated.
- **Policy OR-6.5:** Preserve uncovered resources in their natural state, as much as feasible, to assure their conservation and availability for later study.

3.6.5 CONSERVATION ELEMENT

Goal CN-1: Preservation of visual resources along existing and planned landscape corridors.

- **Policy CN-1.1:** Ensure that new development along landscaped corridors preserve unique visual features.

Goal CN-2: Preservation of natural resource areas of community and regional significance.

- **Policy CN-2.1:** Support the preservation of native wildlife and plant communities, and their habitats.
- **Policy CN-2.2:** Work with developers to ensure that resource protection measures are prepared and incorporated into development proposals.
- **Policy CN-2.6:** Support the requirement for development proposals to provide detailed biological assessments in areas which may contain important plant communities and wildlife habitat.



Goal CN-3: Protection of sensitive hillside areas within and adjacent to the community.

- **Policy CN-3.1:** Support the preservation of sensitive hillside, canyon areas, and ridgelines within the City.
- **Policy CN-3.2:** Ensure that site planning and architectural design respect the natural landform to minimize grading and visual impact.
- **Policy CN-3.3:** Ensure the practice of proper soil management techniques to reduce erosion, sedimentation, and other soil-related problems during the construction and operation of new development.

Goal CN-4: A healthy watershed and adequate, safe, and reliable water supply

- **Policy CN-4.2:** Consider conservation of water resources in the review of all development proposals and public facility improvement plans.
- **Policy CN-4.3:** Promote the use of water efficient practices in site and building design for private and public projects.
- **Policy CN-4.4:** Ensure the maintenance and monitoring of flood control and drainage facilities to provide protection from inundation from a 100-year flood event.
- **Policy CN-4.6:** Protect groundwater from sources of pollution.

Goal CN-6: Preservation of the views of stars and the night sky.

- **Policy CN-6.1:** Support efforts that require outdoor lighting fixtures to be shielded and down-directed in order to minimize glare and light trespass.
- **Policy CN-6.3:** Strive to achieve a natural nighttime environment and an uncompromised view of the night sky.

3.6.6 PUBLIC HEALTH AND SAFETY ELEMENT

Goal PS-1: The City's highest priority shall be the protection of human life.

- **Policy PS-1.3:** Ensure appropriate response to recognized natural and manmade disasters with a high probability of occurrence.

Goal PS-2: The protection of property shall be the second highest priority.



- **Policy PS-2.2:** Ensure all new development pays its share of costs and/or completes necessary improvements to mitigate impacts on existing infrastructure.
- **Policy PS-2.3:** Review and evaluate existing traffic mitigation fees and develop new fees, if necessary, to fund the improvements identified in the General Plan in cooperation with other jurisdictions.
- **Policy PS-2.4:** Proactively seek best practices in engineering and construction of structures to enhance occupant safety with particular emphasis on hazards identified by the City's disaster response plans.
- **Policy PS-2.5:** Ensure that structures within very high fire zones include adequate fire sprinkler systems.

Goal PS-3: A community protected from hazards associated with geologic instability and seismic events.

- **Policy PS-3.1:** Ensure stable soil and geologic conditions in the review of development decisions, especially in regards to type of use, size of facility, and ease of evacuation of occupants.
- **Policy PS-3.3:** Mitigate the potential for landslides and seismic hazards in the engineering and construction of structures within the City.
- **Policy PS-3.4:** Promote high standards for seismic performance of structures.
- **Policy PS-3.5:** Promote the collection of relevant data on groundwater levels and soil types in regard to liquefaction susceptibility, landslide potential and subsidence risks.
- **Policy PS-3.6:** Discourage the siting of habitable facilities and structures close to an active or potentially active fault.
- **Policy PS-3.7:** Promote the use of earthquake survival and efficient post-disaster functioning in the siting, design and construction standards for structures and facilities.

Goal PS-4: Protect the lives and property of residents and visitors of the City from flood hazards.

- **Policy PS-4.1:** Provide appropriate land use designations and regulations for areas subject to flooding.

Goal PS-5: Protect the lives and property of residents and visitors of the City from wildfire hazards through preventative measures.



- **Policy PS-5.1:** Reduce the risk for wildfires within the City.
- **Policy PS-5.2:** Coordinate with the U.S. Forest Service, the Orange County Fire Authority, and private land owners to maintain landscape and provide buffers which will reduce the risk of wildfires.

Goal PS-6: Community protection from hazards associated with fires and crime.

- **Policy PS-6.1:** Minimize the loss of life, damage to property, and the economic and social dislocations resulting from structural fires.
- **Policy PS-6.2:** Consult with the responsible agencies to ensure that fire, police, and emergency services concerns are considered in the review of planning and development proposals.
- **Policy PS-6.3:** Ensure that adequate police, fire, and emergency service facilities and personnel are maintained to provide service at sufficient levels.
- **Policy PS-6.5:** Ensure that local streets and transportation corridors are sufficient in the event of fires within the City for safe evacuation.
- **Policy PS-6.6:** Ensure that local streets and transportation corridors have adequate capacity for safe evacuation when new development is constructed.

Goal PS-8: Protect public health, safety, and welfare and the environment from exposure to hazardous materials and waste.

- **Policy PS-8.1:** Establish planning procedures which consider the handling and transportation of hazardous materials and ensure that they are in accordance with applicable County, State and Federal regulations.
- **Policy PS-8.2:** Discourage transportation of hazardous materials on residential streets and establish transportation routes for the conveyance of hazardous materials

3.6.7 PUBLIC SERVICES AND UTILITIES ELEMENT

Goal PSU-1: Maintenance and improvement of local school facilities that serve the City.

- **Policy PSU-1.1:** Work with the Placentia-Yorba Linda Unified School District to properly serve the educational needs of Yorba Linda's school-age children.
- **Policy PSU-1.3:** Continue to monitor the impacts of new development and redevelopment on city- serving schools.



Goal PSU-2: A high level of fire protection services which adequately serves the community.

- **Policy PSU-2.1:** Ensure that adequate fire facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.
- **Policy PSU-2.3:** Use the development review process to assess the impact of new development on fire protection services and to ensure that increased demand for emergency services will be adequately served.
- **Policy PSU-2.4:** Ensure that existing and new developments maintain or exceed standards for fire prevention to minimize the risk of fire.

Goal PSU-3: A high level of police protection services which adequately serve the community and provides a sense of safety to residents.

- **Policy PSU-3.1:** Ensure that sufficient law enforcement facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.
- **Policy PSU-3.3:** Use the development review process to assess the impact of new development on police protection services and to ensure that increased demand for emergency services will be adequately served.

Goal PSU-4: A strong sense of community and opportunities for the continuing education and entertainment of the community.

- **Policy PSU-4.2:** Work with the Yorba Linda Library to ensure adequate facilities for the current and future population.

Goal PSU-5: Efficient, high-quality public infrastructure facilities and utility services throughout the City.

- **Policy PSU-5.1:** Support projects, programs, policies and regulations to ensure that development is appropriate in scale to current and planned infrastructure capabilities.
- **Policy PSU-5.2:** Work with the Yorba Linda Water District to ensure adequate wastewater facilities for all new developments.
- **Policy PSU-5.4:** Provide storm drainage in accordance with best management practices and all adopted plans. Assess the system's ability to accommodate current and future users and include all necessary improvements in development plans.

Goal PSU-6: An adequate, safe, and reliable water supply.



- **Policy PSU-6.3:** Promote water efficient practices in site and building design for public and private projects.
- **Policy PSU-6.4:** Work with the Yorba Linda Water District to ensure adequate water supply for all new developments.

3.6.8 NOISE ELEMENT

Goal N-1: Indoor and outdoor living areas that are adequately protected from excessive transportation noise impacts.

- **Policy N-1.4:** Ensure potentially excessive noise generators provide for the highest feasible level of noise mitigation and compliance with local, state, and federal noise standards.

Goal N-2: Noise and land use compatibility.

- **Policy N-2.1:** Ensure compliance with the City's established noise thresholds for various land uses.
- **Policy N-2.2:** Ensure compliance with the City's established noise thresholds for noise sensitive receptors, land uses, and activities.
- **Policy N-2.3:** Ensure noise producing land uses and activities are designed and located to consider impacts to adjacent uses and activities.

Goal N-3: Mitigate noise impacts from non-transportation sources.

- **Policy N-3.1:** Ensure compliance with standards and procedures for mitigating construction-related activities that introduce excessive noise levels.

Goal N-4: Project approvals that include conditions to mitigate noise impacts.

- **Policy N-4.1:** Consider noise impacts in the siting, design, and construction of new development to minimize noise impacts
- **Policy N-4.3:** Consider a combination of noise barriers, landscape berms, and architectural design treatments when needed to mitigate noise impacts.
- **Policy N-4.5:** Consider measures which alter, prohibit or mitigate noise generating uses through site design.



3.6.9 GROWTH MANAGEMENT ELEMENT

Goal GM-1: Adequate infrastructure and public services provided to areas within the City limits and, if determined appropriate, to areas outside City limits and within its sphere of influence.

- **Policy GM-1.1:** Ensure that new development pays its share of the costs of public facilities and services needed to serve new residents.

Goal GM-2: Reduced traffic congestion.

- **Policy GM-2.2:** Ensure that new development pays its fair share of street improvement costs associated with local and regional traffic mitigation.

3.6.10 GENERAL PLAN EIR MITIGATION MEASURES

The City's General Plan EIR included mitigation measures to reduce and eliminate potential significant adverse impacts within the City. These mitigation measures are incorporated into the Project. Applicable mitigation measures to the Project are as follows:

- AQ-1:** The City shall include a policy requiring future development projects that are subject to CEQA review and deemed to have a potentially significant construction air quality impact to provide air quality mitigation to address short-term construction emissions, as recommended by the SCAQMD.
- AQ-2:** Consider and mitigate the impacts on regional air quality when reviewing proposals for new development. Air quality impacts shall be evaluated in accordance with SCAQMD-recommended methodologies and procedures.
- AQ-3:** Consider and mitigate the impacts on new sensitive land uses that are proposed to be constructed near major stationary or transportation sources of emissions, in accordance with SCAQMD-recommended methodologies and procedures. Sensitive land uses include, but are not limited to, residential dwellings, hospitals, daycare facilities, convalescent care facilities, and schools.
- BIO-1:** Any development in the Cielo/Esperanza focus area must be preceded by site inspection by a qualified biologist to determine the presence of species that are candidates to become, or currently, protected or special status.
- NOI-1:** Ensure that future development exposed to transportation noise sources complies with the City's noise standards for determination of land use compatibility.
- PS-1:** Fuel modification easements for maintaining fuel modification areas must list OCFA as an authorized user. These are recorded as part of the mapping process. Prior to recordation of



the CC&Rs, OCFA must approve language allowing OCFA access to any HOA owned property for the purpose of inspecting the fuel modification, plant palette, and added improvements to ensure maintenance of the fire safe zones. In addition, CC&Rs shall provide landscaping and maintenance guidelines to ensure that each residential lot is fire-safe and list allowable improvements such as patio structure, play equipment construction, and fencing materials. The CC&Rs shall be recorder prior to issuance of certificate of use and occupancy

- PS-2:** For the safety of construction personnel, neighboring homes, and firefighting safety in the wildland areas, the developer of any new construction, under the supervision of the Fire Chief, and prior to the issuance of building permits, shall have completed the project roadways in accordance with applicable OCFA and/or County design standards in the area prior to building permit issuance.
- PS-3:** Prior to issuance of building permits, a service letter from the water agency serving the project area shall be submitted and approved by the OCFA water liaison describing the water supply system, pump system, and fire flow and lists the design features to ensure fire flow during a major wildfire incident.
- TRA-6:** A fair-share contribution to the cost of widening shall be made a condition of approval for future developments which contributes to the need for widening.

3.7 SUMMARY OF REQUESTED ACTIONS

The City of Yorba Linda has primary approval responsibility for the Project. As such, the City serves as the Lead Agency for this PEIR pursuant to CEQA Guidelines Section 15050. The Yorba Linda City Council is the decision-making authority for the Project and will consider the Project along with the Planning staff's recommendations and will make a final decision to approve, approve with changes, or deny the Project. The City will consider the information contained in this PEIR and the Project's Administrative Record in its decision-making processes. In the event of approval of the Project and certification of the PEIR, the City would conduct administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval to the extent permitted by CEQA.

A list of the actions under City of Yorba Linda jurisdiction is provided in Table 3-3, *Project-Related Approvals/Permits*. Additional discretionary and/or administrative actions may be necessary from other government agencies to fully implement the Project. Table 3-3 lists the government agencies that are expected to use the Project's PEIR during their consultation and review of the Project and its implementing actions and provides a summary of the subsequent actions associated with the Project.



Table 3-3 Project-Related Approvals/Permits

Public Agency	Approvals and Decisions
City of Yorba Linda	
Planning Commission	<ul style="list-style-type: none"> • Provide recommendation to the City Council regarding whether to certify the Project’s PEIR. • Provide recommendations to the City Council regarding whether to approve: <ul style="list-style-type: none"> ○ General Plan Amendments ○ Amendments to the Zoning Code
City Council	<ul style="list-style-type: none"> • Certify the Project’s PEIR and adopt the Mitigation Monitoring and Reporting Program and Findings and Statement of Overriding Considerations. • Approval or Adoption of: <ul style="list-style-type: none"> ○ General Plan Amendments ○ Amendments to the Zoning Code
Responsible Agencies – Approvals and Permits	
California Department of Housing and Community Development (HCD)	<ul style="list-style-type: none"> • Demonstrate compliance with 2021-2029 Housing Element
California Department of Fish and Wildlife (CDFW)	<ul style="list-style-type: none"> • Section 1602 Permit
United States Army Corps of Engineers (ACOE)	<ul style="list-style-type: none"> • Section 404 Permit
Yorba Linda Water District (YLWD)	<ul style="list-style-type: none"> • Approvals for construction of water infrastructure and connection to water distribution and wastewater system.
Regional Water Quality Control Board (RWQCB)	<ul style="list-style-type: none"> • Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit. • Issuance of a Section 401 Permit pursuant to the Clean Water Act
Southern California Gas Company and Southern California	<ul style="list-style-type: none"> • Issuance of approvals necessary for the installation of new SoCalGas and SCE facilities/connections to service the Project.
South Coast Air Quality Management District	<ul style="list-style-type: none"> • Issuance of permits that allow for the construction and operation of the proposed Project.
Trustee Agencies – Approvals and Permits	
Native American Heritage Commission	<ul style="list-style-type: none"> • Ensuring California Native American tribes have accessibility to ancient Native American cultural resources on public lands overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act.



4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF PEIR SCOPE

In accordance with CEQA Guidelines §§15126–15126.4, this PEIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, the City of Yorba Linda prepared a Notice of Preparation (*Technical Appendix A*) to determine the scope of environmental analysis for this PEIR that was issued on April 29, 2022. The NOP public comment periods began April 29, 2022 and ended on May 30, 2022. Public comment on the scope of this PEIR consisted of written comments received by the City of Yorba Linda in response to the NOP (see Section 2.9 of this Draft PEIR); the City received several comments from members of the public at the EIR scoping meeting held on May 23, 2022, which are summarized on Table 2-3. Taking all known information and public comments into consideration, this Draft PEIR evaluates eleven (11) environmental subject areas identified in CEQA Guidelines Appendix G in this Section 4.0, as listed below. Each subsection of this Section 4.0 evaluates several specific subject matters related to the general topic of the subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein. Environmental issues and their corresponding sections are:

4.1 Air Quality	4.7 Public Services
4.2 Biological Resources	4.8 Recreation
4.3 Energy	4.9 Transportation
4.4 Greenhouse Gas Emissions	4.10 Tribal Cultural Resources
4.5 Land Use and Planning	4.11 Wildfire
4.6 Noise	

Sections 4.1 through 4.11 provide analysis of impacts for those environmental topics where it was determined that the Project could result in “potentially significant impacts.” Each topical section includes the following information:

- Existing Setting
- Public comments received based on this PEIR’s Notice of Preparation (NOP) and Scoping Meeting
- A description of the existing setting including a discussion of the regulatory framework, if applicable.
- Identification of thresholds of significance.



- Analysis of potential Project effects.
- Evaluation of potential cumulative impacts.
- Identification of the level of significance of impacts before mitigation.
- Identification of additional Project-specific mitigation measures, if required, to reduce the identified Project impacts.
- Identification of the level of significance of impacts after mitigation, including unavoidable significant adverse impacts

4.0.2 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

To assist the reader with comparing information between environmental issues, each section is organized under nine major headings:

- Existing Conditions
- Notice of Preparation/Scoping Comments
- Applicable Regulatory Requirements
- Basis for Determining Significance
- Impact Analysis
- Cumulative Impact Analysis
- Significance of Impacts Before Mitigation
- Mitigation
- Significance of Impacts After Mitigation

In addition, Section 1.0, *Executive Summary*, summarizes all impacts by environmental issue.

4.0.3 TERMINOLOGY USED IN THIS PEIR

The level of significance is identified for each impact in this PEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No impact.** The project would not change the physical environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the physical environment.



- **Significant impact.** A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this PEIR, requiring the consideration of mitigation measures.

Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- **Less than significant with mitigation incorporated.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this PEIR; however, the impact can be avoided or reduced to a less-than-significant level through the application of feasible mitigation measure(s).
- **Significant and unavoidable.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this PEIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

4.0.4 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts as "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines Section 15130(b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of two sources:

- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.*
- B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.*



The cumulative impact analysis in this PEIR uses Method B. Method B uses projections in the long-range planning documents—such as Yorba Linda’s General Plan, Southern California Association of Governments’ (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and South Coast Air Quality Management District (South Coast AQMD) 2016 Air Quality Management Plan (AQMP).

Cumulative impact analyses for several topical sections are also based on the most appropriate geographic boundary for the respective impact. For example, cumulative air quality and greenhouse gas emission impacts are based on the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert regions of Los Angeles, Riverside, and San Bernardino counties, in addition to the City of Yorba Linda. The approach and cumulative development area for each respective topical section is further discussed below. Several potential cumulative impacts that encompass regional boundaries (e.g., air quality, greenhouse gases, transportation) have been addressed in the context of various regional plans and defined significance thresholds. Following is a summary of the approach and extent of cumulative impacts, which is further detailed in each topical environmental section.

- **Air Quality.** Air quality impacts are based on the regional boundaries and emissions standards of the South Coast Air Basin and South Coast AQMD.
- **Biological Resources.** The cumulative impact analysis for biological resources considers development of the Project in conjunction with other development projects in the vicinity of the Project area. The cumulative impact evaluation also takes into consideration the geographic area covered by Orange County Central-Coastal Natural Communities Conservation Plan and Habitat Conservation Plan, which is the prevailing habitat conservation plan applicable to the region.
- **Energy.** Energy impacts are based on the service areas of Southern California Edison and SoCalGas and transportation fuel consumption.
- **Greenhouse Gas (GHG) Emissions.** Potential GHG emission impacts are not bounded by geography but affect global climate change. The assessment of cumulative GHG impacts, therefore, is based on the regional boundaries and emissions standards of the Orange County and Orange County Climate Action Plan, respectively.
- **Land Use and Planning.** Cumulative analysis for land use consistency considers the Project’s impacts in conjunction with buildout of the City’s General Plan.
- **Noise.** Cumulative traffic noise is assessed relative to applicable City’s noise-level standards, and considers development of the Project in conjunction with other development projects in the vicinity of the Project site. The study area is aligned with the traffic study area (see Table 4.0-2).



- **Public Services.** Public services impacts are based on the service areas of Yorba Linda Police Services, Orange County Fire Authority, Placentia-Yorba Linda Unified School District, Orange Unified School District, and Yorba Linda Public Library.
- **Recreation.** This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development within the City.
- **Transportation.** The cumulative analysis considers development of the Project in conjunction with other development projects in the Orange County. In addition, the cumulative analysis considers consistency with SCAG's Connect SoCal and the City's General Plan.
- **Tribal Cultural Resources.** Cumulative analysis considers development of the Project in conjunction with other development projects and planned development project in the vicinity of the Project site that are in the northwestern area of Campo Band of Diegueno Mission Indians, Ewiiapaayp Band of Kumeyaay Indians, Gabrieleno Band of Mission Indians - Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, Juaneno Band of Mission Indians Acjachemen Nation - Belardes, La Posta Band of Diegueno Mission Indians, Manzanita Band of Kumeyaay Nation, Mesa Grande Band of Diegueno Mission Indians, Pechanga Band of Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians.
- **Wildfire.** The cumulative impact analysis considers potential wildfire impacts of the Project in conjunction with other development within the City of Yorba Linda.



4.1 AIR QUALITY

The following analysis is based in part on information obtained from a technical report entitled, *Air Quality Analysis*, which was prepared by Urban Crossroads, Inc., dated May 27, 2022, and is included as *Technical Appendix B* to this PEIR (Urban Crossroads, 2022a). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.1.1 EXISTING CONDITIONS

A. South Coast Air Basin

The Project area is located in the South Coast Air Basin (SCAB) within the jurisdiction of South Coast Air Quality Management District (South Coast AQMD). The SCAB encompasses a 6,745-square mile subregion of the South Coast AQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

B. Climate and Meteorology

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of



widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed “Santa Anas” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NOX) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

C. Existing Air Quality

Existing air quality is measured at established South Coast AQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are



the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 4.1-1, *Ambient Air Quality Standards*.

The determination of whether a region’s air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of the Air Quality Impact Analysis (AQIA) was performed for this Project, the most recent state and federal standards were updated by the California Air Resources Board (CARB) on May 4, 2016 and are presented in Table 4.1-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O₃, CO, SO₂ (1 and 24 hour), NO₂, PM₁₀, and PM_{2.5} are not exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the South Coast AQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area.

Table 4.1-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		---		
Fine Particulate Matter (PM _{2.5})	24 Hour	---	---	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m ³)	Non-Dispersive Infrared	35 ppm (40 mg/ m ³)	---	Non-Dispersive Infrared



Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
	8 Hour	9.0 ppm (10 mg/ m ³)	Photometry (NDIR)	9 ppm (10 mg/ m ³)	---	Photometry (NDIR)
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m ³)		---	---	
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/ m ³)	Gas Phase Chemiluminescence	110 ppb (188 µg/ m ³)	---	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/ m ³)		0.053 ppm (100 µg/ m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (665 µg/ m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/ m ³)	---	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	---		---	0.5 ppm (1300 µg/ m ³)	
	24 Hour	0.04 ppm (105 µg/ m ³)		0.14 ppm (for certain areas)	---	
	Annual Arithmetic Mean	---		0.030 ppm (for certain areas)	---	
Lead	30 Day Average	1.5 µg/ m ³	Atomic Absorption	---	---	High Volume Sampler and Atomic Absorption
	Calendar Quarter	---		1.5 µg/ m ³ (for certain areas)	Same as Primary Standard	
	Rolling 3-Month Average	---		0.15 1.5 µg/ m ³	---	
Visibility Reducing Particles	8 Hour	See Footnote 14 in <i>Technical Appendix B.</i>	Beta Attenuation and Transmittance through filter tape	No National Standards		
Sulfates	24 Hour	25 µg/ m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/ m ³)	Ultraviolet Fluorescence			



Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/ m ³)	Gas Chromatography			

See footnotes in Table 2-2, *Technical Appendix B*.

Source: (Urban Crossroads, 2022a, Table 2-2)

D. Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O₃, particulate matter (PM₁₀ and PM_{2.5}), NO₂, and SO₂ which are known as criteria pollutants. The South Coast AQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district. On February 21, 2019, CARB posted the 2018 amendments to the state and national area designations. The attainment status for criteria pollutants within the SCAB is summarized in Table 4.1-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 4.1-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Criteria Pollutant	State Designation	Federal Designation
O ₃ – 1-hour standard	Nonattainment	--
O ₃ – 8-hour standard	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/ Attainment
NO ₂	Attainment	Unclassifiable/ Attainment
SO ₂	Unclassifiable/ Attainment	Unclassifiable/ Attainment
Pb	Attainment	Unclassifiable/ Attainment

“—” The national 1-hour O₃ standard was revoked effective June 15, 2005.

Source: (Urban Crossroads, 2022a, Table 2-3)

E. Local Air Quality

The South Coast AQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents with information about the air quality conditions. The Project area is located within the North Orange County area (SRA 16). The North Orange County monitoring station, located within SRA 16 and is located 6.41 miles east of the Project area, monitors air quality data for O₃, CO, and NO₂. For PM₁₀ and PM_{2.5} data, the Central Orange County monitoring station, located in SRA 17 and 6.58 miles southeast of the Project area, was utilized. It should be noted that the Central Orange County station was utilized in lieu of the North Orange County monitoring station only in instances where data was not available.



Table 4.1-3, *Project Area Air Quality Monitoring Summary 2018-2020*, provides a summary of ambient air quality conditions in the general vicinity of the Project area from 2018 to 2020, which is the most recent three-year period for which air quality information is available, and identifies the number of days ambient air quality standards were exceeded at the study site. The study site is considered to be representative of the local air quality at the Project area. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} for 2018 through 2020 was obtained from the South Coast AQMD Air Quality Data Tables. Additionally, data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

Table 4.1-3 Project Area Air Quality Monitoring Summary 2018-2020

Pollutant	Standard	Year		
		2018	2019	2020
O₃				
Maximum Federal 1-Hour Concentration (ppm)		0.111	0.107	0.171
Maximum Federal 8-Hour Concentration (ppm)		0.077	0.094	0.113
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	3	2	15
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	4	6	23
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	3.0	2.6	2.1
Maximum Federal 8-Hour Concentration	> 20 ppm	1.4	1.2	1.2
NO₂				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.067	0.059	0.057
Annual Federal Standard Design Value		0.013	0.012	0.013
PM₁₀				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	129	127	120
Annual Federal Arithmetic Mean (µg/m ³)		27.2	21.9	23.9
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	13	13	13
PM_{2.5}				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	54.10	36.10	41.40
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	11.02	9.32	11.27
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	3	3	1

ppm = Parts Per Million

µg/m³ = Microgram per Cubic Meter

Source: (Urban Crossroads, 2022a, Table 2-4)



4.1.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. Comments were made during the PEIR Scoping Meeting and public scoping period that expressed concern in air quality near the housing opportunity sites S4-053, S4-201, and S4-060 due to the increase in traffic and a construction management plan to address air quality issues.

4.1.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations governing air quality emissions.

A. Federal

1. *Federal Clean Air Act*

The Federal Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project area include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, PM_{2.5}, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of NO_x which are emitted as byproducts of the combustion process.

B. State

1. *California Air Resources Board (CARB)*

The CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state



ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO₄, visibility, hydrogen sulfide (H₂S), and vinyl chloride (C₂H₃Cl). However, at this time, H₂S and C₂H₃Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the South Coast AQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS. Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROG_s, NO_x, CO and PM₁₀. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

2. Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that will be effective January 1, 2020. Local jurisdictions are permitted



to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided, they establish a minimum 65% diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official.

Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020. The 2019 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption in the SCAB and across the State of California. For example, the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting requirements for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards would use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards would use about 53% less energy than homes built under the 2016 standards. Nonresidential buildings (such as the Project) would use approximately 30% less energy due to lighting upgrade requirements.

Because the Project will be constructed after January 1, 2019, the 2019 CALGreen standards are applicable to the Project. The 2019 CALGreen standards which are applicable to the Project are discussed in subsection Title 24 Energy Efficiency Standards and California Green Building Standards of the *Technical Appendix B* of this PEIR.

C. Regional

1. South Coast AQMD Rule 401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U. S. Bureau of Mines.

2. South Coast AQMD Rule 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The



provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

3. *South Coast AQMD Rule 403*

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust. Applicable dust suppression requirements from Rule 403 are summarized below:

- Nontoxic chemical soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Active sites shall be watered at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) maintained in accordance with the requirements of CVC Section 23114.
- Construction access roads shall be paved at least 30 meters (100 feet) onto the site from the main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.

4. *South Coast AQMD Rule 1113*

This rule serves to limit the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the South Coast AQMD. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

5. *South Coast AQMD Rule 1301*

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the NAAQS, while future economic growth within the South Coast AQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants



or their precursors. Rule 1301 also limits emission increases of ammonia, and ODCs from new, modified or relocated facilities by requiring the use of BACT.

Although the Project would comply with the above regulatory requirements, it should be noted that emission reductions associated with Rules 402, 1301, 1401, and 2305 cannot be quantified in the CalEEMod. Conversely, Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) can be modeled in CalEEMod.

4.1.4 METHODOLOGY

In May 2022 California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including South Coast AQMD, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source emissions (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions refer to Appendix 3.1 through 3.2 of the Project's *Air Quality Analysis (Technical Appendix B)* for Criteria Air Pollutant CalEEMod Output Files.

A. Project-Related Construction Emissions

Construction of each area associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

B. Project Operational Emissions

Operational activities associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from Area Source Emissions, Energy Source Emissions, and Mobile Source Emissions.

1. Area Source Emissions

Area source emissions associated with the Project would occur as a result of architectural coatings, consumer products, and landscape maintenance equipment, as follows:



Architectural Coatings

Over a period of time the buildings that are part of this Project will require maintenance and will therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

2. Energy Source Emissions

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits Regional Clean Air Incentives Market (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod.

3. Mobile Source Emissions

The Project related operational air quality emissions derive primarily from vehicle miles traveled (VMT) associated with the Project. The Project-generated average weekday daily VMT is 183,955 and was obtained from modeling conducted for the Yorba Linda 2021-2029 Housing Element Implementation Programs Vehicle Miles Traveled Analysis (*Technical Appendix H*) which is based on the Orange County Transportation Analysis Model (OCTAM) for the Year 2045. To estimate the Saturday and Sunday VMT for inclusion in CalEEMod, the daily VMT was converted to annual VMT using a factor of 347 days consistent with the California Air Resources Board 2017 Scoping Plan. 347



days is used instead of 365 days to account for reduced daily VMT that occurs on weekends and holidays. In other words, the average weekend VMT represents 95% (347 days ÷ 365 days) of the average weekday daily VMT.

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of break and tire wear particulates. The emissions estimate for travel on paved roads were calculated using CalEEMod.

C. Localized Pollutant Emissions

Localized emissions associated with Project-related construction and operational activities were calculated and evaluated in accordance with South Coast AQMD's *Final Localized Significance Threshold Methodology* ("Methodology"). The South Coast AQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and CAAQS. Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}; both of which are non-attainment pollutants.

The South Coast AQMD established LSTs in response to the South Coast AQMD Governing Board's Environmental Justice Initiative I-4¹. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The South Coast AQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the South Coast AQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology*.

"Preliminary Warehouse Emission Calculations" cites 39.9-mile trip length for heavy-heavy trucks. As a conservative measure, a trip length of 40 miles has been utilized for all trucks for the purpose of this analysis.

SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."



4.1.5 BASIS FOR DETERMINING SIGNIFICANCE

According to Section III of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to air quality if the Project or any Project-related component would (OPR, 2019):

- a) *Conflict with or obstruct implementation of the applicable air quality plan;*
- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;*
- c) *Expose sensitive receptors to substantial pollutant concentrations;*
- d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The South Coast AQMD has developed regional significance thresholds for other regulated pollutants, as summarized in Table 4.1-4, *Maximum Daily Regional Emission Thresholds*. The South Coast AQMD’s CEQA Air Quality Significance Thresholds (April 2019) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact. These thresholds have been used to determine air quality impacts in this analysis.

Table 4.1-4 Maximum Daily Regional Emission Thresholds

Pollutant	Regional Construction Threshold (lbs/day)	Regional Operational Thresholds (lbs/day)
NO _x	100	55
VOC	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550
Pb	3	3

Source: (Urban Crossroads, 2022a, Table 3-1)



4.1.6 IMPACT ANALYSIS

Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The South Coast AQMD's 2016 AQMP is the applicable air quality plan for the Project area, which estimates long-term air quality conditions for the SCAB. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements. The Project's consistency with the AQMP will be determined using the 2016 AQMP as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the 1993 CEQA Handbook. These indicators are discussed below:

- ***Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.***

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds were exceeded. As evaluated under Thresholds b) and c) below, Project construction-source and operational-source emissions have the potential to exceed the applicable regional significance thresholds for criteria pollutants. Therefore, the Project would have the potential to result in or cause violations of the CAAQS and NAAQS.

Based on the preceding, the Project is determined to be inconsistent with the first criterion and impacts would be potentially significant.

- ***Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of project build-out phase.***

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Yorba Linda General Plan is considered to be consistent with the AQMP.



During construction, peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential could occur, with disturbance of the entire site occurring during construction activities. As such, when considering that emissions thresholds could be exceeded, a significant impact would result.

During operation, the Project is intensifying existing land use designations and will also exceed applicable thresholds.

Based on the preceding, the Project is determined to be inconsistent with the second criterion and impacts would be potentially significant.

Threshold b: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

A. Construction Emissions Impact Analysis

Construction-related emissions are speculative and cannot be accurately determined at this stage of the planning process. Therefore, such impacts are too speculative to evaluate (see CEQA Guidelines Section 15145). To the extent that specific projects are known, those projects have already been or would be subjected to their own environmental analysis. Additionally, due to the variables that must be considered when examining construction impacts (e.g., development rate, disturbance area per day, specific construction equipment and operating hours, etc.), it would be speculative to state conclusively that construction activity associated with the Project would cause a significant air quality impact. Notwithstanding, implementation of the Project has a potential to result in a significant impact with respect to construction activity associated with future development projects particularly if multiple construction projects overlap for emissions of CO, VOCs, NO_x, SO_x, PM₁₀, and PM_{2.5}. Therefore, impacts would be potentially significant.

A. Operational Emissions Impact Analysis

The estimated operational-source emissions for the proposed Project are summarized in Table 4.1-5, *Summary of Peak Operation Emissions*. As shown, the Project will exceed the applicable South Coast AQMD thresholds for VOC, and NO_x. Therefore, impacts would be potentially significant.



Table 4.1-5 Summary of Peak Operation Emissions

Area	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Area Source	67.50	3.72E+01	153.00	0.24	2.96E+00	2.97E+00
Energy Source	4.00E-01	6.76	2.88	4.00E-02	5.50E-01	5.50E-01
Mobile Source	107.00	23.90	370.00	1.10	51.10	9.31
Total Maximum Daily Emissions	174.90	67.86	525.88	1.38	54.61	12.83
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	YES	YES	NO	NO	NO	NO
Winter						
Area Source	55.60	3.60E+01	15.30	0.23	2.91E+00	2.91E+00
Energy Source	4.00E-01	6.76	2.88	4.00E-02	5.50E-01	5.50E-01
Mobile Source	110.00	26.10	341.00	1.05	51.10	9.31
Total Maximum Daily Emissions	166.00	68.86	359.18	1.32	54.56	12.77
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	YES	YES	NO	NO	NO	NO

Source: (Urban Crossroads, 2022a, Table 3-4)

Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?

A. Localized Emissions Impact Analysis

The South Coast AQMD established LSTs in response to the South Coast AQMD Governing Board’s Environmental Justice Initiative I-4. LSTs represent the maximum emissions from a project that will not cause or contribute to exceeding the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The South Coast AQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

South Coast AQMD developed LSTs to determine if emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at a project site (offsite mobile-source emissions are not included in the LST analysis) would expose sensitive receptors to substantial concentrations of criteria air pollutants.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the hourly levels for projects under five acres. LSTs represent the maximum emissions at a project site that are not expected



to cause or contribute to exceeding the most stringent federal or state AAQS. LSTs are based on the ambient concentrations of that pollutant within the project SRA and the distance to the nearest sensitive receptor. However, consistent with South Coast AQMD guidance an LST analysis can only be conducted at a project-level, and quantification of LSTs is not applicable for this program-level environmental analysis. Future development projects have the potential to exceed LST emissions thresholds. Therefore, impacts would be potentially significant.

B. CO Hot Spot Impact Analysis

The Project would not result in potentially adverse CO concentrations or “hot spots.” Further, detailed modeling of Project-specific CO “hot spots” is not needed to reach this conclusion. An adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. For example, 8.4 ppm 8-hr CO concentration measured at the Long Beach Boulevard/Imperial Highway intersection (highest CO generating intersection within the “hot spot” analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, an adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 4.5 ppm and 3.1 ppm, respectively (data from South Central Los Angeles County station for 2020). Therefore, even if the traffic volumes for the Project were double or even triple of the traffic volumes generated at the Long Beach Boulevard/Imperial Highway intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections.

Furthermore, the Bay Area Air Quality Management District (BAAQMD) concluded that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph)—or 24,000 vph where vertical and/or



horizontal air does not mix—in order to generate a significant CO impact. The busiest intersection evaluated was that at Wilshire Blvd and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day and AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).

Therefore, CO “hot spots” are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. Based on the foregoing analysis, the Project would result in less-than-significant impacts related to the creation of CO Hot Spots.

Threshold d: Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)

Land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors.

Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project’s (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant.

During operation, it is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the solid waste regulations. The Project would also be required to comply with South Coast AQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project operations would be less than significant.

4.1.7 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for air quality includes the City of Yorba Linda and the SCAB. The SCAB is designated as a nonattainment area for State standards of O₃, PM₁₀, and PM_{2.5}. The region is also designated as a nonattainment area for federal standards of O₃ and PM_{2.5}. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, with exception of odors, the setting for this cumulative analysis consists of the SCAB and associated growth and development anticipated in the air basin. For



the issue of odors, the cumulative study area includes the Project area and lands in close proximity to the Project area, as odors diminish rapidly with distance from the source.

According to South Coast AQMD, projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. During construction, the Project would exceed the Project-specific significance thresholds and during operation the Project would exceed the Project-specific significance thresholds for emissions of VOC and NO_x. Therefore, impacts with regard to those thresholds would be cumulatively considerable. Additionally, the Project would have no potential to result in or contribute to a CO “Hot Spot.” Accordingly, impacts associated with CO “Hot Spots” would be less than cumulatively considerable.

4.1.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project would result in and cause NAAQS or CAAQS violations. Furthermore, the Project would exceed any applicable regional thresholds. As such, the Project is therefore considered to be inconsistent with the AQMP and a potentially significant impact would occur.

Threshold b: Potentially Significant Impact. The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project operation-source air pollutant emissions would result in exceedances of regional thresholds. Construction-related emissions are speculative and cannot be accurately determined at this stage of the planning process. Therefore, Project construction-source and operation-source emissions would be considered potentially significant on a project-specific and cumulative basis for those emissions.

Threshold c: Potentially Significant Impact. Emissions also would not cause or contribute to a CO “Hot Spot.” However, quantification of LSTs is not applicable for this program-level environmental analysis. Therefore, impacts would be potentially significant.

Threshold d: Less than Significant Impact. Although short-term construction activities and long-term operational land uses could produce objectionable odors, compliance with standard construction requirements and regulations established by the City of Yorba Linda and South Coast AQMD would reduce odor impacts to less-than-significant levels. Near- and long-term odor impacts would be less than significant.

4.1.9 MITIGATION MEASURES

MM 4.1-1 Prior to issuance of grading permits, project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts (regional and localized) to the City for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-



related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City shall require that applicants for new development projects incorporate all feasible mitigation measures to reduce air pollutant emissions below the significant threshold during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City.

Mitigation measures to reduce construction-related emissions could include, but are not limited to:

- Require construction equipment that meets or exceeds CARB Certified Tier 3 or Tier 4 engine standards.
- Limit the idling time of diesel off-road construction equipment to no more than five (5) minutes.
- Require the use of "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by South Coast AQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Alternatively, projects may utilize building materials that do not require the use of architectural coatings.
- The Construction Contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if available rather than electrical generators powered by internal combustion engines.
- The Construction Contractor shall require the use of alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.
- The Construction Contractor shall require that construction equipment be maintained in good operation condition to reduce emissions. The Construction Contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specification. Maintenance records shall be available at the construction site for City verification.

MM 4.1-2 Prior to issuance of a grading permit, project applicants shall prepare and submit a technical assessment evaluating potential project operation air quality impacts (regional and localized) to the City for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD's



adopted thresholds of significance, the City shall require that applicants for new development projects incorporate all feasible mitigation measures to reduce air pollutant emissions below significance thresholds during operational activities. The identified measures shall be included as part of the conditions of approval.

Possible mitigation measures to reduce operational emissions could include, but are not limited to the following:

- Increase in insulation such that heat transfer and thermal bridging is minimized;
- Limit air leakage through the structure and/or within the heating and cooling distribution system;
- Use of energy-efficient space heating and cooling equipment;
- Installation of electrical hook-ups at loading dock areas;
- Installation of dual-paned or other energy efficient windows;
- Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards;
- Installation of automatic devices to turn off lights where they are not needed;
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;
- Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;
- Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems;
- Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.
- Landscaping palette emphasizing drought tolerant plants;
- Use of water-efficient irrigation techniques;
- U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.
- Applicants for residential within 1,000 feet of a major sources of TACs (e.g., warehouses, industrial areas, freeways, roadways, and rail lines with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Yorba Linda prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of CEQA and the South Coast AQMD. If the HRA shows



that the incremental cancer risk exceeds ten in one million (10E-06), PM10 concentrations exceed 2.5 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), PM2.5 concentrations exceed 2.5 $\mu\text{g}/\text{m}^3$, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes located away from high volume roadways and/or truck loading zones.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters (e.g., MERV 13 or better).

4.1.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. The Project would be inconsistent with AQMP Criterion No. 1 and 2, resulting in a potentially impact significant. The Project would implement development-specific air quality Mitigation Measures (MM 4.1-1 and 4.1-2), to reduce the Project's construction-source and operational-source air pollutant emissions. Additionally, compliance with South Coast AQMD emissions reductions and control requirements would reduce Project air pollutant emissions. However, as discussed below, it cannot be definitively stated that all future development projects would not exceed the applicable thresholds. Therefore, impacts would remain significant and unavoidable.

Threshold b: Significant and Unavoidable Direct and Cumulatively-Considerable Impact.

1. Construction

As noted above, there is uncertainty regarding the specific nature of construction activities that would be facilitated by future development projects. All feasible mitigation shall be applied to minimize construction-related significant air quality impacts, including one or more of the measures listed under Mitigation Measure MM 4.1-1, based on project-specific air quality modeling. The mitigation measure(s) to be applied shall be roughly proportional and have a nexus with the project-specific impact identified, consistent with Section 15126.4 of the State CEQA Guidelines.

Despite the implementation of Mitigation Measure MM 4.1-1, which would require future development projects to conduct project-specific analysis and incorporate mitigation measures, it cannot be definitively stated that all future development projects would not exceed the applicable thresholds, especially since some individual projects would exceed the thresholds. As such, the Project would result in a significant and unavoidable impact for emissions of emissions of CO, VOCs, NO_x,



SO_x, PM₁₀, and PM_{2.5} with respect to future development projects even with implementation of feasible mitigation measures.

2. *Operation*

As noted above, there is uncertainty regarding the specific nature of operational activities that would be facilitated by future development projects. Despite the implementation of Mitigation Measure MM 4.1-2, which would require future development projects to conduct project-specific analysis and incorporate mitigation measures, it cannot be definitively stated that all future development projects at buildout would not exceed the applicable thresholds. At buildout, implementation of the Housing Element as evaluated herein would result in an exceedance for VOCs and NO_x emissions. Although the Project would implement Mitigation Measure MM 4.1-2 to reduce emissions from VOCs and NO_x, it is not possible to know the quantity of emissions that would be reduced by implementing Mitigation Measure MM 4.1-2. Therefore, the emissions reductions that would be achieved by cannot be accurately quantified and are not accounted for in the analysis herein. As such, a significant and unavoidable impact is presumed even with implementation of Mitigation Measure MM 4.1-2.

Threshold c: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. As discussed in the analysis above, site-specific localized emissions analysis would be required to address potential impacts from construction and operational activity, pursuant to Mitigation Measures MM 4.1-4 and MM 4.1-2. Notwithstanding, Mitigation Measures MM 4.1-1 and MM 4.1-2 cannot guarantee that future development projects would in fact reduce all of their localized impacts to less than significant. Additionally, construction activity would also have the potential to result in carcinogenic and non-carcinogenic emissions associated with diesel exhaust from construction equipment. Since Mitigation Measures MM 4.1-1 and MM 4.1-2 cannot guarantee that future development projects would reduce all of their impacts to less than significant, this impact is considered significant and unavoidable.



4.2 BIOLOGICAL RESOURCES

This Subsection provides an overview of the existing biological resources within the City of Yorba Linda (City) that could potentially be affected the by the implementation of the Project. The analysis herein is based on City's General Plan Conservation Element (City of Yorba Linda, 2016a) and the City's General Plan EIR (City of Yorba Linda, 2016b). Additional references used for this Subsection are listed in Section 7.0, *References*.

4.2.1 EXISTING CONDITIONS

The following information is summarized from the City's General Plan Conservation Element. Areas in the northern and southeastern portions of the City of Yorba Linda, provide natural open space, important wildlife connectivity, and biological habitats. Exhibit CN-2, Natural Habits Areas, in the City's General Plan shows the locations of natural habitat areas within the City. Natural habitat areas are open spaces which contain wildlife and native plant life.

Important open space in Yorba Linda includes the riparian habitat around the Santa Ana River in the southeastern portion of the City, as well as extensive oak woodland, chaparral, coastal sage scrub and riparian habitats located adjacent to the Chino Hills State Park in the northern portion of the City. According to the National Land Cover Database, Yorba Linda's natural open space areas consists of a majority of shrub/scrub, with some herbaceous and woody wetlands land cover.

A. Sensitive Plant and Animal Species

According to data provided by the California Natural Diversity Database (CNDDDB), there are sensitive plant and animal species located in the City. These sensitive biological resources include species that have been given special recognition by federal, state, or local resource conservation agencies and organizations due to declining, limited or threatened populations, resulting in most cases from habitat reduction; and habitat areas that are unique, of relatively limited distribution, or of special value to wildlife. State agencies have developed a rating system to designate the status of sensitive species. These designations include, "Candidate," "Threatened," or "Endangered." Official designation of a species in one of these categories affords species or habitats certain levels of protection in an effort to preserve their existence. Table CN-1, Sensitive Animals, Plants and Communities, lists the sensitive species that are rated "Threatened" or "Endangered" within the City. (City of Yorba Linda, 2016a)

B. Vegetation Communities

- **Grasslands.** Grasslands are found throughout the City, dominated primarily by non-native annual grasses. Examples include filaree (*Erodium sp.*), wild oats (*Avena barbata*), and wild radish (*Raphanus sativus*). Native and perennial grasses are less common due to past encroachments by the built environment.



- **Coastal Sage Scrub.** These communities occur primarily along the Santa Ana River, as well as in the north and east of the City, adjacent to Chino Hills State Park.
- **Chaparral.** The chaparral vegetation that dominates much of the Southern California landscape, including the City, can be broken down into several varieties. These include chamise (*Adenostoma fasciculatum*) and ceanothus chaparral including big podded ceanothus (*Ceanothus megacarpus*).
- **Oak Woodland.** There are oak woodlands throughout the City. These are dominated primarily by the coast live oak (*Quercus agrifolia*). (City of Yorba Linda, 2016b)

C. Wildlife and Riparian Habitat

According to the California Department of Parks and Recreation, the open space areas around the City are ideal locations for observing many wildlife species native to Southern California. More than 200 species of birds and mammals, numerous reptiles and amphibians, and thousands of types of insects and other invertebrates can be found in habitat areas, including Chino Hills State Park. Wildlife species in and around Yorba Linda include: mountain lions, bobcats, coyotes, mule deer, raccoons, opossums, striped skunks, western grey squirrels, red-tailed hawks, Cooper's hawks, and turkey vultures. (City of Yorba Linda, 2016a)

Areas in northern and southeastern Yorba Linda provide natural open space and various biological habitats. The area of biological activity in the southeast of the City is centered on the Santa Ana River. The northern biologically-active area contains riparian habitats and includes oak woodland, chaparral, and coastal sage scrub adjacent to Chino Hills State Park. (City of Yorba Linda, 2016b)

D. Wildlife Corridors

A wildlife corridor is a section of land connecting two larger areas of natural habitat which is free of barriers that would prevent wildlife passage. Wildlife movement corridors are important for the free movement of animals between population centers, for access to food and water sources, as escape routes from brush fires, and in the longer term, for genetic dispersal of individuals between populations. According to the California Essential Habitat Connectivity Project, parts of northern and eastern Yorba Linda are considered Natural Landscape Blocks. These are relatively natural habitat blocks that support native biodiversity and areas essential for ecological connectivity between them. (City of Yorba Linda, 2016a)

4.2.1 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. Comments were made during the PEIR Scoping Meeting that pertain to biological resources in regards to hawks and other endangered protected species of plants and animals. A comment related to biological resources was made by Hills for Everyone



(HFE) on May 25, 2022. HFE expressed that housing opportunity site S5-008 was within the Critical Habitat of the federally threatened California Gnatcatcher and has neighboring properties that include California Gnatcatcher occurrences.

Additionally, comments related to biological resources from California Department of Fish and Wildlife (CDFW) on May 26, 2022. CDFW recommended providing a complete assessment and impact analysis of the native/naturalized vegetation communities, flora, and fauna within and adjacent to the Project area, with emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species; a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts; that measures be taken to avoid Project impacts to nesting birds; and to include information as to how the Project or adjacent land may be affected by fuel modification requirements.

4.2.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations governing biological resources.

A. Federal

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened.

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. (USFWS, 2017)



2. *Clean Water Act Section 401*

Clean Water Act (CWA) § 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived § 401 certification. The central feature of CWA § 401 is the state or tribe's ability to grant, grant with conditions, deny, or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification. Denying certification prohibits the federal permit or license from being issued. Waiver allows the permit or license to be issued without state or tribal comment. States and tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with Environmental Protection Agency (EPA)-approved water quality standards. In addition, states and tribes consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law.

Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, § 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA § 401. (EPA, 2019)

3. *Clean Water Act Section 404*

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities).

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation's waters would be significantly degraded. Applications for permits must, to the extent practicable: (1) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts



on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process.

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (USACE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption. (EPA, n.d.)

4. *Executive Order 11990 – Protection of Wetlands*

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2020) The Order applies to:

- Acquisition, management, and disposition of federal lands and facilities construction and improvement projects which are undertaken, financed, or assisted by federal agencies;
- Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. (FEMA, 2020)

5. *Migratory Bird Treaty Act (16 USC Section 703-712)*

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, 2020a)



B. State

1. *California Endangered Species Act (CESA)*

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. CDFW works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met.

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs).

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA.

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, n.d.)

2. *Natural Community Conservation Planning Act (NCCP)*

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly.

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous



activities that compose the development of an NCCP. CDFW and the USFWS provide the necessary support, direction, and guidance to NCCP participants.

There are currently 14 approved NCCPs (includes 6 subarea plans) and more than 20 NCCPs in the active planning phase (includes 10 subarea plans), which together cover more than 7 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.)

3. *California Fish and Game Code, Section 1600, et seq.*

CFGF Section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGF indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, n.d.)

4. *Native Plant Protection Act (NPPA) of 1977*

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.)

5. *Porter-Cologne Water Quality Act*

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.



The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous Non-Point Source (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

C. Local

1. City of Yorba Linda General Plan

The General Plan identifies goals related to biological resources in its Land Use and Conservation Element. Goals and policies that are relevant to the Project are as follows:

Goal LU-9: Preservation and enhancement of the natural landscape and topography of the City.

- **Policy LU 9.1:** Preserve areas within the City that provide scenic, cultural, natural, or biological significance.

Goal LU-11: Protection of water quality in the land use decision making process.

- **Policy LU 11.2:** Preserve wetlands, riparian corridors, and buffer zones to establish reasonable limits on the clearing of vegetation from the project site.

Goal CN-2: Preservation of natural resource areas of community and regional significance.

- **Policy CN-2.1:** Support the preservation of native wildlife and plant communities, and their habitats.



- **Policy CN-2.6:** Support the requirement for development proposals to provide detailed biological assessments in areas which may contain important plant communities and wildlife habitat.

4.2.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IV of Appendix G to the CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources (OPR, 2019):

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;*
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

4.2.4 IMPACT ANALYSIS

Threshold a: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The City of Yorba Linda General Plan EIR concluded that with the exception of the Cielo/Esperanza Focus Area, the City is generally built out and would primarily have infill development and reuse of existing developed sites for commercial, industrial, and residential uses. The six focus areas that are currently developed are not examined in the EIR, as there would be no potential impact on any special



status or sensitive species; these areas have already been modified. With the implementation of mitigation measure MM BIO-1, biological resources impacts for the Cielo/Esperanza Focus Area would be less than significant. (City of Yorba Linda, 2016b)

Sensitive biological resources are habitats or species that have been recognized by federal, state, and/or local agencies as being endangered, threatened, rare, or in decline throughout all or part of their historical distribution. Sensitive animal and plant species have been identified within the Yorba Linda region, including species identified in the CDFW's CNDDDB. This database lists special-status wildlife species that have historically occurred within regions of California, including Yorba Linda. It is important to note that the inclusion of species in the database does not mean that the listed species would occur within the housing opportunity sites. The potential presence of a species is dependent on the type of habitat available. The City of Yorba Linda encompasses three quads within the CNDDDB. The CNDDDB indicates that three rare plant species and fifteen sensitive, federally- and state-listed wildlife species have been identified in the Yorba Linda, Black Star Canyon, and Prado Dam regions.

As depicted in Exhibit CN-2, *Natural Habitat Areas*, of the City's General Plan, the majority of the housing opportunity sites are not located within a natural habitat area and are developed and surrounding by existing development (City of Yorba Linda, 2016a). However, two housing opportunity sites (Site S5-008 and Site S7-005) are located within a natural habitat area; both sites are currently vacant and undeveloped. Therefore, future development on these two sites would have the potential to have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, and impacts would be potentially significant.

Threshold b: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

The City's General Plan EIR concluded that six of the seven focus areas are primarily built out, no significant impacts to biological resources would be anticipated. There are presence of wetland and riparian habitat within the Cielo/Esperanza Focus Area. With the implementation of mitigation measure MM BIO-1, impact for the Cielo/Esperanza Focus Area would be less than significant. (City of Yorba Linda, 2016b)

Riparian habitats are those occurring along the banks of rivers and streams. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors. There are no housing opportunity sites located within riparian habitats or in sensitive natural communities identified in local or regional plans, policies, and regulations, and by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, with the exception of housing



opportunity site S3-203, which has forested/shrub riparian habitat. (USFWS, 2020b) Under existing conditions, this site is developed and contains residential uses and a berry farm. Therefore, future development at this site has a potential to have substantial adverse effect on riparian habitat or other sensitive natural community, and impacts would be potentially significant.

Threshold c: Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The City of Yorba Linda General Plan EIR findings related to wetlands are discussed under threshold b. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs.

As shown in the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory, there are four areas of wetlands within the housing opportunity sites (Freshwater pond and riverine habitat on site S7-005; Riverine habitat on S5-008; Freshwater Forested/Shrub Wetland and Riverine habitat on S4-053; and Freshwater Forested/Shrub Wetland and Riverine habitat on S3-203). (USFWS, 2020b) Accordingly, future development at these sites would have the potential to involve direct removal, filling, hydrological interruption, or other direct or indirect impact to wetlands under jurisdiction of regulatory agencies, and impacts would be potentially significant.

Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The City of Yorba Linda General Plan EIR concluded that although the undeveloped hillsides provide for the local movement and dispersal of local wildlife, the Cielo/Esperanza focus area is constrained by urban development to the south and west. Existing development limits regional connectivity to other habitat areas and development within this focus area would not be expected to substantially interfere with wildlife movement. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)

The City is entirely developed and is mostly surrounded by developed urban uses. The housing opportunity sites contain trees, the majority of which are ornamental. Future development undertaken in accordance with the Project would also be required to comply with the Migratory Bird Treaty Act (MBTA), which implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The USFWS administers permits to take migratory birds in accordance with the MBTA. Adherence to the required MBTA regulations would ensure that if construction occurs during the



breeding season, appropriate measures would be taken to avoid impacts to nesting birds. Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant.

Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Yorba Linda General Plan EIR concluded that the General Plan Update would not significantly impact biological resources within the City because it is predominately built out and any new development would occur in areas that are already disturbed. It found that the only new development on undeveloped land that could occur would be in the Cielo/Esperanza focus area which currently lies adjacent to the City in unincorporated Orange County. The General Plan EIR found that there are no applicable Orange County ordinances or policies such as tree preservation that would be affected by any development in that area and impacts would be less than significant.

Trees in the City of Yorba Linda are protected under the City's Municipal Code Chapter 16.08 (Tree Preservation), which regulates the planting, maintenance, and removal of trees in the City. Future development under the Project may involve the removal of existing ornamental trees. However, future development would be required to comply with the provisions of the City's Municipal Code identified above. Therefore, implementation of the Project would not conflict with local polices or ordinances protecting trees and impacts would be less than significant.

Threshold f: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City of Yorba Linda General Plan EIR concluded that the Cielo/Esperanza Focus Area is adjacent to the Orange County Central-Coastal Natural Communities Conservation Plan and Habitat Conservation Plan (NCCP/HCP); however, CEQA documentation prepared for projects within this Focus Area have not identified impacts to conservation goals and policies. Any new development in this focus area would also be subject to Mitigation Measure BIO-1, which requires that a sensitive species survey be conducted in any area of new growth in order to determine potential impacts and identify required mitigation. Therefore, the General Plan EIR determined that with the implementation of mitigation measure MM BIO-1, impacts would be less than significant. (City of Yorba Linda, 2016b)

The City Yorba Linda is a participating jurisdiction to the Orange County Central-Coastal NCCP/HCP. (CDFW, 2019) However, the housing opportunity sites are not located within the boundaries of the NCCP/HCP. Therefore, the Project would not conflict with the provisions of approved local, or state habitat conservation plan or natural community conservation plan and no impact would occur.



4.2.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for biological resources considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project area. The cumulative impact evaluation also takes into consideration the geographic area covered by Orange County Central-Coastal Natural Communities Conservation Plan and Habitat Conservation Plan, which is the prevailing habitat conservation plan applicable to the region.

The temporary direct and/or indirect impacts of the Project would not result in significant cumulative impacts (CEQA Section 15310) to environmental resources within the Project area. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. Although the Project would have the potential to disturb sensitive species and wildlife, riparian habitats, wetlands, the proposed Project would incorporate Mitigation Measures MM 4.2-1 through MM 4.2-6 to ensure impacts be reduced to a less than significant level and therefore will not result in an adverse cumulative impact.

4.2.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. There are two housing opportunity sites (Site S5-008 and Site S7-005) that are located within a natural habitat area. Therefore, future development on these two sites would have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, and impacts would be potentially significant.

Threshold b: Potentially Significant Impact. There is a forested/shrub riparian habitat within housing opportunity Site S3-203. Therefore, future development at this site has a potential to have substantial adverse effect on riparian habitat or other sensitive natural community, and impacts would be potentially significant.

Threshold c: Potentially Significant Impact. There are four areas of wetlands within the housing opportunity sites (Freshwater pond and riverine habitat on Site S7-005; Riverine habitat on Site S5-008; Freshwater Forested/Shrub Wetland and Riverine habitat on Site S4-053; and Freshwater Forested/Shrub Wetland and Riverine habitat on Site S3-203). Accordingly, Project implementation would have the potential to involve direct removal, filling, hydrological interruption, or other direct or indirect impact to wetlands under jurisdiction of regulatory agencies, and impacts would be potentially significant.

Threshold d: Less than Significant Impact. Future development undertaken in accordance with the Project would also be required to comply with the Migratory Bird Treaty Act (MBTA). Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and impacts would be less than significant.



Threshold e: Less than Significant Impact. Trees in the City of Yorba Linda are protected under Chapter 16.08 (Tree Preservation) of the City's Municipal Code, which regulates the planting, maintenance, and removal of trees in the City. Future development would be required to comply with provisions of the City's Municipal Code, and impacts would be less than significant.

Threshold f: No Impact. None of the housing opportunity sites are located within the boundaries of the NCCP/HCP. Therefore, the Project would not conflict with the provisions of approved local, or state habitat conservation plan or natural community conservation plan and no impact would occur.

4.2.7 MITIGATION MEASURES

MM 4.2-1 The City of Yorba Linda shall require applicants of future development projects on housing opportunity sites S5-008, S7-005, S3-203, and S4-053 to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall be a reconnaissance level field survey of the sites for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, special status species or their habitat, sensitive habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the sites and adjacent lands potentially affected by the future development, the biologist shall submit a written report substantiating such to the City of Yorba Linda before issuance of a grading permit by the City, and the project may proceed without any further biological investigation. If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, implementation of Mitigation Measure MM 4.2-2 shall be required.

MM 4.2-2 A qualified biologist shall evaluate impacts to sensitive or protected biological resources from development. The impact assessment may require focused surveys that determine absence or presence and distribution of biological resources on the site. These surveys may include, but are not limited to: 1) focused special status animal surveys if suitable habitat is present; 2) appropriately timed focused special status plant surveys that will maximize detection and accurate identification of target plant species; and 3) a delineation of jurisdictional boundaries around potential wetlands, riparian habitat, and waters of the United States or State.

MM 4.2-3 The results of these surveys will assess project impacts and develop site specific mitigation measures to avoid impacts to sensitive or protected biological resources. Depending on the resources potentially present on the project site, avoidance may include: 1) establishing appropriate no-disturbance buffers around onsite or adjacent resources, and/or 2) initiating construction at a time when special status or protected animal species will not be vulnerable to project-related mortality (e.g., outside the avian nesting season or bat maternal or wintering roosting season). Consultation with relevant regulatory agencies may be required in order to establish suitable buffer areas.



The qualified biologist shall substantiate the impact evaluation or the assumed presence of special-status species in all suitable habitats onsite in a written report submitted to the City of Yorba Linda before issuance of a grading permit by the City. If the project avoids all sensitive or protected biological resources, no further action is required. If avoidance of all significant impacts to sensitive or protected biological resources is not feasible, the project shall implement Mitigation Measure MM 4.2-4.

MM 4.2-4 The City of Yorba Linda shall require applicants to design development projects to minimize potential impacts to sensitive or protected biological resources to the greatest extent feasible, in consultation with a qualified biologist and/or appropriate regulatory agency staff. Minimization measures may include 1) exclusion and/or silt fencing, 2) relocation of impacted resources, 3) construction monitoring by a qualified biologist, and 4) an informative training program conducted by a qualified biologist for construction personnel on sensitive biological resources that may be impacted by project construction. If minimization of all significant impacts to sensitive or protected biological resources is infeasible, the project shall implement Mitigation Measure MM 4.2-5.

MM 4.2-5 A qualified biologist will develop appropriate mitigations that will reduce project impacts to sensitive or protected biological resources to a less than significant level. The type and amount of mitigation will depend on the resources impacted, the extent of the impacts, and the quality of habitats to be impacted. Mitigations may include, but are not limited to: 1) compensation for lost habitat or waters in the form of preservation or creation of in-kind habitat or waters, either onsite or offsite, protected by conservation easement; 2) purchase of appropriate credits from an approved mitigation bank servicing the Yorba Linda area; and 3) payment of in-lieu fees. Furthermore, project applicants shall obtain appropriate permit authorization(s) for impacts to jurisdictional waters, wetlands, and/or riparian habitats. The types of permits potentially required for impacts to jurisdictional waters are a Clean Water Act (Section 404) permit issued by the US Army Corps of Engineers, a California Water Certificate or Waste Discharge Order issued by the Regional Water Quality Control Board, and a Stream Alteration Agreement issued by the California Department of Fish and Wildlife.

4.2.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.2-1 through MM 4.2-4 would ensure the Project's potential impacts to sensitive or protected biological resources be mitigated through biological surveys and impact assessments by a qualified biologist. With implementation of the required mitigation and General Plan goals and policies, the Project's potential impacts to sensitive or protected biological resources would be reduced to less than significant.



Threshold b and c: Less-than-Significant Impact with Mitigation. Mitigation Measures MM 4.2-1 through 4.2-4 would continue to apply. Additionally, implementation of Mitigation Measure MM 4.2-5 would ensure the Project's potential impacts to riparian habitats and wetlands be mitigated through obtaining appropriate permit authorization(s). With implementation of the required mitigation and General Plan goals and policies, the Project's potential impacts to riparian habitats and wetlands would be reduced to less than significant.



4.3 ENERGY

The analysis in this Subsection is based, primarily, on a Project-specific energy analysis titled “Yorba Linda 2021-2029 Housing Element Implementation Programs” dated May 27, 2022 (Urban Crossroads, 2022b). The report (herein, “Energy Analysis”) was prepared by Urban Crossroads, Inc (hereafter, Urban Crossroads) and is included as *Technical Appendix C* to this PEIR. Additional references used for this Subsection are listed in Section 7.0, *References*.

4.3.1 EXISTING CONDITIONS

A. Overview

The most recent data for California’s estimated energy consumption and natural gas consumption is from 2019, released by the United States (U.S.) Energy Information Administration’s (EIA) California State Profile and Energy Estimates in 2021 and included (EIA, 2022a):

- As of 2019, approximately 7,802 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2019, approximately 662 million barrels of petroleum
- As of 2019, approximately 2,144 billion cubic feet of natural gas
- As of 2019, approximately 1 million short tons of coal

The California Energy Commission’s (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation Energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California’s future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (CEC, 2017)
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (CEC, 2017)
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2019 (DOE, n.d.)



The most recent data provided by the EIA for energy use in California by demand sector is from 2018 and is reported as follows:

- Approximately 39.3% transportation
- Approximately 23.2% industrial
- Approximately 18.7% residential
- Approximately 18.9% commercial (EIA, n.d.)

In 2020, total system electric generation for California was 272,576 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 190,913 GWh, which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (15%) (CEC, n.d.). Natural gas is the main source for electricity generation at 42.97% of the total in-state electric generation system power as shown in Table 4.3-1, *Total Electricity System Power (California 2020)*.

Table 4.3-1 Total Electricity System Power (California 2020)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix	Total California Power Mix
Coal	317	0.17%	194	6,963	7,157	8.76%	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	8,724	10.68%	101,022	37.06%
Oil	30	0.02%	-	-	0	0.00%	30	0.01%
Other (Waste Heat/Petroleum Coke)	384	0.20%	125	9	134	0.16%	518	0.19%
Nuclear	16,280	8.53%	672	8,481	9,154	11.21%	25,434	9.33%
Large Hydro	17,938	9.40%	14,078	1,259	15,337	18.78%	33,275	12.21%
Unspecified	-	0.00%	12,870	1,745	14,615	17.90%	14,615	5.36%
Non-Renewable and Unspecified Totals	127,248	66.65%	28,009	27,111	55,120	67.50%	182,368	66.91%
Biomass	5,680	2.97%	975	25	1,000	1.22%	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	1,991	2.44%	13,336	4.89%
Small Hydro	3,476	1.82%	320	2	322	0.39%	3,798	1.39%
Solar	29,456	15.43%	284	6,312	6,596	8.08%	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	16,635	20.37%	30,343	11.13%
Renewable Totals	63,665	33.35%	13,184	13,359	26,543	32.50%	90,208	33.09%
System Totals	190,913	100%	41,193	40,471	81,663	100%	272,576	100%

Source: (Urban Crossroads, 2022b. Table 2-1)



An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below (EIA, 2022a):

- California was the seventh-largest producer of crude oil among the 50 states in 2019, and, as of January 2020, it ranked third in oil refining capacity. Foreign suppliers, led by Saudi Arabia, Iraq, Ecuador, and Colombia, provided more than half of the crude oil refined in California in 2019.
- California is the largest consumer of both jet fuel and motor gasoline among the 50 states and accounted for 17% of the nation’s jet fuel consumption and 11% of motor gasoline consumption in 2019. The State is the second-largest consumer of all petroleum products combined, accounting for 10% of the U.S. total. In 2018, California’s energy consumption was the second highest among the states, but its per capita energy consumption was the fourth-lowest due in part to its mild climate and its energy efficiency programs.
- In 2019, California was the nation’s top producer of electricity from solar, geothermal, and biomass energy and the State was second in the nation in conventional hydroelectric power generation.
- In 2019, California was the fourth largest electricity producer in the nation, but the State was also the nation’s largest importer of electricity and received about 28% of its electricity supply from generating facilities outside of California, including imports from Mexico.

As indicated above, California is one of the nation’s leading energy-producing states, and California’s per capita energy use is among the nation’s most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

B. Electricity

The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board’s once-through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies revealed the extent to which the South California Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air



districts (CEC, 2013). Similarly, the subsequent 2021 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

Electricity is currently provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2018 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (CEC, 2019)

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator (ISO) is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (California ISO., n.d.).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Table 4.3-2, *SCE 2019 Power Content Mix*, identifies SCE's specific proportional shares of electricity sources in 2019. As indicated in Table 4.3-2, the 2019 SCE Power Mix has renewable energy at 35.1% of the overall energy resources. Geothermal resources are at 5.9%, wind power is at 11.5%, large hydroelectric sources are at 7.9%, solar energy is at 16.0%, and coal is at 0%



Table 4.3-2 SCE 2019 Power Content Mix

Energy Resources	2019 SCE Power Mix
Eligible Renewable	35.1%
Biomass & Waste	0.6%
Geothermal	5.9%
Eligible Hydroelectric	1.0%
Solar	16.0%
Wind	11.5%
Coal	0.0%
Large Hydroelectric	7.9%
Natural Gas	16.1%
Nuclear	8.2%
Other	0.1%
Unspecified Sources of power	32.6%
Total	100%

Source: (Urban Crossroads, 2022b. Table 2-2)

C. Natural Gas

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

“The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercials customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.



SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.



The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this



service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California.” (CPUC, n.d.)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

D. Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 35.8 million registered vehicles in California as of December 2020 (DMV, 2020), and those vehicles consume an estimated 17.4 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project residents and employees via commercial outlets.

California's on-road transportation system includes 394,383 land miles, more than 26.4 million passenger vehicles and light trucks, and almost 8.8 million medium- and heavy-duty vehicles (DMV, 2020). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 10% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 85% of the petroleum consumed in California is used in the transportation sector (EIA, 2022b).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2019, about 37% of the natural gas delivered to consumers went to the state's industrial sector, and about 28% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the state's utility-scale electricity generation in 2019. The residential sector, where two-thirds of California households use

¹ Fuel consumptions estimated utilizing information from EMFAC2021.



natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (EIA, 2022b).

4.3.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. No comments were made during the PEIR Scoping Meeting that pertain to energy. Additionally, one comment related to energy was received during the public scoping period regarding the requirement for solar panels and concern about rerouting powerlines.

4.3.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, state, and local environmental laws and related regulations to energy.

A. Federal Regulations

1. *Intermodal Surface Transportation Efficiency Act (ISTEA)*

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO for the City of Yorba Linda is the Southern California Association of Governments (SCAG). SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area. (FHWA, n.d.)

2. *The Transportation Equity Act for the 21st Century (TEA-21)*

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.



B. State Regulations

1. Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR). (CEC, n.d.)

The 2019 IEPR focuses on changes in its energy system to address climate change and improve air quality in order to ensure that all Californians share in the benefit of the state's clean energy future. The report provides an analysis of electricity sector trends, building decarbonization and energy efficiency, zero-emission vehicles, energy equity, climate change adaptation, electricity reliability in Southern California, natural gas technologies, and electricity, natural gas, and transportation energy demand forecasts. In response to SB 100, which calls for California's electricity system to become 100 percent zero-carbon by 2045, the CEC, California Public Utilities Commission (CPUC) and the California Air Resources Board (CARB) are leading the way to identify pathways to remove carbon from the state's electricity system. The goal is to utilize the clean electricity system to eliminate the carbon from other portions of California's energy system. (CEC, n.d.)

The 2021 IEPR was adopted March 23, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2021 IEPR identifies actions the state and others can take to ensure a clean, affordable, and reliable energy system. California's innovative energy policies strengthen energy resiliency, reduce greenhouse gas (GHG) emissions that cause climate change, improve air quality, and contribute to a more equitable future (CEC, n.d.).

2. State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce



California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. (CEC, n.d.)

4. California Renewable Portfolio Standards (RPS)

The California Energy Commission (CEC) implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)

5. Pavley Fuel Efficiency Standards (AB 1493)

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

6. Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved



infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions: (CA Legislative Info, n.d.)

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

4.3.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to energy if the Project or any Project-related component would (OPR, 2019):

- *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or*
- *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

4.3.5 METHODOLOGY

Information from the CalEEMod Version 2022.1 outputs for the *Yorba Linda 2021-2029 Housing Element Implementation Programs AQIA* (PEIR *Technical Appendix B*) were utilized in this analysis, detailing Project-related transportation energy demands and facility energy demands.

In May 2022 California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage (CAPCOA, 2016). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model run is provided in Appendix 4.1 of *Technical Appendix C*.

Operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB. EMFAC2021 was run for the San Bernardino Orange sub-area for the 2023 calendar years. Data from EMFAC2021 is provided in *Technical Appendix C*.



4.3.6 IMPACT ANALYSIS

Threshold a: *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

A. Construction Energy Demands

During construction of the 27 sites, both mobile and stationary construction equipment will require energy supplies. Construction equipment, vehicles transporting construction workers, and on-site facilities will require gas and diesel fuels and electrical energy. The amount of energy to be consumed during construction will be limited to the construction period and would be supplied to the site by existing infrastructure. Additionally, construction of the 27 sites would consume minimal quantities of electricity (i.e., temporary use for lighting and small power tools). Future development would be required to comply with best management practices for construction activity, and would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during construction. Therefore, impacts to energy during construction would be less than significant.

B. Operational Energy Demands

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

1. Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project area. The VMT per vehicle class can be determined by the vehicle fleet mix and the total VMT.

As summarized on Table 4.3-3, *Total Project-Generated Traffic Annual Fuel Consumption*, the Project will result in 63,832,385 annual VMT and an estimated annual fuel consumption of 2,680,177 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other multi-family uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to similar uses.



Table 4.3-3 Total Project-Generated Traffic Annual Fuel Consumption

Vehicle Type	Annual Miles Traveled ¹	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel
			Consumption (gallons)
LDA	31.43	30,319,403	964,604
LDT1	24.79	2,119,588	85,503
LDT2	24.07	15,855,539	658,706
MDV	19.70	9,516,086	483,110
LHD1	15.46	1,988,567	128,597
LHD2	14.64	565,399	38,610
MHD	7.48	1,110,309	148,379
HHD	5.92	494,526	83,540
OBUS	6.10	35,457	5,817
UBUS	3.73	29,652	7,949
MCY	41.99	1,567,713	37,337
SBUS	6.55	55,058	8,410
MH	5.91	175,087	29,615
TOTAL (ALL VEHICLES)	63,832,385		2,680,177

¹Total VMT may not match CalEEMOD output due to rounding.
 (Urban Crossroads, 2022b. Table 4-1)

It should be noted that the State strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The future development in accordance with the Project would be required to construct sidewalks (as appropriate), facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.



2. *Facility Energy Demands*

Project building operations activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCal Gas; electricity would be supplied to the Project by SCE. As previously stated, the analysis herein assumes compliance with the 2019 Title 24 and CALGreen standards. Annual natural gas and electricity demands of the Project are summarized in Table 4.3-4, *Project Annual Operational Natural Gas Demand Summary*, and provided in *Technical Appendix C*.

Table 4.3-4 Project Annual Operational Natural Gas Demand Summary

Land Use	Natural Gas Demand (kBTU/year)	Electricity Demand (kWh/year)
Multifamily Housing (Mid Rise)	8,834,660	26,767,491
TOTAL PROJECT ENERGY DEMAND	8,834,660	26,767,491

kBTU – kilo-British Thermal Units
(Urban Crossroads, 2022b. Table 4-2)

Project facility operational energy demands are estimated at 8,834,660 kBTU/year of natural gas and 26,767,491 kWh/year of electricity. The Project would allow for conventional residential uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Consistency with ISTE A

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTE A because SCAG is not planning for intermodal facilities on or through the Project site.

Consistency with TEA-21

The Project area is located in an area with proximate access to the Interstate freeway system. The Project area facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The



Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

Consistency with IEPR

Electricity would be provided to the Project by SCE. SCE's Clean Power and Electrification Pathway (CPEP) white paper builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2021 IEPR.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2021 IEPR.

Consistency with State of California Energy Plan

The Project site is located in an area with proximate access to the Interstate freeway system. The Project area facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

Consistency with California Code Title 24, Part 6, Energy Efficiency Standards

The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Standards. It should be noted that the CEC anticipates that nonresidential buildings will use approximately 30% less energy and residential buildings will use 53% less energy compared to the prior code (CEC, 2018). The proposed Project would be subject to Title 24 standards.

Consistency with California Code Title 24, Part 11, CALGreen

As previously stated, CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020. The proposed Project would be subject to CALGreen standards.

Consistency with AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.



Consistency with RPS

California's RPS is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

Consistency with SB 350

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new residential development and would include several measures designed to reduce energy consumption.

Conclusion

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

4.3.7 CUMULATIVE IMPACT ANALYSIS

As indicated under the analysis of Threshold a., the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Although it is possible other cumulative developments could result in the wasteful, inefficient, or unnecessary consumption of energy resources, the Project's projected energy demand during operations would be less-than-cumulatively considerable with mandatory compliance with applicable regulations.

As indicated under the analysis of Threshold b., the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the Project has no potential to result in cumulatively-considerable impacts due to a conflict with or obstruction of such plans.

4.3.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California.

Threshold b: Less than Significant Impact. The Project would not conflict with any state or local plans for renewable energy or energy efficiency.

4.3.9 MITIGATION MEASURES

No mitigation is required.



4.3.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant and no mitigation is required.



4.4 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based on a technical report prepared by Urban Crossroads titled, Greenhouse Gas Analysis, dated May 27, 2022 and included as *Technical Appendix D* to this PEIR (Urban Crossroads, 2022c). The technical report and analysis in this Subsection assess the proposed Project's potential to generate greenhouse gas (GHG) emissions that could contribute to global climate change and its associated environmental effects.

4.4.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

Global Climate Change (GCC) is a change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the Project cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, the Project's Greenhouse Gas Analysis will evaluate the potential for the Project to have a cumulatively significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radioactive heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.



B. Greenhouse Gases

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. For the purposes of this analysis, emissions of CO₂, CH₄, and N₂O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

GHGs have varying Global Warming Potential (GWP) values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO₂ is utilized as the reference gas for GWP, and thus has a GWP of 1. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.4-1, *GWP and Atmospheric Lifetime of Select GHGs*.

Table 4.4-1 GWP and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2 nd Assessment Report	5 th Assessment Report
CO ₂	See*	1	1
CH ₄	12.4	21	28
N ₂ O	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
SF ₆	3,200	23,900	23,500

*As per Appendix 8.A of IPCC’s 5th Assessment Report, no single lifetime can be given.

** HFC = Hydrofluorocarbon

Source: (Urban Crossroads, 2022c, Table 2-2)

Provided below is a description of the common gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Section 2.3 of *Technical Appendix D* to this PEIR and the reference sources cited therein.

- Carbon Dioxide (CO₂) is an odorless and colorless GHG that is emitted from natural and artificial sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically. As an example, prior to the industrial revolution,



CO₂ concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Exposure to CO₂ in high concentrations can cause human health effects, but outdoor levels are not high enough to adversely affect human health.

- Methane (CH₄) is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO₂ and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other artificial sources include fossil-fuel combustion and biomass burning. No human health effects are known to occur from atmospheric exposure to methane; however, methane is an asphyxiant that may displace oxygen in enclosed spaces.
- Nitrous Oxide (N₂O) concentrations began to rise in the atmosphere at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N₂O is used as an aerosol spray propellant, (e.g., in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N₂O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. N₂O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage.
- Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH₄ or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 and have no natural source. CFCs were used for refrigerants, aerosol propellants and cleaning solvents. After discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, due to their long atmospheric lifetime, some of the CFCs will remain in the atmosphere for over 100 years.
- Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Out of all GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order largest to smallest), HFC-23 (CHF₃), HFC-134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). Prior to 1990, the only significant



emissions were HFC-23 emissions. HFC-134a emissions are increasing due to its use as a refrigerant. No human health effects are known to result from exposure to HFCs, which are used for applications such as automobile air conditioners and refrigerants.

- Perfluorocarbons (PFCs) are primarily produced for aluminum production and semiconductor manufacture. PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆). The U.S. Environmental Protection Agency (EPA) estimates that concentrations of CF₄ in the atmosphere are over 70 ppt. No human health effects are known to result from exposure to PFCs.
- Sulfur Hexafluoride (SF₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (22,800). The EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
- Nitrogen Trifluoride (NF₃) is a colorless gas with a distinctly moldy odor. The World Resources Institute indicates that NF₃ has a 100-year GWP of 17,200. NF₃ is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display panels, types of solar panels, and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

C. Greenhouse Gas Emissions Inventories

1. Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2018. Based on the latest available data, the sum of these emissions totaled approximately 28,768,439 gigagram (Gg) CO₂e, as shown in Table 4.4-2, *Top GHG-Producing Countries and the European Union*. As noted in Table 4.4-2, the United States (U.S.), as a single country, was the number two producer of GHG emissions in 2018.



Table 4.4-2 Top GHG-Producing Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO₂e)
China	12,300,200
Unites States	6,676,650
European Union (28-member countries)	4,232,274
India	2,220,123
Russian Federation	2,100,850
Japan	1,238,343
Total	28,768,439

Source: (Urban Crossroads, 2022c, Table 2-3)

2. State of California

California has significantly slowed the rate GHG emissions growth due to the implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a contributor to the U.S. emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2018 GHG emissions period, California emitted an average 425.3 million metric tons of CO₂e per year (MMTCO₂e/yr) or 425,320 Gg CO₂e (6.37% of the total United States GHG emissions). Based on data published by the U.S. Energy Information Administration, California’s per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average

D. Effects of Climate Change in California

Climate change will likely cause shifts in weather patterns, potentially resulting in changes in rainfall levels and volumes, resulting in flooding or droughts, increased wildfire risk, impair habitats for threatened and endangered species, and cause food shortages in some areas, among other climate change results. The potential health effects related directly to the emissions of CO₂, CH₄, and N₂O as they relate to development projects such as the Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth’s ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport those higher ambient temperatures could affect disease survival rates and result in more widespread disease. As shown in Exhibit 4.4-1, *Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990)*, climate change impacts in California have the potential to include, but are not limited to, the following areas:

1. Public Health

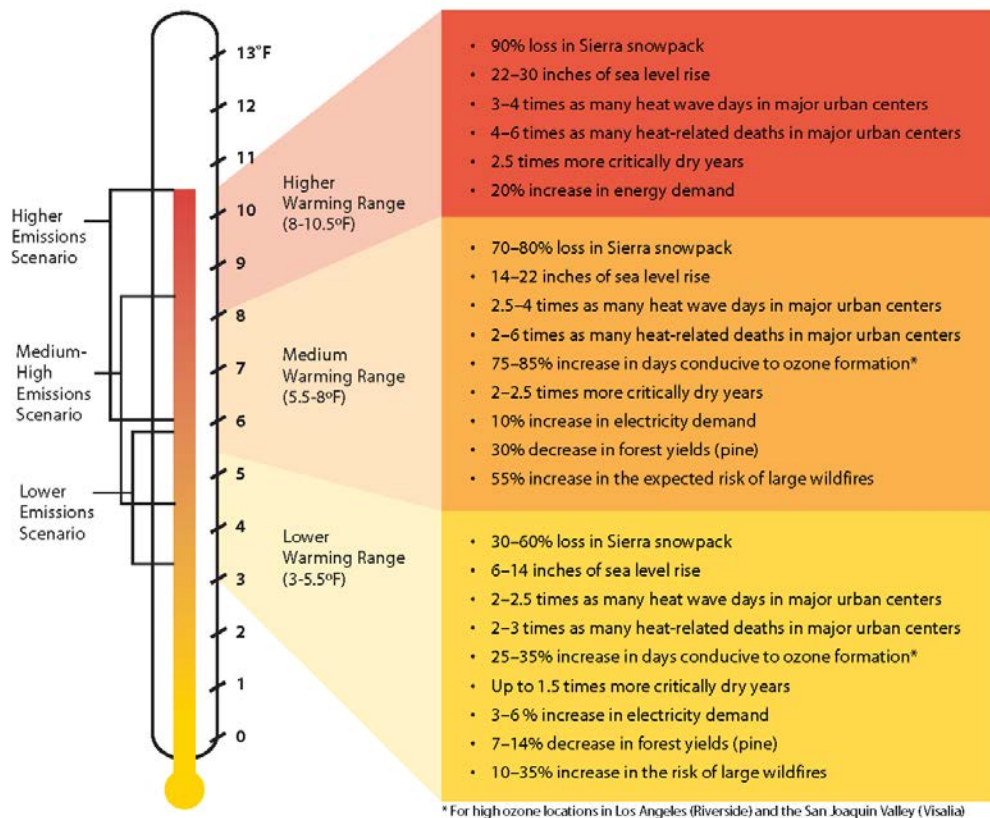
Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases



in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Our Changing Climate: Assessing the Risks to California report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Exhibit 4.4-1: Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990)



Source: (Urban Crossroads, 2022c, Exhibit 2-A)

2. Water Resources

A vast network of artificial reservoirs and aqueducts captures and transports water throughout the State from northern California rivers and the Colorado River. The current distribution system from northern California relies on Sierra Nevada snowpack to supply water during the dry spring and summer months.



Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, and result in a drier Colorado River, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within several areas including Orange County and the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

3. *Agriculture*

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.



4. *Forest and Landscapes*

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

5. *Rising Sea Levels*

Although not relevant to the Project area, rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the State's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

4.4.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. No comments were made during the PEIR Scoping Meeting that pertain to GHG emissions. Additionally, no comments related to GHG emissions were received during the public scoping period.

4.4.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the international, federal, state, and local environmental laws and related regulations related to GHG emissions. For more information, refer to Section 2.7 of *Technical Appendix D* of this PEIR and the reference sources cited therein.

A. International Regulations

1. *Intergovernmental Panel on Climate Change*

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess the scientific, technical and



socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

2. United Nation’s Framework Convention on Climate Change (Convention)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

3. International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014 more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the U.N. Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12, 2015 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to



strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP). Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC (C2ES, 2015).

Following President Biden’s day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.



B. Federal

1. *Federal Regulation and the Clean Air Act*

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding direct and indirect regulations by the federal government concerning GHGs and fuel efficiency.

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (U.S. Court) found that four GHGs, including CO₂, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in Section 2.7.2 “Clean Vehicles” in *Technical Appendix D* of this PEIR.

2. *Mandatory Reporting of GHGs*

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

C. State

1. *Executive Order S-3-05*

Then California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:



- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector, and do not apply to this Project.

2. *Executive Order S-13-08*

Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the Order, the 2009 California Climate Adaptation Strategy (CNRA 2009) was adopted, which is the “...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research. This is provided for informational purposes only and does not apply to the Project.

3. *Executive Order B-30-15*

The GHG reduction target of 40% below 1990 levels by 2030 in this 2015 Executive Order issued by Governor Edmund G. Brown Jr. was subsequently codified in SB 32. It directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO_{2e}. The Order also requires the State’s climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector, and does not apply to this Project.

4. *Executive Order B-55-18 and SB 100*

SB 100 and Executive Order B-55-18 were signed by Governor Brown in 2018. Before then, 25% of retail energy sales were required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raised California’s RPS requirement to 50% renewable resources target by December 31, 2026 and established a 60% target by December 31, 2030. SB 100 also required that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 established a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain



net negative emissions thereafter. The Executive Order directed the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal which does not apply to local governments and the private sector, and does not apply to this Project.

5. California Assembly Bill No. 32 (AB 32)

In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. “GHGs” as defined under AB 32 include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride (NF₃), has also been added to the list of GHGs. The Act required CARB to determine the 1990 statewide GHG emissions level and approve a statewide GHG emissions limit to be achieved by 2020 by adopting regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. CARB is the state agency charged with monitoring and regulating sources of GHGs.

CARB approved the 1990 GHG emissions level of 427 MMTCO_{2e} on December 6, 2007. Therefore, emissions generated in California in 2020 were required to be equal to or less than 427 MMTCO_{2e}. Emissions in 2020 in a “business as usual” (BAU) scenario were estimated to be 596 MMTCO_{2e}, which do not account for reductions from AB 32 regulations. At that level, a 28.4% reduction was required to achieve the 427 MMTCO_{2e} 1990 inventory. In October 2010, CARB prepared an updated BAU 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation was then estimated at 545 MMTCO_{2e}. Therefore, under the updated forecast, a 21.7% reduction from BAU was required to achieve 1990 levels on a statewide basis.

6. California Air Resources Board (CARB) Scoping Plans

The first Scoping Plan was adopted by CARB on December 11, 2008. The 2008 Scoping Plan contained measures designed to reduce the State’s emissions to 1990 levels by the year 2020 to comply with AB 32. The First Scoping Plan Update adopted May 22, 2014, highlights California’s progress toward meeting the near-term 2020 GHG reduction goals defined in the 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs; and the 427 MMTCO_{2e} 1990 emissions level and 2020 GHG emission limit, established in response to AB 32, are slightly higher at 431 MMTCO_{2e}.

In November 2017, CARB released the 2017 Scoping Plan Update, which implements the 2030 target of a 40% reduction below 1990 levels codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH₄ emissions from agricultural and other wastes.



The 2017 Scoping Plan Update establishes a new emissions limit of 260 MMTCO₂e for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030.

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities, jobs-housing balance and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources.

The 2017 Scoping Plan acknowledges that:

[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

In addition to the statewide strategies listed above, the 2017 Scoping Plan Update also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO₂e (MTCO₂e) or less per capita by 2030 and 2 MTCO₂e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible. Alternatively, lead agencies may utilize a performance-based metric using a CAP or other plan to reduce GHG emissions.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) in 2015 and supported by CARB, California, was expected to (and subsequently did) meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and anticipated future GHG-reducing policies. The CALGAPS model showed that, as of 2017, GHG emissions through 2020 could range from 317 to 415 MTCO₂e per year (MTCO₂e/yr), “indicating that existing state policies will likely allow California to meet its target [of 2020 levels



under AB 32].” CALGAPS also showed that by 2030, emissions could range from 211 to 428 MTCO₂e/yr, indicating that “even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32].” CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State’s 80% reduction goal by 2050, various combinations of policies could allow California’s cumulative emissions to remain very low through 2050.

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by CARB for 2000 through 2019. The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 MMTCO₂e (AB 32 2020 target)
- 2000: 468 MMTCO₂e
- 2010: 447.9 MMTCO₂e
- 2019: 418.2 MMTCO₂e (2020 target of 431 MMTCO₂e has been met)

7. The Sustainable Communities and Climate Protection Act of 2008 (SB 375)

Senate Bill (SB) 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

SB 375 also requires Metropolitan Planning Organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities’ strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.



2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

8. *Senate Bill No. 350 (SB 350)*

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

9. *Senate Bill No. 32 (SB 32)/AB 197*

On September 8, 2016, Governor Jerry Brown signed the SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. SB 32 builds upon the AB 32 goal and provides an intermediate goal to achieving Executive Order S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

10. *Title 24 Standards*

CCR Title 24 Part 6: California's Energy Code, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission.



CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that have become effective on January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided, they establish a minimum 65% diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official.

Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions associated with energy consumption in the South Coast Air Basin (SCAB) and across the State of California. For example, the Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, update indoor and outdoor lighting for nonresidential buildings. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades. The 2019 CALGreen standards, which are applicable to the Project, and its requirements are incorporated into the Project, and are further discussed in subsection 2.7.3.3, Title 24 CCR Part 11 - California Green Building Standards Code, of the *Technical Appendix D* of this PEIR.

D. Regional

1. *South Coast Air Quality Management District*

The South Coast Air Quality Management District (South Coast AQMD) is the agency responsible for air quality planning and regulation in the SCAB. South Coast AQMD addresses the impacts to climate change of projects subject to South Coast AQMD permits as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The South Coast AQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, South Coast AQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the South Coast AQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, that could be applied by lead agencies. However, the document was never finalized. The working group has not provided additional guidance since release of the interim guidance in 2008. The South Coast AQMD Board has not approved the thresholds which remain interim. The interim thresholds consist of a tiered approach. Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying



local GHG reduction plan, it does not have significant GHG emissions. Tiers 1 through 5 are further discussed in subsection 2.7.4, South Coast AQMD, of the *Technical Appendix D* of this PEIR.

4.4.4 METHODOLOGY

A. Quantification of Emissions

In May 2022 California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including South Coast AQMD, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendices 3.1 through 3.2 of *Technical Appendix D* of this PEIR. CalEEMod includes GHG emissions from the following source categories: construction, area sources, energy, mobile, waste, water.

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

The South Coast AQMD recommends analyzing direct and indirect Project-related GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate. Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, South Coast AQMD has not recommended, and is not requiring, life-cycle emissions analysis.

1. *Construction Emissions*

Project construction activities would generate CO₂ and CH₄ emissions. Detailed information regarding Project construction is discussed in Section 4.1, *Air Quality*, of this PEIR. Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating



Specific construction related criteria pollutant emissions will be quantified in future GHG analyses to be conducted for individual CEQA projects under the Project. Construction-related emissions are speculative and cannot be accurately determined at this stage of the planning process. Therefore, such impacts are too speculative to evaluate (see CEQA Guidelines Section 15145). To the extent that specific projects are known, those projects have already been or would be subjected to their own environmental analysis.

2. *Operational Emissions*

Operational activities associated with the Project will result in emissions of CO₂, CH₄, and N₂O from the following primary sources: Area Source Emissions; Energy Source Emissions; Mobile Source Emissions; Water Supply, Treatment, and Distribution; and Solid Waste.

Area Source Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. Detailed information regarding how emissions generated from landscape maintenance equipment can be found in Appendix A of *Technical Appendix D*.

Energy Source Emissions

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered.

Mobile Source Emissions

The Project related operational mobile source emissions derive primarily from vehicle miles traveled (VMT) associated with the Project. The Project-generated average weekday daily VMT is 183,955 and was obtained from modeling conducted for the Yorba Linda 2021-2029 Housing Element Implementation Programs Vehicle Miles Traveled Analysis (*Technical Appendix H*) which is based on the Orange County Transportation Analysis Model (OCTAM) for the Year 2045. To estimate the Saturday and Sunday VMT for inclusion in CalEEMod, the daily VMT was converted to annual VMT using a factor of 347 days consistent with the California Air Resources Board 2017 Scoping Plan. 347 days is used instead of 365 days to account for reduced daily VMT that occurs on weekends and holidays. In other words, the average weekend VMT represents 95% ($347 \text{ days} \div 365 \text{ days}$) of the average weekday daily VMT.



Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

Solid Waste

Residential land uses will result in the generation and disposal of solid waste. A percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

4.4.5 BASIS FOR DETERMINING SIGNIFICANCE

Section VII of Appendix G to the CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to (OPR, 2019):

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The South Coast AQMD defines the Service Population (SP) as the total residents and employees associated with a Project. The origin of the SP is based on CARB's 2008 Scoping Plan. The 2008 Scoping Plan identified that based on the GHG emissions inventories for the state, the people of California generate approximately 14 tons of GHG emissions per capita and would need to reduce annual emissions to approximately 10 tons per capita in order to meet the GHG reduction target of AB 32. Because people who live in California generally work in California, the SP metric did not include employees. As CEQA significance thresholds were being determined by air districts, the air districts considered applying this efficiency metric to their air district boundaries. Consistent with methodology provided by the Regional Targets Advisory Committee (RTAC) as part of the SB 375 target setting discussions, the definition of SP was amended to include employees in addition to residents. This is because the transportation sector is the primary source of project-related GHG emissions; and unlike the state as a whole, people who work in one county/air district may not live in the same county/ air district boundary. Also, people who live in a county/air district boundary would also have other trip ends such as school, parks, and retail uses. As such, the air district/county boundary as a whole did not take into account other users within the site.



Relevant to the Project, the South Coast AQMD Tier 4 Option 3 is to utilize an efficiency target. The South Coast AQMD has proposed targets for project-level and plan-level analysis. At the September 2010 working group meeting, the South Coast AQMD recommended a project-level efficiency target of 4.8 MTCO₂e/SP as a target and 6.6 MTCO₂e per SP per year for plans. Although the Project consists of a plan-level document, the project-level efficiency target was utilized herein to provide a conservative analysis.

Although the South Coast AQMD’s draft significance criteria have not been adopted, the City has determined that the South Coast AQMD’s project-level efficiency threshold methodology can be used to set an appropriate significance criterion by which to determine whether the project emits a significant amount of GHG. As previously noted, the 2017 Scoping Plan identifies a reduction target of 80% below 1990 levels by 2050. As such, the appropriate reduction target for 2050 would be 0.96 MTCO₂e/yr. For analysis purposes herein, the SP threshold for the Project’s buildout year of 2045 was calculated by linear interpolation between the 2020 target of 4.8 MTCO₂e/yr and the 2050 target of 0.96 MTCO₂e/yr. As such, the target for the Project’s buildout year of 2040 is 1.44 MTCO₂e/yr.

4.4.6 IMPACT ANALYSIS

Threshold a: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Future housing development facilitated by the Project would result in a total net potential of 2,410 dwelling units. Assuming an average household size of 2.94 residents per unit,¹ the additional dwelling units would result in the population growth of approximately 7,085 residents. As shown in Table 4.4-3, *Project Scenario GHG Emissions*, construction and operation of the Project would generate a total of 2.93 MTCO₂e/SP per year. The Project total GHG emissions would exceed the screening threshold of 1.44 MTCO₂e/SP per year. Thus, Project-related emissions would have a potentially significant direct or indirect impact on GHG and climate change.

¹ Based on population density factors identified in the California Department of Finance, Table 2: E-5 (January 2021).



Table 4.4-3 Project Scenario GHG Emissions

Emission Source	Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
Area Source	559.00	0.01	< 0.005	560.00
Energy Source	2,465.00	0.26	0.02	2,477.00
Mobile Source	17,120.00	0.60	0.64	17,327.00
Waste	53.40	5.33	0.00	187.00
Water Usage	125.00	2.95	0.07	220.00
Refrigerant				2.74
Total CO₂e (All Sources)	20,773.74			
Service Population	7,085.40			
Total CO₂e/Service Population	2.93			
Screening Threshold (CO₂e)	1.44			
Threshold Exceeded?	YES			

Source: (Urban Crossroads, 2022c, Table 3-1)

Threshold b: *Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

A. CARB Scoping Plan

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 4.4-4, *2017 Scoping Plan Consistency Summary*, summarizes the Project’s consistency with the 2017 Scoping Plan. As summarized, the Project would not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories. However, since the Project would exceed the efficiency based GHG emissions target, the Project has the potential to conflict with the 2017 Scoping Plan.



Table 4.4-4 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify the portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. Future development would be constructed in compliance with current California Building Code requirements. Specifically, new buildings must achieve compliance with 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements. Future development would be required to include energy efficient field lighting and fixtures that meet the current Title 24 Standards and would be a modern development with energy efficient heaters and air conditioning systems.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and would therefore comply with the strategy.
At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets. As this is a CARB enforced standard, vehicles that access the Project are required



Action	Responsible Parties	Consistency
		to comply with the standards and would therefore comply with the strategy.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and would therefore comply with the strategy.
Medium- and Heavy-Duty GHG Phase 2.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and would therefore comply with the strategy.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.		Not applicable. This measure is not within the purview of this Project.
Last Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		Not applicable. This measure is not within the purview of this Project.



Action	Responsible Parties	Consistency
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”		Consistent. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	Not applicable. This measure is not within the purview of this Project.
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor’s Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	Consistent. Although this is directed towards CARB and Caltrans, future development would be designed to promote and support pedestrian activity on-site and in the Project area.
By 2019, develop pricing policies to support low-GHG transportation (e.g., low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Not applicable. This measure is not within the purview of this Project.
Implement California Sustainable Freight Action Plan		



Action	Responsible Parties	Consistency
Improve freight system efficiency.	CalSTA, CalEPA,	Not applicable. This measure is not within the purview of this Project.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	CNRA, CARB, Caltrans, CEC, GO-Biz	Not applicable. This measure is not within the purview of this Project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the State. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, California State Water Resource Control Board	Consistent. The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not obstruct or interfere agency efforts to reduce SLPS emissions.
50% reduction in black carbon emissions below 2013 levels.	(SWRCB), Local Air Districts	Not applicable. This measure is not within the purview of this Project.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Not applicable. This measure is not within the purview of this Project.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Not applicable. This measure is not within the purview of this Project.



Action	Responsible Parties	Consistency
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California’s land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Not applicable. This measure is not within the purview of this Project. However, the Project would not convert conservation land to other land uses.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.		Consistent. Future development in accordance with the Project would not convert land that would provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments.		Consistent. To the extent appropriate for future residential buildings, wood products would be used in construction. Additionally, future development in accordance with the Project would include landscaping.
Establish scenario projections to serve as the foundation for the Implementation Plan.		Not applicable. This measure is not within the purview of this Project.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Not applicable. This measure is not within the purview of this Project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Not applicable. This measure is not within the purview of this Project.

Source: (Urban Crossroads, 2022c, Table 3-7)



4.4.7 CUMULATIVE IMPACT ANALYSIS

AB 32 states, in part, that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project has no potential to result in a direct impact to GCC; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, impacts under Threshold a are not Project-specific impacts, but the Project’s contribution to cumulative GHG impact. Therefore, Project-related GHG emissions and their contribution to global climate change would be cumulatively considerable, and GHG emissions impacts would be significant and unavoidable.

4.4.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project total GHG emissions would exceed the screening threshold of 1.44 MTCO₂e/SP per year. Thus, Project-related emissions would have a potentially significant direct or indirect impact on GHG and climate change.

Threshold b: Potentially Significant Impact. The Project would not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories. However, since the Project would exceed the efficiency based GHG emissions target, the Project has the potential to conflict with the 2017 Scoping Plan.

4.4.9 MITIGATION MEASURES

Mitigation Measures MM 4.1-1 and MM 4.1-2 shall apply.

4.4.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a and b: Significant and Unavoidable Impact. As described Section 4.1, *Air Quality*, there is uncertainty regarding the specific nature of the construction and operational activities that would be facilitated under implementation of the Project. Mitigation Measures MM 4.1-1 and MM 4.1-2 would require the preparation of project-specific construction and operational air quality analysis and incorporation of mitigation if emissions levels are shown to be above South Coast AQMD-recommended thresholds of significance. Resulting mitigation would not only reduce criteria pollutant emissions but would also generally reduce GHG emissions. However, it cannot be definitively known or stated at this time what level of emissions reductions future development projects occurring under implementation of the Project would achieve via the implementation of these mitigation measures. While the implementation of Mitigation Measures MM 4.1-1 and MM 4.1-2 would reduce GHG emissions, it cannot be definitively known or stated at this time if future emissions in the City would be reduced to levels that are below applicable thresholds. Therefore, impacts would remain significant and unavoidable despite the implementation of applicable regulatory requirements and policies that have been incorporated with the intent of reducing GHG emissions and the incorporation of Mitigation Measures MM 4.1-1 and MM 4.1-2.



4.5 LAND USE AND PLANNING

The analysis presented in this Subsection is based, in part, on a review of the City of Yorba Linda General Plan (dated October, 2016). This section of the PEIR evaluates the potential impacts to land use and planning in the City of Yorba Linda (City) from implementation of the proposed Project. The General Plan document is available for review on the City of Yorba Linda's website referenced in PEIR Section 7.0, *References*.

4.5.1 EXISTING CONDITIONS

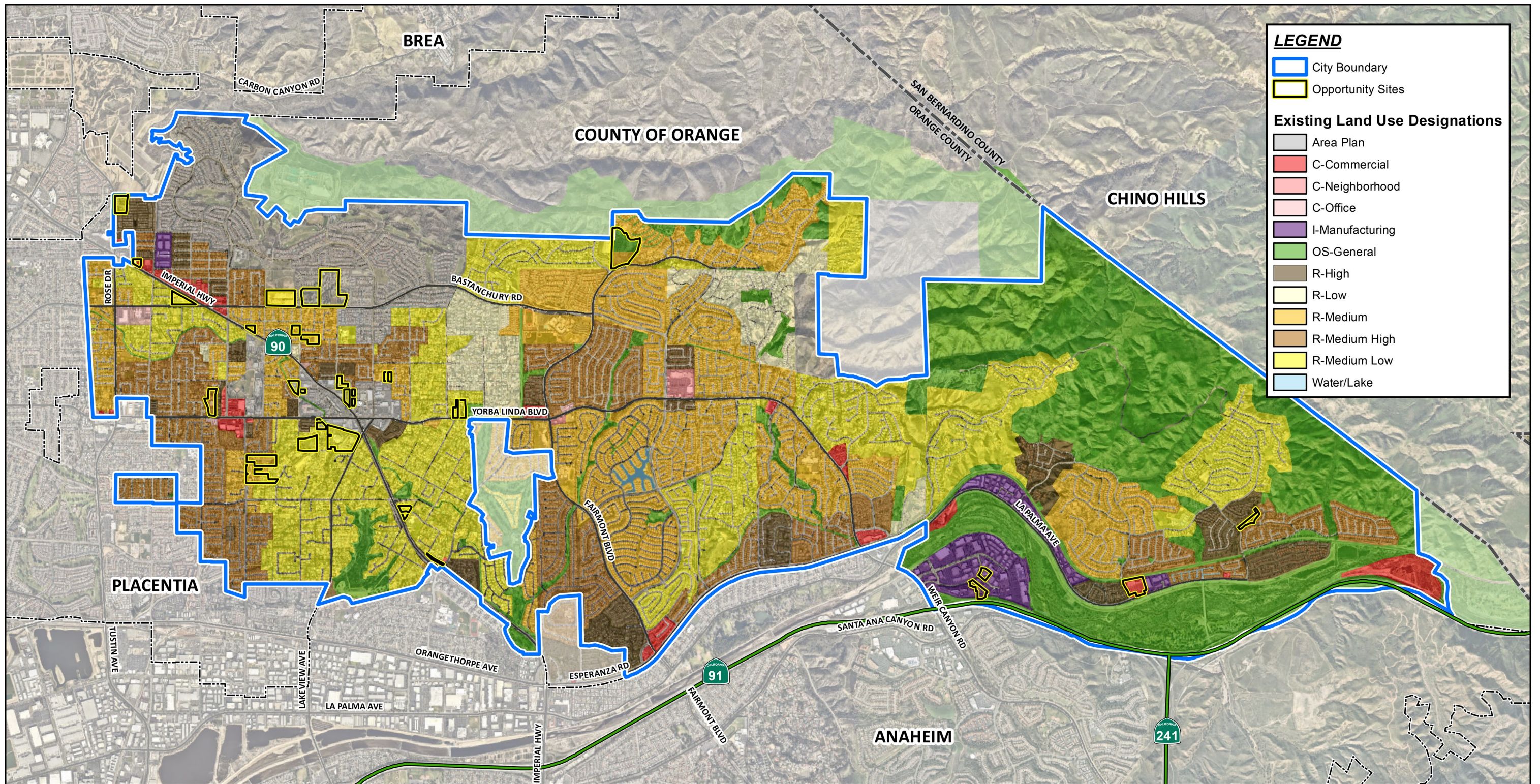
A. Existing Land Uses

Incorporated in 1967, the City of Yorba Linda is predominately a suburban, low-density community. As shown in Figure 4.5-1, *Existing Land Use Designations*, and Figure 4.5-2, *Existing Zoning Designations*, the City's land uses designations consist predominately of residential and open space uses. Residential uses comprise over 46 percent of the total acreage in the City, and open space and recreation uses comprise over 27 percent of the total acreage in the City. Open space is predominately located along the northern boundary of the City. Less than six percent of the land in the City is in public/institutional, commercial, office and industrial uses. Commercial corridors are focused along Imperial Highway, Yorba Linda Boulevard, and Savi Ranch. The majority of industrial uses are located in the Savi Ranch area in the southeastern portion of the City. Additionally, approximately 2,586 acres of vacant land is interspersed throughout the City (City of Yorba Linda, 2016b).

B. Geological Setting

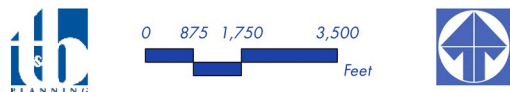
The City is located within the central, northernmost portion of the Santa Ana Mountains, which are part of the Peninsular Ranges Geomorphic Province. It is located in Santa Ana Canyon on a low rolling plain formed by streams that drain the Puente Hills. The Puente Hills extend beyond the City to the north and east while the Santa Ana River forms a natural southern boundary. Yorba Linda can be divided into three terrain provinces: the eroded plain, the Santa Ana River floodplain, and the Puente Hills.

The eroded plain area covers the majority of the City, extending from the edge of the Puente Hills to the Santa Ana River, and is characterized by low rounded ridges and knolls, separated by generally northeast-and southeast trending gullies and ravines. The Santa Ana floodplain is the relatively flat area between the Santa Ana Mountains and the floodplain to the north and is covered by relatively recent deposits of course-grained sand and gravel. The Puente Hills area is characterized by semi-to-well-rounded hills with rather deeply gashed drainage channels. The Puente Hills are mostly underlain by Cenozoic sedimentary bedrock formations consisting of sand stone, silt-stone, and shale. The eastern Puente Hills are made up of marine sedimentary rock units overlain in some areas by terrestrial sediments. Reviews of geologic maps indicate that sediments from the Late Miocene Yorba and Sycamore Canyon Members of the Puente Formation, Quaternary landslides, and older and younger Quaternary Alluvium underlie the eastern Puente Hills. (City of Yorba Linda, 2016b)

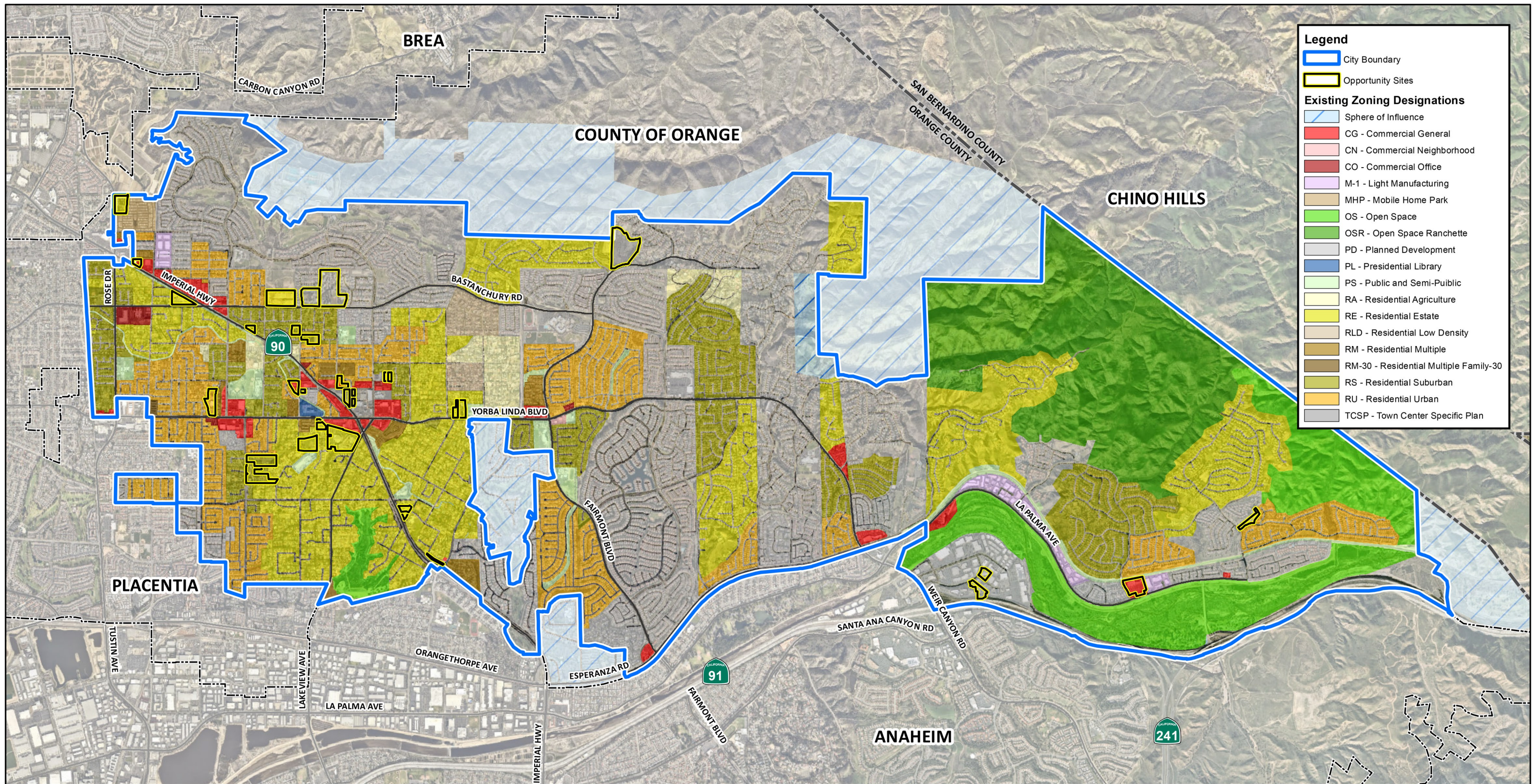


Source(s): ESRI, Nearmap (2022) City of Yorba Linda (2022), City of Yorba Linda - General Plan Map (2016)

Figure 4.5-1

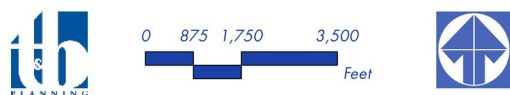


EXISTING LAND USE DESIGNATIONS



Source(s): ESRI, Nearmap (2022) City of Yorba Linda (2022), City of Yorba Linda - Zoning Map (2019)

Figure 4.5-2



EXISTING ZONING DESIGNATIONS

SCH No. 2022040574



4.5.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. One comment was made during the PEIR Scoping Meeting that expressed concern on housing opportunity site S1-200 with the continued use as equestrian property in the future due to rezoning. Additionally, comments related to land use and planning were received during the public scoping period about the development of the designated Open Space portion on housing opportunity site S5-008, and increased density in sites S4-053, S4-201 and S4-060.

One comment related to land use and planning from the Southern California Association of Governments (SCAG) was received on May 26, 2022. SCAG provided informational resources to facilitate consistency of the Project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, encouraged side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency, or non-applicability of the goals and supportive analysis in a table format, and recommends that the City review the Connect SoCal Final Program Environmental Impact Report (Final PEIR) for guidance.

4.5.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the regional and local environmental laws and related regulations related to land use and planning.

A. *Regional*

1. *Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local government and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties: Riverside, Los Angeles, Orange, San Bernardino, Ventura, and Imperial; and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region.

As an MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, known as "Connect SoCal." Connect SoCal includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies to increase mobility options and achieve a



more sustainable growth pattern. Connect SoCal identifies a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG, 2020b). Connect SoCal also provides objectives for meeting emissions reduction targets set forth by CARB; these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. (SCAG, 2020a)

SCAG was also responsible for the Regional Housing Needs Assessment (RHNA) for the 6th Housing Cycle from 2021-2029. On August 22, 2019, HCD provided its regional determination for the SCAG region at 1,344,740 housing units. On September 18, 2019, SCAG formally objected to HCD’s regional determination and proposed a revision between 823,808 and 920,772 housing units. On October 15, 2019, HCD rejected SCAG’s objection on all points, but did lower the regional determination by 2,913 housing units “due to the availability of more recent data,” which resulted in the regional determination of 1,341,827 housing units. SCAG was responsible for establishing the methodology for equitably distributing these 1.34 million housing units among the 197 jurisdictions in the SCAG region. Despite the RHNA Subcommittee’s recommendation for an equitable housing solution that was unanimously supported by SCAG’s Community, Economic and Human Development Committee, this recommendation was overturned through a last-minute decision by its Regional Council to redistribute significantly more housing into Orange County and Los Angeles County.

B. Local

1. *City of Yorba Linda General Plan Policies*

State law requires that general plans address seven topics (referred to as “Elements”) of land use, circulation (mobility), housing, open space, safety, and noise (California Government Code Section 65302). A General Plan may also include other topics of local interest, as chosen by the local jurisdiction (California government Code Section 65303). The complete rewrite of the General Plan was adopted in October 2016, with the exception of the Housing Element which was adopted by the City Council in October 2013. The City of Yorba Linda General Plan is organized into 13 chapters that include the following:

- Introduction and Vision
- Guide to the Yorba Linda General Plan
- Land Use Element
- Circulation Element
- Economic Development Element
- Housing Element
- Historic Resources Element
- Open Space & Recreation Element
- Conservation Element



- Public Health & Safety Element
- Public Services and Utilities Element
- Noise Element
- Growth Management Element

Information presented in the General Plan chapters relevant to the Project are discussed in the representative sections of this PEIR.

2. City of Yorba Linda Municipal Code

The City’s Zoning Code are contained in Title 18 of the Yorba Linda Municipal Code. The primary purpose of the City’s Zoning Code is to promote and protect the public health, safety and welfare of the people of the City of Yorba Linda; to safeguard and enhance the appearance and quality of development of the City; to provide for the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources; and to implement the Yorba Linda General Plan. The Zoning Code is a regulatory document that establishes classification of zones and regulation within those zones that is established and adopted by the City Council. (City of Yorba Linda, 2022)

4.5.4 BASIS FOR DETERMINING SIGNIFICANCE

Section X of Appendix G to the CEQA Guidelines addresses typical adverse effects to agricultural resources, and includes the following threshold questions to evaluate the Project’s impacts on agricultural resources (OPR, 2019):

- a) *Physically divide an established community;*
- b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

4.5.5 IMPACT ANALYSIS

Threshold a: Would the Project physically divide an established community?

Implementation of the Project would involve the development of vacant land, intensification of existing land uses, and the introduction of new residential land uses on parcels throughout the City. Land use changes proposed within the City are intended to tie into the existing uses and surrounding neighborhoods. Development would occur within existing urban areas and infill sites, which is not expected to divide an established community. Therefore, the implementation of the Project is not anticipated to physically divide an established community and impacts are less than significant.



Threshold b: *Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

This PEIR analyzes the physical environmental effects associated with all components of the Project, including Project construction and operation. Governmental approvals requested from the City of Yorba Linda include a General Plan Amendment and Amendments to the Zoning Code and Zoning Map.

The Project’s consistency with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect is discussed below. This section includes an analysis of consistency with the City of San Yorba Linda General Plan and Zoning Code, and SCAG’s Connect SoCal.

1. City of Yorba Linda General Plan

The General Plan Amendments consist of amending the Land Use Element of the General Plan to increase the total residential capacity in the Community Core/Downtown Historical District Area Plan by 181 dwelling units to account for housing opportunity sites S3-024, S3-074, S3-082, and S4-075; in the West Bastanchury Area Plan by 228 dwelling units to account for Site S3-203; amendments to General Plan land use designations as shown in Table 3-2, *Housing Opportunity Sites for Rezoning*; and creation of overlay descriptions as land use categories and how each interact with the underlying zones. Although the Project would result in a change to the General Plan land use designations for the housing opportunity sites, these changes would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of avoiding or reducing an environmental effect, as demonstrated in the analysis below. Accordingly, a less-than-significant environmental impact would result from the Project’s proposed governmental approvals.

Table 4.5-1, *General Plan Consistency Analysis*, provides an analysis of the Project’s consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.5-1, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Yorba Linda General Plan.

Table 4.5-1 General Plan Consistency Analysis

General Plan Policy	Consistency
Land Use Element	
<i>Goal LU-1: A well planned community with sufficient land uses and intensities to meet the needs of anticipated growth and achieve the community’s vision.</i>	
Policy LU 1.2: Identify appropriate locations for residential and non-residential development to accommodate growth through the year 2035 as shown on the General Plan Land Use Diagram.	Consistent. The Project identifies 27 housing opportunity sites that would result in a total net potential of 2,410 dwelling units. Assuming an average household size of 2.94 residents per unit, the additional



General Plan Policy	Consistency
	dwelling units would result in the population growth of approximately 7,085 residents. The General Plan Land Use Diagram would be amendment as part of the Project to be consistent with the proposed zoning. Implementation of the Project would accommodate growth through the year 2035. Therefore, the Project would not conflict with General Plan Policy LU 1.2.
<p>Policy LU 1.3: Promote future patterns of development and land use that reduce infrastructure construction costs and make better use of existing and planned public facilities.</p>	<p>Consistent. The identified housing opportunity sites are located within existing urban areas and infill sites. For example, the Congregational Land Overlay (CLO) includes conversion of underutilized auxiliary congregational areas such as parking lots to housing. Moreover, majority of Yorba Linda has the necessary infrastructure, streets, electrical lines, and water distribution, already in place for new development. As discussed in Sections 4.7, <i>Public Services</i>, and 5.0, <i>Other CEQA Considerations</i>, all sites are adjacent to existing public roadways and are serviceable by police and fire departments, as well as private companies that provide phone, cable, gas, and electric service. Existing water delivery and wastewater collection infrastructure is available to all properties located in the residential sites inventory and the City has adequate water and wastewater capacity to accommodate the additional 2,410 units. Therefore, the Project would not conflict with General Plan Policy LU 1.3.</p>
<p>Goal LU-3: Land use compatibility.</p>	
<p>Policy LU 3.1: Consider and mitigate the impacts on surrounding land uses and infrastructure when reviewing proposals for new development.</p>	<p>Consistent. This PEIR analyzes the environmental impacts from the implementation of the Project and provide mitigation measures with all environmental topic required under CEQA. Future development under the Project would be required to perform site-specific technical studies to ensure impacts to surrounding land uses and infrastructure are adequately addressed and mitigated. Therefore, the Project would be consistent with General Plan Policy LU 3.1.</p>
<p>Policy LU 3.4: Support the review of uses characterized by high levels of noise, nighttime patronage, and safety concerns by local law enforcement to prevent impact on adjacent residences, schools, religious facilities and similar sensitive uses.</p>	<p>Consistent. As discussed in Section 4.6, <i>Noise</i>, residential land uses are considered noise-sensitive receiving land uses and are not expected to include any specific type of stationary source noise levels beyond the typical noise sources associated with existing residential land use in the City. The Project would be required to comply with the City of Yorba Linda Municipal Code Section 8.32.060, Noise Standard - Exterior, and exterior noise levels at adjacent property lines will satisfy exterior noise level limits. Therefore,</p>



General Plan Policy	Consistency
	Project operational noise impacts would be less than significant with Mitigation Measure 4.6-5. Allowing for higher density residential infill development would not result in an increase in nighttime patronage or safety concerns by law enforcement. Therefore, the Project would be consistent with General Plan Policy LU 3.4.
<i>Goal LU-4: Community design that contributes to the preservation and enhancement of character and identity in Yorba Linda.</i>	
Policy LU 4.1: Utilize the City’s design review process to address community design concerns.	Consistent. Future development under the Project would be required to go through Design Review and the City’s development review and permitting process to address community design concerns. Additionally, the City’s Multi-family Design Guidelines further address potential privacy and view impacts between single and multi-story residential uses. Therefore, the Project would be consistent with General Plan Policy LU 4.1.
Policy LU 4.3: Promote the establishment of physical and functional connections between various land uses, while preserving parkland and designated open space.	Consistent. The housing opportunity sites are located with existing urban uses with connections to existing residential and commercial uses. Moreover, the Project would preserve parkland and designated open space and would not introduce residential uses on designated parkland and open space. Therefore, the Project would be consistent with General Plan Policy LU 4.3.
Policy LU 4.4: Promote standards and provisions that further enhance overall community design when reviewing existing City policies and regulations.	Consistent. Future development under the Project would be required to go through Design Review and the City’s development review and permitting process to ensure compliance with City policies and regulations. Therefore, the Project would be consistent with General Plan Policy LU 4.1.
<i>Goal LU-5: Existing and future development coordinated with future infrastructure capacity.</i>	
Policy LU 5.1: Coordinate future infrastructure improvements through the City’s Capital Improvement Program to ensure facilities meet the needs of existing and future land uses.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , all sites are adjacent to existing public roadways and are serviceable by police and fire departments, as well as private companies that provide phone, cable, gas, and electric service. Existing water delivery and wastewater collection infrastructure is available to all properties located in the residential sites inventory and the City has adequate water and wastewater capacity to accommodate the additional 2,415 units. Therefore, the Project would be consistent with General Plan Policy LU 5.1.
<i>Goal LU-8: Hillside development that preserves and protects the unique natural and topographic features of the community.</i>	
Policy LU 8.1: Promote development within hillside areas that take into account density based on slope severity and stability, topographic conditions, and	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , future development pursuant to the Project, including site S5-008, would be required to



General Plan Policy	Consistency
<p>natural resource protection and other environmental conditions.</p>	<p>have a site-specific geotechnical investigation, which would ensure that each development is engineered and constructed to maximize stability and preclude safety hazards related to stability to on-site and adjacent areas. Additionally, future development along hillside would be required to comply with the standards and guidelines in Chapter 18.30, <i>Hillside Development</i>, of the City’s Municipal Code. Therefore, the Project would be consistent with General Plan Policy LU 8.1.</p>
<p>Policy LU 8.2: Continue to uphold current development standards for determination of density and regulation of quality within hillside areas similar to the density of surrounding developed properties.</p>	<p>Consistent. Out of the 27 housing opportunity sites, there is only one site (S5-008) located along a hillside. Site S5-008 has a current land use designation of Residential-Medium in the southern portion (9 acres) and Open Space-General (OS) in the northern portion (14 acres). Based on the restrictions of the General Plan for OS, no residential development would occur in this portion. It should also be noted that changes to the General Plan would be subject to Measure B. The Measure B vote on the Housing Element Implementation Programs would not change the OS designation on site S5-008. Further, the Project would continue to uphold current development standards for determination of density and regulation of quality within hillside areas similar to the density of surrounding developed properties. Therefore, the Project would be consistent with General Plan Policy LU 8.2.</p>
<p><i>Goal LU-9: Preservation and enhancement of the natural landscape and topography of the City.</i></p>	
<p>Policy LU 9.1: Preserve areas within the City that provide scenic, cultural, natural, or biological significance.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, the Project would not have a substantial adverse effect on a scenic vista. Additionally, as discussed in Section 4.2, <i>Biological Resources</i>, implementation of Mitigation Measures MM 4.2-1 through MM 4.2-6 would ensure impacts to biological resources to be reduced to less than significant levels for housing opportunity sites that are located within natural habitat areas, riparian habits, and wetlands. Furthermore, compliance with Standard Condition Planning no. 06, which requires that unknown resources be adequately addressed, would ensure that impacts to cultural resources are less than significant. Therefore, the Project would be consistent with General Plan Policy LU 9.1.</p>
<p>Policy LU 9.2: Ensure that land uses within designated and proposed scenic corridors are compatible with scenic enhancement and preservation.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, the housing opportunity sites are not located within or near any officially designated state</p>



General Plan Policy	Consistency
	scenic highway. As such, the Project would not damage scenic resources within a State scenic highway, and impact would be less than significant. Therefore, the Project would be consistent with General Plan Policy LU 9.2.
Policy LU 9.3: Protect the scenic and visual qualities of hillside areas and ridgelines.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , the Project would not have a substantial adverse effect on a scenic vista. The Project would allow for intensification of existing uses and would be subject to the restrictions imposed by City’s Municipal Code and the goals and policies included in the City of Yorba Linda General Plan. Therefore, the Project would be consistent with General Plan Policy LU 9.3.
Goal LU-10: Provision of adequate school facilities to meet the needs of current and future students.	
Policy LU 10.1: Ensure future development is coordinated with School District needs to serve the present and projected student population.	Consistent. Project buildout would result in an increase of 2,410 dwelling units, resulting population growth of approximately 7,085 residents. The population would lead to an increase in student population, which in turn would create additional demand for Placentia-Yorba Linda Unified School District (PYLUSD) and Orange Unified School District (OUSD) services and facilities. As discussed in Section 4.7, <i>Public Services</i> , there is more than adequate capacity to serve the Project generated students. Therefore, the Project would be consistent with General Plan Policy LU 10.1.
Policy LU 10.2: Support School District efforts to address current and future needs of the City’s student population.	Consistent. See Project Consistency response to General Plan Policy LU 10.1. As discussed in Section 4.7, <i>Public Services</i> , there is more than adequate capacity to serve the Project generated students. Therefore, the Project would be consistent with General Plan Policy LU 10.2.
Policy LU 10.3: Ensure future development addresses impacts on school facilities and contributes its fair share towards expanding, upgrading, or providing school facilities.	Consistent. See Project Consistency response to General Plan Policy LU 10.1. Future development would be required to pay the development impact fees pursuant to AB 1600. Therefore, the Project would be consistent with General Plan Policy LU 10.2.
Goal LU-11: Protection of water quality in the land use decision making process.	
Policy LU 11.1: Ensure urban/stormwater runoff and water quality protection principles are properly considered in the land use decision making process.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , future development under the Project is subject to the requirements of the State Water Resources Control Board’s (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities which requires a Stormwater Pollution Prevention Plan (SWPPP). Additionally, the City would require project



General Plan Policy	Consistency
	<p>applicants of future development projects to submit a project Water Quality Management Plan (WQMP) at the project processing and permitting stages and compliance with the City’s Municipal Code Section 16.04, Water Quality Control. Therefore, the Project would be consistent with General Plan Policy LU 11.1.</p>
<p>Policy LU 11.2: Preserve wetlands, riparian corridors, and buffer zones to establish reasonable limits on the clearing of vegetation from the project site.</p>	<p>Consistent. As discussed in 4.2, <i>Biological Resources</i>, there is a forested/shrub riparian habitat within housing opportunity site S3-203, and four areas of wetlands within the housing opportunity sites (Freshwater pond and riverine habitat on site S7-005; Riverine habitat on S5-008; Freshwater Forested/Shrub Wetland and Riverine habitat on S4-053; and Freshwater Forested/Shrub Wetland and Riverine habitat on S3-203). Future development on housing opportunity sites that are located within a natural habitat areas, riparian habits, and wetlands would be preceded by site inspection by a qualified biologist, permitting and mitigation (MM 4.2-1 through 4.2-6) to ensure impacts to biological resources would be less than significant. Therefore, the Project would be consistent with General Plan Policy LU 11.2.</p>
<p>Policy LU 11.3: Promote the use of technology and design that maintain water quality and reduces stormwater pollutants from the development site.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 11.1. Therefore, the Project would be consistent with General Plan Policy LU 11.3.</p>
<p>Circulation Element</p>	
<p><i>Goal CR-3: An efficient circulation system that utilizes transportation system management and demand management strategies.</i></p>	
<p>Policy CR-3.2: Provide for safe and efficient traffic operations, by maintaining City standards for the installation and operations of traffic control devices.</p>	<p>Consistent. A Traffic Analysis has been prepared for the Project (<i>Technical Appendix G</i>) to evaluate the proposed development intensities expected for the 27 sites and assess the potential traffic deficiencies that result from the implementation of the rezoning and changes to land use. Improvements have been recommended at the study area intersections to maintain City standards for safe and efficient traffic operations. Additionally, future developments would be required to conduct focused traffic analyses that meet the City’s standards which will provide a review of potential intersection operational deficiencies in conjunction with a detailed review of site access. Therefore, the Project would be consistent with General Plan Policy CR 3.2.</p>
<p>Policy CR-3.3: Continue to adhere to OCTA’s Congestion Management Program.</p>	<p>Consistent. Both the Project’s Traffic Analysis and Vehicle Miles Travel (VMT) Report (<i>Technical Appendices G and H</i>) were prepared using Orange</p>



General Plan Policy	Consistency
	County Transportation Analysis Model. Future development under the Project would be required to continue to adhere to OCTA’s Congestion Management Program. Therefore, the Project would be consistent with General Plan Policy CR 3.3.
Policy CR-3.5: Effectively operate and maintain transportation facilities and infrastructure to improve system capacity and meet traffic demand.	Consistent. See Project Consistency response to General Plan Policy CR 3.2. Future developments would be required to conduct site specific traffic analyses to ensure that transportation facilities would meet the increase in traffic demand and impacts would be less than significant. Therefore, the Project would be consistent with General Plan Policy CR 3.5.
Policy CR-3.7: Ensure the circulation system promotes a wide variety of travel modes to serve the greatest cross section of residents, employees and businesses.	Consistent. The City’s transit system is currently served by Orange County Transportation Authority (OCTA). Additionally, bicycle lanes and bicycle routes are provided on a number of roadways within the City. Implementation of the Project would not conflict with the existing transit routes or bicycle routes. Moreover, the Project would provide site opportunities for development of housing that responds to diverse community needs in terms of housing types, cost and location, emphasizing locations near services and transit that promote walkability (Policy 3.1 of the 2021-2029 Housing Element). Therefore, the Project would be consistent with General Plan Policy CR 3.7.
Policy CR-3.8: Encourage new development to provide access to transit, bicycle, pedestrians, and other non-vehicular modes of transportation.	Consistent. The housing opportunity sites are located within existing urban uses with close proximity to transit, bicycle, pedestrians, and other non-vehicular modes of transportation. For example, several housing opportunity sites are located along OCTA Route 26. Implementation of the Project would encourage residents to travel using alternative modes of transportation. Therefore, the Project would be consistent with General Plan Policy CR 3.8.
<i>Goal CR-5: A safe, integrated, and efficient public transportation system.</i>	
Policy CR-5.2: Encourage public and private shuttle services to provide greater transit choices.	Consistent. The City’s transit system is currently served by OCTA. Transit service is reviewed and updated by OCTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Therefore, the Project would be consistent with General Plan Policy CR 5.2.
<i>Goal CR-6: An efficient non-motorized transportation system.</i>	
Policy CR-6.1: Promote the development and maintenance, where feasible, of safe and convenient	Consistent. See Project Consistency response to General Plan Policy CR 3.8. As shown in Figure 4.8-2,



General Plan Policy	Consistency
non-motorized transportation and multi-purpose trails throughout the City.	<i>Existing Trails Network</i> , and 4.9-1, <i>Existing Bikeways</i> , several housing opportunity sites are located within close proximity to the existing trails and bicycle paths within the City. Implementation of the Project would not impede travel on the existing trails or bicycle routes. Therefore, the Project would be consistent with General Plan Policy CR 6.1.
Policy CR-6.2: Provide for safe pedestrian, bicycle, and equestrian access throughout the City.	Consistent. See Project Consistency response to General Plan Policy CR 6.1. Implementation of the Project would allow for safe pedestrian, bicycle, and equestrian access by placing residential uses near the existing sidewalks, bicycle and equestrian trails. Therefore, the Project would be consistent with General Plan Policy CR 6.2.
Goal CR-8: <i>Limited transport of hazardous materials through the City of Yorba Linda in conformance with the State and county HAZMAT program.</i>	
Policy CR-8.2: Require that the transportation of hazardous materials generated within the City be accomplished through the most direct route to the designated HAZMAT routes, the nearest designated HAZMAT Freeway, and the nearest appropriate HAZMAT disposal facility, as discussed in the Safety Element of the General Plan.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , the use, storage, transport, and disposal of hazardous materials by future development would be required to comply with existing regulations of several agencies, including the California Department of Toxic Substances Control, US Environmental Protection Agency, California Division of Occupational Safety and Health, California Department of Transportation, Orange County Environmental Health Division, and Orange County Fire Authority (OCFA). Additionally, transportation of hazardous materials would continue to be limited to SR-91 and to the most direct routes from SR-91 to local delivery sites. Therefore, the Project would be consistent with General Plan Policy CR 8.2.
Historic Resources Element	
<i>Goal HR-2: Protect Yorba Linda's significant historic and cultural resources.</i>	
Policy HR-2.5: Avoid adversely affecting significant archeological and paleontological resources.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , the great majority of the City is developed with urban uses where ground has been previously disturbed by construction of those uses. However, archeological and paleontological resources could still be present in soils that have been previously disturbed. Compliance with Standard Condition Planning no. 06, which requires that unknown resources encountered during grading activities to be adequately addressed, would ensure that impacts to cultural resources are less than significant. Additionally, as subsequent infill and redevelopment residential projects occur, any needed Native American consultation would be assessed, and could require additional CEQA



General Plan Policy	Consistency
	analysis in accordance with Section 15162 of the State CEQA Guidelines. Therefore, the Project would be consistent with General Plan Policy HR 2.5.
Open Space and Recreation Element	
<i>Goal OR-1: Preservation and maintenance of open space resources.</i>	
Policy OR-1.1: Mitigate the impacts of development on sensitive lands such as steep slopes, cultural resources and sensitive habitats through the development review process.	Consistent. See Project Consistency response to General Plan Policies LU 8.1 and LU 9.1. Therefore, the Project would be consistent with General Plan Policy OR 1.1.
Policy OR-1.2: Preserve and protect the scenic and visual quality of canyon and hillside areas as a resource of public importance	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , the Puente and Chino Hills are visible to the north from much of the City. One of the most important ridgelines is known as Telegraph Canyon, located within the Chino Hills State Park to the north of Yorba Linda. Mandatory compliance with applicable rules, regulations, goals and policies by the City would ensure that the Project would not have a substantial adverse effect on a scenic vista. Specifically, housing opportunity site S5-008 is within a hillside area, however, no development would occur on the portions of the site designated for Open Space. Therefore, the Project would be consistent with General Plan Policy OR 1.2.
<i>Goal OR-3: Adequate provision of parks and open space as part of new development.</i>	
Policy OR-3.1: Ensure developers of new residential projects contribute to a citywide minimum park- to-population ratio per City standards or pay in-lieu fees as appropriate.	Consistent. As discussed in Section 4.8, <i>Recreation</i> , future development would be required to pay impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City’s growing population, which are reinforced in the City’s Municipal Code, Section 15.56, Park and Recreation Impact Fees. Therefore, the Project would be consistent with General Plan Policy OR 3.1.
<i>Goal OR-5: A comprehensive multi-purpose trail system.</i>	
Policy OR-5.1: Establish the dedication of right-of-way and construction of public trails or payment of in-lieu fees as a condition of approval on appropriate development projects.	Consistent. Future development would be required to establish the dedication of right-of-way and construction of public trails consistent with the City’s Existing Trail Network or payment of in-lieu fees as a condition of approval. Therefore, the Project would be consistent with General Plan Policy OR 5.1.
Policy OR-5.8: Promote commercial, office, industrial and multi-family residential developers to provide local bicycle trails and rack facilities within their projects as conditions of development, where appropriate.	Consistent. Future development under the Project would be subject to City review and approval which would require installing bicycle racks within their projects as conditions of development to promote alternative modes of transportation. Therefore, the Project would be consistent with General Plan Policy OR 5.8.



General Plan Policy	Consistency
<i>Goal OR-6: Valued and preserved cultural, paleontological, and historical buildings, sites, and features.</i>	
Policy OR-6.1: Protect significant areas of historical, archaeological, educational or paleontological resources.	Consistent. See Project Consistency response to General Plan Policies HR 2.5. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , none of the properties listed or eligible for listing in the NRHP are included within the housing opportunity sites. Further, no site within the Project is included as appearing eligible for the Local Historical Register. Therefore, the Project would be consistent with General Plan Policy OR 6.1.
Policy OR-6.2: Ensure the implementation of effective mitigation measures where development may affect historical, archaeological or paleontological resources.	Consistent. Future development project would be required to comply with Standard Condition Planning No. 06, which requires that unknown resources be adequately addressed, would ensure that impacts to cultural resources are less than significant. Therefore, the Project would be consistent with General Plan Policy OR 6.2.
Policy OR-6.3: Continue to require preparation of archaeological or paleontological reports in areas where there is potential to impact cultural resources.	Consistent. Future developments would be required to prepare site specific archaeological or paleontological reports to ensure impacts to these resources would be less than significant. Therefore, the Project would be consistent with General Plan Policy OR 6.3.
Policy OR-6.4: Continue to require an archaeologist be retained to observe grading activities in areas where the probable presence of archaeological or paleontological resources is indicated.	Consistent. Standard Condition Planning No. 06 would require that archaeologist be retained to observe grading activities for developments with the potential of discovering archaeological or paleontological resources during ground disturbing activities. Therefore, the Project would be consistent with General Plan Policy OR 6.4.
Policy OR-6.5: Preserve uncovered resources in their natural state, as much as feasible, to assure their conservation and availability for later study.	Consistent. Standard Condition Planning No. 06 would include measures to preserve cultural resources upon discovery. Therefore, the Project would be consistent with General Plan Policy OR 6.5.
Conservation Element	
<i>Goal CN-1: Preservation of visual resources along existing and planned landscape corridors.</i>	
Policy CN-1.1: Ensure that new development along landscaped corridors preserve unique visual features.	Consistent. See Project Consistency response to General Plan Policy OR 1.2. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , the Project would not result in significant impacts related to aesthetics. Therefore, the Project would be consistent with General Plan Policy CN 1.1.
<i>Goal CN-2: Preservation of natural resource areas of community and regional significance.</i>	
Policy CN-2.1: Support the preservation of native wildlife and plant communities, and their habitats.	Consistent. As discussed in Section 4.2, <i>Biological Resources</i> , future development on housing opportunity sites that are located within a natural habitat areas, riparian habits, and wetlands would be preceded by site inspection by a qualified biologist, reporting, and



General Plan Policy	Consistency
	<p>permitting (MM 4.2-1 through 4.2-6) to ensure impacts to biological resources would be less than significant. Therefore, the Project would be consistent with General Plan Policy CN 2.1.</p>
<p>Policy CN-2.2: Work with developers to ensure that resource protection measures are prepared and incorporated into development proposals.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 9.1. The City would work with project applicants to ensure future development includes measures and standard conditions to ensure the protection of natural resources. Therefore, the Project would be consistent with General Plan Policy CN 2.2.</p>
<p>Policy CN-2.6: Support the requirement for development proposals to provide detailed biological assessments in areas which may contain important plant communities and wildlife habitat.</p>	<p>Consistent. As discussed in Section 4.2, <i>Biological Resources</i>, implementation of Mitigation Measures MM 4.2-1 through MM 4.2-5 would require a biological resources surveys by a qualified biologist to determine the presence and quality of biological resources potentially affected by project development and adequate mitigation of impacts. Therefore, the Project would be consistent with General Plan Policy CN 2.6.</p>
<p><i>Goal CN-3: Protection of sensitive hillside areas within and adjacent to the community.</i></p>	
<p>Policy CN-3.1: Support the preservation of sensitive hillside, canyon areas, and ridgelines within the City.</p>	<p>Consistent. See Project Consistency response to General Plan Policies LU 8.1 and LU 8.2. The majority of the housing opportunity sites are not located within hillside, canyon areas, and ridgelines within the City. The Project would support the preservation of sensitive hillside, canyon areas, and ridgelines within the City. Therefore, the Project would be consistent with General Plan Policy CN 3.1.</p>
<p>Policy CN-3.2: Ensure that site planning and architectural design respect the natural landform to minimize grading and visual impact.</p>	<p>Consistent. Future development pursuant to the Project would be required to have a site-specific geotechnical investigation, which would ensure that each development is engineered and constructed to minimize grading and respect the natural landform. Therefore, the Project would be consistent with General Plan Policy CN 3.2.</p>
<p>Policy CN-3.3: Ensure the practice of proper soil management techniques to reduce erosion, sedimentation, and other soil-related problems during the construction and operation of new development.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, future development within the Project site would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from Project-related grading and construction activities. Therefore, the Project would be consistent with General Plan Policy CN 3.3.</p>
<p><i>Goal CN-4: A healthy watershed and adequate, safe, and reliable water supply.</i></p>	



General Plan Policy	Consistency
<p>Policy CN-4.2: Consider conservation of water resources in the review of all development proposals and public facility improvement plans.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 11.1. The City’s Multi-Family Design Guidelines include provisions for sustainable site planning and streetscape and encourage multi-family development to achieve LEED certification. Additionally, as stated in Policy 2.6 of the 2021-2029 Housing Element, the Project would promote sustainable site planning and green building practices to reduce energy and water consumption in new and existing housing. Therefore, the Project would be consistent with General Plan Policy CN 4.3.</p>
<p>Policy CN-4.3: Promote the use of water efficient practices in site and building design for private and public projects.</p>	<p>Consistent. As stated in Policy 2.6 of the 2021-2029 Housing Element, the Project would promote sustainable site planning and green building practices to reduce energy and water consumption in new and existing housing. Housing Program 7 - Sustainability and Green Building would encourage the development of green buildings that would reduce water consumption, improve energy efficiency, generate less waste, and lessen a building’s overall environmental impacts. Therefore, the Project would be consistent with General Plan Policy CN 4.3.</p>
<p>Policy CN-4.4: Ensure the maintenance and monitoring of flood control and drainage facilities to provide protection from inundation from a 100-year flood event.</p>	<p>Consistent. As discussed in Sections 4.11, <i>Wildfire</i>, and 5.0, <i>Other CEQA Considerations</i>, portions of the City along the Santa Ana River are located within a flood hazard zone. Specifically, according to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Maps, northwestern corner of housing opportunity sites SS6-020, northwestern portion of S6-015 and southern portion of S7-001 are designated as 0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X); and the southeastern portion of S4-053 is designated as areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies (Zone A). In order for development to be considered outside of the floodplain and no longer subject to special flood hazard requirements, project applicants are required to submit an application to FEMA for a Conditional Letter of Map Revision/Letter of Map Revision (CLOMR-F/LOMR-F) after the fill has been placed. With compliance with Federal and local regulatory requirements, impacts related flooding would be less than significant. Therefore, the Project would be consistent with General Plan Policy CN 4.4.</p>



General Plan Policy	Consistency
<p>Policy CN-4.6: Protect groundwater from sources of pollution.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 11.1. Compliance with the local standards would ensure water quality impacts associated with construction and operation to be less than significant. Therefore, the Project would be consistent with General Plan Policy CN 4.6.</p>
<p><i>Goal CN-6: Preservation of the views of stars and the night sky.</i></p>	
<p>Policy CN-6.1: Support efforts that require outdoor lighting fixtures to be shielded and down- directed in order to minimize glare and light trespass.</p> <p>Policy CN-6.3: Strive to achieve a natural nighttime environment and an uncompromised view of the night sky.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, sources of light and glare from future development would include street lighting and building illumination, security lighting, nighttime traffic, sign illumination, and lighting during with construction activities and potential glare from building and site improvement materials. Also, the Project would be required to comply with existing requirements to control lighting and would not create a new source of substantial light or glare which would adversely affect day or nighttime view. Therefore, the Project would be consistent with General Plan Policy CN 6.2.</p>
<p>Public Health and Safety Element</p>	
<p><i>Goal PS-1: The City's highest priority shall be the protection of human life.</i></p>	
<p>Policy PS-1.3: Ensure appropriate response to recognized natural and manmade disasters with a high probability of occurrence.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, there are adequate fire protection and police protection services within the City which will ensure appropriate response to recognized natural and manmade disasters. Therefore, the Project would be consistent with General Plan Policy PS 1.3.</p>
<p><i>Goal PS-2: The protection of property shall be the second highest priority.</i></p>	
<p>Policy PS-2.2: Ensure all new development pays its share of costs and/or completes necessary improvements to mitigate impacts on existing infrastructure.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, future development under the Project would be required to pay development impact fees (DIF) to assist in providing for fire protection facilities, police protection facilities, school facilities, and parks and recreational facilities. Therefore, the Project would be consistent with General Plan Policy PS 2.2.</p>
<p>Policy PS-2.3: Review and evaluate existing traffic mitigation fees and develop new fees, if necessary, to fund the improvements identified in the General Plan in cooperation with other jurisdictions.</p>	<p>Consistent. As discussed in the Project's Traffic Analysis (<i>Technical Appendix G</i>), Project improvements may include a combination of fee payments to established programs (e.g., DIF), construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Therefore, the Project would be consistent with General Plan Policy PS 2.3.</p>
<p>Policy PS-2.4: Proactively seek best practices in engineering and construction of structures to enhance</p>	<p>Consistent. See Project Consistency response to General Plan Policies LU 8.1 and CN 4.4. The Project would result in less than significant impact related to</p>



General Plan Policy	Consistency
occupant safety with particular emphasis on hazards identified by the City’s disaster response plans.	seismic hazards and flooding. Therefore, the Project would be consistent with General Plan Policy PS 2.4.
Policy PS-2.5: Ensure that structures within very high fire zones include adequate fire sprinkler systems.	Consistent. As discussed in Sections 4.11, <i>Wildfire</i> , mitigation measure MM 4.10-2 would require a Fire Protection Plan (FPP) for sites located within a Very High Fire Hazards Severity Zone (FHSZ). The FPP shall specifically identify the need for fire systems, water availability, construction requirements, and fire-resistant landscaping and appropriate defensible space around structures. Therefore, the Project would be consistent with General Plan Policy PS 2.5.
Goal PS-3: <i>A community protected from hazards associated with geologic instability and seismic events.</i>	
Policy PS-3.1: Ensure stable soil and geologic conditions in the review of development decisions, especially in regards to type of use, size of facility, and ease of evacuation of occupants.	Consistent. As discussed in Sections 4.11, <i>Wildfire</i> , implementation of the Project is not anticipated to directly or indirectly cause potential substantial risks, including landslides, as a result of runoff, post-fire instability or drainage change. Additionally, implementation of Mitigation Measures s MM 4.10-1 and MM 4.10-2 would require the preparation of a Fire Evacuation Analysis and FPP to ensure proper evacuation of occupants. Therefore, the Project would be consistent with General Plan Policy PS 3.1.
Policy PS-3.3: Mitigate the potential for landslides and seismic hazards in the engineering and construction of structures within the City.	Consistent. As discussed in Sections 4.11, <i>Wildfire</i> , and 5.0, <i>Other CEQA Considerations</i> , each project developed pursuant to the Project would be required to have a site-specific geotechnical investigation conducted. The geotechnical investigation for each such project on a site within a zone of required investigation for earthquake-induced landslides would be required to evaluate the potential for such landslides onsite provide any needed recommendations for minimizing hazards. Each project must also comply with seismic safety regulations and requirements regarding slope stability in the California Building Code (CBC) and City of Yorba Linda Building Code. Compliance with the CBC and City’s Building Code would ensure impacts related to landslides would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 3.3.
Policy PS-3.4: Promote high standards for seismic performance of structures.	Consistent. Future development would be designed and built in compliance with the CBC. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site or in the area. Compliance with the CBC and City’s Building



General Plan Policy	Consistency
	Code would ensure impacts from seismic hazards would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 3.4.
Policy PS-3.5: Promote the collection of relevant data on groundwater levels and soil types in regard to liquefaction susceptibility, landslide potential and subsidence risks.	Consistent. See Project Consistency response to General Plan Policy PS 3.3. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , there are zones of required investigation for liquefaction in the southern and southwestern parts of the City within a mile of the Santa Ana River. Each project developed pursuant to the Project would be required to have a site-specific geotechnical investigation conducted. The geotechnical investigations for each respective project would evaluate liquefaction potential at the affected project sites and provide any needed recommendations for minimizing hazards from liquefaction, subsidence, and from other seismic ground failure. Therefore, the Project would be consistent with General Plan Policy PS 3.5.
Policy PS-3.6: Discourage the siting of habitable facilities and structures close to an active or potentially active fault.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , one Alquist-Priolo earthquake fault zone, Whittier-Elsinore Fault Zone, passes through the City, and also is within the northern portion of housing opportunity site S5-008. Any future development projects pursuant to the Project would be required to comply with all applicable Building and Safety division requirements. Further, the City’s Building Code (Yorba Linda Municipal Code, Title 15) requires future development to submit an engineering geology report and soils engineering report to identify and mitigate geology conditions and hazards. Development would not be allowed to be constructed on an active fault. Compliance with the CBC and City’s Building Code would ensure impacts would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 3.6.
Policy PS-3.7: Promote the use of earthquake survival and efficient post-disaster functioning in the siting, design and construction standards for structures and facilities.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , future development would be designed and built in compliance with the CBC. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site or in the area. Therefore, the Project would be consistent with General Plan Policy PS 3.7.
Gola PS-4: <i>Protect the lives and property of residents and visitors of the City from flood hazards.</i>	



General Plan Policy	Consistency
<p>Policy PS-4.1: Provide appropriate land use designations and regulations for areas subject to flooding.</p>	<p>Consistent. See Project Consistency response to General Plan Policy CN 4.4. With compliance with Federal and local regulatory requirements, impacts related flooding would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 4.1.</p>
<p><i>Goal PS-5: Protect the lives and property of residents and visitors of the City from wildfire hazards through preventative measures.</i></p>	
<p>Policy PS-5.1: Reduce the risk for wildfires within the City.</p>	<p>Consistent. As discussed in Sections 4.11, <i>Wildfire</i>, majority of the opportunity sites that would be re-zoned as part of this Project are not within a FHSZ. Among the 27 housing opportunity sites, there are only two sites (S7-005 and S5-008) that are located within a Very High FHSZ. Additionally, implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would require the preparation of a Fire Evacuation Analysis and FPP for site located within a Very High FHSZ. With the implementation of the require mitigation measures, impacts to wildfire would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 5.1.</p>
<p>Policy PS-5.2: Coordinate with the U.S. Forest Service, the Orange County Fire Authority, and private land owners to maintain landscape and provide buffers which will reduce the risk of wildfires.</p>	<p>Consistent. As discussed in Section 4.11, <i>Wildfire</i>, implementation of Mitigation Measure MM 4.10-2 would require the preparation of a FPP for site located within a Very High FHSZ. The FPP shall be subject to the review and approval from the City of Yorba Linda and OCFA. The FPP shall also specifically identify the need for fire systems, water availability, construction requirements, and fire-resistant landscaping and appropriate defensible space around structures. With the implementation of the Mitigation Measure MM 4.10-2, impacts to wildfire would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 5.2.</p>
<p><i>Goal PS-6: Community protection from hazards associated with fires and crime.</i></p>	
<p>Policy PS-6.1: Minimize the loss of life, damage to property, and the economic and social dislocations resulting from structural fires.</p>	<p>Consistent. See Project Consistency response to General Plan Policy PS 5.1. With the implementation of the required mitigation measures, impacts to wildfire would be less than significant. Therefore, the Project would be consistent with General Plan Policy PS 6.1.</p>
<p>Policy PS-6.2: Consult with the responsible agencies to ensure that fire, police, and emergency services concerns are considered in the review of planning and development proposals.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, based on the consultation with Orange County Sherriff’s Department (OCSD), there are sufficient resources to service the additional residents that will be generated by the Project. The Project would not generate a need for additional public services facilities.</p>



General Plan Policy	Consistency
	Therefore, the Project would be consistent with General Plan Policy PS 6.2.
<p>Policy PS-6.3: Ensure that adequate police, fire, and emergency service facilities and personnel are maintained to provide service at sufficient levels.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, considering the existing resources available, the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. There are adequate police, fire, and emergency service facilities and personnel within the City to serve the Project. Therefore, the Project would be consistent with General Plan Policy PS 6.3.</p>
<p>Policy PS-6.5: Ensure that local streets and transportation corridors are sufficient in the event of fires within the City for safe evacuation.</p> <p>Policy PS-6.6: Ensure that local streets and transportation corridors have adequate capacity for safe evacuation when new development is constructed.</p>	<p>Consistent. As discussed in Section 4.11, <i>Wildfire</i>, implementation of Mitigation Measure MM 4.10-2 would require the preparation of a Fire Evacuation Analysis for sites located within a Very High FHSZ. The Fire Evacuation Analysis shall also identify how much the project would increase evacuation times by; how long it would take residents to evacuate; and how emergency response times would be affected by evacuation under reasonable scenarios. Analysis shall demonstrate how the Project would not result in a substantial alteration to the design or capacity of an existing road that would impair or interfere with an adopted emergency response or evacuation plan. Therefore, the Project would be consistent with General Plan Policy PS 6.5.</p>
<p>Goal PS-8: <i>Protect public health, safety, and welfare and the environment from exposure to hazardous materials and waste.</i></p>	
<p>Policy PS-8.1: Establish planning procedures which consider the handling and transportation of hazardous materials and ensure that they are in accordance with applicable County, State and Federal regulations.</p> <p>Policy PS-8.2: Discourage transportation of hazardous materials on residential streets and establish transportation routes for the conveyance of hazardous materials.</p>	<p>Consistent. See Project Consistency response to General Plan Policy CR 8.2. The Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Therefore, the Project would be consistent with General Plan Policies PS 8.1 and 8.2.</p>
<p>Public Services and Utilities Element</p>	
<p><i>Goal PSU-1: Maintenance and improvement of local school facilities that serve the City.</i></p>	
<p>Policy PSU-1.1: Work with the Placentia-Yorba Linda Unified School District to properly serve the educational needs of Yorba Linda’s school-age children.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 10.1. As discussed in Section 4.7, <i>Public Services</i>, there is more than adequate capacity to serve the Project generated students. Therefore, the Project would be consistent with General Plan Policy PSU 1.1.</p>



General Plan Policy	Consistency
Policy PSU-1.3: Continue to monitor the impacts of new development and redevelopment on city- serving schools.	Consistent. See Project Consistency response to General Plan Policy LU 10.1. Future development would be required to pay the development impact fees established by PYLUSD to ensure impacts to school facilities would be less than significant. Therefore, the Project would be consistent with General Plan Policy PSU 1.3.
Goal PSU-2: <i>A high level of fire protection services which adequately serves the community.</i>	
Policy PSU-2.1: Ensure that adequate fire facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.	Consistent. See Project Consistency response to General Plan Policies PS 6.2 and 6.3. There are adequate fire and emergency service facilities and personnel within the City to serve the Project. Therefore, the Project would be consistent with General Plan Policy PSU 2.1.
Policy PSU-2.3: Use the development review process to assess the impact of new development on fire protection services and to ensure that increased demand for emergency services will be adequately served.	Consistent. As discussed in Section 4.7, <i>Public Services</i> , in order to ensure adequate level of fire protections service within the City of Yorba Linda, OCFA typically enters into a Secured Fire Projection Agreement with private developers. The Project applicant will enter into a Secured Fire Protection Agreement with OCFA to address any incremental impacts to fire facilities and services. Therefore, the Project would be consistent with General Plan Policy PSU 2.3.
Policy PSU-2.4: Ensure that existing and new developments maintain or exceed standards for fire prevention to minimize the risk of fire.	Consistent. See Project Consistency response to General Plan Policy PU 5.1. With the implementation of the required mitigation measures, impacts to wildfire would be less than significant. Therefore, the Project would be consistent with General Plan Policy PSU 2.4.
Goal PSU-3: <i>A high level of police protection services which adequately serve the community and provides a sense of safety to residents.</i>	
Policy PSU-3.1: Ensure that sufficient law enforcement facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.	Consistent. See Project Consistency response to General Plan Policies PS 6.2 and 6.3. There are adequate police and emergency service facilities and personnel within the City to serve the Project. Therefore, the Project would be consistent with General Plan Policy PSU 3.1.
Policy PSU-3.3: Use the development review process to assess the impact of new development on police protection services and to ensure that increased demand for emergency services will be adequately served.	Consistent. As discussed in Section 4.7, <i>Public Services</i> , development impact fees will be paid to OCSD to accommodate new demand for police protection services to the Project area. Therefore, the Project would be consistent with General Plan Policy PSU 3.3.
Goal PSU-4: <i>A strong sense of community and opportunities for the continuing education and entertainment of the community.</i>	



General Plan Policy	Consistency
<p>Policy PSU-4.2: Work with the Yorba Linda Library to ensure adequate facilities for the current and future population.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, the City has indicated that demand on library services would be incremental and would not require the need for new or expanded physical library facilities. Therefore, the Project would be consistent with General Plan Policy PSU 4.2.</p>
<p>Goal PSU-5: <i>Efficient, high-quality public infrastructure facilities and utility services throughout the City.</i></p>	
<p>Policy PSU-5.1: Support projects, programs, policies and regulations to ensure that development is appropriate in scale to current and planned infrastructure capabilities.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, existing water delivery and wastewater collection infrastructure is available to all properties located in the housing opportunity sites inventory and the City has adequate water and wastewater capacity to accommodate the additional 2,410 units. Additionally, there would be adequate capacity in the landfill to serve buildout of the Project. Therefore, the Project would be consistent with General Plan Policy PSU 5.1.</p>
<p>Policy PSU-5.2: Work with the Yorba Linda Water District to ensure adequate wastewater facilities for all new developments.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, individual developments would be reviewed by the City and Orange County Sanitization District (OCS D) in order to determine if sufficient local and trunk sewer capacity exists to serve the specific development. Therefore, the Project would be consistent with General Plan Policy PSU 5.2.</p>
<p>Policy PSU-5.4: Provide storm drainage in accordance with best management practices and all adopted plans. Assess the system’s ability to accommodate current and future users and include all necessary improvements in development plans.</p>	<p>Consistent. See Project Consistency response to General Plan Policy LU 11.1. The City requires new development and significant redevelopment projects within the City to address storm water quality impacts through incorporation of permanent (post-construction) Best Management Practices (BMPs) in project design. Therefore, the Project would be consistent with General Plan Policy PSU 5.4.</p>
<p>Goal PSU-6: <i>An adequate, safe, and reliable water supply.</i></p>	
<p>Policy PSU-6.3: Promote water efficient practices in site and building design for public and private projects.</p>	<p>Consistent. See Project Consistency response to General Plan Policies LU 11.1 and CN 4.3. Additionally, as stated in Policy 2.6 of the 2021-2029 Housing Element, the Project would promote sustainable site planning and green building practices to reduce energy and water consumption in new and existing housing. Therefore, the Project would be consistent with General Plan Policy PSU 6.3.</p>
<p>Policy PSU-6.4: Work with the Yorba Linda Water District to ensure adequate water supply for all new developments.</p>	<p>Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i>, the Yorba Linda Water District has forecasted water availability for a normal water year, a single dry water year, and a drought lasting five consecutive water years. Therefore, the Project would be consistent with General Plan Policy PSU 6.4.</p>



General Plan Policy	Consistency
Noise Element	
<i>Goal N-1: Indoor and outdoor living areas that are adequately protected from excessive transportation noise impacts.</i>	
<p>Policy N-1.4: Ensure potentially excessive noise generators provide for the highest feasible level of noise mitigation and compliance with local, state, and federal noise standards.</p>	<p>Consistent. The Project would allow for future development of residential uses which are not considered excessive noise generators. However, as discussed in Section 4.6, <i>Noise</i>, off-site traffic related noise would be less than significant and potential operational stationary source noise would be less than significant with mitigation measure 4.6-5. Future development under the Project would be required to comply with the City’s Municipal Code for noise standards. Therefore, the Project would be consistent with General Plan Policy N 1.4.</p>
<i>Goal N-2: Noise and land use compatibility.</i>	
<p>Policy N-2.1: Ensure compliance with the City’s established noise thresholds for various land uses.</p> <p>Policy N-2.2: Ensure compliance with the City’s established noise thresholds for noise sensitive receptors, land uses, and activities.</p>	<p>Consistent. Under the General Plan’s Criteria for Noise Compatible Land Use, housing opportunity site S5-008 is considered conditionally acceptable and site S7-001 is considered normally unacceptable. For conditionally acceptable land use, new construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. For normally unacceptable land use, new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.</p> <p>As discussed in Section 4.6, <i>Noise</i>, implementation of Mitigation Measures MM 4.6-1 through 4.6-4 would reduce noise and vibration levels produced by the Project. However, construction equipment to nearby noise-sensitive uses due to the unknown number of construction activities that could occur at one time, proximity of construction activities to sensitive receivers, and other factors that cannot be quantified at this time, such as the longevity of activities, construction-related noise impacts may not be reduced to less than significant levels for some projects. With incorporation of all feasible mitigation measures, the Project would be consistent with General Plan Policies N 2.1 and N 2.2.</p>



General Plan Policy	Consistency
<p>Policy N-2.3: Ensure noise producing land uses and activities are designed and located to consider impacts to adjacent uses and activities.</p>	<p>Consistent. Residential uses are considered noise-sensitive receiving land uses and are not expected to include any specific type of stationary source noise levels beyond the typical noise sources associated with existing residential land use in the City. Operational stationary source noise would be less than significant with mitigation measure 4.6-5. Therefore, the Project would be consistent with General Plan Policy N 2.3.</p>
<p><i>Goal N-3: Mitigate noise impacts from non-transportation sources.</i></p>	
<p>Policy N-3.1: Ensure compliance with standards and procedures for mitigating construction-related activities that introduce excessive noise levels.</p>	<p>Consistent. As discussed in Section 4.6, <i>Noise</i>, although construction noise and vibration impacts were determined to be significant, construction activities are intermittent and of short duration, and will not present any long-term impacts, Mitigation Measures MM 4.5-1 through 4.5-4 would ensure noise and vibration levels produced by construction equipment to nearby noise-sensitive uses reduce construction-related noise impacts. With incorporation of all feasible mitigation measures, the Project would be consistent with General Plan Policy N 3.1.</p>
<p><i>Goal N-4: Project approvals that include conditions to mitigate noise impacts.</i></p>	
<p>Policy N-4.1: Consider noise impacts in the siting, design, and construction of new development to minimize noise impacts.</p>	<p>Consistent. The Noise Impact Analysis for the Project (<i>Technical Appendix E</i>) includes analysis for noise impacts during both construction and operational (off-site traffic and stationary sources) activities. Future noise analyses would be required as future development occurs and details of future development are known. Therefore, the Project would be consistent with General Plan Policy N 4.1.</p>
<p>Policy N-4.3: Consider a combination of noise barriers, landscape berms, and architectural design treatments when needed to mitigate noise impacts.</p> <p>Policy N-4.5: Consider measures which alter, prohibit or mitigate noise generating uses through site design.</p>	<p>Consistent. As discussed in Section 4.6, <i>Noise</i>, although construction noise and vibration impacts were determined to be significant, construction activities are intermittent and of short duration, and will not present any long-term impacts, Mitigation Measures MM 4.5-1 through 4.5-4 would ensure noise and vibration levels produced by construction equipment to nearby noise-sensitive uses reduce construction-related noise impacts. With incorporation of all feasible mitigation measures, the Project would be consistent with General Plan Policies N 4.3 and 4.5.</p>
<p>Growth Management Element</p>	
<p><i>Goal GM-1: Adequate infrastructure and public services provided to areas within the City limits and, if determined appropriate, to areas outside City limits and within its sphere of influence.</i></p>	
<p>Policy GM-1.1: Ensure that new development pays its share of the costs of public facilities and services needed to serve new residents.</p>	<p>Consistent. As discussed in Section 4.7, <i>Public Services</i>, future development under the Project would be required to pay DIF to assist in providing for fire</p>



General Plan Policy	Consistency
	protection facilities, police protection facilities, school facilities, and parks and recreational facilities. Therefore, the Project would be consistent with General Plan Policy GM 1.1.
Goal GM-2: <i>Reduced traffic congestion.</i>	
Policy GM-2.2: Ensure that new development pays its fair share of street improvement costs associated with local and regional traffic mitigation.	Consistent. As discussed in the Project’s Traffic Analysis (<i>Technical Appendix G</i>), Project improvements may include a combination of fee payments to established programs (e.g., DIF), construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Therefore, the Project would be consistent with General Plan Policy GM 2.2.

Source: (City of Yorba Linda, 2016a)

2. City of Yorba Linda Zoning Code

Amendments to the Zoning Code consist of amending the Yorba Linda Hills Planned Development to modify Area E from Church to RM standards and allowing 230 dwelling units; amending the West Bastanchury Planned Development to modify sites from RM zone and allowing 228 dwelling units; increasing height limit in RM-20 to 40 feet and three stories; zoning designation changes as shown in Table 3-2; and creation of a new Chapter 18.11 or Chapter 18.17 with the three overlays (Affordable Housing Overlay, a Congregational Land Overlay, and a Mixed-Use Housing Overlay) with all the development standards consistent with the Housing Element. The City’s approval and implementation of Amendments to the Zoning Code would ensure that the Project would be consistent with the Adopted 2021-2029 Housing Element. Based on the foregoing, the Project would have a less-than-significant impact with respect to a conflict with the City of Yorba Linda’s Zoning Ordinance.

3. Connect SoCal

SCAG’s Connect SoCal is the applicable SCAG planning document that applies to the Project. Connect SoCal identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. The Connect SoCal goals are meant to provide guidance for considering proposed project for municipalities throughout the SCAG jurisdictional area within the context of regional goals and policies. As shown in Table 4.5-2, *SCAG Connect SoCal Consistency Analysis*, implementation of the Project would not result in an inconsistency with the adopted Connect SoCal. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the SCAG’s Connect SoCal.



Table 4.5-2 SCAG Connect SoCal Consistency Analysis

Connect SoCal Goal Number	Goal Statement	Consistency
1	Encourage regional economic prosperity and global competitiveness.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project would encourage economic prosperity by providing various types of housing for all economic segments of the population and redevelopment of underutilized lots. The Project identifies a total of 27 housing opportunity sites. Each of the housing opportunity sites was selected based on a combination of factors including: physical underutilization of the site; economic obsolescence of the existing use, dilapidated condition of the existing use; developer and/or property owner interest in development. The Mixed-Use Overlay (MUO) will allow for residential development in commercial properties that has been struggling to maintain tenants and contains large areas of underutilized parking. Redesignation of underutilized sites would support economic growth and health in the City.
2	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. The housing opportunity sites are located within existing urban uses with close proximity to transit, bicycle, pedestrians, and other non-vehicular modes of transportation. Implementation of the Project would encourage residents to travel using alternative modes of transportation. Additionally, as stated in Policy 3.1 of the 2021-2029 Housing Element, the Project would provide opportunities for development of housing that responds to diverse community needs in terms of housing types, cost and location, emphasizing locations near services and transit that promote walkability.
3	Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. Additionally, this policy provides guidance to City staff to monitor the transportation network and to continue to coordinate with other agencies as appropriate. The implementation of the Project would have no adverse effect on such planning or maintenance efforts.
4	Increase person and goods movement and travel choices within the transportation system.	Consistent. The Project includes the establishment of three new overlay zones; rezoning selected sites to higher densities; and accommodating higher density and mixed-use housing near jobs and transit. By bringing residential uses in close proximity to the regional transportation



Connect SoCal Goal Number	Goal Statement	Consistency
		network; the Project increases person, goods movement, and travel choices within the transportation system.
5	Reduce greenhouse gas emissions and improve air quality.	<p>Consistent. An analysis of the Project’s environmental impacts is provided throughout this PEIR and mitigation measures are specified where warranted. Air quality and greenhouse gas emissions impacts are addressed in Section 4.1, <i>Air Quality</i> and Section 4.4, <i>Greenhouse Gas Emissions</i>. As concluded, despite the implementation of Mitigation Measures MM 4.1-1 and 4.1-2, which would require future development projects to conduct project-specific analysis and incorporate mitigation measures, it cannot be definitively stated that all future development projects at buildout would not exceed the applicable thresholds. Therefore, impacts would be significant and unavoidable.</p> <p>However, Housing Program 7 - Sustainability and Green Building would encourage the development of green buildings that would reduce water consumption, improve energy efficiency, generate less waste, and lessen a building’s overall environmental impacts.</p>
6	Support healthy and equitable communities.	<p>Consistent. The Project would increase the variety of housing units available to all income levels including very low income, low income, moderate, and above moderate units. The City’s Housing Element programs also includes housing opportunities for persons living with disabilities, affordable housing development assistance, and Affirmatively Furthering Fair Housing. By accommodating housing availability for each income level, the Project would support healthy and equitable communities.</p>
7	Adapt to changing climate and support an integrated regional development pattern and transportation network.	<p>Consistent. The Project would support State goals to ease the housing crisis and comply with housing element requirements by increasing the variety of housing units available to all income levels including very low income, low income, moderate, and above moderate units. Providing a variety of housing types would support an integrated regional development pattern and transportation network.</p>
8	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<p>Not Applicable. This goal is not applicable to the Project.</p>
9	Encourage development of diverse housing types in areas that are	<p>Consistent. As discussed above, several housing opportunity sites are located along OCTA Route 26 and within close proximity to bicycle routes. As stated in</p>



Connect SoCal Goal Number	Goal Statement	Consistency
	supported by multiple transportation options.	Policy 2.1 of the 2021-2029 Housing Element, the Project would encourage the production of housing that meets all economic segments of the community, including lower, moderate-, and upper-income households, to maintain a balanced community.
10	Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent. As discussed in Section 5.0, <i>Other CEQA Considerations</i> , none of the housing opportunity sites are designated as agricultural land. Therefore, implementation of the Project would not interfere with the City’s ability to promote the conservation of natural and agricultural lands and the restoration of habitats.

Source: (SCAG, 2020a)

4.5.6 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City of Yorba Linda. As discussed under Threshold a, the Project would not physically divide an established community because land use changes proposed within the City are intended to tie into the existing uses and surrounding neighborhoods. Development would occur within existing urban areas and infill sites, which is not expected to divide an established community. Therefore, the Project would have a less than cumulatively considerable impact with respect to a physical division of an established community.

As discussed under Threshold b, the Project would not conflict with any other aspects of the City’s General Plan or any other applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects. Cumulative development would also be subject to site-specific environmental and planning reviews that would address consistency with adopted land use plans, policies, and regulations. Thus, it is expected that the land uses of cumulative projects would be consistent with policies that avoid an environmental effect; therefore, cumulatively considerable impacts from cumulative projects related to policy consistency would be less than significant.

4.5.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant. The implementation of the Project is not anticipated to physically divide an established community and impacts would be less than significant.

Threshold b: Less than Significant. Implementation of the Project would not result in an inconsistency with the General Plan, Zoning Code, or Connect SoCal. The Project would not result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this PEIR and impacts would be less than significant.



4.5.8 MITIGATION MEASURES

Impacts would be less than significant and mitigation is not required.

4.5.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impacts would be less than significant and mitigation is not required.



4.6 NOISE

The analysis in this Subsection is based, primarily, on a Project-specific noise impact analysis titled “Yorba Linda 2021-2029 Housing Element Implementation Programs” dated May 31, 2022 (Urban Crossroads, 2022d). The report (herein, “Noise Impact Analysis”) was prepared by Urban Crossroads, Inc. (hereafter, Urban Crossroads) and is included as *Technical Appendix E* to this PEIR. Additional references used for this Subsection are listed in Section 7.0, *References*.

4.6.1 NOISE AND VIBRATION FUNDAMENTALS

A. Noise

Noise is simply defined as “unwanted sound.” Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

A variety of reactions can be expected from people exposed to any given environment. Despite variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels: an increase of 1 dBA cannot be perceived except in carefully controlled laboratory experiments; a change of 3 dBA is considered “barely perceptible;” and a change of 5 dBA is considered “readily perceptible.”

B. Vibration

Vibration is the periodic oscillation of a medium or object. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB.

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels.



4.6.2 EXISTING CONDITIONS

Urban Crossroads recorded 24-hour noise readings at 14 noise sensitive receiver locations near the housing opportunity sites on May 5, 2022. The noise measurement locations are identified in Figure 4.6-1, *Noise Measurement Locations*. The results of the existing noise level measurements are summarized below. Refer to Appendix 5.2 of *Technical Appendix E* of this PEIR for the noise measurement worksheets used to calculate the noise levels, including a summary of the hourly noise levels and the minimum and maximum observed noise levels at each measurement location. Table 4.6-1, *24-Hour Ambient Noise Level Measurements*, identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

Table 4.6-1 24-Hour Ambient Noise Level Measurements

Location ¹	Housing Element Site ID ²	Description	Energy Average Noise Level (dBA L _{eq}) ³		CNEL
			Daytime	Nighttime	
L1	1	Site S1-021 - West of 16951 Imperial Highway	55.4	51.9	59.5
L2	3	Site S2-008 - 17151 Bastanchury Road	60.3	55.3	63.1
L3	4	Site S2-012 - 5320 Richfield Road	49.0	42.1	50.7
L4	6	Site S2-013 - 4861 Liverpool Street	61.4	45.8	60.1
L5	10	Site S3-210 - 18111 Bastanchury Road	58.0	52.5	60.6
L6	12	Site S4-075 - 4742 Plumosa Drive	51.9	47.6	55.4
L7	13	Site S6-015 - 22722 Old Canal Road	59.1	56.9	64.0
L8	15	Site S7-001 - Bryant Ranch Shopping Center	66.1	67.9	74.4
L9	16	Site S3-034 - 4341 Eureka Avenue	60.0	52.6	61.5
L10	26	Site S5-008 - Vacant Parcel on Fairmont Boulevard	66.0	60.0	68.3
L11	27	Site S7-005 - Vacant Parcel on Camino de Bryant	57.6	54.0	61.5
L12	8	Site S3-103 - Friend Church Overflow Parking	55.1	47.6	56.7
L13	25	Site S4-060 - 5541 South Ohio Street	55.5	50.4	58.1
L14	21	Site S4-204A - 19045 Yorba Linda Boulevard	57.8	52.0	60.1

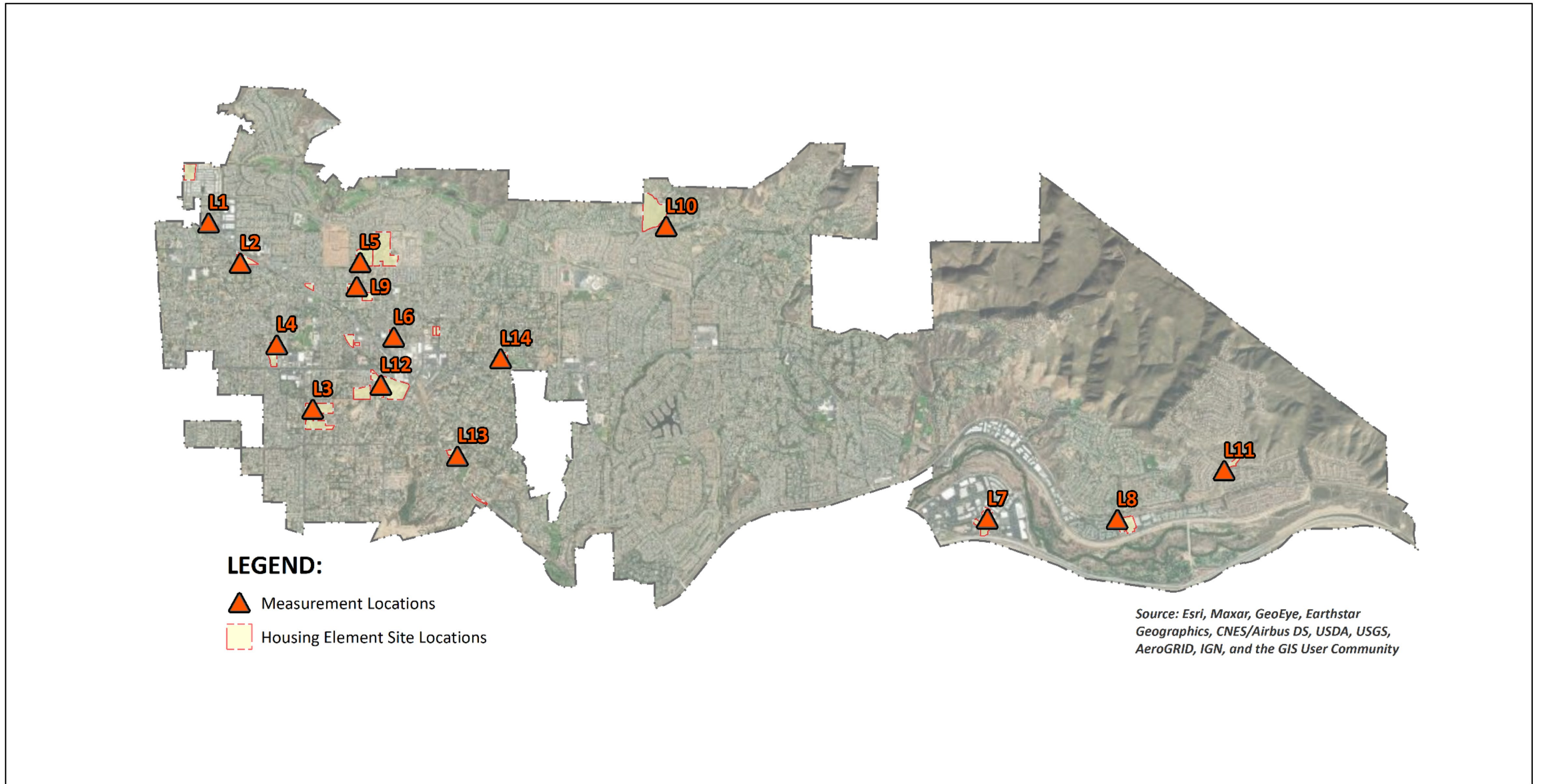
¹ See Figure 4.6-1 for the noise level measurement locations.

² Housing element site locations are shown on Figure 3-3 of this PEIR.

³ Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2 of *Technical; Appendix E*.

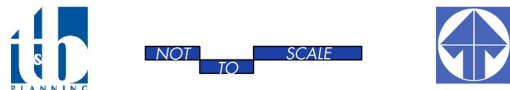
"Day" = 7:00 a.m. to 6:00 p.m.; "Evening" = 6:00 p.m. to 10:00 p.m.; "Night" = 10:00 p.m. to 7:00 a.m.

Source: (Urban Crossroads, 2022d, Table 5-1)



Source(s): Urban Crossroads (05-24-2022)

Figure 4.6-1



NOT TO SCALE



4.6.3 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. In particular, comments were made during the public scoping period and PEIR Scoping Meeting expressed noise concern on housing opportunity sites S4-053, S4-201 and S4-060.

4.6.1 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, state, and local environmental laws and related regulations related to noise. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

A. Federal

1. *Noise Control Act of 1972*

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products.

While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control. (EPA, 2020e)

2. *Federal Transit Administration*

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The manual sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact. (FTA, 2018)

3. *Federal Highway Administration*

The Federal Highway Administration (FHWA) is the agency responsible for administering the Federal-aid highway program in accordance with Federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat.



1713). The regulation, 23 CFR 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, applies to highway construction projects where a State department of transportation has requested Federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design. (FHWA, 2017)

Highway projects receiving federal aid and requiring a traffic noise analysis must use the latest version of the FHWA Traffic Noise Model (TNM) according to Title 23 of the United States Code of Federal Regulations Part 772.9(a). The FHWA Traffic Noise Model (TNM) Version 1.0 was initially released in March of 1998. Since then, there have been five additional releases which have contained fixes to software bugs. The FHWA TNM provides for the accurate prediction of traffic noise levels along the wayside of a highway. The Project's Noise Impact Analysis utilizes FHWA Traffic Noise Prediction Model FHWA-RD-77-108 for roadway noise level increases from vehicular traffic.

B. State

1. *State of California Noise Requirements*

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

2. *OPR General Plan Guidelines*

Though not adopted by law, the 2017 California General Plan Guidelines, published by the California Governor's Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must "analyze and quantify" noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that "minimizes the exposure of community residents to excessive noise." Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions. The element must include implementation measures and possible solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for



compliance with sound transmission control requirements. The noise element directly correlates to the Land Use, Circulation, and Housing Elements. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities since these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agricultural, and industrial activities, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses. (OPR, 2017, pp. 131-132)

3. *Building Standards Code*

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

C. Local

1. *City of Yorba Linda Noise Element*

The City of Yorba Linda Noise Element provides goals and policies to protect local citizens from the harmful effects of excessive exposure to noise. Goals and policies that are relevant to the Project are as follows:

Goal N-1: Indoor and outdoor living areas that are adequately protected from excessive transportation noise impacts.

- Policy N-1.4: Ensure potentially excessive noise generators provide for the highest feasible level of noise mitigation and compliance with local, state, and federal noise standards.

Goal N-2: Noise and land use compatibility.

- Policy N-2.1: Ensure compliance with the City's established noise thresholds for various land uses.
- Policy N-2.2: Ensure compliance with the City's established noise thresholds for noise sensitive receptors, land uses, and activities.
- Policy N-2.3: Ensure noise producing land uses and activities are designed and located to consider impacts to adjacent uses and activities.



Goal N-3: Mitigate noise impacts from non-transportation sources.

- Policy N-3.1: Ensure compliance with standards and procedures for mitigating construction-related activities that introduce excessive noise levels.

Goal N-4: Project approvals that include conditions to mitigate noise impacts.

- Policy N-4.1: Consider noise impacts in the siting, design, and construction of new development to minimize noise impacts.
- Policy N-4.3: Consider a combination of noise barriers, landscape berms, and architectural design treatments when needed to mitigate noise impacts.
- Policy N-4.5: Consider measures which alter, prohibit or mitigate noise generating uses through site design.

2. *City of Yorba Linda Municipal Code*

Noise impacts originating from a designated fixed location or private property noise from stationary-source (operational) noise levels such as the expected residents moving around each of the sites, residential air conditioning units, and parking lot activities are evaluated against standards established under the City of Yorba Linda Municipal Code.

For all noise-sensitive residential properties, Section 8.32.060 of the Municipal Code identifies stationary source noise level limits for the daytime (7:00 a.m. to 10:00 p.m.) hours of 55 dBA L_{eq} and 50 dBA L_{eq} during the nighttime (10:00 p.m. to 7:00 a.m.) hours as shown in Table 4.6-2, *Stationary Source Noise Level Standards*. The exterior noise level standards shall apply for a cumulative period of more than 30 minutes in any hour, as well as the standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. Further, Section 8.32.060 indicates that if the existing ambient noise level already exceeds any of the exterior noise level limit categories, then the standard shall be adjusted to reflect the ambient conditions.

Table 4.6-2 Stationary Source Noise Level Standards

Land Use	Time Period	Exterior Noise Level Standards (dBA) ²				
		L ₅₀ (30 mins)	L ₂₅ (15 mins)	L ₈ (5 mins)	L ₂ (1 min)	L _{max} (Anytime)
Residential ¹	Daytime (7:00 a.m. to 10:00 p.m.)	55	60	65	70	75
	Nighttime (10:00 p.m. to 7:00 a.m.)	50	55	60	65	70

¹Noise Zone 1 includes all residential properties in the City (Municipal Code, Section 8.32.050).

²Exterior noise standards (Municipal Code, Section 8.32.060).



The percent noise level is the level exceeded "n" percent of the time during the measurement period. L_{50} is the noise level exceeded 50% of the time.

Source: (Urban Crossroads, 2022d, Table 3-1)

The percentile noise descriptors are provided to ensure that the duration of the noise source is fully considered. However, due to the relatively constant intensity of the Project stationary source activities, the L_{50} or average L_{eq} noise level metrics best describe the residents moving around each of the sites, residential air conditioning units, and parking lot activities. In addition, the L_{eq} noise level metric accounts for noise fluctuations over time by averaging the louder and quieter events and giving more weight to the louder events. In addition, due to the mathematical relationship between the median (L_{50}) and the mean (L_{eq}), the L_{eq} will always be larger than or equal to the L_{50} . The more variable the noise becomes, the larger the L_{eq} becomes in comparison to the L_{50} . Therefore, this noise study conservatively relies on the average L_{eq} sound level limits to describe the Project stationary source noise levels. (Urban Crossroads, 2022d, p. 17)

4.6.2 METHODOLOGY

A. Construction Noise Analysis

Noise levels generated by heavy construction equipment can range from approximately 68 dBA to more than 80 dBA when measured at 50 feet. Hard site conditions are used in the construction noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source (i.e. construction equipment). For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver and would be further reduced to 68 dBA at 200 feet from the source to the receiver. (Urban Crossroads, 2022d, p. 41)

B. Stationary Source Noise Analysis

The proposed residential development is considered a noise-sensitive receiving land use and is not expected to include any specific type of stationary noise levels beyond those typically associated with residential land use in the Project study area. However, since the individual locations of potential stationary source noise activities for the housing opportunity sites are not known at this time, several potential stationary source noise activities are considered.

The stationary source noise activities are expected to include residents moving around each of the sites, residential air conditioning units, and parking lot activities. Since the actual plans for each housing opportunity site are not known at this time, the potential stationary source noise activities may also include trash enclosures, dog parks, pool/spas, or other similar source of outdoor activity. To ensure that stationary source noise activity does not represent a nuisance, the Project shall satisfy the exterior noise level limits outlined in the City of Yorba Linda Municipal Code Section 8.32.060 and satisfy any conditions of approval.



1. *Reference Noise Levels*

To estimate the Project stationary source noise level impact to existing nearby noise sensitive receivers, reference sound power levels (L_w) were collected from similar types of activities to represent the noise levels expected with the development of Project. While sound pressure levels (e.g. L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The reference stationary source sound power noise levels used to estimate the potential stationary source noise activities are summarized below:

- Residential Air Conditioning Units: 75 dBA L_w according to the reference product data sheet for the Carrier model 24ACC4 Air Conditioner Unit.
- Parking Lot Activities: 88 dBA L_w based on reference noise level measurements collected by Urban Crossroads, Inc. The residential parking lot noise levels are mainly due to cars pulling in and out of spaces and residents going to and from their homes. Additional noise sources include key fob horn activities as well as vehicle loading and unloading activities.
- Trash Enclosure Activities: 89 dBA L_w based on reference noise level measurements collected by Urban Crossroads, Inc. at an existing trash enclosure containing two dumpster bins.
- Dog Park Activities: 79 dBA L_w based on reference noise level measurements collected by Urban Crossroads, Inc. at the La Paws Dog Park in the City of Mission Viejo. The reference noise level measurement describes large and small dogs with people talking, dogs running, playing fetch, chasing each other, growling, barking, and owners talking on cell phones.
- Pool/Spa Activities: 86 dBA L_w based on reference noise level measurements collected by Urban Crossroads, Inc. The pool activity noise levels include kids playing, running, screaming, splashing, playing with a ball, and parents talking.
- Outdoor Activity: 75 dBA L_w based on reference outdoor noise level measurements collected by Urban Crossroads, Inc. describing picnic tables, tot lots and areas of outdoor use.



2. *Noise Prediction Calculations*

To describe the exterior stationary source noise levels from the Project, Urban Crossroads, Inc. calculated the potential Project stationary source noise levels at distances ranging from 25 to 200 feet. The stationary source noise levels were estimated using the ISO 9613-2 protocol in the CadnaA (Computer Aided Noise Abatement) computer program. Consistent with the ISO 9613-2 protocol, the CadnaA noise prediction model relies on a reference sound power level (L_w) to describe individual noise sources. The stationary source noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 9.1 of *Technical Appendix E* of this PEIR includes the detailed stationary source noise model calculations.

C. *Transportation-Related Noise Analysis*

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model FHWA-RD-77-108 (the "FHWA Model"). The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California, the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis.

Table 4.6-3, *Roadway Parameters*, presents the FHWA Model roadway parameters used for each of the 22 roadway segments in the Project's study area. The roadway segments were selected based on Urban Crossroads review of the Project study area evaluated in the Traffic Analysis (*Technical Appendix G*).



Table 4.6-3 Roadway Parameters

ID	Roadway	Segment	Classification ¹	Distance from Centerline to Receiving Land Use (Feet) ²	Vehicle Speed (mph)
1	Rose Dr.	s/o Imperial Hwy.	Modified Primary	40'	50
2	Imperial Hwy.	e/o Roase Dr.	Smart Street	50'	55
3	Imperial Hwy.	w/o Prospect Av.	Smart Street	50'	55
4	Imperial Hwy.	e/o Prospect Av.	Smart Street	50'	55
5	Imperial Hwy.	n/o Bastanchury Rd.	Smart Street	50'	55
6	Bastanchury Rd.	w/o Imperial Hwy.	Modified Primary	40'	50
7	Bastanchury Rd.	e/o Imperial Hwy.	Modified Primary	40'	50
8	Imperial Hwy.	n/o Lemon Dr.	Smart Street	50'	55
9	Imperial Hwy.	s/o Lemon Dr.	Smart Street	50'	55
10	Lakeview Av.	n/o Buena Vista Av.	Primary	50'	45
11	Lakeview Av.	s/o Buena Vista Av.	Primary	50'	45
12	Buena Vista Av.	w/o Lakeview Av.	Secondary	40'	45
13	Bastanchury Rd.	e/o Plumosa Dr.	Modified Primary	40'	50
14	Lakeview Av.	s/o Bastanchury Rd.	Secondary	40'	45
15	Bastanchury Rd.	w/o Lakeview Av.	Modified Primary	40'	50
16	Bastanchury Rd.	e/o Lakeview Av.	Modified Primary	40'	50
17	Lakeview Av.	n/o Yorba Linda Bl.	Secondary	40'	45
18	Lakeview Av.	s/o Yorba Linda Bl.	Primary	50'	45
19	Yorba Linda Bl.	w/o Lakeview Av.	Modified Major	50'	50
20	Bastanchury Rd.	w/o Fairmont Bl.	Modified Primary	40'	50
21	Gypsum Canyon Rd.	s/o La Palma Av.	Secondary	40'	45
22	La Palma Av.	e/o Gypsum Canyon Rd.	Modified Primary	40'	50

¹ City of Yorba Linda General Plan Circulation Element

² Distance to receiving land use is based upon the right-of-way distances.

Source: (Urban Crossroads, 2022d, Table 7-1)

D. Vibration

Vibration levels were predicted using reference vibration levels and logarithmic equations contained in the Federal Transit Administration’s (FTA) 2018 publication: “Transit Noise and Vibration Impact Assessment.” The vibration source levels for Project construction equipment are summarized in Table 4.6-4, *Vibration Source Levels for Construction Equipment*.



Table 4.6-4 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Vibratory Roller	0.210
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual
Source: (Urban Crossroads, 2022d, Table 10-1)

4.6.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XII of the CEQA Guidelines, the proposed Project would result in a significant impact to noise if the Project or any Project-related component would (OPR, 2019):

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- b) *Generation of excessive ground borne vibration or ground borne noise levels;*
- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.*

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant.

A. Summary of Significance Criteria

Noise impacts will be considered significant if any of the following occur as a result of the Project. Table 4.6-5, *Summary of Noise Significance Criteria*, provides a summary of the allowable criteria used to identify potentially significant incremental noise level increases.



Table 4.6-5 Summary of Noise Significance Criteria

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
Off-Site Traffic ¹	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
	If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
	If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Stationary-Source	Exterior Noise Level Standards ²	55 dBA L _{eq}	50 dBA L _{eq}
	If ambient is < 60 dBA Leq ¹	≥ 5 dBA L _{eq} Project increase	
	If ambient is 60 - 65 dBA Leq ¹	≥ 3 dBA L _{eq} Project increase	
	If ambient is > 65 dBA Leq ¹	≥ 1.5 dBA L _{eq} Project increase	
Construction	Exempt provided the activities do not take place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or federal holidays. ³		
	Noise Level Threshold ⁴	80 dBA L _{eq}	70 dBA L _{eq}
	Vibration Level Threshold ⁵	0.3 PPV (in/sec) ⁶	
		0.1 PPV (in/sec) ⁷	

¹ FICON, 1992.

² City of Yorba Linda Municipal Code, Section 8.32.060

³ City of Yorba Linda Municipal Code, Section 8.32.090[D]

⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.

⁵ Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.

⁶ Older Residential Structures

⁷ Fragile Buildings

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Source: (Urban Crossroads, 2022d, Table 4-1)

1. Off-Site Traffic Noise

When the existing ambient noise levels:

- are less than 60 dBA CNEL and the Project creates a 5 dBA CNEL or greater Project-related noise level increase; or
- range from 60 to 65 dBA CNEL and the Project creates a 3 dBA CNEL or greater Project-related noise level increase; or
- exceed 65 dBA CNEL, and the Project creates a 1.5 dBA CNEL or greater Project-related noise level increase.

2. Stationary Noise

Project operational activities would result in a significant impact if operational noise exceeds the levels allowed by the City of Yorba Linda Municipal Code 8.32.060 and 8.32.090[D] as follows:



- If Project-related operational (stationary-source) noise levels exceed an exterior noise level of 55 dBA Leq, during the daytime hours of 7:00 a.m. to 10:00 p.m., and 50 dBA Leq during the nighttime hour of 10:00 p.m. to 7:00 a.m.

- If the existing ambient noise levels:
 - are less than 60 dBA CNEL and the Project creates a 5 dBA CNEL or greater Project-related noise level increase; or
 - range from 60 to 65 dBA CNEL and the Project creates a 3 dBA CNEL or greater Project-related noise level increase; or
 - exceed 65 dBA CNEL, and the Project creates a 1.5 dBA CNEL or greater Project-related noise level increase.

3. *Construction Noise*

According to Section 8.32.090[D] of the Municipal Code, noise sources associated with construction-related activities are typically exempt provided the activities do not take place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or federal holidays. While the City establishes limits to the hours during which construction activity may take place, neither the City of Yorba Linda General Plan or Municipal Codes establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. Therefore, a numerical construction threshold based on FTA Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

4. *Vibration*

To analyze vibration impacts, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code if such standards exist. However, the City of Yorba Linda does not identify specific construction vibration level limits. Therefore, for analysis purposes, the Caltrans Transportation and Construction Vibration Guidance Manual vibration damage are used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. Most buildings near the housing opportunity sites can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration. Fragile buildings represent structures and/or finishes that are possibly weakened due to the method of construction (such as unreinforced masonry) and deterioration with age and/or lack of adequate maintenance. Therefore, a more



conservative maximum acceptable continuous vibration threshold for fragile buildings of 0.10 PPV (in/sec) is used.

4.6.4 GENERAL PLAN EIR MITIGATION MEASURE

The City's General Plan EIR included mitigation measures to reduce and eliminate potential significant adverse impacts within the City. These mitigation measures are incorporated into the Project. Applicable mitigation measures related to noise are as follows:

NOI-1: Ensure that future development exposed to transportation noise sources complies with the City's noise standards for determination of land use compatibility.

4.6.5 IMPACT ANALYSIS

Threshold a: *Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The analysis presented on the following pages summarizes the Project's potential construction noise levels and operational noise levels, including operational noise that would be generated on-site as well as off-site noise that would be generated by Project-related traffic. The detailed noise calculations for the analysis presented here are provided in Appendices 7.1 of *Technical Appendix E* of this PEIR.

A. Construction Noise Impact Analysis

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The highest construction noise levels will occur when construction activities take place at the closest point from the edge of primary construction activity to each of the nearby receiver locations. Project construction activity shall satisfy the FTA nighttime exterior construction noise level of 70 dBA Leq for noise sensitive residential land use. No Project construction activity is anticipated within the hours specified in the City of Yorba Linda Municipal Code, Section 8.32.090[D].

The applicable General Plan goals and policies listed above would minimize construction-related noise to the extent feasible. However, future development would likely occur in close proximity to noise sensitive receptors and elevate the ambient noise environment. Furthermore, the construction of future development projects could last for prolonged periods and result in a substantial or periodic increase in ambient noise levels. Therefore, construction noise impacts from buildout of the Project would be potentially significant.

B. Operational Noise Impact Analysis - Stationary Noise

To demonstrate compliance with local noise regulations, the Project stationary source noise levels are evaluated against the exterior noise level limits outlined in City of Yorba Linda Municipal Code



Section 8.32.060. Table 4.6-6, *Project Stationary Source Noise Level Compliance*, shows the operational noise levels associated with the Project will satisfy the City of Yorba Linda daytime and nighttime exterior noise level limits at distances of greater than 50 feet from the stationary noise source activity. However, the existing noise sensitive receivers located within 50 feet of parking lot activities, trash enclosures, dog parks, pool/spas, or other similar source of outdoor activity may experience unmitigated exterior noise levels exceeding the exterior noise level limits. Therefore, the stationary source noise impacts due to Project-related stationary source activities would be potentially significant.

Table 4.6-6 Project Stationary Source Noise Level Compliance

Distance to Const. Activity (Feet)	Project Operational Noise Levels (dBA Leq) ¹	Noise Level Limits (dBA Leq) ²		Noise Level Limits Exceeded? ³	
		Daytime	Nighttime	Daytime	Nighttime
25'	61.2	55	50	Yes	Yes
50'	53.6	55	50	No	Yes
100'	44.8	55	50	No	No
150'	34.5	55	50	No	No
200'	30.5	55	50	No	No

¹ Highest potential stationary source noise activity (Table 9-1).

² Exterior noise standards (Municipal Code, Section 8.32.060).

³ Do the estimated Project stationary source noise activities exceed the noise level limits?

"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

Source: (Urban Crossroads, 2022d, Table 9-2)

C. Operational Noise Impact Analysis - Off-Site Traffic Noise

To evaluate off-site noise increases that could result from Project-related traffic, noise levels were modeled for the following scenarios:

- Existing (2022)
 - Without Project Conditions
 - With Project Conditions
- Horizon Year (2045)
 - Without Project Conditions
 - Without Project Conditions

The Existing (2022) plus Project Conditions analysis determines the Project’s traffic noise impacts under the theoretical scenario where traffic from the Project is added to existing conditions. The Horizon Year (2045) were derived from the Orange County Transportation Analysis Model (OCTAM) Version 5.5 maintained by the Orange County Transportation Authority (OCTA). To develop future traffic forecast volumes in the vicinity of the 27 housing opportunity sites proposed to be rezoned to



allow multifamily residential use, changes in population related to each proposed site were added to the OCTAM models and rerun. Details on Horizon Year (2045) methodology are discussed in the Project’s Traffic Analysis (*Technical Appendix G*).

1. Existing with Project Conditions

Existing plus Project conditions realistically would not occur, since the Project will not be fully developed and occupied under Existing conditions. However, as summarized in Table 4.6-7, *Existing with Project Traffic Noise Level Increases*, Project traffic noise would not exceed the City’s applicable significance threshold under the Existing with Project traffic conditions. Therefore, the Project’s contribution to off-site traffic noise would be less than significant.

Table 4.6-7 Existing with Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Rose Dr.	s/o Imperial Hwy.	71.6	71.9	0.3	1.5	No
2	Imperial Hwy.	e/o Roase Dr.	77.4	77.6	0.2	1.5	No
3	Imperial Hwy.	w/o Prospect Av.	77.6	77.7	0.1	1.5	No
4	Imperial Hwy.	e/o Prospect Av.	77.3	77.4	0.1	1.5	No
5	Imperial Hwy.	n/o Bastanchury Rd.	77.1	77.2	0.1	1.5	No
6	Bastanchury Rd.	w/o Imperial Hwy.	72.3	72.9	0.6	1.5	No
7	Bastanchury Rd.	e/o Imperial Hwy.	73.0	73.5	0.5	1.5	No
8	Imperial Hwy.	n/o Lemon Dr.	76.8	76.9	0.1	1.5	No
9	Imperial Hwy.	s/o Lemon Dr.	76.6	76.7	0.1	1.5	No
10	Lakeview Av.	n/o Buena Vista Av.	68.9	69.3	0.4	1.5	No
11	Lakeview Av.	s/o Buena Vista Av.	68.2	68.6	0.4	1.5	No
12	Buena Vista Av.	w/o Lakeview Av.	67.1	68.1	1.0	1.5	No
13	Bastanchury Rd.	e/o Plumosa Dr.	72.6	72.7	0.1	1.5	No
14	Lakeview Av.	s/o Bastanchury Rd.	68.1	68.7	0.6	1.5	No
15	Bastanchury Rd.	w/o Lakeview Av.	72.4	72.9	0.5	1.5	No
16	Bastanchury Rd.	e/o Lakeview Av.	73.1	73.3	0.2	1.5	No
17	Lakeview Av.	n/o Yorba Linda Bl.	69.6	70.0	0.4	1.5	No
18	Lakeview Av.	s/o Yorba Linda Bl.	68.9	69.3	0.4	1.5	No
19	Yorba Linda Bl.	w/o Lakeview Av.	74.6	74.7	0.1	1.5	No
20	Bastanchury Rd.	w/o Fairmont Bl.	72.5	72.6	0.1	1.5	No
21	Gypsum Canyon Rd.	s/o La Palma Av.	69.6	70.3	0.7	1.5	No
22	La Palma Av.	e/o Gypsum Canyon Rd.	70.2	71.2	1.0	1.5	No



¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.6-5)?

Source: (Urban Crossroads, 2022d, Table 8-5)

2. Horizon Year (2045) Conditions

As summarized in Table 4.6-8, *Horizon Year (2045) Traffic Noise Levels*, Project traffic noise would not exceed the City’s applicable significance threshold under the Horizon Year (2045) traffic conditions. Moreover, future development would be required to comply with goals and policies of the City’s General Plan and mitigation measure NOI-1 from the City’s General Plan PEIR. Therefore, the Project’s contribution to off-site traffic noise would be less than significant.

Table 4.6-8 Horizon Year (2045) Traffic Noise Levels

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Rose Dr.	s/o Imperial Hwy.	72.3	72.6	0.3	1.5	No
2	Imperial Hwy.	e/o Roase Dr.	77.9	78.1	0.2	1.5	No
3	Imperial Hwy.	w/o Prospect Av.	77.9	78.0	0.1	1.5	No
4	Imperial Hwy.	e/o Prospect Av.	77.6	77.8	0.2	1.5	No
5	Imperial Hwy.	n/o Bastanchury Rd.	77.7	77.8	0.1	1.5	No
6	Bastanchury Rd.	w/o Imperial Hwy.	73.5	73.9	0.4	1.5	No
7	Bastanchury Rd.	e/o Imperial Hwy.	74.2	74.5	0.3	1.5	No
8	Imperial Hwy.	n/o Lemon Dr.	77.1	77.2	0.1	1.5	No
9	Imperial Hwy.	s/o Lemon Dr.	76.9	77.0	0.1	1.5	No
10	Lakeview Av.	n/o Buena Vista Av.	69.6	69.9	0.3	1.5	No
11	Lakeview Av.	s/o Buena Vista Av.	68.4	68.8	0.4	1.5	No
12	Buena Vista Av.	w/o Lakeview Av.	67.8	68.6	0.8	1.5	No
13	Bastanchury Rd.	e/o Plumosa Dr.	72.9	73.1	0.2	1.5	No
14	Lakeview Av.	s/o Bastanchury Rd.	68.2	68.8	0.6	1.5	No
15	Bastanchury Rd.	w/o Lakeview Av.	73.1	73.6	0.5	1.5	No
16	Bastanchury Rd.	e/o Lakeview Av.	73.6	73.8	0.2	1.5	No
17	Lakeview Av.	n/o Yorba Linda Bl.	70.2	70.6	0.4	1.5	No
18	Lakeview Av.	s/o Yorba Linda Bl.	69.6	69.9	0.3	1.5	No
19	Yorba Linda Bl.	w/o Lakeview Av.	74.1	74.2	0.1	1.5	No
20	Bastanchury Rd.	w/o Fairmont Bl.	72.9	73.1	0.2	1.5	No
21	Gypsum Canyon Rd.	s/o La Palma Av.	72.2	72.6	0.4	1.5	No
22	La Palma Av.	e/o Gypsum Canyon Rd.	72.6	73.2	0.6	1.5	No



¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.6-5)?

Source: (Urban Crossroads, 2022d, Table 8-6)

Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?

A. Construction

Construction activities on the Project site would utilize construction equipment that has the potential to generate vibration. Table 4.6-9, *Construction Equipment Vibration Levels*, presents the expected Project related vibration levels at distances ranging from 25 to 200 feet from construction activity. As shown in Table 4.6-9, construction vibration levels are expected to range from 0.009 to 0.210 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at 25 feet for older residential structures. However, since individual projects may be located at distances of less than 25 feet from existing nearby sensitive receivers or adjacent to nearby fragile buildings, the construction-related vibration impacts would exceed the maximum acceptable continuous vibration threshold for fragile buildings of 0.10 PPV (in/sec) for some projects. Therefore, the Project would generate excessive groundborne vibration or groundborne noise levels during construction and impacts would be potentially significant.

Table 4.6-9 Construction Equipment Vibration Levels

Distance to Const. Activity (Feet)	Typical Construction Vibration Levels PPV (in/sec) ¹						Thresholds PPV (in/sec) ²	Thresholds Exceeded? ³
	Vibratory Roller	Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
25'	0.210	0.210	0.035	0.076	0.089	0.210	0.3	No
50'	0.074	0.074	0.012	0.027	0.031	0.074	0.3	No
100'	0.026	0.026	0.004	0.010	0.011	0.026	0.3	No
125'	0.019	0.019	0.003	0.007	0.008	0.019	0.3	No
150'	0.014	0.014	0.002	0.005	0.006	0.014	0.3	No
200'	0.009	0.009	0.002	0.003	0.004	0.009	0.3	No

¹ Based on the Vibration Source Levels of Construction Equipment included on Table 4.6-4.

² Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.

³ Does the peak vibration exceed the acceptable vibration thresholds?

"PPV" = Peak Particle Velocity

Source: (Urban Crossroads, 2022d, Table 10-2)



B. Operation

The Project's residential development is not expected to include any specific type of stationary vibration sources. Therefore, the Project would not generate excessive groundborne vibration or groundborne noise levels during operation and impacts would be less than significant.

Threshold c: *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?*

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the John Wayne Airport, located approximately 13 miles southwest of the City. Therefore, the Project site would not be exposed to excessive noise levels from airport operations and no impact would occur.

4.6.6 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City of Yorba Linda.

A. Substantial Noise Increase or Violations

1. *Short-Term Cumulative Construction-Noise Impacts*

Construction activities associated with the Project, especially activities involving heavy construction equipment would create intermittent periods of noise when construction equipment is in operation and cause a short-term increase in ambient noise levels. In the event that construction activities occur on any properties surrounding the housing opportunity sites simultaneously with Project-related construction activities and that also contribute construction noise to the sensitive receptors located in the Project vicinity, the construction activities associated with the Project would result in a cumulative contribution of increased noise levels at the nearest sensitive receptors. Future development under the Project would be constructed within the hours identified in the City's noise ordinance that are exempted from noise standards. Additionally, the Project was determined to result in potentially significant impacts associated with construction-related noise impacts. If multiple construction projects were to occur nearby each other, the Project could result in a cumulatively considerable contribution of construction noise that would result in a significant cumulative impact.

2. *Long-Term Cumulative Off-Site Traffic-Related Noise Impact*

As shown on Table 4.6-8, future traffic associated with the Project and buildout of the General Plan would result in less than a 1.5 dBA CNEL noise increase and will not exceed the City's threshold. Moreover, future development would be required to comply with goals and policies of the City's General Plan and mitigation measure NOI-1 from the City's General Plan EIR. Therefore, the Project's



traffic-related noise impacts along study area roadway segments would not be cumulatively considerable and cumulative impacts would be less than significant.

3. *Long-Term Cumulative Stationary Noise Impacts*

As identified above, noise impacts from stationary noise sources would be potentially significant. However, with the implementation of Mitigation Measure MM 4.6-5, impacts would be reduced to a less than significant level. Future development would be required to comply with the City of Yorba Linda Municipal Code Section 8.32.060, Noise Standard - Exterior. Other development projects in the Project area would also be subject the same noise standards as the Project, and there would be no potential for cumulatively considerable stationary operational noise impacts to occur.

B. Groundborne Vibration and Noise

As shown in Table 4.6-9, Project vibration levels will remain below the maximum acceptable transient peak-particle-velocity (PPV) vibration threshold 0.3 PPV (in/sec) at all distances from construction activities. However, since individual projects may be located at distances of less than 25 feet from existing nearby sensitive receivers or adjacent to nearby fragile buildings, the construction-related vibration impacts could exceed the maximum acceptable continuous vibration threshold for fragile buildings of 0.10 PPV (in/sec) for some projects. If multiple construction projects were to occur nearby each other, the Project could result in a cumulatively considerable contribution of construction noise that would result in a significant cumulative impact.

Under long-term operating conditions, the Project would not involve the use of equipment, facilities, or activities that would result in perceptible groundborne vibration. In addition, there are no sources of substantial groundbourne-vibration associated with the Project. Accordingly, groundborne vibration and noise impacts would be cumulatively considerable and result in a significant cumulative impact.

C. Noise from Airport Operations

As stated, the Project site is not located within two miles of a public airport or within an airport land use plan. The closest major airport is the John Wayne Airport, located approximately 13 miles southwest of the City. Therefore, the Project would not contribute to the exposure of excessive noise levels from airport operations. Accordingly, noise impacts related to public airport or public use airport would not be cumulatively considerable.

4.6.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project would not result in a significant impact from operational off-site traffic increases. However, future development could result in a significant impact from operation stationary source activities. Additionally, future development would likely occur in close proximity to noise sensitive receptors and elevate the ambient noise environment. Therefore, construction noise impacts would be potentially significant.



Threshold b: Potentially Significant Impact. The Project's construction activities would potentially result in a perceptible groundborne vibration or noise.

Threshold c: No Impact. The Project site would not be exposed to excessive noise levels from airport operations.

Cumulative Impact. Future development could result in cumulatively considerable noise impacts related to construction-related activities and vibration.

4.6.8 MITIGATION MEASURES

- MM 4.6-1 Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, and all stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive use nearest the construction activity.
- MM 4.6-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receiver nearest to the construction activity.
- MM 4.6-3 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment Section 8.32.090[D] of the City of Yorba Linda Municipal Code. The contractor shall design delivery routes to minimize the exposure of sensitive land uses to delivery truck noise.
- MM 4.6-4 Prior to issuance of any construction permits, applicants for individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, within 25 feet of sensitive receptors (e.g., residences and fragile structures), shall prepare and submit to the City of Yorba Linda Planning Department a study to evaluate potential construction-related vibration impacts. The vibration assessment shall be prepared by an acoustical engineer and be based on recognized vibration-induced architectural damage criterion. If the study determines a potential exceedance of the thresholds, measures shall be identified that ensure vibration levels are reduced to below the thresholds. Identified measures shall be included on all construction and building documents and submitted for verification to the City of Yorba Linda Planning Department.
- MM 4.6-5 Prior to issuance of any construction permits, applicants for individual projects that are within 50 feet of a sensitive receptor, shall prepare and submit to the City of Yorba Linda Planning Department a study to evaluate potential operational-related stationary source noise impacts. The noise report shall be prepared by an acoustical engineer using the ISO 9613-2 protocol in the CadnaA (Computer Aided Noise Abatement) computer program. If the study determines a potential exceedance of the City's



thresholds (55 dBA L_{eq} daytime, or 50 dBA L_{eq} nighttime), measures shall be identified that ensure noise levels are reduced to below the thresholds. Identified measures shall be included on all construction and building documents and submitted for verification to the City of Yorba Linda Planning Department.

4.6.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Significant and Unavoidable Impact. Mitigation Measures MM 4.6-1 through MM 4.6-3 would contribute in minimizing construction-related noise. However, due to the unknown number of construction activities that could occur at one time, proximity of construction activities to sensitive receptors, and other factors that cannot be quantified at this time, such as the longevity of activities, construction-related noise impacts may not be reduced to less than significant levels for some future development. Therefore, impacts would remain significant and unavoidable.

With the implementation of Goal N-4 of the City of Yorba Linda General Plan Noise Element and compliance with the exterior noise level limits outlined in the City of Yorba Linda Municipal Code Section 8.32.060 and Mitigation Measure MM 4.6-5, the Project stationary source impacts would be reduced to less than significant impacts.

Threshold b: Less than Significant with Mitigation Incorporated. Mitigation Measure MM 4.6-4 would reduce construction-related vibration impacts to acceptable levels and ensure that construction would not exceed the maximum acceptable continuous vibration threshold for fragile buildings of 0.10 PPV (in/sec). Therefore, impacts would be less than significant.



4.7 PUBLIC SERVICES

The following analysis is based on information obtained from public correspondence letters with service providers (*Technical Appendix F*); General Plan; City of Yorba Linda Municipal Code. All references used in this Subsection are listed in PEIR Section 7.0, *References*.

4.7.1 EXISTING CONDITIONS

A. Fire Protection Services

Fire protection services for the City of Yorba Linda is currently provided by the Orange County Fire Authority (OCFA). The City is located with Operations Division 4 which also serves the cities of Villa Park and Tustin, and surrounding unincorporated areas of Orange County (OCFA, 2022). As shown in Figure 4.7-1, *Existing Public Service Facilities*, there are three fire stations that serve the City. As shown in Table 4.7-1, *Orange County Fire Authority Stations*, Station 10 staffed with 1 battalion chief, 1 fire captain, 1 fire apparatus engineer, and 2 firefighters, and is equipped with Battalion 2, Medic Engine 10, Patrol 101, and Water Tender 10. Station 32 staffed with 2 fire captains, 2 fire apparatus engineer, and 4 firefighters and is equipped with Medic Truck 32, Truck 32, Engine 132, and Swift Water 32. Station 53 is staffed with 1 fire captain, 1 fire apparatus engineer, and 2 firefighters and is equipped with Medic Engine 53 and Engine 353.

Table 4.7-1 Orange County Fire Authority Stations

Location	Apparatus	Daily Staffing
Station 10 18422 Lemon Drive Yorba Linda, CA 92886	Battalion 2, Medic Engine 10, Patrol 10 ¹ , Water Tender 10	1 Battalion Chief, 1 Fire Captain, 1 Fire Apparatus Engineer, 2 Firefighters
		Total Station Staffing: 15 Firefighters
Station 32 20990 Yorba Linda Boulevard Yorba Linda, CA 92886	Medic Engine 32, Truck 32, Engine 132, Swift Water 32	2 Fire Captains, 2 Fire Apparatus Engineers, 4 Firefighters
		Total Station Staffing: 24 Firefighters
Station 53 25415 La Palma Avenue Yorba Linda, CA 92887	Medic Engine 53, Engine 353 ¹	1 Fire Captain, 1 Fire Apparatus Engineer, 2 Firefighter
		Total Station Staffing: 12 Firefighters

¹Cross Staffed by on duty personnel
Source: (OCFA, 2022)

2. Calls for Service

In 2021, OCFA responded to a total of 161,762 incidents, including 2,694 fire incidents, 120,880 emergency medical service (EMS) incidents. Specifically, the City of Yorba Linda had 6,707 responses



including 45 fire incidents and 3,276 EMS incidents, and 1,018 other (cancelled, ruptures, hazardous conditions, service calls, good intent, false alarms, and miscellaneous call) incidents. (OCFA, 2021)

B. Police Protection Services

The City of Yorba Linda currently contracts with the Orange County Sheriff’s Department (OCSD) for police protection services. The City is located within the North Operations Division, which also covers the cities of Stanton and Villa Park and surrounding unincorporated areas of Orange County (OCSD, 2022). The Yorba Linda Police Services is located at 20994 Yorba Linda Boulevard. OCSD is responsible for providing protection of citizens, the enforcement of laws, apprehension of criminals, and crime prevention. Law enforcement services include patrol, general and special crime investigation, traffic enforcement, collision investigation, parking enforcement, and a crime prevention unit. A Sherriff’s lieutenant is designated at the Chief of Police Services and is responsible for the day-to-day operation of law enforcement services in the City. Daily staffing at the Yorba Linda Police Services is 25 with a total staffing of 41, which includes two patrol shifts, and administrative and investigative staff.

1. Response Times

OCSD divides call into level of priorities: Priority 1 calls are defined as emergency calls; Priority 2 calls are defined as non-emergency calls. The goal for Priority 1 calls is 5 minutes or less and 12 minutes or less for Priority 2 calls. In 2021, the Yorba Linda Police Services responds to Priority 1 call in 4 minutes and 59 seconds and Priority 2 calls in 12 minutes and 55 seconds.

C. School Services

The City of Yorba Linda is within the attendance boundaries of the Placentia-Yorba Linda Unified School District (PYLUSD). Student enrollment for the 2021-2022 school year is approximately 23,687 (CDE, 2022a). As shown in Table 4.7-2, *PYLUSD Schools*, PYLUSD operates a District Education Center, Education Service Center, 1 Adult Transition Program, 1 TK-12 online school, and 32 school sites including 20 elementary schools, 5 middle schools, 1 TK-8 school, 5 comprehensive high schools, 1 special education school, and 1 TK-12 home school. Figure 4.7-2, *Existing PYLUSD Schools*, depicts all schools and district facilities within PYLUSD. Additionally, there are two housing opportunity sites (S6-026 and S6-015) located within the Orange Unified School District (OUSD) and they are within the attendance boundary of Running Springs Elementary School, El Rancho Middle School, and Canyon High School.

Table 4.7-2 PYLUSD Schools

ID	School	School Level	Address
1	Venture Academy	Adult Transition Program	710 E. Golden Avenue Placentia, CA 92870
2	Bernardo Yorba Middle School	7-8	5350 Fairmont Boulevard Yorba Linda, CA 92886



ID	School	School Level	Address
3	Brookhaven Elementary School	TK-6	1851 N. Brookhaven Avenue Placentia, CA 92870
4	Bryant Ranch Elementary School	TK-5	24695 Paseo de Toronto Yorba Linda, CA 92887
5	District Education Center	N/A	1351 E. Orangethorpe Avenue Placentia, CA 92870
6	Education Services Center	N/A	4999 Casa Loma Avenue Yorba Linda, CA 92886
7	El Camino Real High School	9-12	1351 E. Orangethorpe Avenue Placentia, CA 92870
8	El Dorado High School	9-12	1651 N. Valencia Avenue Placentia, CA 92870
9	Esperanza High School	9-12	1830 N. Kellogg Drive Anaheim, CA 92807
10	Fairmont Elementary School	TK-6	5241 Fairmont Boulevard Yorba Linda, CA 92886
11	George Key School	Special Education	710 East Golden Avenue Placentia, CA 92870
12	Glenknoll Elementary School	TK-6	6361 Glenknoll Drive Yorba Linda, CA 92886
13	Glenview Elementary School	TK-6	1775 Glenview Avenue Anaheim, CA 92807
14	Golden Elementary School	TK-6	740 East Golden Avenue Placentia, CA 92870
15	Kraemer Middle School	7-8	645 N. Angelina Drive Placentia, CA 92870
16	Lakeview Elementary School	TK-5	17510 Lakeview Avenue Yorba Linda, CA 92886
17	Linda Vista Elementary School	TK-5	5600 South Ohio Street Yorba Linda, CA 92886
18	Mabel Paine Elementary School	TK-5	4444 Plumosa Avenue Yorba Linda, CA 92886
19	Melrose Elementary School	TK-5	974 Melrose Street Placentia, CA 92870
20	Morse Elementary School	TK-6	431 E. Morse Avenue Placentia, CA 92870
21	Parkview Elementary School	Home School TK-12	2189 N. Kraemer Boulevard Placentia, CA 92870
22	Rio Vista Elementary School	TK-5	310 N. Rio Vista Street Anaheim, CA 92806
23	Rose Drive Elementary School	TK-5	4700 Rose Drive Yorba Linda, CA 92886
24	Ruby Drive Elementary School	TK-6	601 Ruby Drive Placentia, CA 92870
25	Sierra Vista Elementary School	TK-6	1811 N. Placentia Avenue Placentia, CA 92870



ID	School	School Level	Address
26	Valadez Middle School Academy	6-8	161 E. La Jolla Street Placentia, CA 92870
27	Topaz Elementary School	TK-6	3232 Topaz Lane Fullerton, CA 92831
28	Travis Ranch School	TK-8	5200 Via de la Escuela Yorba Linda, CA 92887
29	Tuffree Middle School	7-8	2151 N. Kraemer Boulevard Placentia, CA 92870
30	Tynes Elementary School	TK-6	735 Stanford Drive Placentia, CA 92870
31	Valencia High School	9-12	500 N. Bradford Avenue Placentia, CA 92870
32	Van Buren Elementary School	TK-6	1245 N. Van Buren Street Placentia, CA 92870
33	Wagner Elementary School	TK-6	717 E. Yorba Linda Boulevard Placentia, CA 92870
34	Woodsboro Elementary School	TK-6	7575 Woodsboro Avenue Anaheim, CA 92807
35	Yorba Linda Middle School	6-8	4777 Casa Loma Avenue Yorba Linda, CA 92886
36	Yorba Linda High School	9-12	19900 Bastanchury Road Yorba Linda, CA 92886

Source: (PYLUSD, 2022)

As shown in Table 4.7-3, *PYLUSD School Capacity and Enrollment*, there is adequate capacity at all school levels within PYLUSD. There is a remaining capacity of 5,065 total students, including 3,753 elementary students, 906 middle school students, and 406 high school students.

Table 4.7-3 PYLUSD School Capacity and Enrollment

School	2021/2022 Current Enrollment	2015/2016 Facility Capacity	Remaining Capacity
Elementary School (K-6)	11,735	15,488	3,753
Middle School (7-8)	3,760	4,666	906
High School (9-12)	8,192	8,598	406
Total	23,687	28,752	5,065

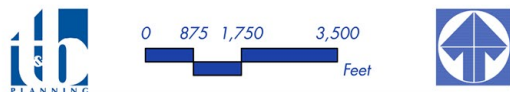
Source: (CDE, 2022a; PYLUSD, 2016)

According to OUSD, there are approximately students at 620 students Running Springs Elementary School, 986 students at El Rancho Middle School, and 1,892 students Canyon High School in 2019/2020. (Davis Demographics & Planning, Inc., 2020)



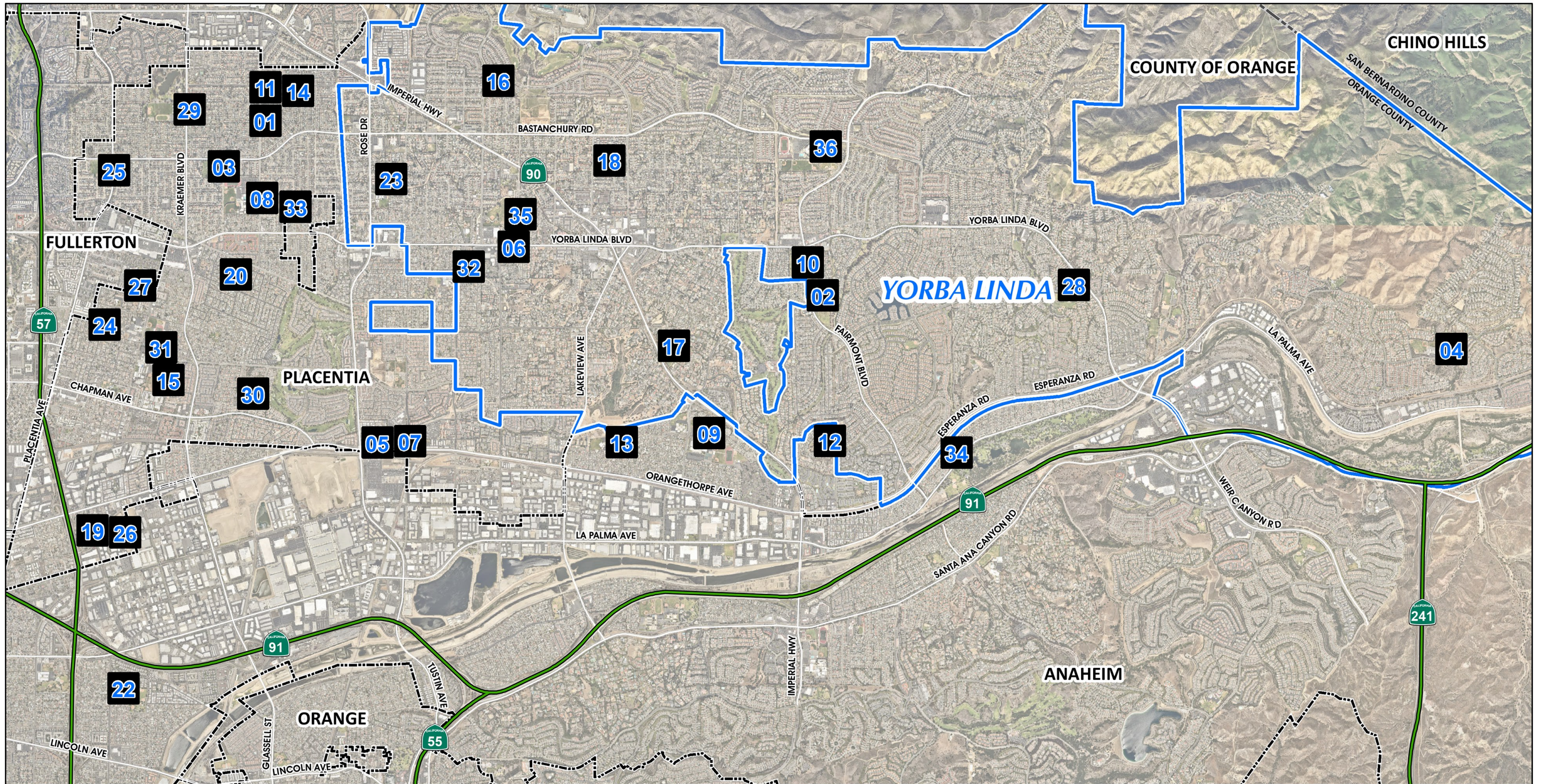
Source(s): ESRI, Nemap Imagery (2022), OC Landbase (2022), RCTLMA (2022), SB County (2022), City of Yorba Linda (2022)

Figure 4.7-1



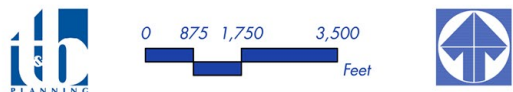
EXISTING PUBLIC SERVICE FACILITIES

SCH No. 2022040574



Source(s): ESRI, Nearmap Imagery (2022), OC Landbase (2022), RCTLMA (2022), SB County (2022), PYLUSD (2022)

Figure 4.7-2



EXISTING PYLUSD SCHOOLS



D. Parks

As described in Section 4.8, *Recreation*, of this PEIR, the City currently has 27 developed and planned local public parks, totaling 186.08 acres. Additionally, there are three regional parks within the City and the City currently has joint-use agreements within 9 schools within PYLUSD. Refer to PEIR Subsection 4.8, *Recreation*, for a more detailed discussion regarding parks and recreational facilities in the region.

E. Other Public Facilities

Built in 2020, the Yorba Linda Public Library (YLPL) is located at 4852 Lakeview Drive, adjacent to the City's Cultural Arts Center. The 47,806-square-foot library includes a storytime theater, community room, DIY studio, study room, and meeting room. The library offers a collection of more than 150,000 books, periodicals, and media items, which includes Large Print, Spanish language, and Chinese language materials. The media collections include educational and feature films, audiobooks, e-books, and video and computer game (YLPL, 2022). The library total staffing is currently 30.8 full-time equivalent (FTE) and funding from the library is from property taxes.

4.7.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. Comments were made during the public scoping period or PEIR Scoping Meeting that pertain to public services in regards to public safety from increase in crimes, equestrian safety, and privacy concerns. Environmental impacts related to wildfires, earthquakes, and landslides are discussed separately in their own sections in this PEIR.

4.7.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the state and local environmental laws and related regulations related to public services.

A. State

1. Fire Protection Services Regulations and Plans

Public Resources Code (PRC) Sections 4290-4299

This portion of the Public Resources Code (PRC) requires minimum statewide fire safety standards pertaining to: road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fuel breaks and greenbelts. With certain exceptions, all new construction in potential wildland fire areas is required to meet the statewide standards. State requirements, however, do not supersede more restrictive local regulations.



PRC Sections 4102-4127 - State Responsibility Areas (SRAs)

PRC Section 4102 specifies that “‘State responsibility areas’ means areas of the state in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state.” These areas may contain state or privately-owned forest, watershed, and rangeland. §§ 4126-4127 of the PRC further specify the standards that define what does and does not constitute an SRA. The Project is currently located in a Very High Fire Hazard Severity Zone (VHFHSZ) and High Fire Hazard Severity Zone within an SRA by the Riverside County General Plan and CalFire.

California Code of Regulations (CCR) Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code which contains complete regulations and general construction building standards of State of California adopting agencies, including administrative, fire and life safety and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, “Materials and Construction Methods for Exterior Wildfire Exposure,” in the 2010 California Building Code addresses fire safety standards for new construction and Section 701A.3.2 addresses “New Buildings Located in Any Fire Hazard Severity Zone.”

CCR Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.).

California Government Code (CGC) Sections 51178-51179 – Very High Fire Hazard Severity Zones

Section 51178 specifies that the Director of CalFire, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazard. It further specifies that VHFHSZs “shall be based on fuel loading, slope, fire weather and other relevant factors,” including areas subject to Santa Ana winds which are a “major cause of wildfire spread.” Section 51179 states that a local agency (such as a county) must also designate (and map) the VHFHSZs in its jurisdiction by ordinance. (See the discussion on Ordinance No. 787, below, regarding Riverside County’s VHFHSZs). Other portions of the Government Code outline when a local agency may use



its discretion to exclude areas from VHFHSZ requirements or add areas not designated by the State of California to its VHFHSZ areas.

CGC Section 51182 – Defensible Space

Pursuant to this code, a person who “owns, leases, controls, operates or maintains an occupied dwelling or occupied structure in, upon or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land or land that is covered with flammable material” in a very high fire hazard severity zone designated by the local agency pursuant to § 51179, shall at all times maintain a specified amount of “defensible space” to protect structures in high fire hazard areas.

CGC Section 66474.02

Before approving a tentative or parcel map for land within a SRA or VHFHSZ, as defined in § 51177, the local agency must (subject to certain limited exceptions) find that (1) the subdivision and each lot within it are consistent with applicable state fire regulations, (2) state or local fire protection services will be available, and (3) to the extent practicable, ingress and egress meet state and local fire emergency access requirements.

Health and Safety Code Section 13159.5

Senate Bill 190 was signed into law October 2, 2019, and requires the Office of the State Fire Marshal to develop; in consultation with representatives from local, state, and federal fire services, local government, building officials, utility companies, the building industry, insurers and insurance research organizations, and the environmental community; a model defensible space program to be made available for use by a city, county, or city and county in the enforcement of the defensible space provisions. The bill also adds Health and Safety Code Section 13159.5 to require the Office of the State Fire Marshal to development and make available on its website a Wildland-Urban Interface Fire Safety Building Standards Compliance training intended for use in the training of local building officials, builders, and fire service personnel.

PRC Section 4213 - Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual “Fire Prevention Fee” for all habitable structures within the State’s Responsibility Area (SRA) to pay for fire prevention services. The SRA is the portion of the state where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As of 2013, the fee is up to \$150 per habitable structure (i.e., a building that can be occupied for residential use, which does not include incidental buildings such as detached garages, barns, outdoor bathrooms, sheds, etc.).



2. *School Services*

Assembly Bill (AB) 16

In 2002, AB 16 created the Critically Overcrowded School Facilities program, which supplements the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply.

Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50)

Senate Bill 50 (SB 50) was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior California Government Code (CGC) Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with “any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property....”

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “legislative or adjudicative act [involving] the planning, use or development of real property.” Further, SB 50 established the base amount of allowable developer fees: \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial. These base amounts are commonly called “Level 1 fees” and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years.

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50% of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions:

- At least 30% of the district’s students are on a multi-track year-round schedule.
- The district has placed on the ballot within the previous four years a local school bond that received at least 50% of the votes cast.
- The district has passed bonds equal to 30% of its bonding capacity.



- Or, at least 20% of the district’s teaching stations are relocatable classrooms.

Additionally, if the State of California’s bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as “Level 3 fees,” these fees are equal to 100% of land and construction costs of new schools required as a result of new developments.

B. Local

1. *City of Yorba Linda General Plan*

The General Plan identifies goals related to public services in its Land Use Element and Public Services and Utilities Element. Goals and policies that are relevant to the Project are as follows:

Goal LU-10: Provision of adequate school facilities to meet the needs of current and future students.

- **Policy LU 10.1:** Ensure future development is coordinated with School District needs to serve the present and projected student population.
- **Policy LU 10.2:** Support School District efforts to address current and future needs of the City’s student population.
- **Policy LU 10.3:** Ensure future development addresses impacts on school facilities and contributes its fair share towards expanding, upgrading, or providing school facilities

Goal PSU-1: Maintenance and improvement of local school facilities that serve the City.

- **Policy PSU-1.1:** Work with the Placentia-Yorba Linda Unified School District to properly serve the educational needs of Yorba Linda’s school-age children.
- **Policy PSU-1.3:** Continue to monitor the impacts of new development and redevelopment on city-serving schools.

Goal PSU-2: A high level of fire protection services which adequately serves the community.

- **Policy PSU-2.1:** Ensure that adequate fire facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.
- **Policy PSU-2.3:** Use the development review process to assess the impact of new development on fire protection services and to ensure that increased demand for emergency services will be adequately served.



- **Policy PSU-2.4:** Ensure that existing and new developments maintain or exceed standards for fire prevention to minimize the risk of fire.

Goal PSU-3: A high level of police protection services which adequately serve the community and provide a sense of safety to residents.

- **Policy PSU-3.1:** Ensure that sufficient law enforcement facilities and personnel are maintained by the County and contracted by the City to provide adequate service levels.
- **Policy PSU-3.3:** Use the development review process to assess the impact of new development on police protection services and to ensure that increased demand for emergency services will be adequately served.

Goal PSU-4: A strong sense of community and opportunities for the continuing education and entertainment of the community.

- **Policy PSU-4.2:** Work with the Yorba Linda Library to ensure adequate facilities for the current and future population.

2. *City of Yorba Linda Municipal Code*

The City of Yorba Linda Municipal Code identifies policies related to public services. The specific Municipal Code policy that is relevant to the Project is as follows:

Section 15.56 Park and Recreation Impact Fees. Park and Recreation Impact Fees are hereby established on new residential development within the City of Yorba Linda to pay a proportionate share of public facilities related to parks and recreation. The Impact Fees are for the purpose of developing new or rehabilitating existing park or recreational facilities, although no such fees will be used to overcome any current deficiency in park and recreation facilities.

4.7.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XIV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to public services if the Project or any Project-related component would (OPR, 2019):

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*
 - Fire Protection;*



- ii. *Police Protection;*
- iii. *Schools;*
- iv. *Parks; or*
- v. *Other Public Facilities*

4.7.5 IMPACT ANALYSIS

Threshold a: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

- i. *Fire Protection;*
- ii. *Police Protection;*
- iii. *Schools;*
- iv. *Parks; or*
- v. *Other Public Facilities*

A. Fire Protection Services

Implementation of the Project would increase the overall demand on fire protection and emergency services in the City. Project buildout would result in an increase of 2,410 dwelling units, resulting population growth of approximately 7,085 residents¹. This growth in accordance with the Project is expected to create the typical range of fire and emergency service calls, and would increase call volumes, which impacts response times for emergency and non-emergency services.

Considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Additionally, future development associated with the Project would occur in an area of the City already served by OCFA; therefore, the Project would not result in an expansion of OCFA's service area. In the event of an emergency that requires more resources than the primary fire stations that serve the area could provide, OCFA would direct resources to the site from other OCFA stations nearby.

Further, the future development would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirements based upon the tenant type, building size, and building type. Access to and around

¹ Assuming an average household size of 2.94 residents per unit, based on California Department of Finance, Table 2: E-5 (January 2021).



structures would meet OCFA and CFC requirements. Compliance with OCFA requirements would ensure adequate provision of resources.

In order to ensure adequate level of fire protection service within the City of Yorba Linda, OCFA typically enters into a Secured Fire Projection Agreement with private developers. Therefore, project applicants for future development would be required to enter into a Secured Fire Protection Agreement with OCFA to address any incremental impacts to fire facilities and services. Because the Project does not include construction of new fire station facilities and does not generate a need for additional facilities, Project-related impacts to fire protection services are evaluated as less than significant.

For further evaluation related to wildfire hazards please refer to Section 4.11, *Wildfire*, of this PEIR.

B. Police Protection Services

Buildout of the Project would increase demands for police protection services in the City. During future construction and operation of the Project, the need for police services is expected to grow due to the increase in population and associated potential for additional crime and accidents. Crime and safety issues during construction may include theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. After construction, the Project is anticipated to generate a typical range of police service calls as similar developments, such as vehicle burglaries, residential thefts, disturbances, and driving under the influence.

The increase in demands on police services resulting from the implementation of the Project would not adversely impact OCSD's existing resources. There are currently no staffing or equipment deficiencies in the service area. The increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. Implementation of the Project would result in an increase in calls for service; however, OCSD has indicated that this increase would not adversely impact OCSD's existing resources. OCSD will work closely with the City to determine proper level of law enforcement staffing based on best practices for population and crime statistics.

Moreover, development impact fees will be paid to OCSD to accommodate new demand for police protection services to the Project area. Because the Project does not include construction of new police facilities and does not generate a need for additional facilities, and future development will be required to pay development impacts fees that will provide its fair share of future police needs; increases in demands for police protection resulting from implementation of the Project would not have significant impacts on OCSD services.



C. School Services

As previously discussed, Project buildout would result in an increase of 2,410 dwelling units, resulting population growth of approximately 7,085 residents². The population would lead to an increase in student population, which, in turn, would create additional demand for PYLUSD services and facilities. Table 4.7-4, *Projected Student Population*, provides an estimate of the number of K-12 grade level students by school type that would be generated by the Project. The student generation rates are specific to PYLUSD and are based on general citywide single- and multifamily housing developments. Student generation rates are used by school districts to estimate the number of students generated by new development in order to determine whether or not existing school facilities would be adequate for future students.

Table 4.7-4 also calculates the addition of the net new students that could be generated at Project buildout to the current enrollment in order to determine if there would be adequate capacity at schools serving the City. This approach is conservative because student enrollment fluctuates over time. As shown in Table 4.7-4, the Project would generate approximately 1,115 students at buildout, consisting of 534 elementary school students, 247 middle school students, and 334 high school students. There is more than adequate capacity in PYLUSD schools to serve the Project generated students; the Project in combination with current enrollment would leave a remaining capacity of 3,950 total students, including 3,219 elementary students, 659 middle school students, and 72 high school students. Therefore, based on the preceding, impacts from implementation of the Project on school services would not be significant.

Furthermore, as stated previously, two sites S6-020 and S6-015 are within OUSD school district boundaries. These sites have the potential to generate 232 residential units, resulting in 682 residents. Using the generation factors provided in Table 4.7-4, this would result in a total of 315 students—51 elementary school students, 23 middle school students, and 32 high school students—who would attend Running Springs Elementary School, El Rancho Middle School, and Canyon High School. Over the next four years, the projections show that the OUSD is expected to have a net decline of 2,961 TK-12 students. Specifically, OUSD project enrollment for Running Springs Elementary School, El Rancho Middle School, and Canyon High School would be 638 students, 953 students, and 1,730 in 2026, respectively (Davis Demographics & Planning, Inc., 2020). Therefore, there is sufficient capacity to accommodate to serve the Project generated students, and impacts would be less than significant.

² Assuming an average household size of 2.94 residents per unit



Table 4.7-4 Projected Student Population

School	Student Generation Rates		Project	Project Generated Students	Current Enrollment	Current Enrollment + Project	Facility Capacity	Remaining Capacity
	SFR	MFR						
Elementary School	0.1887	0.2216	2,410 MFR	534	11,735	12,269	15,488	3,219
Middle School	0.1151	0.1023		247	3,760	4,007	4,666	659
High School	0.1714	0.1384		334	8,192	8,526	8,598	72
Total	0.4752	0.4623		1,115	23,687	24,802	28,752	3,950

Source: (PYLUSD, 2016; CDE, 2022a)

D. Parks

As discussed in Section 4.8, *Recreation*, the additional dwelling units would result in an increase in the number of residents in the City, which could lead to an increase in demand for existing City parks and recreational facilities. As discussed in Section 4.8, *Recreation*, the City currently is in a deficit of approximately 32.2 acres of parkland. All residential developments within the City would be required to pay impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City’s growing population, which are reinforced in Section 15.56, Park and Recreation Impact Fees, of the City’s Municipal Code. Construction of new park and/or recreational facilities would occur within the housing opportunity sites, which has been analyzed throughout this PEIR, or within land use designations that allow such facilities. Therefore, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered parks or recreational facilities or the need for new or physically altered parks or recreational facilities. Refer to Section 4.8, *Recreation*, for further discussion.

E. Other Public Facilities

Project buildout would increase population onsite by an estimated 7,085 residents, thus increasing demand for library services. Project impacts on the YLPL system would include needs for increased staffing, increased collection budget, and increased operating hours. The City has indicated that demand on library services would be incremental and would not require the need for new or expanded physical library facilities, the construction of which could cause a substantial adverse impact. Therefore, impacts to library services would be less than significant.

4.7.6 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City.



A. Fire Protection Services

Residential and employment population increases and associated increases in the demand for public services have been taken into account in long-range planning efforts on behalf of the City and the agencies providing public services to the area.

As would the Project, related projects within the City would also be required pay development impact fees and enter into Secured Fire Protection Agreements to assist in providing for fire protection facilities, including fire stations. Increased property and sales tax from future development would provide additional funding for any capital improvements necessary to maintain adequate fire protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion of facility improvements, OCFA would be able to ensure that its performance objectives are consistently met. In addition, compliance with the existing regulations would maintain adequate access within the Project sites, which further ensures an adequate level of service for fire protection and emergency services to residents, workers, and visitors in the Project sites. Furthermore, individual development projects pursuant to the City's General Plan would be reviewed by the City and OCFA and would be required to comply with all applicable building code and other code requirements in effect at the time building permits are issued. Therefore, the Project's increased demand for fire protection services, in conjunction with the increased demand for cumulative development pursuant to the City's General Plan, would not result in significant cumulative impact.

B. Police Protection Services

Local population growth would result in an increased demand for public services and facilities, including law enforcement. Service providers would continue to evaluate levels of service and potential funding sources to meet demand. The City performs long-range planning for the provisions of public services and facilities based on its growth projections, which are revised over time and includes areas within the City's sphere of influence. Through assessments of the City's capital improvement needs and annual budget review process, police department needs are assessed, and budget allocations are revised accordingly to ensure that adequate levels of police services, including police protection facilities, equipment, and/or personnel, are maintained throughout the City.

As would the Project, related projects within the City would also be required to pay development impact fees to assist in providing for police protection facilities, including police stations. Increased property and sales tax from future development would provide funding for any capital improvements necessary to maintain adequate police protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion or facility improvements, OCSD would be able to ensure that its performance objectives are consistently met. Furthermore, individual development projects pursuant to the City's General Plan would be reviewed by the City and would be required to comply with the requirements in effect at the time building permits are issued.



Therefore, the demand for police services would not be adversely affected by the Project in conjunction with cumulative development pursuant to the City's General Plan. No significant cumulative impacts related to police services are anticipated.

C. School Services

Cumulative development in the PYLSD and OUSD service areas, including the related projects, may generate a substantial increase in student population in PYLUSD and OUSD schools. Assuming enrollment increases, administrators will need to seek short-term and long-term remedies to accommodate those added students. In recognition of these conditions, the State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects. Those fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure, and the payment of these fees constitutes full mitigation for the impacts generated by new development, per Government Code Section 65995. There is sufficient capacity within the schools serving the Project area to accommodate the additional students generated by the Project. Additionally, since the Project and cumulative development must pay appropriate impact fees, no cumulative impact would occur as a result of the implementation of the Project in conjunction with other area-wide development activities. Cumulative project impacts would be less than significant. .

D. Parks

As discussed in Section 4.8, *Recreation*, cumulative development will increase the demand in parks and recreational facilities. All new residential development is required to pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative project impacts would be less than significant.

E. Other Public Facilities

Cumulative population growth within the service area as a result of the related projects will likely increase the demand for library services. Similar to the Project, future residents of development projects within the City may visit the YLPL. However, there is sufficient capacity serving the City to accommodate the additional residents generated by the Project. Therefore, library capacity would not be significantly impacted and cumulative project impacts would be less than significant.

4.7.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant. Implementation of the Project would result in an increased requirement for public services. However, considering the existing resources available, the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact.



4.7.8 MITIGATION MEASURES

No mitigation measures are required. Impacts would be less than significant and mitigation is not required.

4.7.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impacts would be less than significant and mitigation is not required.



4.8 RECREATION

This Subsection provides an overview of the existing parks and recreational facilities that exist within the City of Yorba Linda (City) that could potentially be indirectly physically affected by implementation of the Project. The analysis herein is based on City's General Plan Open Space and Recreation Element and the City of Yorba Linda Municipal Code. Additional references used for this Subsection are listed in Section 7.0, *References*.

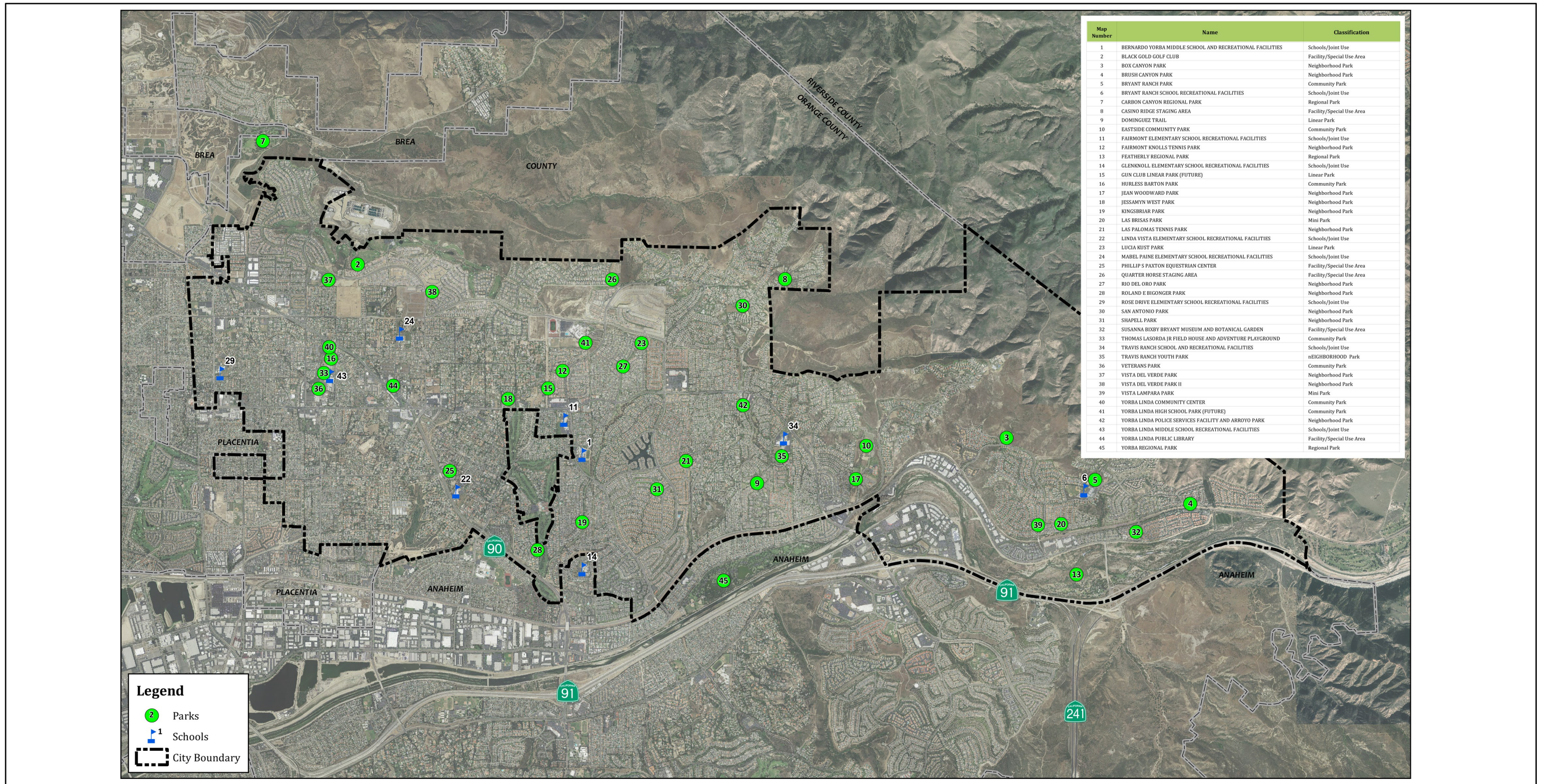
4.8.1 EXISTING CONDITIONS

The following information is summarized from the City's General Plan Open Space and Recreation Element. Figure 4.8-1, *Existing Parks and Recreational Facilities*, depicts the existing parks and recreational facilities within the City of Yorba Linda.

A. Regional Park

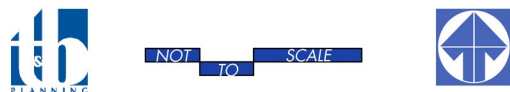
There are three regional parks within the City, along with the Chino Hills State Parks, which is accessible from the City. In total, these four regional parks consist of approximately 14,770 acres.

- **Yorba Regional Park.** Located between the Santa Ana River and La Palma Avenue, east of Imperial Highway, the 105.69-acre park has group shelters, volleyball courts, horseshoe puts, two ball diamonds, a physical fitness course, 200 barbecues, more than 400 picnic tables, and a series of four lakes.
- **Carbon Canyon Regional Park.** Located upstream of the Carbon Canyon Dam in a protected valley northwest of the City of Yorba Linda, the 124-acre park consists of 60 acres of developed areas with grassy areas for picnicking, backstops and lighted tennis courts, and a 4-acre lake with piers for fishing. The remaining undeveloped portion has a trail that leads to Orange County's only grove of redwoods.
- **Featherly Regional Park.** Located in the Santa Ana Canyon, the 364-acre park consists of mostly natural riparian wilderness area where public access is restricted. The only developed portion of the park is Canyon R.V. Park, a privately-operated facility, that offers RV sites with full hook-ups, small cabins, youth group camping and areas for group events.
- **Chino Hills State Park.** Located directly to the north and east of the City, the 14,176-acre park provides overnight campsite facilities, RV access, hiking and horseback riding trails, and picnic areas.



Source(s): City of Yorba Linda Parks and Recreation Master Plan (08-2014)

Figure 4.8-1



Lead Agency: City of Yorba Linda

EXISTING PARKS AND RECREATION FACILITIES

SCH No. 2022040574



B. Local Parks

The City’s existing local parks system consist of mini-park, linear parks, greenbelts, neighborhood parks, and community parks. As shown in Table 4.8-1, *Existing and Planned Parks and Recreational Facilities*, the City currently has 27 developed and planned local public parks, totaling 186.08 acres.

Table 4.8-1 Existing and Planned Parks and Recreational Facilities

#	Name	Park Classification	Size (acres)
Existing			
1	Dominguez Trail	Linear Park	17.08
2	Gun Club Road Linear Park	Linear Park	7.50
3	Las Brisas Park	Mini-Park	0.50
4	Lucia Kust Trail	Linear Park	1.20
5	Vista Lampara Park	Mini-Park	1.00
6	Yorba Linda Police Services Facility & Arroyo Park	Neighborhood Park	9.0
7	Box Canyon Park	Neighborhood Park	5.0
8	Brush Canyon Park	Neighborhood Park	5.0
9	Fairmont Knolls Tennis Park	Neighborhood Park	4.0
10	Jean Woodard Park	Neighborhood Park	9.5
11	Jessamyn West Park	Neighborhood Park	7.0
12	Kingsbriar Park	Neighborhood Park	8.0
13	Las Palomas Tennis Park	Neighborhood Park	3.0
14	Rio Del Oro Park	Neighborhood Park	6.0
15	Roland E. Bigonger Park	Neighborhood Park	3.0
16	San Antonio Park	Neighborhood Park	10.5
17	Shapell Park	Neighborhood Park	6.0
18	Travis Ranch Youth Park	Neighborhood Park	8.5
19	Vista Del Verde Park	Neighborhood Park	5.0
20	Bryant Ranch Park	Community Park	9.0
21	Eastside Community Park	Community Park	17.0
22	Hurless Barton Park	Community Park	5.0
23	Thomas Lasorda Jr Field House & Adventure Playground	Community Park	8.0
24	Veterans Park	Community Park	9.5
25	Yorba Linda Community Center	Community Park	5.8
Subtotal (Existing)			171.08
Planned			
26	Vista Del Verde II Park	Neighborhood Park	5.0
27	Yorba Linda High School Park	Community Park	10.0
Subtotal (Planned)			15.0
Total (Existing and Planned)			186.08

Source: (City of Yorba Linda, 2016, Table OR-1)



C. Joint-Use Facilities

The City of Yorba Linda maintains inter-agency cooperative agreements with the Placentia-Yorba Linda Unified School District (PYLUSD) for the use of playing fields when not in use by the school as well as classrooms for various programs sponsored by the City’s Parks and Recreation Department. As shown in Table 4.8-2, *Joint-Use Facilities*, the City currently has joint-use agreements within 9 schools within PYLUSD for a total of 61.6 acres.

Table 4.8-2 Joint-Use Facilities

#	Name	Park Classification	Size (acres)
1	Bernardo Yorba Middle School & Recreation Facilities	Middle School	13.0
2	Bryant Ranch School & Recreational Facilities	Elementary School	7.8
3	Fairmont Elementary School & Recreational Facilities	Elementary School	4.2
4	Glenknoll Elementary School & Recreational Facilities	Elementary School	3.1
5	Linda Vista Elementary School & Recreational Facilities	Elementary School	5.2
6	Mabel Paine Elementary School & Recreational Facilities	Elementary School	4.7
7	Rose Drive Elementary School & Recreational Facilities	Elementary School	3.9
8	Travis Ranch School & Recreational Facilities	Middle School & Activity Center	11.7
9	Yorba Linda Middle School & Recreational Facilities	Middle School Sports Fields & Courts	8.0
Total			61.6

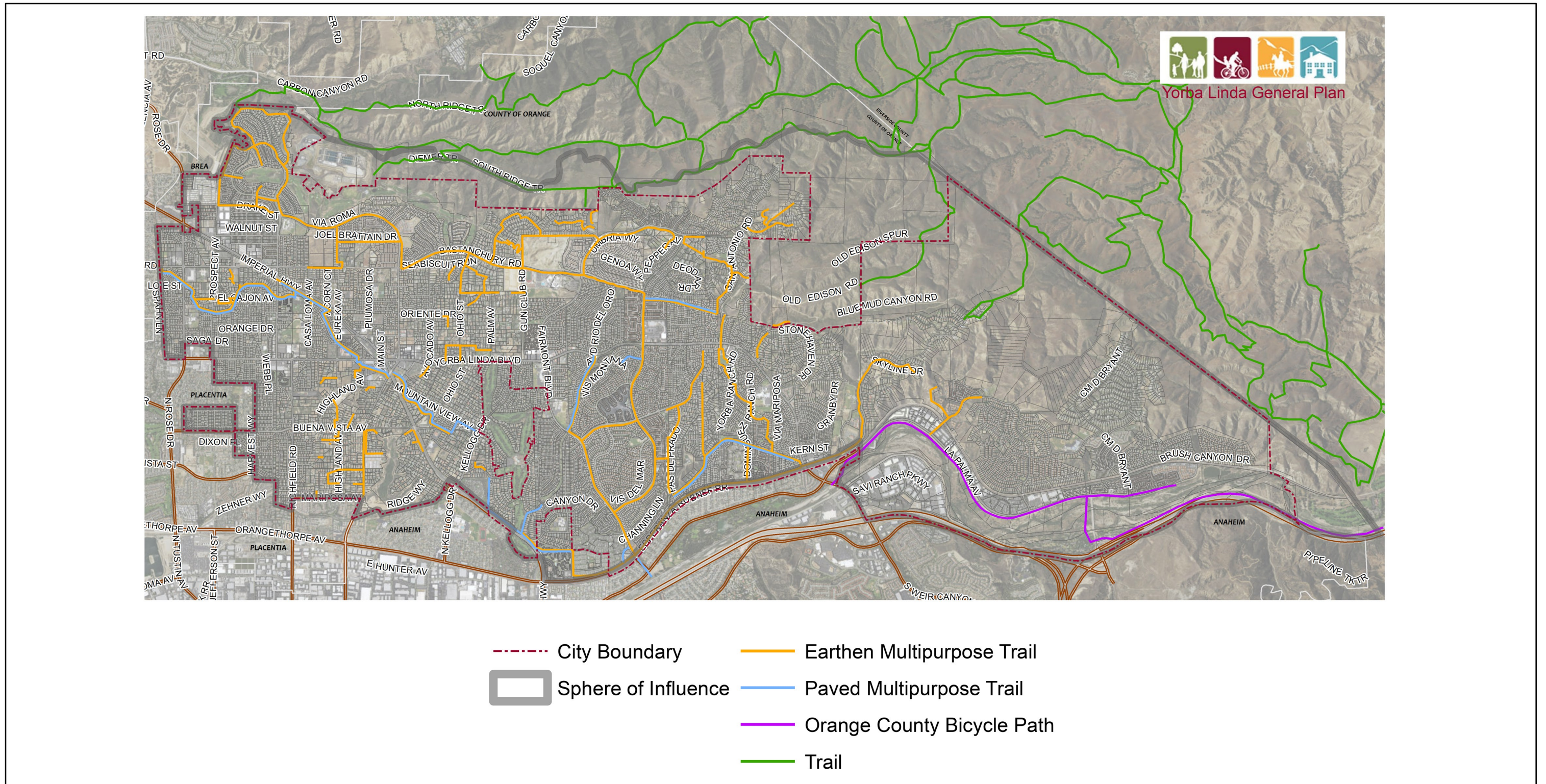
Source: (City of Yorba Linda, 2016, Table OR-2)

D. Trails Network

As shown in Figure 4.8-2, *Existing Trail Network*, the City has 30 multi-use trails, both paved and earthen, which are 100 miles in length. Earthen multipurpose trails are built with soft surfaces intended for use by equestrians, hikers, joggers, and some mountain bicyclists where appropriate. Paved multipurpose trails are intended for hikers, joggers, equestrians, and bicyclists that do not meet Class I bikeway standards because of varying widths and surfaces. Additionally, the Santa Ana River Trail runs along the Santa Ana River and provides a regional bicycle connection to areas east and west of the City.

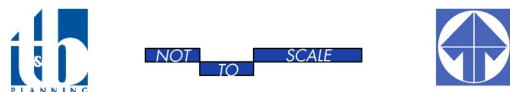
E. Equestrian Facilities

The City currently has over 100 miles of equestrian access trails and a dedicated area known as the Phillip S. Paxton Equestrian Center where equestrian clubs offer lessons, training, shows and events for the local equestrian community. The City also maintains equestrian arenas within the park site for unreserved use by local horse owners.



Source(s): City of Yorba Linda General Plan - Open Space and Recreation Element (10-2016)

Figure 4.8-2





F. Parkland Standard

In January 2014, the Yorba Linda City Council revised the City's Park Dedication and Park In-Lieu Fee Ordinance which established the park ratio requirement of 3 acres of local city parkland (not including joint-use or regional parks) per 1,000 residents. Based on the City's 2021 estimated population of 67,760 (DOF, 2021), the City requires 203.28 acres of parkland to meet park ratio requirements under the Park Dedication and Park In-Lieu Fee Ordinance. Based on the total acres of all parks and facilities within the City limits, a total of 171.08 acres of parkland (excluding joint-use facilities and regional parks) is being provided for a current park ratio of 2.52 acres of parkland per 1,000 residents. Therefore, the City has a current deficit of approximately 32.2 acres of parkland.

4.8.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. No comments were made during the PEIR Scoping Meeting that pertain to recreation. Additionally, no comments related to recreation were received during the public scoping period.

4.8.1 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the state and local environmental laws and related regulations related to recreation.

A. State Plans, Policies, and Regulations

1. *Mitigation Fee Act*

The California Mitigation Fee Act, Government Code sections 66000, et seq., allows cities to establish fees that are imposed on development projects for the purpose of mitigating the impact that the projects have on the city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act a city must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; 3) For fees that have been in the possession of the city for five years or more and for which the dollars have not been spent or committed to a project, the city must make findings each fiscal year describing the continuing need for the money; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

2. *California Public Park Preservation Act*

The primary instrument for protecting and preserving parkland in the state is California's Public Park Preservation Act of 1971. Under Public Resources Code Sections 5400 - 5409, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation,



land, or both, are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

3. *Quimby Act, California Government Code § 66477*

As part of approval of a final tract or parcel map, the Quimby Act allows a city to require dedication of land, the payment of in-lieu fees, or a combination of both to be used for the provision of parks and recreational services. Cities can require land or in-lieu fees for a minimum of three acres per 1,000 residents, with the possibility of increasing the requirement to a maximum of 5 acres per 1,000 residents if the city already provides more than three acres per 1,000 residents. Assembly Bill (AB) 1191, which was approved by the Governor of California on September 8, 2015, amended the definition of park and recreation purposes to include land and facilities for the activity of “recreational community gardening,” which activity consists of the cultivation by persons other than, or in addition to, the owner of the land, of plant material not for sale.

B. Local Plans, Policies, and Regulations

1. *City of Yorba Linda General Plan*

The General Plan identifies goals related to recreation in its Open Space and Recreation Element. Goals and policies that are relevant to the Project are as follows:

Goal OR-3: Adequate provision of parks and open space as part of new development.

- **Policy OR-3.1:** Ensure developers of new residential projects contribute to a citywide minimum park-to population ratio per City standards or pay in-lieu fees as appropriate.

2. *City of Yorba Linda Municipal Code*

The City of Yorba Linda Municipal Code identifies policies related to public services. The specific Municipal Code policy that is relevant to the Project is as follows:

Section 15.56 Park and Recreation Impact Fees. Park and Recreation Impact Fees are hereby established on new residential development within the City of Yorba Linda to pay a proportionate share of public facilities related to parks and recreation. The Impact Fees are for the purpose of developing new or rehabilitating existing park or recreational facilities, although no such fees will be used to overcome any current deficiency in park and recreation facilities.

4.8.2 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to recreation if the Project or any Project-related component would (OPR, 2019):



- a. *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;*
- b. *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

4.8.3 IMPACT ANALYSIS

Threshold a: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project includes a general plan amendment and zoning text amendment to facilitate future housing development in the City, consistent with the City’s adopted 2021-2029 Housing Element. Future housing development facilitated by the Project would be subject to discretionary permits (e.g. Design Review) and would occur as market conditions allow or at the discretion of individual property owners. However, the Project would allow for implementation of the Housing Element, which would increase housing capacity and would induce population growth in the City. Future housing development facilitated by the Project would result in a total net increase of 2,410 dwelling units, resulting in population growth of approximately 7,085 residents¹.

As previously stated, the City currently has a current park ratio of 2.52 acres of parkland per 1,000 residents and a deficit of approximately 32.2 acres of parkland. This is less than the City’s target goal of 3 acres of local city parkland (not including joint-use or regional parks) per 1,000 residents. Because of the existing citywide deficit, it is possible that the existing City parks and recreational facilities that would serve future residents would experience increased use that may lead to deterioration over time. Using the City’s goal of 3 acres of local city parkland per 1,000 residents, the net increase in demand for parkland due to the buildout of the Project (7,085 new residents) would be approximately 21.26 acres.

Although the City does not meet its current park ratio requirement, there are approximately 14,770 acres of regional parks and 61.6 acres of joint-use parks that would serve future project residents. As shown in Table 4.8-1, there are also two planned local parks for a total of 15 acres. In addition, the City requires developers to pay impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City’s growing population, which are reinforced in the City’s Municipal Code, Section 15.56, Park and Recreation Impact Fees. Therefore, impacts to existing parks and recreational facilities would be less than significant.

¹ Assuming an average household size of 2.94 residents per unit



Threshold b: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As noted above, based on the City's existing availability of parkland, the increase in population by 7,085 residents could result in a need for up to 21.25 acres of parkland. Future residential development would be required to provide adequate parkland or pay in-lieu fees. Since specific residential development projects or recreational facilities have not been identified as this time, potential impacts are addressed at a programmatic level. Generally, future construction of recreational facilities, within the 27 housing opportunity sites and its physical effects have been considered in the impact analyses throughout this PEIR. Furthermore, per the analysis provided above under Threshold a, the increase in demand for parks and recreation facilities would be offset by the payment of an in-lieu fee for improvements or acquisition of parkland. Therefore, implementation of the Project would not result in significant impacts relating to new and/or expanded park and recreational facilities.

4.8.4 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the City. Cumulative development projects would be required to comply with all applicable existing regulations, procedures, and policies that are intended to address impacts to park and recreation facilities. For example, per the City's park dedication requirements under Section 15.56 of the City of Yorba Linda Municipal Code, all new residential development is required either dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative impacts related to park and recreational space and facilities would be less than significant.

4.8.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant. Although the Project would result in an increase in residents, all residential development would be required to pay Park and Recreation Impact Fees. Additionally, there are regional and joint uses park and recreational facilities to supplement the need for additional recreational facilities. Accordingly, implementation of the Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and impacts would be less than significant.

Threshold b: Less than Significant Impact. Impacts associated with the construction or expansion of recreational facilities would be less than significant.

4.8.6 MITIGATION MEASURES

Impacts would be less than significant and mitigation is not required.



4.8.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impacts would be less than significant and mitigation is not required.



4.9 TRANSPORTATION

This Subsection assesses transportation impacts resulting from implementation of the Project. Pursuant to Senate Bill (SB) 743, changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt a vehicle miles traveled (VMT) metric as a replacement for automobile delay-based “level of service” (LOS) as the measure for identifying transportation impacts for land use projects. Automobile delay, as measured by “LOS and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts. This statewide mandate went into effect July 1, 2020. CEQA Guidelines Section 15064.3, effective January 1, 2019, “describes specific considerations for evaluating a project’s transportation impacts” and provides that, except for roadway capacity projects, “a project’s effect on automobile delay (or LOS)” shall not constitute a significant environmental impact” (CEQA Guidelines Section 15064.3(a)).

The following analysis is based on a Traffic Impact Analysis (TIA) prepared by Urban Crossroads titled Traffic Analysis, dated May 26, 2022 (Urban Crossroads, 2022e) (*Technical Appendix G* to this EIR) and the Vehicle Miles Traveled (VMT) Analysis prepared on May 23, 2022, by Urban Crossroads (Urban Crossroads, 2022f) (*Technical Appendix H* to this EIR). The information and the conclusions contained in the TIA related to consistency with programs, plans, and polices related to transit, bicycle, and pedestrian facilities; and geometric design features are included in this PEIR section; LOS analyses are not required to be analyzed under CEQA and has been excluded.

4.9.1 EXISTING CONDITIONS

Pursuant to the agreement with City of Yorba Linda staff the study area includes a total of 19 intersections as presented below. Exhibit 4-1 of *Technical Appendix G* illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls. (Urban Crossroads, 2022e)

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Yorba Linda General Plan Circulation Element, are described subsequently. (Urban Crossroads, 2022e)

The study area roadway that is classified as a Smart Street (6-Lane) is identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Smart Street includes three lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadway within the City of Yorba Linda is classified as a Smart Street (6-Lane):

- Imperial Highway from the City Limit to Yorba Linda Boulevard

The study area roadway that is classified as a Smart Street (4-Lane) is identified as having a 96-foot right-of-way and 80-foot curb-to-curb measurement. Smart Street include two lanes of travel in each



direction and a 12-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Smart Street (4-Lane):

- Imperial Highway from Yorba Linda Boulevard to Kellogg Drive

The study area roadway that is classified as a Modified Major identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Modified Major includes three lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Modified Major:

- Yorba Linda Boulevard from City Limit to Fairmont Boulevard

The study area roadway that is classified as a Primary Arterial identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Primary Arterial includes two lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Primary Arterial:

- Lakeview Avenue from Yorba Linda Boulevard to City Limit
- Fairmont Boulevard
- Yorba Linda Boulevard from Fairmont Boulevard to City Limit

The study area roadway that is classified as a Modified Primary Arterial identified as having a 80-foot right-of-way and 64-foot curb-to-curb measurement. Modified Primary Arterial includes two lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Modified Primary Arterial:

- Bastanchury Road
- Rose Drive
- La Palma Avenue from City Limit to Gypsum Canyon Road
- Savi Ranch Parkway from Yorba Linda Boulevard to Old Canal Road

The study area roadway that is classified as a Secondary Arterial identified as having a 80-foot right-of-way and 64-foot curb-to-curb measurement. Secondary Arterial includes two lanes of travel in each direction. The following study area roadways within the City of Yorba Linda are classified as a Secondary Arterial:

- Buena Vista Avenue
- Lakeview Avenue from north of Bastanchury Road to Yorba Linda Boulevard
- Kellogg Drive
- Gypsum Canyon Road



The study area roadway that is classified as a Collector identified as having a 60-foot right-of-way and 40-foot curb-to-curb measurement. Collector includes one lane of travel in each direction. The following study area roadways within the City of Yorba Linda are classified as a Collector:

- Prospect Avenue

A. Bicycle Facilities

Figure 4.9-1, *Existing Bikeways*, illustrates the City of Yorba Linda existing and future planned bicycle facilities per the City's Bicycle Plan (2016). Existing pedestrian facilities within the study area are shown on Exhibit 4-5 of *Technical Appendix G*. Field observations and traffic counts conducted in March 2022 indicate light pedestrian and bicycle activity within the study area. (Urban Crossroads, 2022f)

B. Transit Services

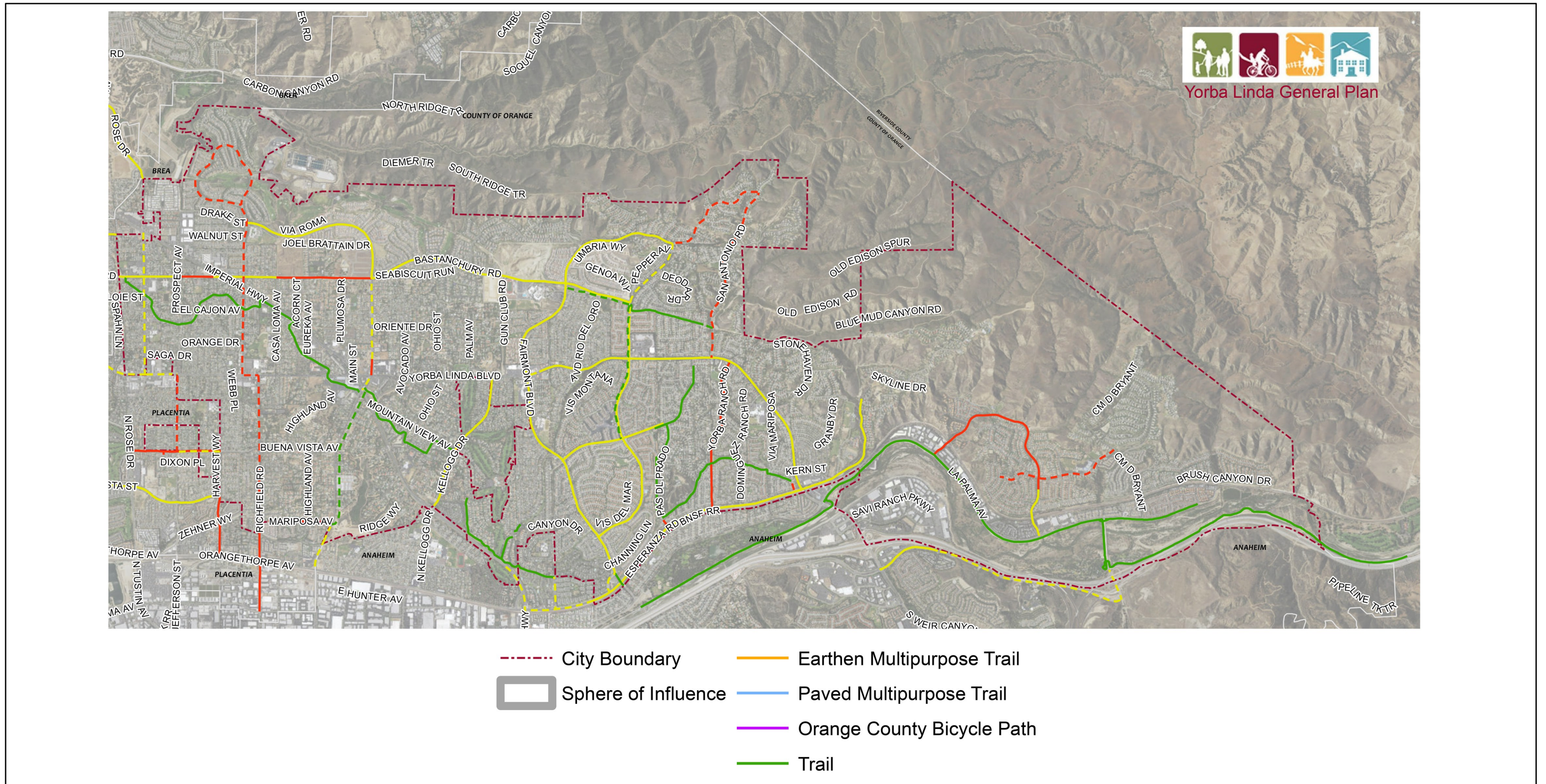
As shown in Figure 4.9-2, *Existing Transit Routes*, the City of Yorba Linda is currently served by Orange County Transportation Authority (OCTA), a public transit agency serving various jurisdictions within Orange County. Based on a review of the existing transit routes within the vicinity of the proposed Project, Route 26 currently runs along Yorba Linda Boulevard, from Rose Drive to Lakeview Avenue; while Route 38 runs along Yorba Linda Boulevard from north side to south side of SR-91. Transit service is reviewed and updated by OCTA periodically to address ridership, budget and community demand needs. (Urban Crossroads, 2022f)

C. Equestrian Facilities

The City of Yorba Linda has an equestrian tradition arising from a period when ranches and agriculture were the main land use area. As the City has developed into residential neighborhoods, the City has sought to preserve the equestrian and semi-rural style of Yorba Linda. The Yorba Linda planning area currently has over 100 miles of equestrian access trails and the City has a dedicated area known as the Phillip S. Paxton Equestrian Center where equestrian clubs offer lessons, training, shows and events for the local equestrian community. The City also maintains equestrian arenas within the park site for unreserved use by local horse owners. Yorba Linda also contains numerous residential equestrian properties with horse boarding amenities. (City of Yorba Linda, 2016a)

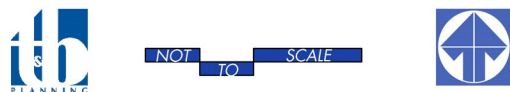
4.9.2 NOP/SCOPING COMMENTS

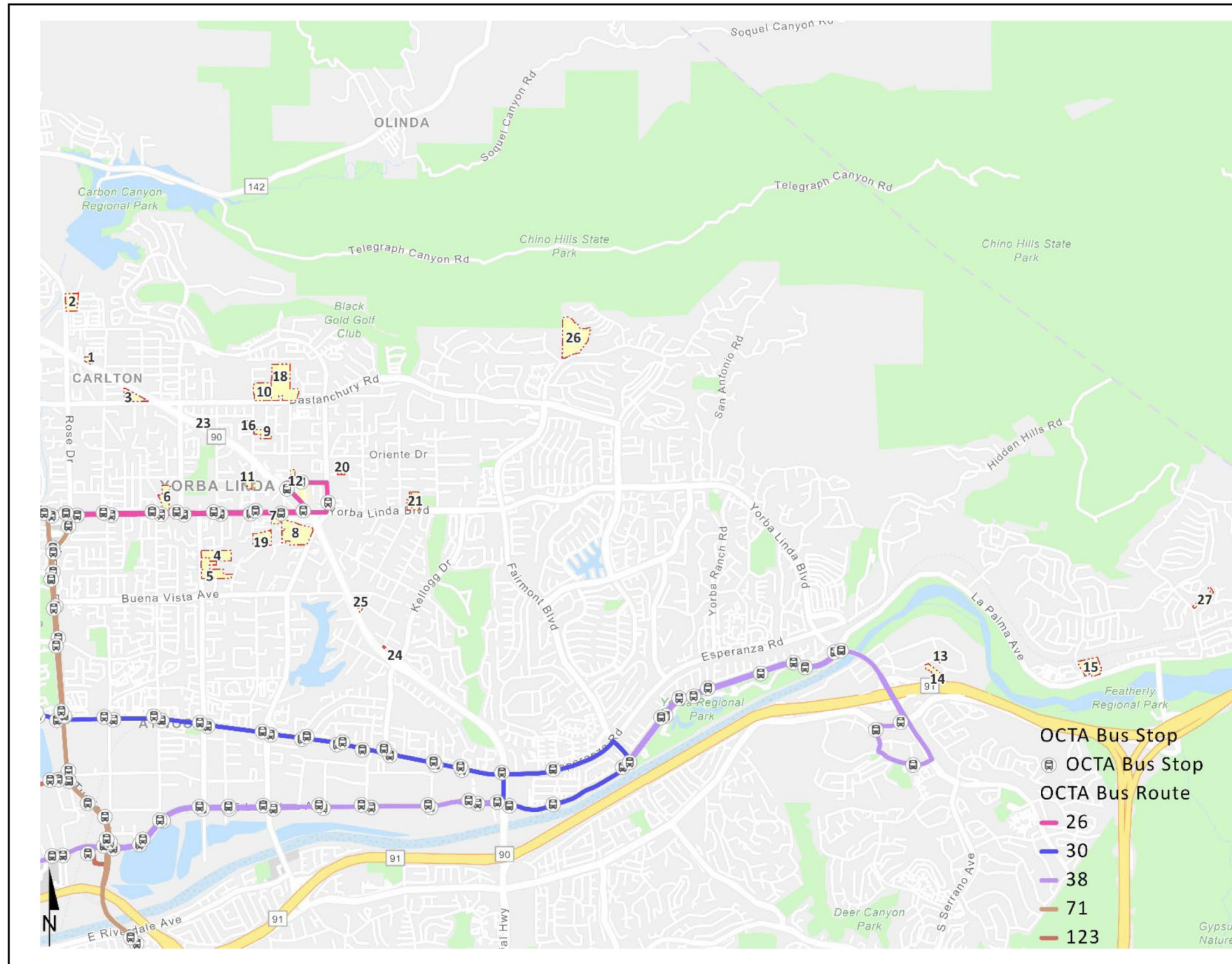
A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. Several comments were made during the public scoping period and PEIR Scoping Meeting expressed concern on housing opportunity sites S4-053, S4-201, S4-060, S5-008 in regards to traffic, traffic near elementary school, and traffic impacts where roadways are not fully improved or areas of one-way traffic, pedestrian safety due to the increase in traffic, lack of sidewalks, cross-walks, and street lights in the area, and equestrian and bicycle safety due to increased traffic.



Source(s): City of Yorba Linda General Plan - Circulation Element (10-2016)

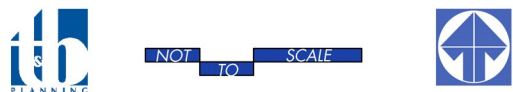
Figure 4.9-1





Source(s): Urban Crossroads (05-20-2022)

Figure 4.9-2



Lead Agency: City of Yorba Linda

EXISTING TRANSIT ROUTES

SCH No. 2022040574



Two comments were received related to transportation from the Santa Ana Office of California Highway Patrol (CHP) on May 23, 2022 and California Department of Transportation (Caltrans) on May 25, 2022. The CHP expressed concern on the potential impact on departmental operations, with emphasis on increased traffic and changes in traffic congestion patterns during the construction stage and that increase traffic congestion would necessitate the need for additional traffic control measures to mitigate the potential increase in traffic collisions. Caltrans requested that new development from the Project to provide a Vehicle Miles Traveled (VMT) study; that the PEIR must include traffic study to address potential impacts to the State Highway System; to consider a discussion on equity; to provide discussion of multimodal transportation mobility options of the current transit services and regional rail services and look for opportunities and connectivity to safe and convenient access; and to consider discussing the potential impacts to bicycle and pedestrian facilities.

4.9.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the state, regional, and local environmental laws and related regulations related to transportation.

A. State

1. *Senate Bill 743 and VMT-Based Analyses*

Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code Section 21099, required changes to the CEQA Guidelines regarding the analysis of transportation impacts. As one appellate court explained: “During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that strategy...” (Covina Residents for Responsible Development v. City of Covina (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (Id., subd. (b)(1); see generally, adopted CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria the California Natural Resources Agency (Agency) has certified and adopted changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by “level of service” and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)

B. Regional

1. *SCAG Regional Transportation Plan/Sustainable Communities Strategy*

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law.



SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG’s regional authority. On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (“RTP/SCS”; also referred to herein as “Connect SoCal”) with goals to: 1) Encourage regional economic prosperity and global competitiveness; 2) Improve mobility, accessibility, reliability, and travel safety for people and goods; 3) Enhance the preservation, security, and resilience of the regional transportation system; 4) Increase person and goods movement and travel choices within the transportation system; 5) Reduce greenhouse gas emissions and improve air quality; 6) Support healthy and equitable communities; 7) Adapt to a changing climate and support an integrated regional development pattern and transportation network; 8) Leverage new transportation technologies and data-driven solutions that result in more efficient travel; 9) Encourage development of diverse housing types in areas that are supported by multiple transportation options; and 10) Promote conservation of natural and agricultural lands and restoration of habitats (SCAG, 2020a). Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP.

C. Local

1. *City of Yorba Linda General Plan Circulation Element*

The City’s General Plan Circulation Element provides a framework for a functional circulation system for the City that promotes the safe, efficient, and reliable movement of people and goods throughout the community. The Circulation Element defines goals and policies that will enhance the development and maintenance of the transportation system and maximize freedom of vehicular and pedestrian movement in the community. The specific policies and recommendations from the General Plan Circulation Element relevant to the Project, include the following:

Goal CR-3: An efficient circulation system that utilizes transportation system management and demand management strategies.

- **Policy CR-3.2:** Provide for safe and efficient traffic operations, by maintaining City standards for the installation and operations of traffic control devices.
- **Policy CR-3.3:** Continue to adhere to OCTA’s Congestion Management Program.
- **Policy CR-3.5:** Effectively operate and maintain transportation facilities and infrastructure to improve system capacity and meet traffic demand.
- **Policy CR-3.7:** Ensure the circulation system promotes a wide variety of travel modes to serve the greatest cross section of residents, employees and businesses.



- **Policy CR-3.8:** Encourage new development to provide access to transit, bicycle, pedestrians, and other non-vehicular modes of transportation.

Goal CR-5: A safe, integrated, and efficient public transportation system.

- **Policy CR-5.2:** Encourage public and private shuttle services to provide greater transit choices.

Goal CR-6: An efficient non-motorized transportation system.

- **Policy CR-6.1:** Promote the development and maintenance, where feasible, of safe and convenient non-motorized transportation and multi-purpose trails throughout the City.
- **Policy CR-6.2:** Provide for safe pedestrian, bicycle, and equestrian access throughout the City.

2. *City of Yorba Linda Development Traffic Impact Fee Program*

The City of Yorba Linda has created its own local TIF program to impose and collect fees from new residential, commercial, office, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The fee schedule was adopted on June 15, 1993. Under the City's TIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the TIF program. The TIF fees are currently under City's review.

The timing to use the TIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of implementing the improvements listed in its facilities list. The City also uses this data to ensure that the improvements listed on the facilities list are constructed before the LOS falls below the LOS performance standards adopted by the City.

4.9.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XVI of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to transportation and traffic if the Project or any Project-related component would (OPR, 2019)

- a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*



- b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*
- c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- d. *Result in inadequate emergency access.*

4.9.5 IMPACT ANALYSIS

Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project's consistency with the City's General Plan policies related to transit, roadway, bicycle, and pedestrian facilities is presented in Section 4.5, *Land Use and Planning*, Table 4.5-1, *General Plan Consistency Analysis*. As presented therein, the Project would not conflict with applicable General Plan goals and policies, including those included within the Circulation Element. In addition to automotive circulation policies, the General Plan also includes goals relating to non-motorized transportation systems. Policy CR-6.1 directs for the development and maintenance, where feasible, of safe and convenient non-motorized transportation and multi-purpose trails throughout the city. Policy CR-6.2 directs for safe pedestrian, bicycle, and equestrian access throughout the city. Compliance with the General Plan would ensure that the Project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities.

Further, as presented on Table 4.5-2, *SCAG Connect SoCal Consistency Analysis*, implementation of the Project would not result in an inconsistency with the adopted Connect SoCal. The Project would have a less-than-significant impact with respect to a conflict with the SCAG's Connect SoCal.

Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

A. VMT Modeling

City Guidelines identify Orange County Transportation Analysis Model (OCTAM) version 5.0 as the appropriate tool for conducting VMT analysis for land use projects in the City of Yorba Linda. OCTAM is a useful tool to estimate VMT as it considers interactions between different land uses based on socio-economic data such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. OCTAM is also consistent with the model used to develop the City's VMT impact thresholds listed by the City Guidelines. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from OCTAM. (Urban Crossroads, 2022f)



B. VMT Metric and Significance Threshold

As stated in City Guidelines, the appropriate VMT metric for land uses projects for the purposes of VMT Analysis is VMT per service population. The City Guidelines identifies that a Project would result in a significant project generated VMT impact if the following condition is met: (Urban Crossroads, 2022f)

1. The baseline project generated VMT per service population exceeds the City of Yorba Linda General Plan Buildout VMT per service population, or
2. The cumulative project generated VMT per service population exceeds City of Yorba Linda General Plan Buildout VMT per service population

North Orange County Cities VMT screening tool (NOCC+ Tool) provides published VMT values for its member agencies. For the City of Yorba Linda, the General Plan Buildout VMT per service population is 35.1.

C. Project Land Use Conversion

In order to evaluate Project VMT, standard land use information must first be converted into a OCTAM compatible dataset. The OCTAM model utilizes socio-economic data (SED) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. Project land use information such as dwelling units must first be converted to SED for input into OCTAM. Adjustments in SED have been made to the appropriate TAZs within the OCTAM model to reflect the Project’s proposed land uses (i.e., residential). Table 4.9-1, *Population Estimates*, summarizes the population estimates for the Project. (Urban Crossroads, 2022f)

Table 4.9-1 Population Estimates

Land Use	Quantity (DU)	Population Density Factor¹	Estimated Population
Residential	2,410	2.94 Persons per Household	7,085

Source: (Urban Crossroads, 2022f)

¹ Population estimates are consistent with the population density factors identified in the California Department of Finance, Table 2: E-5 (January 2021)

Table 4.9-2, *Population Changes by TAZ*, presents the proposed population changes by TAZ within OCTAM. The TAZs represented below are all within the City boundary.



Table 4.9-2 Population Changes by TAZ

TAZ	Population Added
57	676.2
167	979.02
168	793.8
172	176.4
175	279.3
178	117.6
179	388.08
180	179.34
181	88.2
182	117.6
187	1555.26
197	682.08
198	940.8
253	111.72

Source: (Urban Crossroads, 2022f)

D. Baseline and Cumulative “Plus Project” Conditions VMT Calculation

The values as calculated previously for the Project land use conversion are inputted into the OCTAM model for each of the Project’s TAZs and the OCTAM model was ran inclusive of the Project’s SED changes. Table 4.9-3, “Plus Project” VMT Per Service Population, identifies the VMT per SP of the combined TAZs of the Project in the base year (2016) plus project and cumulative year (2045) plus project conditions. (Urban Crossroads, 2022f)

Table 4.9-3 “Plus Project” VMT Per Service Population

	Base Year	Cumulative Year
Service Population	43,525	46,374
VMT	1,448,926	1,564,641
VMT / SP	33.29	33.74

Source: (Urban Crossroads, 2022f)

Table 4.9-4, “With Project” Comparison to City Threshold, shows the comparison between Project’s baseline and cumulative VMT per service population to the City’s impact threshold. As noted previously, the City of Yorba Linda has identified a VMT per service population significance threshold of 35.1. As shown below, the Project would not exceed the City’s VMT per employee impact threshold for baseline and cumulative conditions by 5.16% and 3.87%, respectively. The Project’s VMT impact is therefore considered less than significant. (Urban Crossroads, 2022f)



Table 4.9-4 “With Project” Comparison to City Threshold

	Base Year	Cumulative Year
Impact Threshold	35.1	35.1
With Project VMT / SP	33.29	33.74
Percent Change	-5.16%	-3.87%
Potentially Significant?	No	No

Source: (Urban Crossroads, 2022f)

The City of Yorba Linda’s VMT threshold is consistent with the City’s General Plan build out. The results of Project generated VMT per service population not exceeding the adopted City thresholds, shows additional growth capacity for the City through year 2045. Consistent with Senate Bill 743, the Project’s VMT less than significant findings proves that the Project is incentivized by the development of higher density residential to service the job base in Yorba Linda and Orange County. Thus, reducing commute VMT and employee travel distances. There is an unmet need for housing and providing new housing opportunities allows people to reside closer to their jobs; this is evidenced further by the results of this VMT analysis. The VMT analysis results are consistent with SCAG’s Current Context Demographics and Growth Forecasts, since the City’s employment growth exceeds population growth as shown in Table 4.9-5, *SCAG Growth Forecast for the City of Yorba Linda*. (Urban Crossroads, 2022f)

Table 4.9-5 SCAG Growth Forecast for the City of Yorba Linda

City of Yorba Linda	2016	2045	Increase
Population	67,800	70,600	4.13%
Employment	17,400	19,300	10.92%

Source: (Urban Crossroads, 2022f)

Threshold c: *Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Threshold d: *Would the Project result in inadequate emergency access?*

Buildout of the Project would result in some changes to the City’s circulation network. The Project would result in improvements to the regional and local roadway, bicycle, pedestrian, and transit network.

An evaluation of the roadway alignments, intersection geometrics, and traffic control features will be required as future development occurs and improvements have been designed. Roadway improvements would have to be made in accordance with the City’s Circulation Element, roadway functional design guidelines, and design guidelines included in the California Manual of Uniform Traffic Control Devices (MUTCD) and the Caltrans Roadway Design Manual. All future roadway system improvements associated with development and redevelopment activities under the Project would be designed in accordance with the established roadway design standards incorporated into the City’s



Circulation Element. These improvements will be subject to review and future consideration by the City of Yorba Linda, Public Works Department of. Implementation of the Project would not result in hazardous conditions, create conflicting uses, or cause a detriment to emergency vehicles access.

Future land use development projects would also be analyzed in detail through the City’s plan check process to ensure adequate site access, sight-distance, and pedestrian, equestrian, and bicycle safety. It should be noted that the City will soon be developing an Active Transportation Plan (ATP), which will provide an evaluation of pedestrian, equestrian and school safety. at the project level for site access during the approval process.

Buildout of the proposed Project would result in some changes to the City’s circulation network but would not impact emergency access. Future development would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including access to and around structures. Compliance with OCFA and CFC requirements would ensure adequate emergency access. Impacts would be less than significant, and no mitigation would be required.

In summary, implementation of the Project would not result in a hazardous design feature, incompatible use, or conflict with emergency access.

4.9.6 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City of Yorba Linda. As discussed under Threshold a, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Cumulative development projects would be reviewed for consistency with adopted programs, plans, ordinances, or policies, including but not limited to SCAG’s *2016 RTP/SCS* and *Connect SoCal* and City of Yorba Linda General Plan, as applicable. Even if cumulative development projects are in conflict, the Project would not contribute to a cumulative impact and thus would not be cumulatively-considerable because the Project does not conflict with a program, plan, ordinance, or policy addressing the circulation system, as identified through the analysis presented in this section.

Consistent with City Guidelines, in addition to evaluating the project VMT per service population (SP) (i.e., Population and Employees), the analysis must also evaluate the cumulative effects of the Project on VMT. To complete this cumulative analysis, the analysis must compare the citywide VMT per SP “with project” with “no project” VMT per SP. This analysis is performed using the boundary method, which includes all vehicle trips with one or both trip-ends within a specific geographic area of interest the City of Yorba Linda boundary. Once the areawide VMT value is calculated, it is then normalized by dividing by the number of population and employees in the City of Yorba Linda (based on the OCTAM model). Baseline and Cumulative link-level boundary VMT per service population (City) is



calculated for both “No Project” and “With Project” conditions. If an increase occurs for the With Project condition as compared to No Project condition, then the impact is considered significant. As shown in Table 4.9-6, *Citywide VMT Per Service Population*, citywide VMT per SP was found to decrease under cumulative conditions and would also have a less than significant impact.

Table 4.9-6 Citywide VMT Per Service Population

	Baseline No Project	Baseline With Project	Cumulative No Project	Cumulative With Project
Service Population	91,267	98,352	97,814	104,899
VMT	1,446,176	1,495,953	1,673,239	1,703,753
VMT/SP	15.85	15.21	17.11	16.24
Change in VMT	-0.64		-0.86	

Source: (Urban Crossroads, 2022f)

As discussed under Threshold b, the Project’s VMT analysis findings for project generated VMT per service population was found to not exceed the City’s threshold. In addition, the Project’s cumulative effect to citywide VMT per service population was found also to decrease with the inclusion of the proposed housing element changes as compared to without changes. Therefore, the Project’s cumulative impact on VMT is presumed to be less than significant.

As discussed under Threshold c and d, implementation of the Project would not result in hazardous conditions or conflict with emergency access. Impacts on a cumulative level would also be less than significant.

4.9.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant. The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be less than significant.

Threshold b: Less than Significant. The Project’s VMT analysis findings for project generated VMT per service population was found to not exceed the City’s threshold and is less than significant. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and impacts would be less than significant.

Threshold c & d: Less than Significant. The Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or result in inadequate emergency access.



Cumulative: Less than Significant. The Project's cumulative effect to citywide VMT per service population was found to decrease with the inclusion of the proposed Project as compared to without changes.

4.9.8 MITIGATION MEASURES

Impacts would be less than significant and mitigation is not required.

4.9.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impacts would be less than significant and mitigation is not required.



4.10 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection is based on Native American tribal consultations. Written and oral communication between Native American tribes and the City of Yorba Linda is considered confidential in respect to places that have tribal cultural significance (Gov. Code § 65352.4), and those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120[d]). Additional references used for this Subsection are listed in Section 7.0, *References*.

4.10.1 EXISTING CONDITIONS

Prior to the settlement of the region by Europeans, the City was affiliated with the Gabrielino and Juaneño ethnographic groups. The Gabrielino territory included the Los Angeles Basin, the coast of Aliso Creek in Orange County to the south, and Topanga Canyon to the north, the four southern Channel Islands, and the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers. Their name is derived from their association with Mission San Gabriel. The Gabrielino were advanced in their culture, social organization, religious beliefs, and art and material production. At the time of European contact, the Gabrielino were actively involved in trade using shell and bead currency. The Gabrielino were known for excellent artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry.

The City is located near the traditional territory of the Juaneño, or Acjachemen. The territory of the Juaneño was bound to the north by the Aliso Creek Watershed where they shared a tribal boundary with the Gabrielino. Their territory was bound to the east by the crest of the Santa Ana Mountains, the south by San Onofre Creek, and the west by the Pacific Ocean. The term Juaneño derives from the Mission San Juan Capistrano and has been used to refer to those Takic speakers associated with the mission. Like many California tribes, the Juaneño were organized in permanent villages of 50 to 250 people that were concentrated near watercourses and the coast, which allowed for the exploitation of not only the much needed water, but also the resulting floral and faunal communities that thrived in those areas. Seasonal settlements were also established to harvest acorns, a California staple, and to hunt game in the interior. Marine mammals, fish, and shellfish were also exploited on the coast and goods were traded between Juaneño clans and surrounding groups. (City of Yorba Linda, 2016)

4.10.2 NOP/SCOPING COMMENTS AND TRIBAL OUTREACH

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. No comments were made during the PEIR Scoping Meeting that pertain to tribal cultural resources. One comment was received related to cultural resources from the Native American Heritage Commission (NAHC) on May 9, 2022. The NAHC requested that the PEIR adhere to the Native American consultation requirements pursuant to Senate Bill 18 and Assembly Bill 52.



As required by Assembly Bill 52 (AB 52) and Senate Bill (SB 18), the City submitted invitations to consult with 16 Native American tribes on May 11, 2022, including the following:

- Campo Band of Diegueno Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneno Band of Mission Indians Acjachemen Nation - Belardes
- La Posta Band of Diegueno Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueno Mission Indians
- Pala Band of Mission Indians
- Pechanga Band of Indians
- Rincon Band of Luiseno Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

4.10.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations related to tribal cultural resources.

A. Federal

1. *American Indian Religious Freedom Act*

The American Indian Religious Freedom Act (AIRFA) requires each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies also are required to maintain the confidentiality of sacred sites. Each executive branch agency with statutory or administrative responsibility for the management of Federal lands are required to implement procedures to ensure reasonable notice is provided of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites. (NOAA, n.d.)



2. *Native American Graves Protection and Repatriation Act (NAGPRA)*

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. (NPS, 2016)

NAGPRA is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

3. *Federal Antiquities Act*

The Antiquities Act is the first law to establish that archaeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2018)

B. State Regulations

1. *Senate Bill 18 (SB 18)*

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. SB 18 also requires the Governor’s Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for



adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

2. *Assembly Bill 52 (AB 52)*

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added California Public Resources Code Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017b)

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017b)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code Section 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017b)

Public Resources Code Section 21074 defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017b)



In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017b)

3. *California Register of Historic Place (1993)*

As a recipient of federal funding, the California Office of Historic Preservation administers the California Register of Historical Resources (CRHR) (CA Pub. Res. Code Section 5020 et. seq.). The purpose of the California Register is to develop and maintain an authoritative guide to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate which properties are to be protected, to the extent prudent and desirable, from substantial adverse change. The State Historic Preservation Officer enforces a designation and protection process, has a qualified historic preservation review commission, maintains a system for surveys and inventories, and provides for adequate public participation in its activities. Sites, places, or objects that are eligible to the National Register, are automatically included in the California Register.

4. *State Health and Safety Code*

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that “all California Indian human remains and cultural items are to be treated with dignity and respect.” It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Information, n.d.)

5. *California Code of Regulations Section 15064.5*

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows: (CNRA, 2019)



- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
 - *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
 - *Is associated with the lives of persons important in our past;*
 - *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
 - *Has yielded, or may be likely to yield, information important in prehistory or history.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

4.10.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XVII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to tribal resources if the Project or any Project-related component would (OPR, 2019):

- a) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*



- i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
- ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

4.10.5 IMPACT ANALYSIS

Threshold a: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

In accordance with AB 52 and SB 18 requirements, NAHC provided a list of tribal representatives who may have knowledge of tribal cultural resources in the Project area. The City sent invitation letters to representatives of the Native American contacts provided by the NAHC on May 11, 2022, formally inviting tribes to consult with the City on the proposed Project. The intent of the consultations was to provide an opportunity for interested Native American contacts to work together with the City during the Project planning process to identify and protect tribal cultural resources. Letters were sent to the 16 Tribes and individuals listed above under Section 4.10.2. As of the date of publication of this PEIR, one Tribe responded, Gabrieleno Band of Mission Indians – Kizh Nation. The Tribe stated that that they concur with the General Plan, Housing Element but would like to request consultation for all future projects within this location.

Because future development could require excavation for construction into previously undisturbed soils, there is a potential to uncover undiscovered tribal cultural resources during excavation. Therefore, while unlikely, the presence of subsurface tribal cultural resources on the Project site remains possible, and these could be affected by ground-disturbing activities associated with grading and construction at the Project Site. Accordingly, impacts to tribal cultural resources are potentially significant.



4.10.6 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the City and the traditional use of Campo Band of Diegueno Mission Indians, Ewiiapaayp Band of Kumeyaay Indians, Gabrieleno Band of Mission Indians - Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrieleno/Tongva Nation, Gabrieleno Tongva Indians of California Tribal Council, Gabrieleno-Tongva Tribe, Juaneno Band of Mission Indians Acjachemen Nation - Belardes, La Posta Band of Diegueno Mission Indians, Manzanita Band of Kumeyaay Nation, Mesa Grande Band of Diegueno Mission Indians, Pechanga Band of Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians.

As noted earlier in this Subsection, the City of Yorba Linda conducted Native American consultation with potentially culturally affiliated tribes, as required by AB 52 and SB 18. Although other development projects in the traditional use area for the above listed culturally affiliated tribes may impact significant tribal cultural resources, impacts are generally site-specific resulting from ground disturbing activities. There are no cumulative projects adjacent to the Project sites that would lead to a cumulative effect on tribal cultural resources. Furthermore, with implementation of Mitigation Measure MM 4.10-1, Project impacts to tribal cultural resources would be less than significant. Other projects will also be required to comply with SB 18 and/or AB 52. There is no potential for the Project to contribute towards a significant cumulative impact associated with the significance of a tribal cultural resource or a collection of resources pursuant to California Code of Regulations § 15064.5. Therefore, the Project would not result in a cumulative significant impact related to tribal cultural resources.

4.10.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. Implementation of the Project has the potential cause a substantial adverse change in the significance of tribal cultural resources that may be buried beneath the housing opportunity sites' surface or in on-site vegetation.

4.10.8 MITIGATION MEASURES

Mitigation Measure:

- MM 4.10-1 Prior to the commencement of any ground disturbing activity at the Project sites, the Project Applicant shall retain a Native American Monitor approved by the NAHC. A copy of the executed contract shall be submitted to the City of Yorba Linda Planning Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities into areas of undisturbed soils. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and



any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources.

4.10.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.10-1, would ensure that grading and other ground-disturbing activities during construction are monitored by a qualified archaeologist as well as tribal monitors. The mitigation measure further requires the proper treatment of any resources that may be uncovered, and the avoidance of disturbance in areas where potential resources are uncovered. With implementation of the required mitigation measure, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and potential Project and cumulative impacts would be reduced to less than significant levels.



4.11 WILDFIRE

This Subsection describes the existing wildfire conditions of the Project site and vicinity and evaluates the Project's potential to exacerbate wildfire impacts. Information presented in this Subsection is primarily based on the City's General Plan (City of Yorba Linda, 2016a). Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.11.1 EXISTING CONDITIONS

A. Wildfire Risks

1. *Historical Fires*

The City of Yorba Linda is subject to wildfires due to the City's geographical location, steep terrain, highly flammable chaparral vegetation, and the Santa Ana winds that occur during seasonal dry periods. Fire hazards are typically greatest in the late summer and early fall when vegetation is dry. Early fall is also when the warm dry Santa Ana winds blow from the north and northeast.

Since 1980, the Yorba Linda area has experienced 25 separate wildland fires, burning a total of 82,734 acres; single events range from one to nearly 20,000 acres. Until the recent Freeway Complex Fire, the most notable and devastating of these were the 1982 Gypsum Incident (19,986 acres), the 1980 Owl Incident (18,332 acres), the 1980 Carbon Canyon Incident (14,613 acres) and the 2006 Sierra Peak Incident (10,506 acres). The commonality of each of these larger fires is the Santa Ana Wind and the effect it has on vegetation and fire behavior. The Santa Ana Canyon funnels the wind, increasing its speed and magnifying the effects on the available fuel bed. The frequency of fire in this area has allowed non- native vegetation of volatile grasses and weeds to become the dominate fuel type. (City of Yorba Linda, 2016a, pp. HE-70)

The 2008 Freeway Complex Fire was one of the largest wildland fires in Orange County history. The fire started in the City of Corona and was swiftly spread by the Santa Ana winds, causing widespread damage in the cities of Yorba Linda, Anaheim, and Corona, as well as to the Chino Hills State Park (City of Yorba Linda, 2016a, pp. PS-21). The Orange County Fire Authority's (OCFA) After Action Report on the fire indicated that the fire consumed 30,305 acres; destroyed 187 residential structures and damaged 127 residential structures. Four commercial properties were destroyed or damaged, along with 43 outbuildings. Within the City of Yorba Linda, a total of 117 homes were destroyed, 77 homes were damaged. (OCFA, 2008)

2. *Fire Hazard Severity Zones*

Wildland fire protection in California is the responsibility of either the local government, state, or the federal government. State Responsibility Areas (SRA) are the areas in the state where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The SRA forms one large area over 31 million acres to which the California Department of Forestry and Fire Protection (CAL FIRE) provides a basic level of wildland fire prevention and protection



services (State of California, 2012). The SRA does not include lands within City boundaries or in federal ownership; therefore, the City is not within an SRA.

Local responsibility areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government). CAL FIRE uses an extension of the SRA Fire Hazard Severity Zone model as the basis for evaluating fire hazard in LRAs. The local responsibility area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

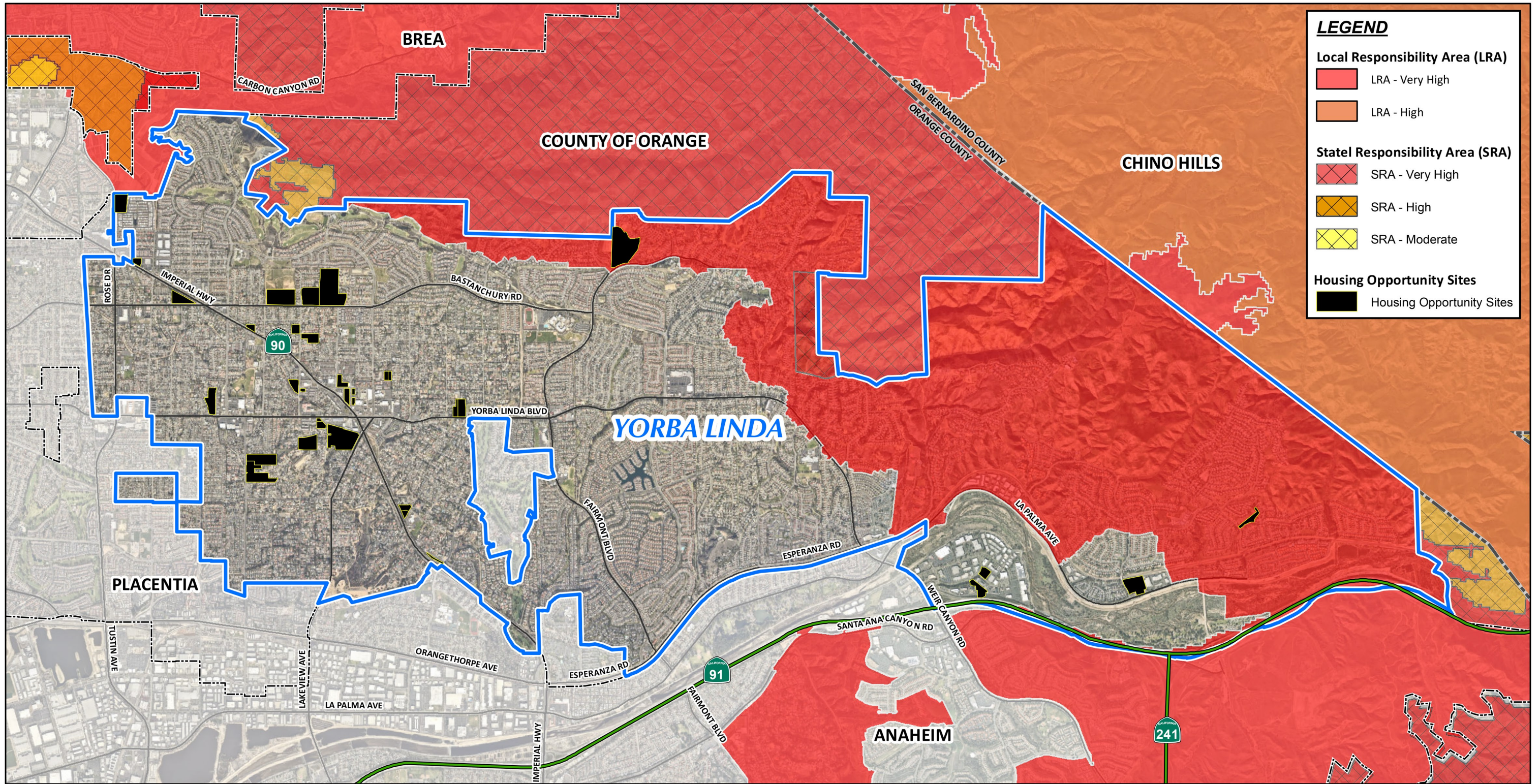
Fire Hazard Severity Zones (FHSZ) are identified by Moderate, High and Very High in an SRA, and Very High in an LRA. As shown in Figure 4.11-1, *Fire Hazards Severity Zones within the City*, The northeastern portion of the City is located within a Very High FHSZ (FRAP, 2020).

B. Emergency Response

Fire protection services for the City of Yorba Linda is currently provided by the Orange County Fire Authority (OCFA). There are three fire stations within the City limits: Station 10, Station 32, and Station 53. Station 10, located at 18422 Lemon Drive, is staffed with 1 battalion chief, 1 fire captain, 1 fire apparatus engineer, and 2 firefighters, and is equipped with Battalion 2, Medic Engine 10, Patrol 101, and Water Tender 10. Station 32, located at 20990 Yorba Linda Boulevard, is staffed with 2 fire captains, 2 fire apparatus engineer, and 4 firefighters and is equipped with Medic Truck 32, Truck 32, Engine 132, and Swift Water 32. Station 53, located at 25415 La Palma Avenue, is staffed with 1 fire captain, 1 fire apparatus engineer, and 2 firefighters and is equipped with Medic Engine 53 and Engine 353.

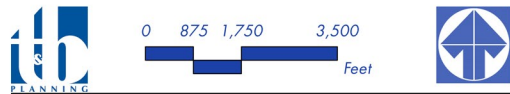
4.11.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the Project was released for public review on April 29, 2022, and an PEIR Scoping meeting was held on May 23, 2022. Comments were made during the PEIR Scoping Meeting and public scoping period that expresses concern related to wildfire due to historical fires in the City. Emergency access during fire and wildfire concerns in housing opportunity sites S5-008 S4-053, S4-201 and S4-060 were identified. Wildfire concerns should address evacuation and safety during a disaster or emergency and fire hazards and development within a Wildfire Urban Interface.



Source(s): ESRI, Nearmap Imagery (2022) OC Landbase (2022), SB County (2022), Cal Fire (2022)

Figure 4.11-1



FIRE HAZARDS SEVERITY ZONES WITHIN THE CITY



4.11.3 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the State and local environmental laws and related regulations related to fire hazards.

A. Federal

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program, which provides subsidized flood insurance to communities that comply with FEMA regulations limiting development in flood-plains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection established by FEMA is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year. FEMA mapping of flood hazards within the City was updated in 2009.

B. State

1. *California Building Code (Chapter 7A)*

The purpose of Chapter 7A of the California Building Code is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within SRAs or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. (CBC, 2019)

C. Regional

1. *OCFA Unit Strategic Fire Plan*

In accordance with the California Fire Plan, Orange County's Unit Strategic Fire Plan was developed with the goal of identifying and prioritizing both pre-fire and post-fire management strategies and tactics, designed to reduce the loss of values at risk within the OCFA service area. The plan addresses such topics as firefighter and public safety, Wildland Urban Interface (WUI) challenges, impactful cost-effective solutions, community preparedness, prioritization, collaborative partnerships, program, project and policy evaluation and adaptability. (OCFA, 2021)

D. Local

1. *City of Yorba Linda Emergency Response Plan*

The City of Yorba Linda Emergency Response Plan (EOP) addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. The plan does not apply to normal day-to-day emergencies. The Emergency Response Plan focuses on potentially large-scale disasters which can generate unique situations requiring unusual responses. Specifically, this includes emergencies which threaten life and property, and potentially impact the wellbeing of large numbers of people.



The City is currently in the process of updating the General Plan Safety Element, Hazard Mitigation Plan, and Emergency Operations Plan to be consistent with recent changes to State law.

2. *City of Yorba Linda General Plan*

The General Plan identifies goals related to wildfire prevention in its Public Safety Element. Goals and policies that are relevant to the Project are as follows:

Goal PS-5: Protect the lives and property of residents and visitors of the City from wildfire hazards through preventative measures.

- **Policy PS-5.1:** Reduce the risk for wildfires within the City.
- **Policy PS-5.2:** Coordinate with the U.S. Forest Service, the Orange County Fire Authority, and private land owners to maintain landscape and provide buffers which will reduce the risk of wildfires.

Goal PS-6: Community protection from hazards associated with fires and crime.

- **Policy PS-6.1:** Minimize the loss of life, damage to property, and the economic and social dislocations resulting from structural fires.
- **Policy PS-6.2:** Consult with the responsible agencies to ensure that fire, police, and emergency services concerns are considered in the review of planning and development proposals.
- **Policy PS-6.3:** Ensure that adequate police, fire, and emergency service facilities and personnel are maintained to provide service at sufficient levels.
- **Policy PS-6.5:** Ensure that local streets and transportation corridors are sufficient in the event of fires within the City for safe evacuation.
- **Policy PS-6.6:** Ensure that local streets and transportation corridors have adequate capacity for safe evacuation when new development is constructed.

3. *City of Yorba Linda Municipal Code*

The City of Yorba Linda Municipal Code identifies policies related to wildfire prevention. The specific Municipal Code policies that are relevant to the Project are as follows.

Chapter 2.32 - Emergency Organizations and Functions. The purposes of this chapter are to provide for the preparation and carrying out of plans for the protection of persons and



property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the city with all other public agencies, corporations, organizations and affected private persons.

Chapter 15.08 – Fire Code. The California Fire Code, 2019 Edition, as adopted herein, is amended as set forth in Sections 15.08.020 through 15.08.360 for the purpose of prescribing regulations covering conditions hazardous to the life and property from fire or explosion. (City of Yorba Linda, 2022)

4.11.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to wildfire, if the Project would be located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and would the project (OPR, 2019):

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan;*
- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;*
- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;*
- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Additionally, the proposed Project would result in a significant impact to hazards, if the Project would:

- e) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*
- f) *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

4.11.5 GENERAL PLAN EIR MITIGATION MEASURES

The City's General Plan EIR included mitigation measures to reduce and eliminate potential significant adverse impacts within the City. These mitigation measures are incorporated into the Project. Applicable mitigation measures related to wildfire prevention are as follows:



- PS-1:** Fuel modification easements for maintaining fuel modification areas must list OCFA as an authorized user. These are recorded as part of the mapping process. Prior to recordation of the CC&Rs, OCFA must approve language allowing OCFA access to any HOA owned property for the purpose of inspecting the fuel modification, plant palette, and added improvements to ensure maintenance of the fire safe zones. In addition, CC&Rs shall provide landscaping and maintenance guidelines to ensure that each residential lot is fire-safe and list allowable improvements such as patio structure, play equipment construction, and fencing materials. The CC&Rs shall be recorder prior to issuance of certificate of use and occupancy

- PS-2:** For the safety of construction personnel, neighboring homes, and firefighting safety in the wildland areas, the developer of any new construction, under the supervision of the Fire Chief, and prior to the issuance of building permits, shall have completed the project roadways in accordance with applicable OCFA and/or County design standards in the area prior to building permit issuance.

- PS-3:** Prior to issuance of building permits, a service letter from the water agency serving the project area shall be submitted and approved by the OCFA water liaison describing the water supply system, pump system, and fire flow and lists the design features to ensure fire flow during a major wildfire incident.

4.11.6 IMPACT ANALYSIS

As shown in Figure 4.11-1, *Fire Hazards Severity Zones within the City*, the northeastern portion of the City is located within a Very High FHSZ within a LRA. The majority of the opportunity sites that would be re-zoned as part of this Project are not within a FHSZ. Among the 27 housing opportunity sites, there are only two sites (S7-005 and S5-008) that are located within a Very High FHSZ.

Threshold a: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Threshold e: *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

During an emergency in the City, operations are coordinated from the City’s Emergency Management Division in accordance with the City’s EOP. The City of Yorba Linda is a member of the Orange County Operation Area and the Orange County Emergency Management Organization, which provide mutual aid to the City via OCFA and Orange County Sheriff’s Department (OCSD).

Future development that has the potential to occur with Project implementation would not interfere with the implementation of the EOP and any of the daily operations of the City’s Emergency Management Division, OCFA, or OCSD. During construction activities, travel lanes along existing roadways would be maintained, and construction materials and equipment would be staged on-site. All construction activities would be required to be performed per the City’s and OCFA’s standards and



regulations. Future development would be required to provide the necessary on and offsite access and circulation for emergency vehicles and services during the construction and operation phases. Future developments would also be required to go through the City’s development review and permitting process and would be required to incorporate all applicable design and safety standards and regulations, as set forth by OCFA and in the Chapter 15.08 (Fire Code) of the City’s Municipal Code, to ensure that they do not interfere with the provision of local emergency services (e.g., provision of adequate access roads to accommodate emergency response vehicles, adequate numbers/locations of fire hydrants, etc.).

Future projects would be subject to an environmental review process and federal, state, and local regulations that support emergency response and evacuation plans and would be required to mitigate for fire-related impacts. Moreover, future developments would be required to comply with goals and policies of the City’s General Plan and mitigation measure PS-2 from the City’s General Plan EIR. However, the increase in dwelling units for opportunity sites S7-005 and S5-008, which are located within a Very High FHSZ could potentially impair implementation of or physically interfere with the City of Yorba Linda or Orange County’s emergency response or evacuation plans. Therefore, Project-related impacts would be potentially significant.

Threshold b: *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, would the Project thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Threshold f: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Wildfire risk is the damage a fire can do to people and structures at risk in the area under existing and future conditions. Wildfire likelihood and intensity are considered together qualitatively as wildfire potential, which depends on three main factors: fuel (wildland vegetation), topography, and weather. Development within or adjacent to areas designated as Very High FHSZ has the potential to exacerbate wildfire risk, particularly if it occurs in areas with steep topography and/or prevailing winds as these conditions contribute to the spread of wildfires. Among the housing opportunity sites, there are two sites (S7-005 and S5-008) that are located within a Very High FHSZ.

Buildout of the Project would allow for the development of 2,410 dwelling units in the City. Future development pursuant to the Project would add people and structures that could be at risk from a wildfire. Future projects would be subject to an environmental review process and federal, state, and local regulations that minimize wildfire risk. Moreover, future development would be required to comply with goals and policies of the City’s General Plan and mitigation measure PS-1 through PS-3 from the City’s General Plan EIR. However, the increase in dwelling units for sites located within a Very High FHSZ could potentially impact wildfire risk and pollutant exposure. Therefore, impacts would be potentially significant.



Threshold c: *Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The Project does not require the installation or maintenance of infrastructure that may exacerbate fire risk or impact the environment. The Project includes the general plan amendment and zoning text amendment to facilitate future housing development in the City. Future housing development facilitated by the Project would be subject to discretionary permits and would occur as market conditions allow or at the discretion of the individual property owners. The need for installation and maintenance of new infrastructure (such as roads, fuel breaks, emergency water resources, power lines, or other utilities) for future development projects would be evaluated as part of the discretionary permit review process. Future developments would also be required to go through the City's development review and permitting process and would be required to incorporate all applicable design and safety standards and regulations, as set forth by CBC and in the Chapter 15.08 (Fire Code) of the City's Municipal Code. Additionally, to the extent feasible, the City requires the undergrounding of electric lines for new development. Therefore, impacts would be less than significant.

Threshold d: *Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

According to the City's General Plan, zones of required investigation for earthquake-induced landslides occur in the Chino Hills along the north City boundary and near the west City boundary. Of the 27 housing opportunity sites, one site S5-008 is located within a landslide zone (City of Yorba Linda, 2016a, pp. Exhibit PS-3). Regardless of the landslide susceptibility, future development pursuant to the Project would be required to have a site-specific geotechnical investigation, which would ensure that each development is engineered and constructed to maximize stability and preclude safety hazards to on-site and adjacent areas. Therefore, implementation of the Project is not anticipated to directly or indirectly cause potential substantial risks, including landslides, as a result of runoff, post-fire instability or drainage change. Impacts would be less than significant.

As shown in Figure 4.11-2, *Flood Hazards Zone*, portions of the City along the Santa Ana River are located within a flood hazard zone. (City of Yorba Linda, 2016, pp. 5.9-9) Specifically, according to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, northwestern corner of housing opportunity sites SS6-020, northwestern portion of S6-015 and southern portion of S7-001 are designated as 0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X); and the southeastern portion of S4-053 is designated as areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies (Zone A). Zone A is identified as a Special Flood Hazard Area and Zone X is identified as a moderate flood hazard area. (FEMA, 2009a; FEMA, 2009b; FEMA, 2009c) Figure 4.11-3, *Flood Hazard Zone - S4-053*, and Figure



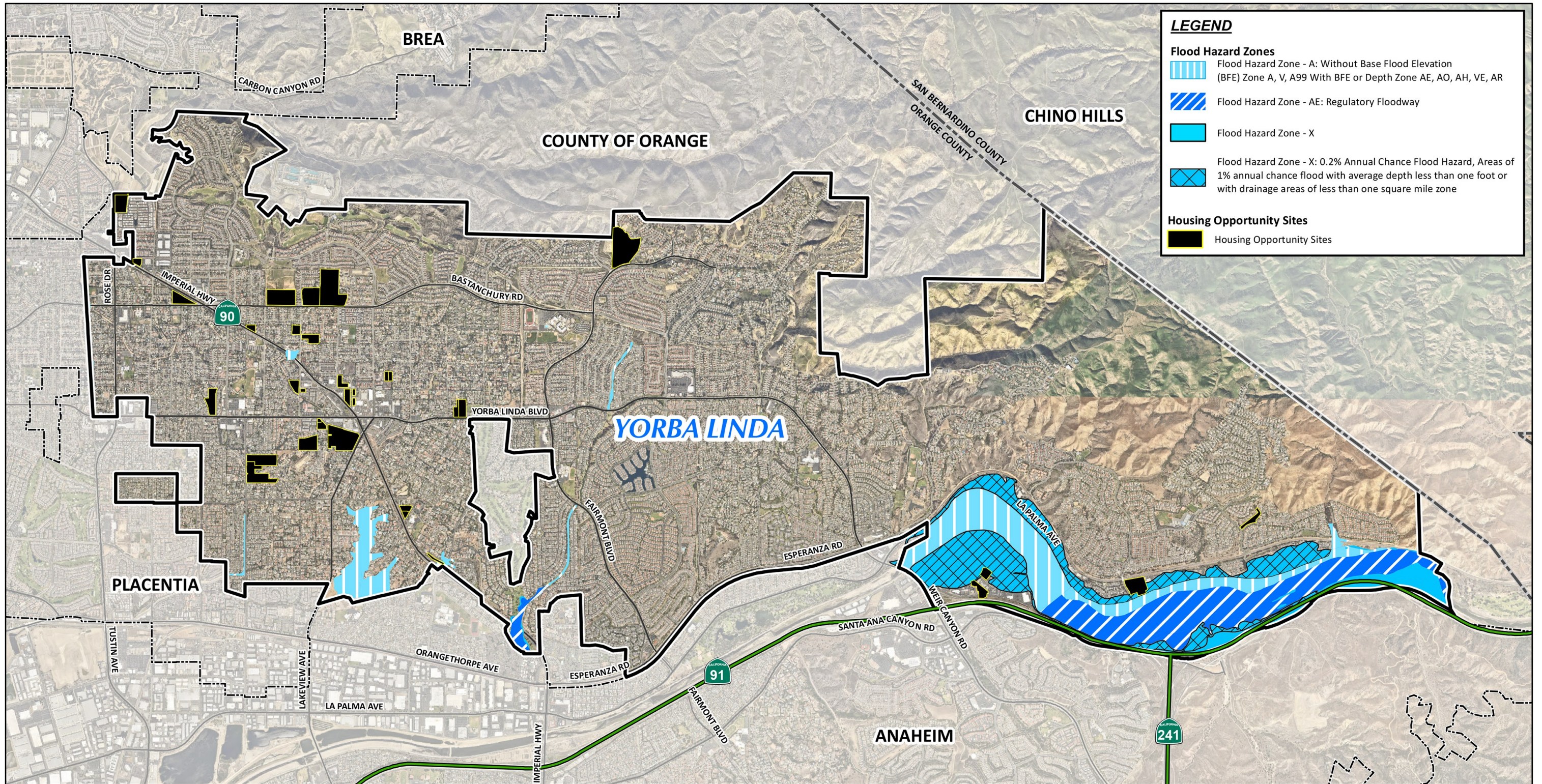
4.11-4, Flood *Hazards Zone - S6-015, S6-020 and S7-001*, depicts the flood hazard zone in details for these sites.

The City of Yorba Linda has adopted local standards for construction in floodplain areas. Development within the 100-year floodplain requires the placement of fill to elevate structures one foot above the 100-year floodplain elevation. In order for development to be considered outside of the floodplain and no longer subject to special flood hazard requirements, project applicants are required to submit an application to FEMA for a Conditional Letter of Map Revision/Letter of Map Revision (CLOMR-F/LOMR-F) after the fill has been placed. After FEMA has revised the FIRM to show that the project is outside of the SFHA, the minimum NFIP floodplain management standards and mandatory flood insurance requirements would no longer apply. The City would review and approve the plans prior to the issuance of grading permits. With compliance with Federal and local regulatory requirements, the potential to cause downstream flooding would be less than significant.

Construction within SFHAs is governed by the City's Municipal Code Chapter 15.12, Flood Damage Protection. Section 15.12.110 requires that a Floodplain Development Permit is obtained before construction or development within any SFHA and sets forth construction requirements for development that would minimize flood hazard risks, Compliance with the City's floodplain management regulations, would ensure impacts are less than significant.

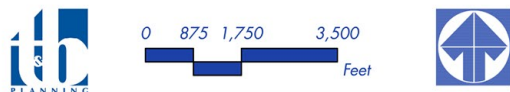
To further reduce impacts related to runoff, the Orange County MS4 permit requires the capture and temporary detention of a Stormwater Quality Design volume, based on the runoff produced from a 0.75-inch, 24-hour storm event or 85th percentile, 24-hour storm event, whichever is greater. future development would be required to prepare a Water Quality Management Plans (WQMPs) at the project processing and permitting stages. WQMPs require stormwater treatment features that are designed to retain the post-development Stormwater Quality Design volume for all storms up to and including the 85th percentile, 24-hour rainfall event. Implementation of the WQMP would reduce runoff from project sites during storm events and identify BMPs for runoff controls and treatments.

Based on the foregoing analysis, the Project is not anticipated to expose people or structure to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire instability, or drainage change. Impacts would be less than significant.



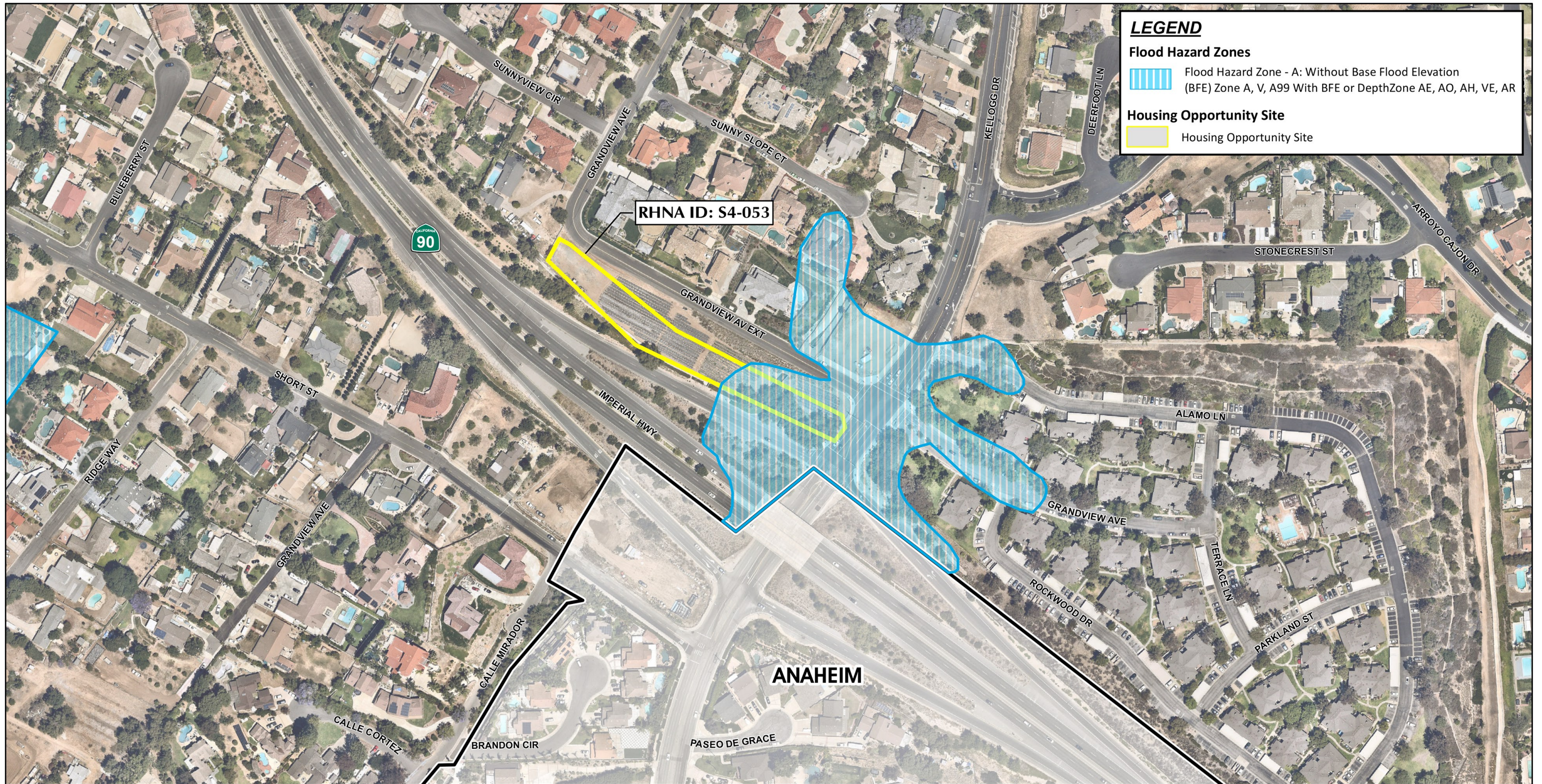
Source(s): ESRI, Nearmap Imagery (2022) OC Landbase (2022), SB County (2022), FEMA (2021)

Figure 4.11-2



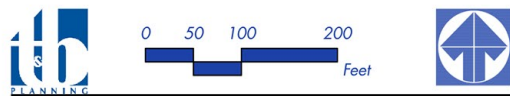
Flood Hazards Zone

SCH No. 2022040574



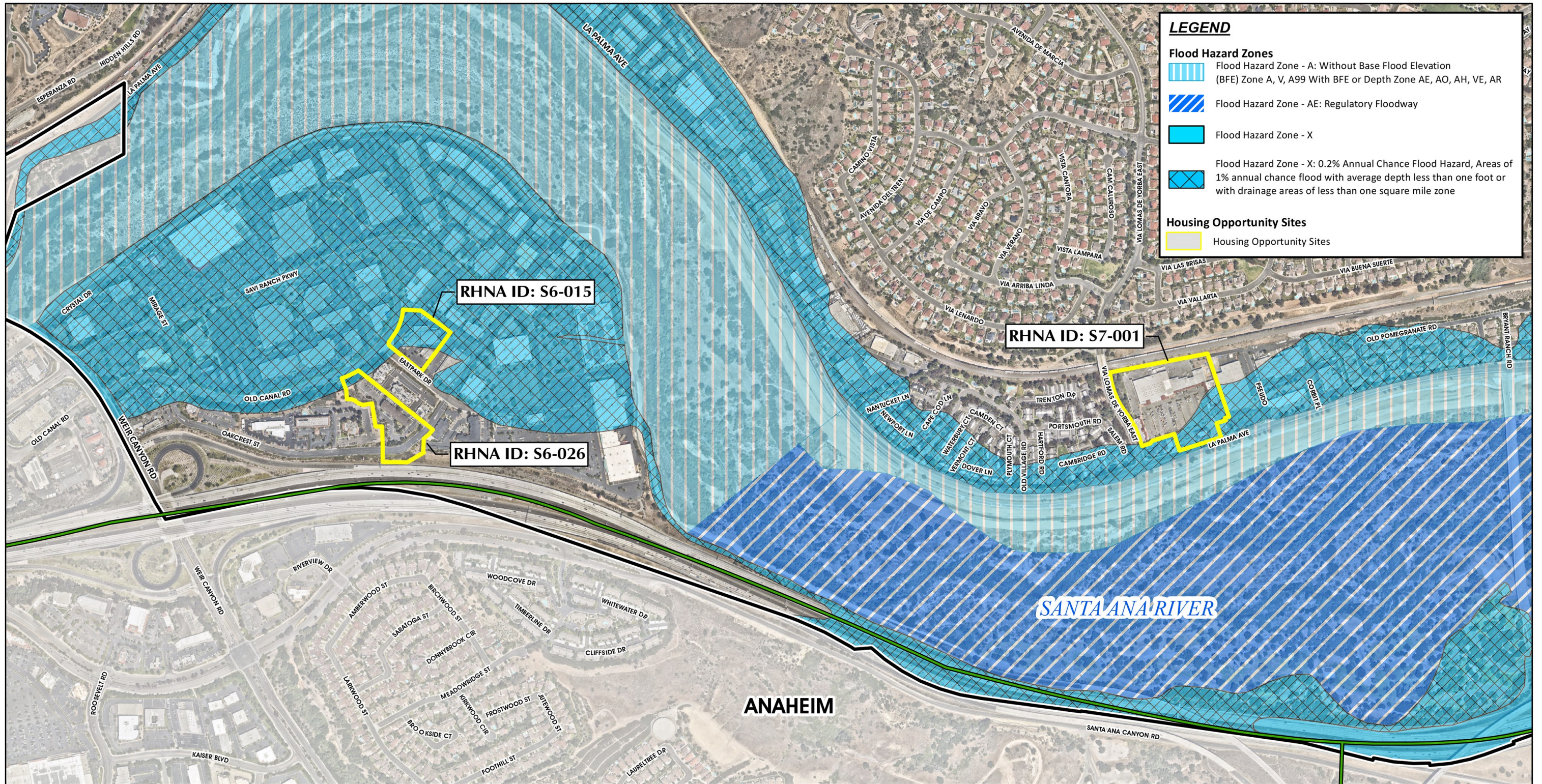
Source(s): ESRI, Nearmap Imagery (2022) OC Landbase (2022), SB County (2022), FEMA (2021)

Figure 4.11-3



Flood Hazards Zone - S4-053

SCH No. 2022040574



LEGEND

Flood Hazard Zones

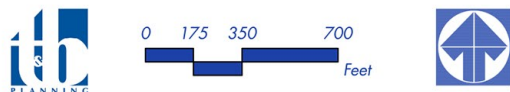
- Flood Hazard Zone - A: Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR
- Flood Hazard Zone - AE: Regulatory Floodway
- Flood Hazard Zone - X
- Flood Hazard Zone - X: 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile zone

Housing Opportunity Sites

- Housing Opportunity Sites

Source(s): ESRI, Nearmap Imagery (2022) OC Landbase (2022), SB County (2022), FEMA (2021)

Figure 4.11-4



Flood Hazards Zone - S6-015, S6-020 and S7-001



4.11.7 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the City of Yorba Linda.

The Project would be required to comply with the City's EOP during construction and operation. Mitigation Measure MM 4.11-1, would require an evacuation analysis for sites near a Very High FHSZ. Implementation of Mitigation Measure MM 4.11-1 would ensure that the further development would not result in the substantial alteration of an existing roadway such that the Project would interfere directly or indirectly with the implementation of an adopted emergency response or emergency evacuation route. Thus, the Project would not result in a cumulative impact.

Future development projects under the Project near a Very High FHSZ would be required to prepare a Fire Protection Plan, as discussed below in Mitigation Measure MM 4.11-2. Implementation of a Fire Protection Plan would reduce the Project's potential to exacerbate wildfire risks. As such, the Project would reduce the potential for wildfires to spread to adjacent properties. Implementation of the mitigation measures will reduce the risk of wildfire spreading into surrounding areas and will improve the ability of firefighters to fight fires on the protect property and neighboring properties and resources, irrespective of the cause or location of ignition. As such, the Project would not result in a cumulative impact.

The Project would not result in the installation of infrastructure and the need for installation and maintenance of new infrastructure (such as roads, fuel breaks, emergency water resources, power lines, or other utilities) for future development projects would be evaluated as part of the discretionary permit review process. Other projects under construction would also be required to comply with the same State and local building and fire code requirements regarding construction and access. As such, the Project would not result in a cumulative impact from the installation or maintenance of associated infrastructure.

The potential hazards related to wildfire addressed under Threshold d are unique to each housing opportunity site and are inherently restricted to the specific property proposed for development. That is, issues including downslope or downstream flooding and landslides are specific to each housing opportunity site and the immediately surrounding area. Due to the site-specific nature of these potential hazards and the measures to address them, there would be no direct or indirect connection to similar potential issues or cumulative effect to or from other properties. The Project would not result in a cumulative impact.

4.11.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a and e: Potentially Significant Impact. The City has an adopted EOP that establishes emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements. There is potential that the increase in dwelling units could lead to changes in mobility patterns; therefore, potentially



impair implementation of or physically interfere with the City of Yorba Linda or Orange County's emergency response or evacuation plans. Therefore, Project-related impacts would be potentially significant.

Thresholds b and f: Potentially Significant Impact. Future development located within a Very High FHSZ would add people and structures that could be at risk from a wildfire. Therefore, impacts would be potentially significant.

Threshold c: Less than Significant Impact. The Project does not require the installation of maintenance of infrastructure that may exacerbate fire risk or impact the environment. The need for installation and maintenance of new infrastructure (such as roads, fuel breaks, emergency water resources, power lines, or other utilities) for future development projects would be evaluated as part of the discretionary permit review process. Therefore, impacts would be less than significant.

Threshold d: Less than Significant Impact. There is one housing opportunity site (S5-008) that is located within a landslide zone. Regardless of the landslide susceptibility, future development pursuant to the Project would be required to have a site-specific geotechnical investigation, which would ensure that each development is engineered and constructed to maximize stability and preclude safety hazards to on-site areas. Several housing opportunities sites (S6-015, S6-025, S7-001, and S4-503) are located within a flood hazard area. Future development would be required to comply with City's floodplain management regulations prepare a WQMP which would reduce runoff from construction and identify BMPs for runoff controls and treatments. Implementation of the Project is not anticipated to directly or indirectly cause potential substantial risks, including landslides, as a result of runoff, post-fire instability or drainage change. Impacts would be less than significant.

4.11.9 MITIGATION MEASURES

MM 4.11-1 Prior to issuance of a grading permit for sites within or adjacent to a Very High FHSZ, the project applicant shall prepare a Fire Evacuation Analysis. The Fire Evacuation Analysis shall assess the time required for emergency evacuation under Existing and Existing with Project Conditions, assuming a worst case, wind-driven fire. The Fire Evacuation Analysis shall also identify how much the project would increase evacuation times by; how long it would take residents to evacuate; and how emergency response times would be affected by a mass evacuation under multiple scenarios. The Fire Evacuation Analysis shall be subject to the review and approval from the City of Yorba Linda and OCFA. The analysis shall demonstrate how the Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

MM 4.11-2 Prior to issuance of a grading permit for sites within or adjacent to a Very High FHSZ, the project applicant shall prepare a Fire Protection Plan (FPP). Prior to preparation of an FPP, the Project proponent shall coordinate with OCFA to ensure that modeling of the FPP and design of the project is appropriate to meet the requirements and standards of the OCFA. The FPP shall be subject to the review and approval from the City of Yorba Linda and OCFA. The FPP shall assess a project's



compliance with current regulatory codes and ensure that impacts resulting from wildland fire hazards have been adequately mitigated. The FPP shall also specifically identify the need for fire systems, water availability, construction requirements, and fire-resistant landscaping i.e. fuel modification zones), and appropriate defensible space around structures.

4.11.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a and e: Less than Significant with Mitigation. Implementation of Mitigation Measure MM 4.11-1 would ensure the proper evaluation of emergency evacuation during wildfires. With implementation of the required mitigation and General Plan goals and policies, EIR mitigation measure PS-2, the Project's potential impacts to an adopted emergency response or emergency evacuation route would be reduced to less than significant

Thresholds b and f: Less than Significant with Mitigation. Implementation of Mitigation Measure MM 4.11-2 would ensure the Project's potential impacts to wildland fire hazards be mitigate through the installation of fire systems, fire-resistant landscaping and appropriate defensible space around structures, and water availability to serve to the Project site. With implementation of the required mitigation and General Plan goals and policies, and EIR mitigation measure PS-1 through PS-3, the Project's potential impacts to exacerbate wildfire risk would be reduced to less than significant.



5.0 OTHER CEQA CONSIDERATIONS

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project that cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126[b]). As thoroughly described in Subsections 4.1 through 4.11 of this PEIR, the Project would result in significant and unavoidable direct and cumulatively-considerable impact related to the topic of air quality, greenhouse gas emissions, and noise. All other Project-related impacts (direct, indirect, and/or cumulatively-considerable), to the environment would be reduced to below a level of significance due to mandatory compliance with applicable laws and regulations, and implementation of feasible mitigation measures that have a proportional nexus to the Project’s impacts.

5.1 SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Table 5-1, *Significant Environmental Effects Which Cannot Be Avoided*, describes the significant and unavoidable impacts that would occur should the Project be implemented and after the application of regulatory requirements and feasible mitigation measures (MMs).

Table 5-1 Significant Environmental Effects Which Cannot Be Avoided

Topic	Type of Impact	Details of Impact
Air Quality	Direct and Cumulatively Considerable Air Quality Management Plan Consistency Impacts	The Project would result in an inconsistency with the South Coast Air Quality Management District’s (South Coast AQMD’s) Air Quality Management Plan with regards to long-term operational impacts from NO _x emissions. No feasible mitigation measures exist to reduce NO _x emissions.
	Direct and Cumulatively Considerable Air Quality Impacts	The Project would result in a considerable increase of VOC and NO _x emissions during long-term operations, and exceed the South Coast AQMD’s daily emission thresholds. Future development projects would exceed construction-related emissions thresholds for CO, VOCs, NO _x , SO _x , PM ₁₀ , and PM _{2.5} . The Project would implement Mitigation Measures MM 4.1-1 and 4.1-2; however, no feasible mitigation measures exist to reduce emissions to less than significant.
Greenhouse Gas Emissions	Cumulatively Considerable Greenhouse Gas Emissions Impact	The Project would result in greenhouse gas emissions that exceed the South Coast AQMD greenhouse gas emissions



Topic	Type of Impact	Details of Impact
		significance threshold. The Project would implement Mitigation Measures MM 4.1-1 and 4.1-2; however, these measures would not reduce the impact to less than significant.
Noise	Direct and Cumulatively Considerable Construction-related Impacts	The Project could result in an exceedance of construction-related noise thresholds. The Project would implement Mitigation Measures MM 4.6-1 through MM 4.6-3 would contribute in minimizing construction-related noise. However, due to the unknown number of construction activities that could occur at one time, proximity of construction activities to sensitive receptors, and other factors that cannot be quantified at this time, such as the longevity of activities, construction-related noise impacts may not be reduced to less than significant levels for some future development. Therefore, impacts would remain significant and unavoidable.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved with the proposed action should it be implemented (CEQA Guidelines §15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy). Significant irreversible changes due to implementation of the Project are:

- Future development would involve construction, maintenance, and operation activities that entail the commitment of nonrenewable and/or slowly renewable energy resources, including gasoline, diesel fuel, electricity; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water.
- An increased commitment of social services and public maintenance services (e.g., police, fire, and sewer and water services) would also be required. The energy and social service commitments would be long term obligations in view of the fact of the low likelihood of returning the land to its original condition once it has been developed.



- Population growth related to project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone and particulate matter (PM10 and PM2.5).
- Future development of the proposed project is a long-term irreversible commitment of vacant parcels of land or redevelopment of existing developed land in the City.

5.3 GROWTH INDUCING IMPACTS

CEQA requires a discussion of how the Project could be growth-inducing. The CEQA Guidelines identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines §15126.2(d)). New employees and new residential populations represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area, placing additional demands on public services and infrastructure systems, and in the generation of a variety of environmental impacts, which are addressed throughout Section 4.0, *Environmental Analysis*, of this PEIR. To address this issue, potential growth-inducing effects are examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment beyond the direct consequences of developing the land use and mobility concepts examined in the preceding sections of this PEIR.



A. Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

The City of Yorba Linda 2021-2029 Housing Element Implementation Programs would not extend infrastructure into currently unserved parts of the City because the City is almost entirely built out with urban land uses. Some minor extensions or improvements of utility facilities from surrounding roadways, including water and sewer lines, may be required for future development. However, as discussed in Subsection 5.4.9, *Utilities and Service Systems*, implementation of the Project can generally be accommodated by the existing storm drain, water, and sewer infrastructure.

Implementation of the Project would not substantially increase automobile capacity of the transportation system (refer to Table 5-2 of the Traffic Analysis, *Technical Appendix G*). Although buildout of the proposed Project would increase the City's service population for the transportation network (the total number of people who live in the City) by approximately 7,085 people, the Project is anticipated to result in a less than significant VMT compared to the buildout of the existing General Plan.

As required by State Law, the purpose of the 2021-2029 Housing Element Implementation Programs is to provide adequate housing sites and assist in the provision of affordable housing, comply with State housing laws including compliance with the Regional Housing Needs Assessment (RHNA) targets, remove governmental constraints to housing investment, and promote fair and equal housing opportunities. Therefore, the proposed Project would remove obstacles to growth within City, however, this is required to assist in providing an unmet need for housing in the region and would not represent a significant adverse impact.

B. Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in Section 4.7, *Public Services*, as the City continues to develop, it would require further commitment of public services in the form of fire protection, police protection, schools, recreation, and other public services. Considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Further, OCSD has indicated that this increase would not adversely impact OCSD's existing resources. There is more than adequate capacity to serve the Project generated students; the Project in combination with current enrollment would leave a remaining capacity of 3,950 total students, including 3,219 elementary students, 659 middle school students, and 72 high school students. Similarly, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered parks, recreational facilities, or other public facilities.



C. Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Short term implementation of the Project would create varying levels of temporary construction employment opportunities as the City builds out. However, this would be a short-term direct economic effect, which would end following completion of individual development projects. Additionally, the Project includes 27 housing opportunity sites, which would not be constructed all at one time, but as the market demands and future discretionary approvals (e.g. Design Review) are obtained. Therefore, the short-term economical effects are not expected to significantly affect the environment.

Long term Project buildout would increase population onsite by an estimated 7,085 residents. As the population grows and occupies new dwelling units, these residents would seek shopping, entertainment, employment, home improvement, auto maintenance, and other economic opportunities in the surrounding area. This would facilitate economic goods and services and could, therefore, encourage the creation of new businesses and/or the expansion of existing businesses to address these economic needs. Actual growth will depend on future market demand, site constraints, and property owner willingness to take advantage of increased densities allowed pursuant to the proposed zoning.

The increase in population and economic activity potentially generated by the proposed project could be considered growth inducing that could significantly affect the environmental. However, such an increase is not considered substantial, since the increase generated by the Project on its own would not exceed the amount of growth projected for the City.

D. Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Changes from a project that could be precedent-setting include (among others) a change in zoning, general plan designation, general plan text or approval of exceptions to regulations that could have implications for other properties or that could make it easier for other properties to develop.

Implementation of the Project would involve a zone change to redesignate all 27 opportunity sites to multifamily use at 10 to 35 units per acre. Although the change in land designation and zoning could encourage other requests for land use designations or rezoning of other properties, each application would be considered by the City on a project-by-project basis. The proposed change in land use designation and rezoning would only apply to each of the sites, would not encompass other properties, and would not facilitate the development of other projects. For these reasons, the project would not be considered growth inducing.

5.4 IMPACTS CONSIDERED LESS THAN SIGNIFICANT

Section 15128 of the State CEQA Guidelines states that “an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” Based on review of the Project and



supporting technical studies, it was determined that the following topical issues would result in less than significant or no impacts after mandatory compliance with regulatory requirements: Aesthetics, Agriculture and Forestry Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, and Population and Housing, and Utilities and Service Systems.

Many of the environmental topics discussed below were addressed in the City's General Plan EIR. Additionally, the General Plan includes goals and policies relevant to these topic issues. These goals and policies are summarized in Section 3.6 of this PEIR. The Project is required to comply with General Plan goals and policies and General Plan EIR mitigation measures that are intended to reduce environmental related impacts. The following section will first summarize the findings of the General Plan EIR and then analyze the environmental effects of the Project and site-specific environmental issues (where appropriate).

5.4.1 AESTHETICS

Threshold a: Would the Project have a substantial adverse effect on a scenic vista?

The City of Yorba Linda General Plan EIR concluded that most future growth under General Plan Update would occur in developed areas, with the exception of the Cielo/Esperanza Focus Area. Existing measures protecting aesthetic resources would continue to be in effect; open space and recreational areas would continue to be preserved; and the total remaining developable area would represent approximately ten percent of the Planning Area, not including the Cielo/Esperanza Focus Area. Therefore, the General Plan EIR determined that residential development would be primarily below the existing ridgelines so as not to affect existing views. Impacts on scenic vistas both into and out of the City would be less than significant. (City of Yorba Linda, 2016b)

The City affords a variety of views of scenic landscapes and built environments. The Puente and Chino Hills are visible to the north from much of the City. One of the most important ridgelines is known as Telegraph Canyon, located within the Chino Hills State Park to the north of Yorba Linda. Development in accordance with the Project would allow for intensification of residential development on 27 opportunity sites in the City.

The City has Multi-Family Design Guidelines to provide upfront direction to the development community regarding the desired quality and character of multi-family development. The Affordable Housing Overlay (AHO) would allow sites to increase height limits (3 stories, with 4 stories permitted on Planned Development zoned sites with an AHO) in exchange for providing 20% affordable units and the Mixed-Use Housing Overlay (MUO) would allow development of at least three stories in height.

Future development would be subject to Design Review, the goals and policies in the City's General Plan and would be required to comply with the provisions of the City's Municipal Code inclusive of the Zoning Code, including general development standards and sign regulations. These standards



regulate the features of buildings and streets that affect the public realm and help guide the physical development of any development project within the City's boundaries. Specifically, the goals and policies of the Conservation Element are intended to preserve the City's visual character, and maintain natural views into and out of the City. In addition, all development or reuse activities would be subject to the restrictions imposed by City's Municipal Code (Chapters 18.10 and 18.16) and the goals and policies included in the City's General Plan (Goal CN-1; Policies CN-1.1, CN-1.2, Goal CN-3; Policies CN-3.1, CN-3.2, Goal LU-4, Policies LU-4.1, LU-4.2, Goal LU-8, Policies LU-8.1, LU-8.2, Goal LU-9, Policies LU-9.1, LU-9.2, LU-9.3; see Section 3.6.7 of this PEIR). With mandatory compliance to applicable rules, regulations, goals and policies, impacts would be less than significant.

Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The City of Yorba Linda General Plan EIR concluded that there are no State, County, or locally designated scenic highways in the City. Historical or aesthetically significant trees are protected by Chapter 16.08 of the City's Municipal Code. There are no significant rock outcroppings found within the City limits or immediate area and no impact would occur. (City of Yorba Linda, 2016b)

The housing opportunity sites are not located within or near any officially designated state scenic highway. The nearest officially designated state scenic highway is State Route 91 (SR-91), approximately 0.3 miles south of the City's boundary. (Caltrans, 2020) Additionally, there is a portion of SR-91 that is designated as Eligible that runs along the southeastern City Boundary; however, this portion is not visible from the housing opportunity sites or surrounding areas due to intervening developments. As such, the Project would not damage scenic resources within a State scenic highway, and impact would be less than significant.

Threshold c: Would the Project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The City of Yorba Linda General Plan EIR concluded that future development that could occur under the General Plan Update would be required to conform to the current visual appearance of the City and would therefore not degrade the existing character or quality of the City. In addition, potential future growth would largely occur in areas where similar activity already occurs thereby preserving the existing visual character and quality of the City and its Sphere of Influence. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)

According to CEQA Guidelines Section 15387, urban areas mean a central city or group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. According to the 2010 Census Urbanized Area Reference Map, the Project is located within an urbanized area. (US Census, 2010)



Implementation of the Project would rezone 27 sites and establish housing overlay zones to allow for an additional 2,410 residential units throughout the City. The sites subject to a rezone have been selected to present minimal conflict with the surrounding zoning designations and would be subject to the restrictions imposed by City's Municipal Code and the goals and policies included in the City of Yorba Linda General Plan and 2021-2029 Housing Element (Goal CN-1, Policies CN-1.1, CN-1.2, Goal CN-3, Policies CN-3.1, CN-3.2, Goal LU-4, Policies LU-4.1, LU-4.2, Goal LU-8, Policies LU-8.1, LU-8.2, Goal LU-9, Policies LU-9.1, LU-9.2, LU-9.3). Accordingly, with mandatory compliance to applicable rules, regulations, goals and policies, impacts would be less than significant.

Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views?

The City of Yorba Linda General Plan EIR concluded that development or redevelopment activities that would be accommodated under the General Plan Update would also be required to adhere to the relevant provisions of the City's Zoning Code. Therefore, substantial lighting and glare impacts are not anticipated to occur. (City of Yorba Linda, 2016b)

Sources of light and glare within the housing opportunity sites include building lighting (interior and exterior) and materials (e.g., glass, reflective materials), security, signage, and parking area lighting. These sources are mostly associated with the residential, commercial, and industrial uses located throughout the housing opportunity sites. Other sources of nighttime light and glare include street lights and vehicular traffic, as well as recreational uses. Additionally, there is ambient lighting from surrounding communities and roadways.

Future development and/or redevelopment activities throughout the housing opportunity sites would generate new sources of light and glare that could affect day or nighttime views in the City and surrounding communities. Sources of light and glare from new development or redevelopment would include street lighting and building illumination, security lighting, nighttime traffic, sign illumination, and lighting during with construction activities and potential glare from building and site improvement materials. Because most development would occur in currently developed portions of the City and would be required to comply with existing requirements to control lighting (Municipal Code Chapter 18.10.110), impacts are expected to be less than significant.

5.4.2 AGRICULTURE AND FORESTRY RESOURCES

Threshold a: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The City of Yorba Linda General Plan EIR concluded that there are two areas within the City and its Sphere of Influence that are agriculturally significant. The first parcel is located just east of Lakeview Avenue and south of Buena Vista Avenue and is designated Unique Farmland. The second parcel is



located just north of the Santa Ana River near Featherly Regional Park and is designated as a mixture of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. The General Plan EIR determined that the General Plan Update would not change the land use designation for these parcels and no impact would occur. (City of Yorba Linda, 2016b)

The Project housing opportunity sites do not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. According to the California Department of Conservation (DOC) “California Important Farmland Finder,” majority of the City is designated as “Urban and Built-up Land”. (DOC, 2018) Thus, the Project would not convert mapped farmland to nonagricultural use and no impact would occur.

Threshold b: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The City of Yorba Linda General Plan EIR concluded that the City does not have agricultural General Plan or zoning land use designations and no properties in the City are under a Williamson Act contract. Therefore, no impact would occur. (City of Yorba Linda, 2016b)

As shown in the City’s Zoning Map, the City of Yorba Linda does not have land zoned for agricultural use (City of Yorba Linda, 2019). Additionally, there are no Williamson Act contracts in the City. Therefore, the Project would not conflict with existing zoning for agriculture use or a Williamson Act contract and no impact would occur.

Threshold c: Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

This threshold was not analyzed under the City of Yorba Linda General Plan EIR. Similar to agricultural zoning, the City does not have any land zoned for forest land, timberland, or timberland zoned Timberland Production (City of Yorba Linda, 2019). Therefore, the Project would not conflict with existing zoning or cause the rezoning of forest land, timberland, or timberland zoned Timberland Production and no impact would occur.

Threshold d: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

This threshold was not analyzed under the City of Yorba Linda General Plan EIR. There is no forest land in the City. Therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest use and no impact would occur.



Threshold e: *Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

The City of Yorba Linda General Plan EIR concluded that the City contains two pieces of agricultural land, both of which are currently being used as such. It determined that the General Plan update would not alter the existing conditions in the City such that this land would specifically be converted to other uses. No impacts would occur. (City of Yorba Linda, 2016b)

As discussed above, there are no agricultural or forest resources within the housing opportunity sites. Therefore, the Project would not involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. No impact would occur from implementation of the Project.

5.4.3 CULTURAL RESOURCES

Threshold a: *Would the Project cause a substantial adverse change in the significant of historical resources pursuant to §15064.5?*

The City of Yorba Linda General Plan EIR concluded that there are several historical resources within the City. Future development within the City would be reviewed for consistency with General Plan Update policies and implementation measures, and the Municipal Code Chapter 18.18. Compliance with the General Plan Update policies and implementation measures, the Municipal Code, and established federal and State regulatory framework would protect currently designated and potential historic resources and districts from significant adverse impacts. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)

The City of Yorba Linda Citywide Historic Property Survey: Historic Context and Survey Report identifies historical resources throughout the City. There are 3 properties are listed on the NRHP, 3 properties which appear eligible for the National Register of Historic Places (NRHP) as an individual property, 1 district is eligible for the NRHP, 1 district that qualifies as a City of Yorba Linda Local Historic District, and 26 properties that appear to be individually eligible for the Local Historical Register. None of the properties listed or eligible for listing in the NRHP are included within the housing opportunity sites. Further, no sites within the Project are included as appearing eligible for the Local Historical Register (City of Yorba Linda, 2016b, Table 5.5-1). Accordingly, impacts would be less than significant.

Threshold b: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

The City of Yorba Linda General Plan EIR concluded that results of the Sacred Lands File search through the Native American Heritage Commission (NAHC) did not indicate any known Native American cultural resources from the NAHC archives within the City and its Sphere of Influence. All



of the focus areas, except for Cielo/Esperanza, are primarily developed or have been previously developed or disturbed. Environmental Impact Reports done for potential development within the Cielo/Esperanza Focus Area concluded that there is a low likelihood of archaeological resources in the area. Although archaeological resources are not anticipated to occur within these areas, there is the potential for unknown or undiscovered resources to occur. Therefore, future development anticipated by the General Plan Update could indirectly result in impacts to previously unknown archaeological resources through construction activities. (City of Yorba Linda, 2016b)

A potentially significant impact would occur if a known or unknown archaeological resource were removed, altered, or destroyed as a result of the proposed development. The great majority of the City is developed with urban uses where ground has been previously disturbed by construction of those uses. However, archaeological resources could still be present in soils that have been previously disturbed and the City's General Plan includes a number of policies to protect archaeological resources, including the following:

- Policy HR-2.5 requires avoiding adversely affecting significant archaeological and paleontological resources.
- Policy OR-6.1 Protect significant areas of historical, archaeological, educational or paleontological resources.
- Policy OR-6.2 Ensure the implementation of effective mitigation measures where development may affect historical, archaeological or paleontological resources.
- Policy OR-6.3 Continue to require preparation of archaeological or paleontological reports in areas where there is potential to impact cultural resources.
- Policy OR-6.4 Continue to require an archaeologist be retained to observe grading activities in areas where the probable presence of archaeological or paleontological resources is indicated.
- Policy OR-6.5 Preserve uncovered resources in their natural state, as much as feasible, to assure their conservation and availability for later study.

Further, compliance with City Standard Condition Planning no. 06, which requires that unknown resources be adequately addressed, would ensure that impacts to such resources are less than significant. Additionally, as subsequent infill and redevelopment residential projects occur, any needed Native American consultation would be assessed, and could require additional CEQA analysis in accordance with Section 15162 of the State CEQA Guidelines.



Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The City of Yorba Linda General Plan EIR concluded that no conditions exist that suggest human remains are likely to be found in the City. In the event human remains are encountered during earth removal or disturbance activities compliance with the California Health and Safety Code Section 7050.57.98 would reduce any impact associated with human remains to less than significant levels. (City of Yorba Linda, 2016b)

Due to the level of past disturbance in the City, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. Thus, discovery of human remains is unlikely during construction due to Project implementation. Pursuant to California Health and Safety Code Section 7050.5, in the unlikely event human remains are encountered during ground-disturbing activities, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the “most likely descendant(s)” of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Mandatory compliance with these requirements would ensure that impacts to human remains would be less than significant.

5.4.4 GEOLOGY AND SOILS

Threshold a: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42); or strong seismic ground shaking; or seismic-related ground failure, including liquefaction; or landslides?

The City of Yorba Linda General Plan EIR concluded that compliance with State laws and local ordinances as well as the policies of the General Plan Update are set forth to ensure that adverse effects caused by seismic and geologic hazards (such as strong seismic ground shaking, liquefaction, and landslides) are identified and mitigated, as needed, to protect public health and safety from substantial risks through appropriate engineering practices. (City of Yorba Linda, 2016b)

A. Rupture of a Known Earthquake Fault

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Sections 2621 et seq.) was passed to prevent construction of buildings used for human occupancy on the surface of



active faults, in order to minimize the hazard of surface rupture of a fault to people and buildings. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that the sites are not threatened by surface rupture from future earthquakes. A fault is considered an active fault if it has had surface displacement within the last 11,000 years. One Alquist-Priolo earthquake fault zone, Whittier-Elsinore Fault Zone, passes through the City and also is within the northern portion of housing opportunity site S5-008.

Future development pursuant to the City of Yorba Linda 2021-2029 Housing Element would be consistent with the City's adopted Public Health and Safety Element, which contains goals and policies to protect residents from geologic and seismic hazards. Additionally, any future development projects pursuant to the Project would be required to comply with all applicable Building and Safety division requirements, which includes avoiding the siting of housing within a fault zone. Further, the City's Building Code (Yorba Linda Municipal Code, Title 15) requires future development to submit an engineering geology report and soils engineering report to identify and mitigate geology conditions and hazards. Compliance with the CBC and City's Building Code would ensure impacts would be less than significant.

B. Strong Seismic Ground Shaking

There are several known active faults in the region, including the Whittier-Elsinore Fault as mentioned above, as well as the San Andreas Fault about 30 miles to the northeast and the Sierra Madre Fault about 20 miles to northwest (City of Yorba Linda, 2016b, pp. 5.6-7). Any major earthquake along these systems will cause seismic ground shaking in the City. Much of the City is on sandy, stony, or gravelly loam formed on the alluvial fan adjacent to the San Gabriel Mountains. This soil is more porous and loosely compacted than bedrock, and thus subject to greater impacts from seismic ground shaking than bedrock.

Development under the Project would expose new structures and residents in the City to seismic ground shaking. Future development would be designed and built in compliance with the California Building Code (CBC). The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site or in the area. Compliance with the CBC and City's Building Code would ensure impacts would be less than significant.

C. Seismic-Related Ground Failure, Including Liquefaction

There are zones of required investigation for liquefaction in the southern and southwestern parts of the City within a mile of the Santa Ana River, as mapped in the City's adopted General Plan Public Health and Safety Element (City of Yorba Linda, 2016b, pp. 5.6-9). Future development would be required to have a site-specific geotechnical investigation conducted. The geotechnical investigations for each respective project would evaluate liquefaction potential at the affected project sites and provide any needed recommendations for minimizing hazards from liquefaction and from other seismic ground failure. In addition, development must also comply with seismic safety regulations in the CBC and



City's Building Code. Compliance with the CBC and City's Building Code would ensure impacts to liquefaction would be less than significant.

D. Landslides

Zones of required investigation for earthquake-induced landslides occur in the Chino Hills along the north City boundary and near the west City boundary. Of the 27 housing opportunity sites, one site S5-008 is located within a landslide zone. (City of Yorba Linda, 2016b, pp. 5.6-13) Regardless of the landslide susceptibility, future development pursuant to the Project would be required to have a site-specific geotechnical investigation conducted. The geotechnical investigation for each such project on a site within a zone of required investigation for earthquake-induced landslides would be required to evaluate the potential for such landslides onsite provide any needed recommendations for minimizing hazards. Each project must also comply with seismic safety regulations and requirements regarding slope stability in the CBC and City of Yorba Linda Building Code. Compliance with the CBC and City's Building Code would ensure impacts would be less than significant.

Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?

The City of Yorba Linda General Plan EIR concluded that future development under the General Plan Update could cause impacts associated with soil erosion resulting in increased fugitive dust that affects air quality and water quality degradation due to increased sedimentation. The provisions of the City's General Plan and Municipal Code regarding soil management and preservation, would continue to ensure that these resources are not lost as a result of construction or other activities. With the existing measures required to prevent soil erosion would continue to be in effect (e.g., compliance with Stormwater Pollution Prevention Plans), impacts would be less than significant.

Erosion is the movement of rock and soil from place to place. Erosion occurs naturally by agents such as wind and flowing water; however, grading and construction activities can greatly increase erosion if effective erosion control measures are not used. Common means of soil erosion from construction sites include water, wind, and being tracked offsite by vehicles. The City is in a highly urbanized area and soils have already been disturbed by existing development. Although soils at the housing opportunity sites could experience erosion during construction and development, implementation of the Project would not cause substantial soil erosion.

The State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ (General Construction Permit) contains water quality standards and stormwater discharge requirements applying to construction projects of one acre or more. The General Construction Permit was issued pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations for implementing part of the federal Clean Water Act. The General Construction Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) that identifies the sources of pollution that may affect the quality of stormwater discharges and describes and ensures the implementation of best management practices (BMPs) to reduce the pollutants, including silt and soil, in construction stormwater discharges. Examples of BMPs that are commonly included in SWPPPs are shown in Table 5-2, below.



Table 5-2 Examples of Construction-Phase Stormwater Pollution Prevention BMPs

Category	Goal	Sample Measures
Erosion Controls	Prevent soil particles from being detached from the ground surface and transported in runoff	Preserving existing vegetation; soil binders; geotextiles and mats
Sediment controls	Filter out soil particles that have entered runoff	Barriers such as slit fences and gravel bag berms; and street sweeping
Tracking Controls	Prevent soil from being tracked offsite by vehicles	Stabilized construction roadways and entrances/exits
Wind Erosion Control	Prevent soil from being transported offsite by wind	Similar to erosion controls above
Non-stormwater Management	Prevent discharges of soil from site by means other than runoff and wind	BMPs regulating various construction practices; water conservation
Waste and Materials Management	Prevent release of waste materials into storm discharges	BMPs regulating storage and handling of materials and wastes

Future development within the Project site would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from Project-related grading and construction activities. Therefore, impacts related to substantial soil erosion or the loss of topsoil would be less than significant.

Threshold c: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The City of Yorba Linda General Plan EIR concluded that Goal PS-3 of Public Health and Safety Element of the General Plan Update directly addresses concerns related to construction of buildings underlain by unstable soils or of geologic nature such that construction would result in landslides, subsidence, or other negative effects. Specifically, site-specific geologic conditions must be reviewed in all development decisions, known and potential geologic hazards must be monitored, and all engineering and construction activities must be required to mitigate the potential for landslides and other geologic hazards. As a result of these policies, impacts as a result of construction atop unstable ground would be less than significant. (City of Yorba Linda, 2016b)

There are known areas in the City with unstable soils that could result in on- or offsite landslides, lateral spreading, liquefaction, or collapse. Development under the proposed Project may occur on soil that is unstable due to these factors and may result in significant impacts. Development proposing structures for human occupancy would be required to have a geotechnical investigation conducted per CBC Section 1802 and the City’s Building Code. The geotechnical investigation would include site-specific assessment of hazards from subsidence and collapsible soils. Additionally, development along hillside would be required to comply with the standards in Chapter 18.30, *Hillside Development*, of



the City's Municipal Code. Each project would be required to comply with recommendations in the geotechnical investigation report for that project ensuring that impacts are less than significant.

Threshold d: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The City of Yorba Linda General Plan EIR concluded that the General Plan update would not directly subject people or structures to hazards associated with expansive soils because it does not authorize any construction projects. Soils testing to determine expansive characteristics is required for new development, pursuant to the CBC. Mitigation of expansive conditions is also required and must be fully defined in the routine building and grading permit process. The City's continued compliance with State and local regulations would avoid significant impacts to expansive soils. (City of Yorba Linda, 2016b)

Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking can shift, crack, or break structures built on such soils. Expansive soils may be present within the City, and development may be proposed and/or located on expansive soils. However, future development built in accordance with the Project would be required to comply with applicable Building and Safety regulations and the CBC. The geotechnical investigation would be prepared and include site-specific assessment of hazards from the potential for expansive soils. Each project would be required to comply with recommendations in the geotechnical investigation report for that project to ensure there would be no significant risks to life or property due to expansive soils.

Threshold e: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The City of Yorba Linda General Plan EIR concluded that new development that could occur under the General Plan Update would occur in areas that are either connected or would be connected to the City of Yorba Linda sewer system. Therefore, no impacts would occur.

There are existing sewers serving the entire urbanized portions of the City of Yorba Linda. Projects developed in accordance with the Project would include sewer laterals and would not rely on septic tanks or other alternative wastewater disposal systems. Therefore, no impact would occur.

Threshold f: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The City of Yorba Linda General Plan EIR concluded that all of the focus areas, except for Cielo/Esperanza, are primarily developed or have been previously developed or disturbed and there is a likelihood of paleontological resources in the Cielo/Esperanza area. Although paleontological resources are not anticipated to occur within the other focus areas, there is the potential for unknown



or undiscovered resources to occur. Therefore, future development anticipated by the General Plan Update could indirectly result in impacts to previously unknown paleontological resources through construction activities. (City of Yorba Linda, 2016b)

A potentially significant impact would occur if a known or unknown paleontological resource were removed, altered, or destroyed as a result of the proposed development. The great majority of the City is developed with urban uses where ground has been previously disturbed by construction of those uses. However, paleontological resources could still be present in soils that have been previously disturbed. Compliance General Plan Policies HR-2.5 and OR-6.1 through 6.5 discussed above with Standard Condition Planning no. 06, which requires that unknown resources be adequately addressed, would ensure that impacts to such resources are less than significant. Additionally, as subsequent infill and redevelopment residential projects occur, any needed Native American consultation would be assessed, and could require additional CEQA analysis in accordance with Section 15162 of the State CEQA Guidelines.

5.4.5 HAZARDS AND HAZARDOUS MATERIALS

Threshold a: Would the Project create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?

The City of Yorba Linda General Plan EIR concluded that future development within the City would be subject to compliance with existing regulations, standards, and guidelines established by the federal, State, and local agencies related to storage, use, and disposal of hazardous materials. Since any use or transportation of hazardous materials in the City under the General Plan Update would not be large scale, uncommon, or unregulated, impacts would be less than significant. Federal and State laws, referenced above, would still apply and the General Plan Update contains measures to ensure that public and environmental safety continues to be protected. (City of Yorba Linda, 2016b)

The term “hazardous material” is defined in different ways by different regulatory programs. For purposes of this environmental document, the definition of “hazardous material” is the same as that outlined in the California Health and Safety Code, Section 25501:

Hazardous materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous waste” is a subset of hazardous materials, and the definition is essentially the same as that in the California Health and Safety Code, Section 25117, and in the California Code of Regulations, Title 22, Section 66261.2:



Hazardous wastes are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous materials can be categorized as hazardous nonradioactive chemical materials, radioactive materials, and biohazardous materials (infectious agents such as microorganisms, bacteria, molds, parasites, viruses, and medical waste).

A. Construction

Construction activities of the Project would involve the use of larger amounts of hazardous materials than would Project operation. Construction activities would include the use of materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature. Project construction workers would also be trained in safe handling and hazardous materials use.

The use, storage, transport, and disposal of construction-related hazardous materials and waste would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Furthermore, strict adherence to all emergency response plan requirements set forth by the City of Yorba Linda and Orange County Fire Authority (OCFA) would be required through the duration of the Project construction. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during Project construction would be less than significant.

B. Operation

Operation of the future residential uses that would be accommodated under the Project would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur as a result of the Project.

The use, storage, transport, and disposal of hazardous materials by future residents would be required to comply with existing regulations of several agencies, including the California Department of Toxic Substances Control, US Environmental Protection Agency, California Division of Occupational Safety



and Health, California Department of Transportation, Orange County Environmental Health Division, and OCFA. Compliance with applicable laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Additionally, future residential uses would be constructed and operated with strict adherence to all emergency response plan requirements set forth by the City of Yorba Linda and OCFA.

Therefore, hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during Project operation would not occur. Impacts would be less than significant.

Threshold b: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The City of Yorba Linda General Plan EIR concluded that transportation of hazardous materials would continue to be limited to SR-91 and to the most direct routes from SR-91 to local delivery sites. The Public Health and Safety Element of the General Plan Update contains measures designed to maintain strict control of the transport of such substances as to ensure public safety. As such, impacts on the likelihood of accidents involving the usage and transport of hazardous materials would be less than significant. (City of Yorba Linda, 2016b)

As discussed under threshold a above, the use and transport of hazardous materials to and from the potential sites during construction and operation would be less than significant. Additionally, the Public Health and Safety Element of the General Plan contains measures designed to maintain strict control of the transport of such substances so as to ensure public safety. As such, impacts on the likelihood of accidents involving the release of hazardous materials into the environment would be less than significant.

Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The City of Yorba Linda General Plan EIR concluded that although hazardous materials and waste generated from future development may pose a health risk to schools, the disclosure to the Electrical Hazard Detection is required for any business that uses, handles, or stores hazardous materials or waste materials equal to or in excess of the basic quantities Any demolition that would occur as a result of redevelopment that could expose hazardous materials to nearby schools would be required to comply with the regulations of the South Coast Air Quality Management District, the California Health and Safety Code, and Occupational Safety and Health Administration. Compliance with existing regulations would minimize the risks to schools associated with the exposure to hazardous materials, and impacts would be less than significant. (City of Yorba Linda, 2016b)



Development that could be allowed with implementation of the Project does not involve hazardous emissions or handling of substantial amounts of hazardous materials. Substances used for maintenance and landscaping, such common cleaners, solvents, paints, fertilizer, and pesticides, would be subject to all applicable regulations. In addition, subsequent projects would be reviewed for their potential impacts related to hazardous materials issues in accordance with CEQA and OCFA requirements, and an appropriate investigation would be conducted based on the individual circumstances involved. Therefore, no impacts related to this issue are anticipated.

Threshold d: *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The City of Yorba Linda General Plan EIR concluded that there are several sites within the City that have been associated with the release or potential release of hazardous materials in the past. These include oil wells, service stations, industrial sites, and public works facilities. Future development that could occur under the General Plan Update has the potential to be impacted by prior residual contamination. This would be limited to areas of redevelopment within the City as the projected new development of residential, commercial, and industrial land uses would occur in areas that are previously undeveloped and therefore uncontaminated. Redevelopment at properties previously affected by hazardous materials emissions or accidents are regulated at all levels of government and would be required to be in compliance with all laws and regulations for remediation. Through application of existing regulations and imposition of mitigation, impacts to persons and other resources would be reduced to less than significant levels. (City of Yorba Linda, 2016b)

California Government Code Section 65962.5 specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. Further evaluation in the PEIR is required to identify whether hazardous materials sites exist on or in the vicinity of the potential sites. The following five databases were reviewed for hazardous material site listings onsite or within 0.25 mile of the potential sites:

- GeoTracker, State Water Resources Control Board
- EnviroStor, Department of Toxic Substances Control
- EnviroMapper, US Environmental Protection Agency
- EJScreen, US Environmental Protection Agency
- Solid Waste Information System (SWIS), California Department of Resource Recovery and Recycling

Based on the results of the database search, there are multiple hazardous material site listings that are listed within 0.25 mile of the housing opportunity sites. These sites consist of primarily closed leaking



underground storage tank (LUST) cleanup sites and are located mostly along the SR-91 and Yorba Linda Boulevard. Therefore, these offsite locations will not pose a threat to the Project site. Moreover, none of the housing opportunity sites are identified on any of the databases; therefore, the Project site is not identified as a hazardous materials site pursuant to Government Code Section 65962.5 and the Project will not create a hazard to the public.

Threshold e: For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The City of Yorba Linda General Plan EIR concluded that there are no public airports or private airstrips within two miles of the City, and no impact would occur. (City of Yorba Linda, 2016b)

The nearest public-use airport to the City is the Fullerton Municipal Airport approximately 10 miles to the west. No portion of the City is within an airport land use plan or within two miles of an airport. Thus, implementation of the Project would not result in safety hazards related to aircraft operations and no impact would occur.

5.4.6 HYDROLOGY AND WATER QUALITY

Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The City of Yorba Linda General Plan EIR concluded that it is possible that upgrades to the existing storm drain system could be required as result of new development and redevelopment that could occur under the General Plan Update. However, the cost of such improvements would be offset by the payment of development impact fees from developers to the City. As a result of the development impact fees that would be paid by developers to the City to ensure the ongoing operation and maintenance of adequate storm drains systems, as well as the policies in the General Plan Update, impacts as a result of project implementation would be less than significant. (City of Yorba Linda, 2016b)

The California Porter-Cologne Water Quality Control Act (§ 13000 et seq., of the California Water Code) (Porter-Cologne Act), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act [CWA]) require that comprehensive water quality control plans be developed for all waters within the State of California. The City is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB).

A. Construction-Related Activities

Construction activities of the future development under the Project would involve demolition, clearing, grading, paving, utility installation, construction, and landscaping activities. Construction activities would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints



and solvents, and other chemicals with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of protective or avoidance measures.

Future development under the Project is subject to the requirements of the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, herein referred to as the "Construction General Permit". Construction-related water quality impacts would be minimized through compliance with the Construction General Permit, which requires completing a construction site risk assessment to determine appropriate coverage level, filing an NOI with the State Water Resources Control Board, and having a Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer prepare a SWPPP. The SWPPP must include erosion- and sediment control BMPs that would meet or exceed measures required by the determined risk level of the Construction General Permit, in addition to BMPs that control the other potential construction-related pollutants (e.g., nutrients, heavy metals, and certain pesticides, including legacy pesticides). Mandatory adherence to the Construction General Permit and implementation of measures outlined in the SWPPP would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant.

B. Post-Development Water Quality Impacts

Buildout under the proposed Project is forecasted to increase residential development by 2,410 units. There is potential that upgrades to the existing storm drain system in the City would be required as result of new development and redevelopment that could occur under the Project. However, the City requires new development and significant redevelopment projects within the City to address storm water quality impacts through incorporation of permanent (post-construction) Best Management Practices (BMPs) in project design. Water Quality Management Plans (WQMPs) are required for private and public new development and significant redevelopment projects. The City requires the project applicant to submit a project WQMP at the project processing and permitting stages. In general, the WQMPs shall follow guidelines set forth in Model WQMP, provided in the Orange County Drainage Area Management Plan. Additionally, the Project would be required to comply with the City's Municipal Code Section 16.04, Water Quality Control. Compliance with the local standards would ensure water quality impacts associated with operation to be less than significant.

Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The City of Yorba Linda General Plan EIR concluded that majority of the development under the General Plan Update would occur in areas that are currently or have previously been developed. Although there is a potential for increase in the amount of impervious surface, it would not be at a



large enough scale to affect groundwater recharge in a significant manner. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)

Potable water service is provided to the City by the Yorba Linda Water District (YLWD). The YLWD main source of water supply is groundwater from the Orange County Basin. Imported treated and untreated water from Metropolitan Water District of Southern California (MET) through Municipal Water District of Orange County (MWDOC) make up the rest of the District's water supply. The Project does not propose the use of any wells or other groundwater extraction activities. Therefore, the Project would not directly draw water from the groundwater table. Accordingly, implementation of the Project has no potential to substantially deplete or decrease groundwater supplies and the Project's impact to groundwater supplies would be less than significant. Further discussion of water supply is provided in Section 5.4.9, *Utilities and Service Systems*, below.

Threshold c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impeded or redirect flood flows?

The City of Yorba Linda General Plan EIR concluded that there are no existing streams or rivers in this area and General Plan Policy CN-4.5 promotes the retention of local drainage courses. Impacts on erosion and siltation would be less than significant as any new development would also be required to incorporate standard Best Management Practices (BMPs) to prevent such occurrences. Additionally, the Cielo/Esperanza Focus Area could experience new development on undeveloped hillsides and canyons. However, construction in this area, as with all others, would require runoff BMPs to be implemented and would not be of a large enough scale to impact runoff at a level that could lead to flooding or be considered significant.

Furthermore, it is anticipated that the existing storm water drainage system in the City is adequate for the majority of potential development that could take place under the General Plan Update. In the event that a proposed development could generate an increased amount of runoff such that the current system would be unable to accommodate the increased flows, the General Plan Update would require that the drainage system be upgraded which would be funded by development impact fees paid by the developers to the City.

The General Plan Update would involve potential redevelopment in areas that are currently built, as well as an expansion of housing into undeveloped hillsides in the City's Sphere of Influence. The currently developed areas and undeveloped Cielo/Esperanza Focus Area are not within 100-year flood hazard zones. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)



1. *Result in substantial erosion or siltation on- or off-site;*

As stated above, the majority of any new development that would occur under the proposed Project would occur in areas that are already developed and as such would not alter the existing course of a stream or river. Although soils in the Project site could experience erosion during construction and development of individual projects pursuant to the Project, implementation of the Project would not cause substantial soil erosion. A SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction would be prepared and implemented. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from Project-related grading and construction activities. Therefore, impacts related to substantial soil erosion or siltation would be less than significant.

2. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;*

Portions of the City along the Santa Ana River are located within a flood hazard zone. (City of Yorba Linda, 2016b, pp. 5.9-9) Specifically, according to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, northwestern corner of housing opportunity sites SS6-020, northwestern portion of S6-015 and southern portion of S7-001 are designated as 0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X); and the southeastern portion of S4-053 is designated as areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies (Zone A). Zone A is identified as a Special Flood Hazard Area and Zone X is identified as a moderate flood hazard area. (FEMA, 2009a; FEMA, 2009b; FEMA, 2009c)

Implementation of the Project may result in an increase in impervious surfaces. However, existing requirements for future development include review by the City Engineer to ensure adequate drainage facilities are provided that meet City design and requirements. Additionally, implementation of the WQMP would reduce runoff from the site and identify BMPs for runoff controls and treatments. Implementation of the Project would not substantially alter the existing drainage pattern, nor is the potential increase in surface runoff anticipated to be substantial. Therefore, impacts related to increase in the rate or amount of surface runoff would be less than significant.

3. *Create or contribute runoff water which would exceed the capacity or existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

Refer to Threshold a and c2. In general, the housing opportunity sites drain to the existing storm drain system. Future development would require the study of localized conditions and construction of additional storm drains based on site-specific conditions and proposed development plans. City standards require developed storm flows to be less than or equal to existing storm flows. There is potential that upgrades to the existing storm drain system in the City would be required as result of new development and redevelopment that could occur under the Project. However, as concluded in the General Plan EIR, the cost of such improvements would be offset through the payment of developer



fees to the City (City of Yorba Linda, 2016b, pp. 5.9-12). Therefore, impacts would be less than significant.

4. *Impede or redirect flood flows?*

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, northwestern corner of housing opportunity sites SS6-020, northwestern portion of S6-015 and southern portion of S7-001 are designated as 0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X); and the southeastern portion of S4-053 is designated as areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies (Zone A). Zone A is identified as a Special Flood Hazard Area (SFHA) and Zone X is identified as a moderate flood hazard area. (FEMA, 2009a; FEMA, 2009b; FEMA, 2009c)

The City of Yorba Linda has adopted local standards for construction in floodplain areas. Construction within SFHAs is governed by the City's Municipal Code Chapter 15.12, Flood Damage Protection. Section 15.12.110 sets forth construction requirements for development that would minimize flood hazard risks. With compliance with Federal and local regulatory requirements, impact would be less than significant.

Threshold d: Would the Project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The City of Yorba Linda General Plan EIR concluded that the only portion of the City that would be subject to potential damn inundation is the located in the southeastern area of the City due to the presence of the Prado Dam. To mitigate threats such as dam inundation the proposed General Plan Update Safety Element contains goals and actions that would lessen risks associated with flooding, thereby ensuring that flood control facilities are maintained and operable in order to prevent flood damage. In addition, the City's Emergency Management Plan, which is part of the Orange County Emergency Management Plan, would further ensure that impacts associated with dam inundation would remain less than significant. (City of Yorba Linda, 2016b)

The following describes potential pollutant impacts related to flood hazard, seiche, and tsunami zones.

1. *Flood Hazard*

As noted in Thresholds a) and c), above, there are four sites within Zone A and Zone X flood hazard zones. Compliance with the City's Municipal Code Chapter 15.12, Flood Damage Protection, which sets forth construction requirements for development within a SFHA to minimize flood hazard risks. With compliance with Federal and local regulatory requirements, impact would be less than significant. Therefore, impacts related to risk of pollutant release due to inundation from a flooding event would be less significant.



2. *Seiche*

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. Although there are no large water tanks in the area that could impact the potential sites, there are dams in the region that could create flooding impacts. The potential sites are not in a dam inundation area (DSOD, 2020). Therefore, there is no risk of pollutant release due to inundation from a seiche. No impact would occur.

3. *Tsunami*

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The City is approximately 19 miles inland from the Pacific Ocean, outside of the tsunami hazard zone identified by the California Governor's Office of Emergency Services. Therefore, there is no possibility of the City being affected by a tsunami; there is no risk of pollutant release due to inundation from a tsunami. No impact would occur.

Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Refer to Threshold a). The quality of surface and groundwater is affected by land uses in the watershed and the composition of subsurface geologic materials. Water quality in surface and groundwater bodies is regulated by the State Water Resources Control Board and RWQCB. The City of Yorba Linda is under the jurisdiction of the SARWQCB, which is responsible for implementation of state and federal water quality protection guidelines in the City. SARWQCB implements the Water Quality Control Plan for the Santa Ana River Basin Plan (Basin Plan), a master policy document for managing water quality issues in the region. The City is in the Orange County Basin and the Basin has a Groundwater Basin Master Plan, which is intended to identify projects and programs to enhance basin replenishment, increase the reliability of groundwater resources, improve, and protect groundwater quality, and ensure that the groundwater supplies are suitable for beneficial uses.

The Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) standards and the City's Water Quality Control regulations to ensure pollutant loads are minimized for downstream receiving waters. SARWQCB would also require a WQMP to be prepared and implement BMPs for site-specific runoff controls and treatments. Conformance would be ensured during the permitting process with the City's Community Development Department. Therefore, the Project would not obstruct implementation of applicable plans, and impacts would be less than significant.



5.4.7 MINERAL RESOURCES

Threshold a: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The City of Yorba Linda General Plan EIR concluded that mineral resources present in the City are petroleum and aggregate materials. However, the General Plan Update would not change land use designation of Oil Production Combining Zone (O). Therefore, the General Plan Update would not preclude ongoing and new oil extraction operations.

With respect to aggregate resources, aggregate resource areas lie along the Santa Ana River to the south of the City and contain sand, gravel, and crushed stone which can be used as construction materials. There are also areas of regionally significant aggregate located east and west of Featherly Regional Park in the City and its Sphere of Influence determined by the State Division of Mines and Geology. The areas have already been developed with land uses which preclude aggregate extraction. Therefore, impacts on mineral resources are considered less than significant. (City of Yorba Linda, 2016b)

The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975. The State Geologist is responsible for classifying areas with California that are subject to urban expansion or other irreversible land uses. Furthermore, the State Geologist is also responsible for classifying mineral resource zones (MRZ) to record the presence or absence of significant mineral resources in the State based on CGS data.

Lands designated MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are “regionally significant.” MRZ-1 are areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. MRZ-3 indicates areas of undetermined mineral resource significance. MRZ-4 indicates areas where available information is inadequate for assignment to any other MRZ zone.

As depicted in Figure 5.11-1, Oil Production and Mineral Resource Zone, of the General Plan EIR, the majority of the potential sites are not located within these zones. (City of Yorba Linda, 2016b, pp. 5.11-3) Three of the sites are located within the City’s Oil Production Zone (S3-201; S3-210; and S3-203). However, as reflected on the Department of Conservation Well Finder Maps, all oil wells located on these sites are plugged and sealed and have since been developed over (DOC, 2022). Therefore, implementation of the Project would not cause the loss of availability of mineral resources valuable to the region or state, and no impact would occur.



Threshold b: Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The City of Yorba Linda General Plan EIR concluded that oil reserves would continue to be protected based on the land use designation placed on these areas and no significant impacts are anticipated. (City of Yorba Linda, 2016b)

The City's General Plan EIR indicates that oil fields are present in within the City (City of Yorba Linda, 2016b, pp. 5.11-3; City of Yorba Linda, 2016b). Implementation of the Project would not change or impact ongoing oil operations, including oil extraction activities. Development in accordance with the Project would occur would not expand into mineral resource recovery sites or currently utilized oil fields. Therefore, the Project would not result in the loss of availability of a locally important mineral resource. No impact would occur.

5.4.8 POPULATION AND HOUSING

Threshold a: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The City of Yorba Linda General Plan EIR concluded that full buildout of the proposed General Plan Update, would result in a 4.4 percent increase in population growth, would not result in substantial unplanned population growth. In addition, the proposed General Plan Update includes several policies related to housing and population growth that would ensure that the amount of growth upon implementation of the Project would not be significant, and would be managed in such a way so as not to affect the quality of life currently enjoyed in the City. (City of Yorba Linda, 2016b)

1. Construction

Project construction activities would require contractors and laborers. It is anticipated that general construction labor would be available from the local and regional labor pool and would not result in substantial population growth because the construction workers would commute from their respective homes. Additionally, each construction phase (e.g. grading, paving, electrical etc.) requires different skills and specialties, which would be needed for the length of time of that phase. Therefore, the Project's construction phases would not result in a long-term increase in employment which could induce substantial unplanned population growth from short-term construction activities. Therefore, the Project would not directly or indirectly induce substantial population growth in the City during construction.

2. Operation

According to SCAG's Connect SoCal, SCAG projects a 4.1 percent increase in the City from 2016 to 2045, with a population of 70,600 in 2045. However, the City's General Plan projected a growth in



population of approximately 10,752 persons with a current population of 67,367. Therefore, General Plan buildout would result in a total population of 78,119, exceeding the SCAG's 2045 projections.

Implementation of the Project would allow the construction of new housing of a variety of densities throughout the City. New housing has the potential to induce substantial population growth in the City. Assuming an average household size of 2.94 residents per unit, future housing development facilitated by the Project would result in a total net increase of 2,410 dwelling units, resulting in population growth of approximately 7,085 residents. This is a conservative assumption because a portion of the City's RHNA allocation was due to overcrowding. Therefore, a portion of the RHNA obligation was derived to meet an existing housing demand rather than projected growth within the City. The State defines an overcrowded housing unit as one occupied by more than 1.01 persons per room (excluding kitchens, porches, and hallways). A unit with more than 1.51 occupants per room is considered severely overcrowded. The incidence of overcrowded housing is a general measure of whether there is an available supply of adequately sized housing units. As shown in Table II-27 of the 2021-2029 Housing Element, the City's renters experienced more overcrowding conditions than owners (7% for renters versus 1% for owners). Furthermore, as indicated in Section C of the Housing Element, a vacancy rate of five percent for rental housing and two percent for ownership housing is generally considered healthy and suggests that there is a balance between the supply and demand of housing. Although the City's residential vacancy rate for rental units (five percent) indicates a healthy market, the vacancy rate for ownership units was 0.4 percent, highlighting a pent-up demand for ownership housing.

As of 2021, City has a population of 67,760 (DOF, 2021). Project buildout would result in a total of 74,845 residents. However, this would not result in substantial unplanned growth in the area since 1) SCAG assigned RNHA obligations and would update its RTP/SCS to reflect planned growth consistent with the Housing Element, 2) the planning housing response to an existing unmet need, 3) the housing opportunity sties are infill development with adequate nearby infrastructure. Therefore, the Project would not result in substantial unplanned population growth. Impacts would be less than significant.

Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The City of Yorba Linda General Plan EIR concluded that there are no aspects of the proposed project that would displace existing housing, as there are no land use changes proposed. Therefore, no impact would occur. (City of Yorba Linda, 2016b)

Growth in accordance with the proposed Project is not expected to displace substantial numbers of housing or people. The Project would allow for approximately 2,410 additional residential units. Development under the Project would alter existing land use designations that could result in the displacement of nonconforming housing with new development. However, the Project is not expected to displace a substantial amount of existing housing or people, and it would increase the number of



dwelling units and population by allowing higher intensity residential uses. As a result, impacts are less than significant.

5.4.9 UTILITIES AND SERVICE SYSTEM

Threshold a: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The City of Yorba Linda General Plan EIR concluded that the General Plan Update would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would not cause significant environmental effects and impacts would be less than significant. (City of Yorba Linda, 2016b)

Yorba Linda is a younger community with the necessary infrastructure in place to support future development in the established areas. The utility infrastructure is relatively new with the majority of public service capacity not yet in need of repair or replacement. One exception is in portions of the Yorba Linda Water District's (YLWD) westerly service area where approximately 24,000 feet of waterline was constructed in the 1920s through 1950s. According to YLWD, the majority of these waterlines will be replaced over the 2022 to 2024 period. All sites are adjacent to existing public roadways and are serviceable by existing water and wastewater infrastructure, as well as private companies that provide phone, cable, natural gas, and electric service. Existing water delivery and wastewater collection infrastructure is available to all housing opportunity sites and the City has adequate water and wastewater capacity to accommodate 2,410 new residential units. However, as a requirement of future development, the existing sewer lines on Linda Verde would need to be extended to accommodate housing opportunity sites S4-060 and S4-201. In summary, no housing opportunity sites are constrained by infrastructure availability.

Wastewater generated by the Project would flow by gravity to OCSD's Reclamation Plant No. 1, which is located in the City of Fountain Valley. Together with Treatment Plan No. 2, which is located in Huntington Beach, the two facilities are designed to treat 332 mgd average dry weather flow (ADWF) to secondary standards and 591 mgd average wet weather flow to secondary standards. Under dry weather conditions, ADWF is 207 mgd without reclamation, and 152 mgd with reclamation. The wastewater that would be generated by implementation of the proposed Project would reflect a small portion of the capacity of these facilities and would be accommodated within the remaining capacity of the combined facilities (RWQCB, 2012).

Development projects are assessed fees for new sewer provision facilities by the YLWD. Individual developments would be reviewed by the City and Orange County Sanitization District (OCSD) in order to determine if sufficient local and trunk sewer capacity exists to serve the specific development. The City and OCSD would ensure that new development does not exceed the capacity of wastewater conveyance and treatment facilities, and that new development pays its fair share to increase capacity



of those facilities. The Yorba Linda General Plan includes policies and implementation actions to support projects, programs, policies and regulations to ensuring that development is appropriate in scale to current and planned infrastructure capabilities (Policy PSU-5.1). The CIP would be used to evaluate and prioritize infrastructure maintenance, replacement, and improvement projects (Action PSU-5.3). Further, future development projects would be required to comply with the City’s Municipal Code and YLWD regulations, in order to connect to the City’s sewer system, including payment of a sewer maintenance fee in order to construct new sewer infrastructure and/or incremental expansions to the existing sewerage system to accommodate individual development, which would mitigate the impact of the development on the sewerage system.

Southern California Edison (SCE) provides electricity services to a large majority of southern and central California, including the City. Additionally, the City is within the service area of Southern California Gas Company (SoCalGas) for the provision of natural gas at residences and businesses. The anticipated service demands created by implementation of the Project are with the service parameters of SCE and SoCalGas current transmission and service infrastructure. SCE and SoCalGas would update existing facilities or add new facilities in the City based upon specific requests for service from end users. Future developments that require new infrastructure would be required to pay any applicable fees assessed by SCE and SoCalGas necessary to accommodate the specific project site. Therefore, impacts would be less than significant.

Based on the preceding, the Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

Threshold b: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The City of Yorba Linda General Plan EIR concluded that residential population growth and associated increase in water demand are included within the YLWD UWMP growth projections while non-residential water demand may exceed that planned for in the final draft 2015 Urban Water Management Plan (UWMP). However, YLWD has indicated it can meet demands in multiple dry years from 2020 through 2040 and the General Plan Update includes goals and policies that would ensure adequate water supply is available for proposed development projects. Therefore, impacts would be less than significant (City of Yorba Linda, 2016b).

As presented in Section 7.3, Water Service Reliability Assessment, of the YLWD UWMP, the district has forecasted water availability for a normal water year, a single dry water year, and a drought lasting five consecutive water years. As shown therein, even with a conservative demand increase of 6% each year for five consecutive years, the District is capable of meeting all customers’ demands from 2025 through 2045, with significant reserves held by Metropolitan Water District of Southern California



(MET) and water use efficiency measures. However, the District can purchase more MET water through MWDOC, should the need arise.

UWMPs are important source documents for cities and counties as they update their general plans. Similarly, general plans are source documents for water suppliers updating the UWMPs. The accuracy and usefulness of these planning documents are interdependent. If a project was included as part of the projected water demand of the current UWMP, the water demand for the proposed development does not need to be separately analyzed as long as water demand for the project has remained substantially the same. The City's UWMP was prepared in 2020, and its service population was based on growth forecasts. Therefore, YLWD would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts would be less than significant. As growth is evaluated and accounted for in its General Plan, SCAG forecasts are updated and these numbers will be reflected in the City's 2024 UWMP..

Threshold c: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As indicated under Threshold a), above, the wastewater generated by buildout of the Project would not exceed the capacity of the YLWD or OCSD. Impacts would be less than significant.

Threshold d: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The City of Yorba Linda General Plan EIR concluded that implementation of the General Plan Update would generate an additional 59,891 ppd of solid waste per day and there would be adequate capacity in the landfill to serve buildout of the General Plan. Therefore, impacts would be less than significant. (City of Yorba Linda, 2016b)

As indicated in Section 3.0, *Project Description*, the Project could result in up to 2,410 new residential units. Applying the General Plan Draft EIR's daily solid waste generation factor residential uses of 12.23 lbs/DU, the Project would generate an additional 29,474.3 ppd of solid waste. This represents approximately less than a percent of the remaining daily capacity at the Olinda Alpha Landfill. Therefore, there would be adequate capacity in the landfill to serve buildout of the Project. The Olinda Alpha Landfill has a permitted disposal capacity of 8,000 tons per day with a remaining capacity of 17,500,000 tons. The Olinda Alpha Landfill is estimated to reach capacity, at the earliest time, in the year 2036. (CalRecycle, 2022)

CalRecycle requires that all counties have an approved Countywide Integrated Waste Management Plan (CIWMP). To be approved, the CIWMP must demonstrate sufficient solid waste disposal capacity for at least 15 years, or identify additional available capacity outside of the county's jurisdiction. Orange County's CIWMP, approved in 1996, future solid waste disposal demand based on the County



population projections adopted by the Board of Supervisors. The Orange County landfill system has capacity in excess of 15 years.

The Orange County IWMB has also prepared a Regional Landfill Options for Orange County, a 40-year strategic plan to evaluate options for waste disposal for Orange County. Furthermore, the City of Yorba Linda has actively pursued programs to comply with federal, state, and local regulations related to solid waste which minimize impacts from project-generated solid waste. Therefore, impacts would be less than significant.

Threshold e: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. SB 2202 clarified that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000. SB 1016 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the dwelling units would be required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. (CA Legislative Information, 2005) The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations. Impacts would be less than significant.



6.0 ALTERNATIVES

6.1 PURPOSE

CEQA Guidelines Section 15126.6 provides that the purpose of the alternatives section of an EIR is to assess a range of reasonable alternatives to the proposed project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The EIR must also include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. The discussion of alternatives should be governed by the “rule of reason.” Generally, significant effects of an alternative shall be discussed, but in less detail than the proposed project.

6.2 INTRODUCTION

As stated above, the principal purpose of the alternatives analysis is to assess a range of project alternatives that would reduce the magnitude of, or eliminate, potential project-related impacts. However, the *State CEQA Guidelines* place some restrictions on the range of alternatives an EIR must address. An EIR need only examine those alternatives that meet most basic objectives of the project. Also, the *State CEQA Guidelines* stipulate that alternatives addressed in an EIR should be feasible and should not be considered remote or speculative. When addressing feasibility, the *State CEQA Guidelines* state that “among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to the alternative site.”

Based on these CEQA-driven directives, alternatives to the project that would reduce significant adverse impacts without undermining basic project objectives were selected for analysis in this section. The objectives of the proposed Yorba Linda Housing Element Update 2021-2029 project are

1. Implementation of the 2021-2029 Housing Element Implementation Programs to provide adequate housing sites and assist in the provision of affordable housing.
2. Allow the City of Yorba Linda to comply with State housing laws including compliance with the Regional Housing Needs Assessment (RHNA) targets.
3. Remove governmental constraints to housing investment.
4. Promote fair and equal housing opportunities.



6.3 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the Project alternatives considered during the scoping and planning process and the reasons why they were not selected for detail analysis in this Draft PEIR.

6.3.1 ALTERNATIVE DEVELOPMENT AREAS

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. In considering alternative locations, the first question in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR (Guidelines Sec. 15126.6[f][2][A]). The proposed Project is the 2021-2029 Housing Element Implementation Programs. The Housing Element is specific to the City and its jurisdiction; it is also specific to the natural, social, and cultural environments within the City and sphere of influence (SOI). The City does not have jurisdiction over areas outside of its boundaries and SOI and cannot impose Housing Element requirements on such areas. Therefore, an alternative development area for the proposed Project is not possible.

6.3.2 NO PROJECT ALTERNATIVES

In accordance with CEQA Guidelines Section 15126.6, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. A discussion of the “no project” alternative will usually proceed along one of two lines: 1) the project does not proceed and the existing environmental setting is maintained (No Development/No Growth), or 2) continuation of the existing plan, policy or operation into the future (Adopted General Plan). An analysis of both no project alternatives is provided below.

1. No Development/No Growth

The No Development/No Growth Alternative would prohibit all new development, restricting urban growth to its current extent. The population would remain at existing levels, approximately 67,760 residents (DOF, 2021). No alterations to the City would occur (with the exception of previously approved development), and all residential development would generally remain in their current conditions. Some minor population growth could occur within the City, to the extent that existing residential unit or units that have already been approved could accommodate additional residents (e.g., a decrease if vacancy rates). None of the impacts of the proposed Project, adverse or beneficial, would occur. Future conditions within the City, except for the impacts of regional growth, would generally be the same as existing conditions which were described in the environmental setting section for each environmental topic.



2. *Adopted General Plan*

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the “No-Project” Alternative. When the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the no-project alternative is the continuation of the plan, policy, or operation into the future. Therefore, under the No Project/Adopted General Plan Alternative, the current Land Use Diagram would remain in effect. All proposed changes to general plan land uses and zoning designations at the 27 housing opportunity sites would not occur. Development in accordance with the adopted General Plan would continue to occur, allowing for buildout of 25,871 dwelling units and 78,389 residents. Environmental impacts relating to physical disturbance of the housing opportunity sites, such as construction-related air quality and noise impacts, biological resources and tribal cultural resources, would be the same as the proposed Project, since future development would continue to be allowed to occur under the adopted General Plan land use designations. However, operational impacts (such as, air quality, energy, GHG emissions, public services, recreation) would be less under the No Project/Adopted General Plan Alternative compared to the Project, because up-zoning would not occur on the housing opportunity sites and overall buildout of the City could be less.

3. *Reasons for Rejecting No Project Alternatives*

Under the No Project Alternatives, the 2021-2029 Housing Element Implementation Projects, including the General Plan and Zoning Amendments, would not occur. State law recognizes the vital role local governments play in the availability, adequacy, and affordability of housing. Every jurisdiction in California is required to adopt a long-range General Plan to guide its physical development; the Housing Element is one of the seven mandated elements of the General Plan. Housing Element law mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for (and do not unduly constrain) housing production. Housing element statutes also require that the State Department of Housing and Community Development (HCD) to review local housing elements for compliance with state law and to report their finds to the local government.

California’s housing element law requires that each city and county develop local housing programs to meet its “fair share” of existing and future housing needs for all income groups. SCAG is responsible for developing and assigning these regional needs, via a Regional Housing Needs Assessment (RHNA), to Southern California jurisdictions such as the City of Yorba Linda.

If the City fails to implement its housing element or adopts one that is inadequate, a court can order the City to halt all development until an adequate element is adopted or order approval of specific affordable housing developments.¹ Therefore, this alternative may result in the State taking over control of the City’s Housing Element and implementing minimum zoning requirements for multi-

¹ California Government Code, Section 65583(f)



family residential units. The No Project Alternatives have been rejected for being legally infeasible since the City would not be in conformance with State law.

Implementation of this alternative would not provide adequate housing supply required to meet the City’s obligations to provide its fair share of affordable housing. Furthermore, this alternative would not achieve any of the objectives established for the proposed Project. As a result, this alternative has been rejected from further consideration.

6.4 REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative would result in a 15% reduction of housing units on all of the housing opportunity sites with the exception of the Congregational Land Overlay (CLO) sites (see Table 6-1). This unit count also represents the realistic unit potential shown in Table 3-2 of this PEIR. This alternative would reduce the proposed residential units from 2,410 dwelling units to 2,100 dwelling units, and result in a population growth of 6,174 residents. This represents an approximate 13% reduction in growth as compared to the Project. The following discussion compares the potential environmental impacts of this alternative to those associated with implementation of the proposed Project.

Table 6-1 Reduced Density Alternative

Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Realistic Unit Potential
Affordable Housing Overlay (AHO) Sites – up to 35 units/acre							
S1-200	SEC Rose Dr/Blake Rd	5.94	RE (1.8 du/ac)	RM-20 with AHO	RML	RH	178
S3-207	5300-5392 Richfield Rd	9.7	RU (4.0 du/ac)	RM-20 with AHO	RM	RH	291
S3-074	Yorba Linda Preschool 18132 Yorba Linda Blvd	0.42	CG	RM-20 with AHO	AP	AP	13
S3-082	4791 and 4811 Eureka Ave	1.75	CG	RM-20 with AHO	AP	AP	53
S4-075	4742 Plumosa Drive	1.62	CG	RM-20 with AHO	AP	AP	48
S6-015	Prior John Force Racing 22722 Old Canal Road	2.56	PD/Industrial R & D	PD with AHO	IM	IM	77
S6-020	Extended Stay America 22711 Oak Crest Circle	10.35	PD/Office-Commercial	RM-20 with AHO	IM	IM	122
<i>Realistic Unit Potential on AHO Sites:</i>							782
Congregational Land Overlay (CLO) Sites – up to 35 units/acre							
S2-008	Friendship Baptist Church 17151 Bastanchury Rd	4.92 (2.01)	RE (1.8 du/ac)	RE with CLO	RML	RML	60
S3-012	Richfield Community Church 5320 Richfield Rd	9.48 (3.7)	RU (4.0 du/ac)	RU with CLO	RM	RM	55



Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Realistic Unit Potential
S2-013	Messiah Lutheran Church 486 Liverpool St	6.2 (2.03)	RU (4.0 du/ac)	RU with CLO	RMH	RMH	40
S3-024	Friends Church Overflow Parking	17.45 (1.61)	RE (1.8 du/ac)	RE with CLO	AP	AP	48
S4-204A	Chabad Center 19045 Yorba Linda Blvd	1.85 (0.93)	RE (1.8 du/ac)	RE with CLO	RML	RML	17
S3-033	Islamic Center of Yorba Linda 4382 Eureka Ave	3.88 (1.58)	RS (3.0 du/ac)	RS with CLO	RM	RM	30
S3-210	Shinnyo-En USA 18021-18111 Bastanchury Rd	9.23 (4.09)	PD/RA Standards	PD-26 with CLO	AP	AP	105
Realistic Unit Potential on CLO Sites:							355
Mixed Use Overlay (MUO) Sites – up to 35 units/acre							
S1-021	Vacant Parcel (W of 16951 Imperial Hwy) APN 322-121- 07	1.76	CG-(I)	CG-(I) with MUO	C	C	53
S7-001	Bryant Ranch Shopping Center 23611-23801 La Palma Ave	9.15	CG	CG with MUO	C	C	272
Realistic Unit Potential on MUO Sites:							325
RM-20 – up to 20 units/acre							
S4-200	18597-18602 Altrudy Lane	2.0	RS (3.0 du/ac)	RM-20	RM	RH	40
S4-204B	19081-19111 Yorba Linda Blvd	3.90	RE (1.8 du/ac)	RM-20	RML	RH	66
Realistic Unit Potential on RM-20 Sites:							106
RM – up to 10 units/acre							
S3-034	4341 Eureka Avenue	2.19	RS (3.0 du/ac)	RM	RM	RH	19
S3-205A	5225-5227 Highland Ave	7.08	RE (1.8 du/ac)	RM	RML	RH	60
S3-211	17651 Imperial Highway	2.32	RS (3.0 du/ac)	RM	RM	RH	20
S4-053	SWC Kellogg Dr/ Grandview Ave	0.98	RE (1.8 du/ac)	RM	RML	RH	9
S4-060	5541 South Ohio St	0.96	RE (1.8 du/ac)	RM	RML	RH	9
S4-201	5531 South Ohio St	1.82	RE (1.8 du/ac)	RM	RML	RH	15
S5-008	Fairmont Blvd	23.01	PD/Church	Amend Yorba Linda Hills PD	RM/OS	RH/OS	196
S7-005	NWC Camino de Bryant/ Meadowland	3.06	RU (4.0 du/ac)	RM	RH	RH	10
Realistic Unit Potential on RM Sites:							338
Planned Development (PD)							



Site ID	Site Description and Address	Acres (Developable acres)	Current Zoning	Proposed Zoning Action	Current General Plan	Proposed General Plan	Realistic Unit Potential
S3-203	18101-19251 Bastanchury	22.83	PD/RA Standards	Amend West Bastanchury PD	AP	AP	194
<i>Realistic Unit Potential on PD Sites:</i>							194
<i>Realistic Potential on all Opportunity Sites:</i>							2,100

Source: (City of Yorba Linda, 2022, Table IV-2)

6.4.1 AIR QUALITY

Reduced Density Alternative would allow for new development on existing vacant land or through redevelopment of currently developed land, similar to the Project. Although new development under the Reduced Density Alternative would be reduced when compared to the Project, significant unavoidable impacts related to construction emissions, regional operational emissions, consistency with applicable air quality plans, and cumulative construction and operational emission impacts would continue to occur. All other air quality impacts associated with this alternative can be mitigated to less than significant levels. Although the Reduced Density Alternative would incrementally reduce construction-related emissions and regional operational emissions when compared to the Project, the significant unavoidable impact would not be eliminated.

6.4.2 BIOLOGICAL RESOURCES

The Project has the potential to result in biological resources impacts to four housing opportunity sites (S5-008, S7-005, S3-203, and S4-053). Although new development under the Reduced Density Alternative would be reduced when compared to the Project, development within each of the 27 housing opportunity sites would continue to be allowed. Therefore, the Reduced Density Alternative would have the same or similar impacts to biological resources, and impacts would be reduced to less than significant with mitigation measures incorporated.

6.4.3 ENERGY

This alternative would result in 310 fewer residential units when compared to the proposed Project. As a result of fewer residential units, impacts to energy under Reduced Density Alternative would be less than the proposed Project and remain less than significant.

6.4.4 GREENHOUSE GAS EMISSIONS

Development pursuant to the Reduced Density Alternative would reduce the amount of new development, resulting in a reduction of greenhouse gas emissions. Although the Reduced Density Alternative would incrementally reduce greenhouse gas emissions when compared to the Project, the significant unavoidable impact would not be eliminated.



6.4.5 LAND USE AND PLANNING

Similar to the Project, the Reduced Density Alternative would involve the intensification of residential land uses and allow for the development of vacant land on 27 housing opportunity sites throughout the City. The proposed housing opportunity sites are intended to tie into the existing uses and surrounding neighborhoods. Development would occur within existing urban areas and infill sites, which is not expected to divide an established community. Similar to the Project, implementation of the Reduced Density Alternative would not result in an inconsistency with the General Plan, Zoning Code, or Connect SoCal. Therefore, under the Reduced Density Alternative, land use and planning impacts would be similar to the proposed Project.

6.4.6 NOISE

As with the Project, construction activities associated with the Reduced Density Alternative, especially activities involving heavy construction equipment would create intermittent periods of noise when construction equipment is in operation and cause a short-term increase in ambient noise levels. Although the Reduced Density Alternative would result in 310 fewer residential units, on-site construction activities and the associated construction noise and vibration levels would be expected to be similar during maximum activity days since only the overall duration, and not the daily intensity of construction activities and associated equipment noise, would decrease under this alternative when compared to the Project. Noise and vibration levels during maximum activity days, which are used for measuring impact significance, would be similar to those of the Project. The Reduced Density Alternative would comply with the same applicable regulatory requirements and implement the same mitigation measures as the Project to on-site noise and vibration levels during construction. The Reduced Density Alternative would continue to result in significant and unavoidable construction-related noise impacts.

The Reduced Density Alternative would reduce operational-related noise impacts due to the reduction in allowed residential units compared to the Project. As with the Project, the Reduced Density Alternative would result in less than significant impacts due to off-site traffic-related noise and less than significant stationary source noise impacts with incorporation of mitigation measures.

6.4.7 PUBLIC SERVICES

The Reduced Density Alternative would result in slightly less impacts to public services, including fire protection, police, schools, parks and library services when compared to the proposed Project. As discussed previously, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities. Additionally, Project development would occur in an area of the City already served by OCFA and OCSO which would not result in an expansion of service area. Additionally, there is more than adequate student capacity at the school districts and impacts on library services would be incremental and would not require the need for new or expanded facilities. Therefore, under the Reduced Density Alternative, impacts to public services would be less than the proposed Project and less than significant.



6.4.8 RECREATION

The Reduced Density Alternative would result in fewer impacts to recreation when compared to the proposed Project. Similar to the Project, although new development would result in an increase in residents, all residential development would be required to pay impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population, which are reinforced in the City's Municipal Code, Section 15.56, Park and Recreation Impact Fees. Therefore, under the Reduced Density Alternative, impacts to public services would be less than the proposed Project and less than significant.

6.4.9 TRANSPORTATION

Development under the Reduced Density Alternative would result in slightly less impacts to transportation when compared to the proposed Project, although impacts of the Project were determined to be less than significant. Similar to the Project, the Reduced Density Alternative would not conflict with applicable General Plan goals and policies or SCAG's Connect SoCal. The Reduced Density Alternative's impact on VMT is expected to be less than significant. Similar to the proposed Project, the Reduced Density Alternative would result in improvements to the regional and local roadway, bicycle, pedestrian, and transit network and would not increase hazards or impact emergency access due to design features.

6.4.10 TRIBAL CULTURAL RESOURCES

Although new development under the Reduced Density Alternative would be reduced when compared to the Project, development within each of the 27 housing opportunity sites would continue to be allowed. Therefore, the development impact areas under the Reduced Density Alternative would be similar to the Project. The Reduced Density Alternative would require implementation of Mitigation Measure MM 4.10-1 to ensure that grading and other ground-disturbing activities during construction are monitored and the proper treatment of tribal cultural resources, if discovered. Tribal cultural resource impacts under the Reduced Density Alternative would be similar to the Project and less than significant with mitigation incorporated.

6.4.11 WILDFIRE

Development under the Reduced Density Alternative would result in similar impacts related to wildfire when compared to the proposed Project. Similar to the proposed Project, the Reduced Density Alternative would allow for development in two housing opportunity sites (S7-005 and S5-008) that are located within a Very High FHSZ. Therefore, the Reduced Density Alternative would be subject to a Fire Evacuation Analysis and Fire Protection Plan. Similar to the Project the Reduced Density Alternative does not require the installation or maintenance of infrastructure that may exacerbate fire risk or impact the environment. Similar to the Project, future development under the Reduced Density Alternative would be required to comply with the City's floodplain management regulations and prepare a WQMP which would reduce runoff from construction and identify BMPs for runoff controls



and treatments. Wildfire impacts under the Reduced Density Alternative would be similar to the Project and less than significant with mitigation incorporated.

6.4.12 CONCLUSION OF ENVIRONMENTAL ANALYSES

The Reduced Density Alternative would result in reduced impacts related to air quality, energy, greenhouse gas emissions, noise, public services, recreation, and transportation; compared to the Project. Similar impacts when compared to the proposed Project include biological resources, land use and planning, tribal cultural resources, and wildfire. The Reduced Density Alternative does not reduce any of the Project's significant and unavoidable impacts to less than significant.

6.4.13 ANALYSIS OF PROJECT OBJECTIVES

The Reduced Density Alternative does not satisfy all of the Project objectives. Specifically, this alternative would only partially meet the following objectives:

1. Implementation of the 2021-2029 Housing Element Implementation Programs to provide adequate housing sites and assist in the provision of affordable housing.
2. Allow the City of Yorba Linda to comply with State housing laws including compliance with the Regional Housing Needs Assessment (RHNA) targets.
3. Remove governmental constraints to housing investment.
4. Promote fair and equal housing opportunities.

Although this alternative could meet the target of residential units projected by the RHNA, it would significantly reduce the City's housing buffer, which is required to be approximately 10 percent. It is to the City's benefit that its residential site capacity exceeds the minimum RHNA required within each income category to help offset any sites that may be developed with fewer units or to a lesser affordability than assumed in the Housing Element sites inventory. A healthy buffer above the required RHNA therefore provides a "margin of safety" from having to rezone additional sites during the 2021-2029 planning period of the element.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should the No Project Alternative be the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining Alternatives.

Therefore, in accordance with the CEQA Guidelines, the Reduced Density Alternative is the Environmentally Superior Alternative. However, the Reduced Density Alternative would reduce, but



not eliminate, the Project's significant and unavoidable air quality impact, greenhouse gas emissions, and noise impacts. All other impacts would be less than or similar to those of the Project.

Although the Reduced Density Alternative would reduce the Project's significant environmental impacts, it would not eliminate the Project's significant and unavoidable impacts. In addition, the Reduced Density Alternative would only partially meet the Project's objectives.



7.0 REFERENCES

7.1 PERSONS CONTRIBUTING TO EIR PREPARATION

7.1.1 CITY OF YORBA LINDA

Community Development Department
David Brantley, Community Development Director
Nate Farnsworth, Planning Manager

Public Works
Tony L. Wang, PE, TE, PTOE, Traffic Engineering Manager
Jamie Lai, Public Works Director/City Engineer

7.1.2 T&B PLANNING, INC.

Nicole Morse, Esq., Principal

Tracy Chu, Environmental Analyst

Justin Nguyen, Environmental Analyst

Jamie Hamilton, JD, Environmental Compliance Analyst

Michael Allocco, GIS Specialist

7.1.3 URBAN CROSSROADS

Haseeb Qureshi, Principal

Ali Dadabhoy, Assistant Analyst

Bill Lawson, PE, INCE

Charlene So, Associate Principal

Aric Evatt, President

Alexander So, Senior Associate



7.2 DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this PEIR and are incorporated by reference within this PEIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public upon request from City of Yorba Linda, Planning Department, 4845 Casa Loma Ave, Yorba Linda, CA 92886, (714) 961-7130; or at the location listed below.

<i>Cited As:</i>	<i>Citation:</i>
C2ES, 2015	Center for Climate and Energy Solutions (C2ES). Outcomes of the U.N. Climate Change Conference in Paris. 2015. Available: https://www.c2es.org/wp-content/uploads/2015/12/outcomes-of-the-u-n-climate-change-conference-in-paris.pdf
California Legislative Information, n.d.	California Legislative Information. SB-350 Clean Energy and Pollution Reduction Act of 2015. n.d. Available: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB350
California Legislative Information, n.d.	California Legislative Information. HSC 7050.5. n.d. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=7050.5
California Legislative Information, 2005	California Legislative Information. PR Code 42911. 2005. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=42911
California ISO, n.d.	California Department of Resources Recycling and Recovery (CalRecycle). Olinda Alpha Landfill (30-AB-0035). 2022. California Independent Service Operator (ISO). Understanding the ISO. n.d. Available: http://www.caiso.com/about/Pages/OurBusiness/Default.aspx
CalRecycle, 2020	Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093
Caltrans, 2020	California Department of Transportation (Caltrans). California Road System – Functional Classification. 2020. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=026e830c914c495797c969a3e5668538
CAPCOA, 2016	California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model. 2016. Available: https://www.caleemod.com/
CARB, n.d.	California Air Resources Board (CARB). Truck and Bus Regulation. n.d. Available: https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about
CARB, n.d.	California Air Resources Board (CARB). Community Air Protection Program. n.d. Available: https://ww2.arb.ca.gov/capp/about
CARB, 2012	California Air Resources Board (CARB). Air Quality and Transportation Planning. June 27, 2012. Available: https://www.arb.ca.gov/planning/planning.htm



- Cited As:*** ***Citation:***
- CARB, 2021 California Air Resources Board (CARB). Advanced Clean Trucks Fact Sheet. August 20, 2021. Available: <https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet>
- CBC, 2019 California Building Code (CBC), 2019. California Building Code Chapter 7A. 2019. Available: https://up.codes/viewer/california/ibc-2018/chapter/new_7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#new_7A
- CDFW, 2019 California Department of Fish and Wildlife. California Natural Community Conservation Plans. April 2019. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>
- CDFW, n.d. CDFW. California Endangered Species Act (CESA) Permits. Available: <https://www.wildlife.ca.gov/Conservation/CESA>
- CDFW, n.d. CDFW. California Laws Protecting Native Plants. Available: <https://www.wildlife.ca.gov/Conservation/Plants/Laws>
- CDFW, n.d. CDFW. Lake and Streambed Alteration Program. Available: <https://www.wildlife.ca.gov/conservation/lisa>
- CDFW, n.d. CDFW. Natural Community Conservation Planning (NCCP). Available: <https://www.wildlife.ca.gov/conservation/planning/nccp>
- CDE, 2022 California Department of Education (CDE). 2021-2022 Enrollment by Ethnicity and Grade Placentia-Yorba Linda Unified Report (30-66647). 2022. Available: <https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=3066647&aggllevel=district&year=2021-22>
- CEC, n.d. California Energy Commission (CEC). 2020 Total System Electric Generation. n.d. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation>
- CEC, n.d. California Energy Commission (CEC). Integrated Energy Policy Report. n.d. Available: <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report>
- CEC, n.d. California Energy Commission (CEC). Building Energy Efficiency Standards – Title 24. n.d. Available: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards>
- CEC, n.d. California Energy Commission (CEC). Renewable Portfolio Standard -RPS. n.d. Available: <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard>
- CEC, 2013 California Energy Commission (CEC). 2013 Integrated Energy Policy Report. 2013. Available: <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report>
- CEC, 2017 California Energy Commission (CEC). Transportation Energy Demand Forecast, 2018-2030. 2017. Available: <https://efiling.energy.ca.gov/getdocument.aspx?tn=221893>
- CEC, 2019 California Energy Commission (CEC). 2018 Power Content Label. July 2019. Available: https://www.energy.ca.gov/sites/default/files/2020-01/2018_PCL_Southern_California_Edison.pdf
- City of Yorba Linda, 2016a City of Yorba Linda. Yorba Linda General Plan. October, 2016. Available: <https://www.yorbalindaca.gov/DocumentCenter/View/475>



- Cited As:*** ***Citation:***
- City of Yorba Linda, 2016b City of Yorba Linda. Yorba Linda General Plan DEIR. May, 2016. Available: <https://www.yorbalindaca.gov/DocumentCenter/View/510/Yorba-Linda-2016-General-Plan-DEIR-PDF?bidId=>
- City of Yorba Linda, 2019 City of Yorba Linda. Zoning Map. 2019. Available: <https://www.yorbalindaca.gov/DocumentCenter/View/466/City-of-Yorba-Linda-Zoning-Map-PDF>
- City of Yorba Linda, 2022 City of Yorba Linda. 2021-2029 Housing Element. 2022. Available: https://www.ylhousingelementupdate.com/files/ugd/b90adb_e889ac167f4a4d029cea6d46668efe8c.pdf
- City of Yorba Linda, 2022. City of Yorba Linda. Yorba Linda Municipal Code. March, 2022. Available: https://library.qcode.us/lib/yorba_linda_ca/pub/municipal_code
- CNRA, 2019 California Natural Resources Agency (CNRA). CEQA Article 5. 2019. Available: https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf
- CPUC, n.d. California Public Utilities Commission (CPUC). Natural Gas and California. n.d. Available: <https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california>
- Davis Demographics & Planning, Inc., 2020 Davis Demographics & Planning, Inc. Demographic Report of 7-Year Student Projections By Residence. February 27, 2020. Available: https://www.orangeusd.org/uploaded/photos/Davis_Demographics-Orange_USD_Fall_2019_-20_FINAL_Report.pdf
- DOC, 2018 California Department of Conservation (DOC). California Important Farmland Finder. 2018. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/>
- DOC, 2022 California Department of Conservation (DOC). Well Finder. 2022. Available: <https://maps.conservation.ca.gov/doggr/wellfinder/#/-117.81646/33.90118/17>
- DOF, 2021 State of California, Department of Finance (DOF), 2021. E-5 2021 Population and Housing Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. May, 2021. Available: <https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2021/>
- DOE, n.d. U.S. Department of Energy. California Transportation Data for Alternative Fuels and Vehicles. n.d. Available: <https://afdc.energy.gov/states/ca>
- DMV, 2020 Department of Motor Vehicles (DMV). State of California DMV Statistics for Publication January Through December 2021. 2020. Available: <https://www.dmv.ca.gov/portal/file/departement-of-motor-vehicles-statistics-pdf/>
- EIA, n.d. U.S. Energy Information Agency (EIA). California Energy Consumption by End-Use Sector. n.d. Available: <https://www.eia.gov/state/?sid=CA#tabs-2>
- EIA, 2022a U.S. Energy Information Administration (EIA). California State Profile and Energy Estimates. March 17, 2022. Available: <https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures>



<i>Cited As:</i>	<i>Citation:</i>
EIA, 2022b	U.S. Energy Information Administration. California Analysis. March 17, 2022. Available: https://www.eia.gov/beta/states/states/ca/analysis
EPA, 2019	U.S. Environmental Protection Agency (EPA). CWA Section 401 Water Quality Certification. May 1, 2019. Available: https://www.epa.gov/cwa-401/clean-water-act-section-401-state-certification-water-quality
EPA, 2020a	U.S. Environmental Protection Agency (EPA). Summary of the Clean Air Act. August 6, 2020. Available: https://www.epa.gov/laws-regulations/summary-clean-air-act
EPA, 2020b	U.S. Environmental Protection Agency (EPA). 1990 Clean Air Act Amendment Summary: Title I. October 13, 2020. Available: https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-i
EPA, 2020c	U.S. Environmental Protection Agency (EPA). 1990 Clean Air Act Amendment Summary: Title II. October 13, 2020. Available: https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-ii
EPA, 2020d	U.S. Environmental Protection Agency (EPA). National Emission Standards for Hazardous Air Pollutants Compliance Monitoring. January 17, 2020. Available: https://www.epa.gov/compliance/national-emission-standards-hazardous-air-pollutants-compliance-monitoring
EPA, 2020e	U.S. Environmental Protection Agency (EPA). Summary of the Noise Control Act. July 31, 2019. Available: https://www.epa.gov/laws-regulations/summary-noise-control-act
EPA, n.d.	U.S. Environmental Protection Agency (EPA). 404 Regulatory Authority Fact Sheet. Available: https://www.epa.gov/sites/production/files/2015-03/documents/404_reg_authority_fact_sheet.pdf
FEMA, 2020	Federal Emergency Management Agency (FEMA). Executive Order 11990, Protection of Wetlands, 1977. July 28, 2020. Available: https://www.fema.gov/emergency-managers/practitioners/environmental-historic/laws/descriptions#11990
FEMA, 2009a	FEMA. National Flood Hazard Layer FIRMette - S4-503. December 3, 2009. Available: https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/j1682f7952da640fba0ef33ac2845bda9/scratch/FIRMETTE_946c2325-6585-4fe1-8a3f-457ae668a2ac.pdf
FEMA, 2009b	FEMA. National Flood Hazard Layer FIRMette - S6-015. December 3, 2009. Available: https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/j5f0339ac60a84a4394bad533b3eda587/scratch/FIRMETTE_7bc52bd3-642d-40ec-b381-e6bd4296bbee.pdf
FEMA, 2009c	FEMA. National Flood Hazard Layer FIRMette - S7-001. December 3, 2009. Available: https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/j486314f82b014470a1050f70e263b2dd/scratch/FIRMETTE_3b4246ac-afc3-443f-9118-00b32ccfb8eb.pdf
FHWA, n.d.	Federal Highway Administration (FHWA). ISTEAs. n.d. Available: https://www.fhwa.dot.gov/planning/public_involvement/archive/legislation/istea.cfm
FHWA, 2017	Federal Highway Administration (FHWA). Highway Traffic Noise. June 6, 2017. Available: https://www.fhwa.dot.gov/environment/noise/



- Cited As:*** ***Citation:***
- FRAP, 2020 Fire and Resource Assessment Program (FRAP). FHSZ Viewer. 2020. Available: <https://egis.fire.ca.gov/FHSZ/>
- FTA, 2018 Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment. September, 2018. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
- NOAA, n.d. National Oceanic and Atmospheric Administration (NOAA). American Indian Religious Freedom Act. n.d. Available: <https://coast.noaa.gov/data/Documents/OceanLawSearch/Summary%20of%20Law%20-%20American%20Indian%20Religious%20Freedom%20Act.pdf>
- NPS, 2016 National Park Service (NPS). The Native American Graves Protection and Repatriation Act (NAGPRA). 2016. Available: <https://www.nps.gov/archeology/tools/laws/nagpra.htm>
- NPS, 2018 NPS. Antiquities Act. 2018. Available: <https://www.nps.gov/archeology/sites/antiquities/about.htm>
- OAG, n.d. Office of the Attorney General (OAG). SB 1000 – Environmental Justice in Local Land Use Planning. n.d. Available: <https://oag.ca.gov/environment/sb1000>
- OCFA, 2008 Orange County Fire Authority (OCFA). After Action Report Freeway Complex Fire. November 15, 2008. Available: <https://www.ocfa.org/Uploads/Transparency/OCFA-AAR-Freeway%20Complex%20Fire.pdf>
- OCFA, 2021 OCFA. 2021 Statistical Annual Report. 2021. Available: <https://ocfa.org/Uploads/Transparency/OCFA%20Annual%20Report%202021.pdf>
- OCFA, 2021 OCFA. 2021 Unit Strategic Fire Plan. May 5, 2021. Available: https://osfm.fire.ca.gov/media/aevnhji1/2021_orc_fireplan.pdf
- OCFA, 2022 OCFA. Operations Division 4. 2022. Available: <https://ocfa.org/AboutUs/Departments/OperationsDirectory/Division4.aspx>
- OCSD, 2022 Orange County Sheriff’s Department (OCSD). North Operations. 2022. Available: <https://www.ocsheriff.gov/commands-divisions/patrol-operations-command/north-operations>
- OEHHA, 2017 Office of Environmental Health Hazard Assessment (OEHHA). SB 535 Disadvantaged Communities. 2017. Available: <https://oehha.ca.gov/calenviroscreen/sb535>
- OPR, 2005 Office of Planning and Research (OPR). Tribal Consultation Guidelines. November 14, 2005. Available: https://opr.ca.gov/docs/011414_Updated_Guidelines_922.pdf
- OPR, 2017 Office of Planning and Research (OPR). General Plan Guidelines. 2017. Available: https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf
- OPR, 2017b Office of Planning and Research (OPR). AB 52 and Tribal Cultural Resources in CEQA. June, 2017. Available: <http://nahc.ca.gov/wp-content/uploads/2017/06/Technical-Advisory-AB-52-and-Tribal-Cultural-Resources-in-CEQA.pdf>
- OPR, 2019 Office of Planning and Research (OPR). California Environmental Quality Act. 2019. Available: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf



<i>Cited As:</i>	<i>Citation:</i>
PYLUSD, 2016	Placentia-Yorba Linda Unified School District (PYLUSD). Residential Development School Fee Justification Study. March 28, 2016. Available: https://1.cdn.edl.io/wsAqc6Rtg9KeQv4OAGxJhfYh560zvAfEsoL0yUtowX8d0zgV.pdf
PYLUSD, 2022	Placentia-Yorba Linda Unified School District (PYLUSD). School Directory. 2022. Available: https://www.pylusd.org/apps/pages/index.jsp?uREC_ID=198842&type=d&pREC_ID=428701
SCAG, 2020a	Southern California Association of Governments (SCAG). Connect SoCal. Adopted: September 3, 2020. Available: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176
SCAG, 2020b	Southern California Association of Governments (SCAG). Southern California Association of Governments, Demographics and Growth Forecast. September 3, 2020. Available: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579
SCAQMD, n.d.	South Coast Air Quality Management District (SCAQMD). Authority. n.d. Available: https://www.aqmd.gov/nav/about/authority
State of California, 2012.	State of California. Frequently Asked Questions. 2012. Available: https://www.firepreventionfee.org/sra_faqs/
SWRCB, 2014	California State Water Resources Control Board (SWRCB). Federal, State and Local Laws, Policy and Regulations. June 23, 2014. Available: http://waterboards.ca.gov/water_issues/programs/nps/encyclopedia/0a_laws_policy.shtml
US Census, 2010	US Census. 2010 Census-Urbanized Area Reference Map: Los Angeles—Long Beach—Anaheim, CA. 2010. Available: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua51445_los_angeles--long_beach--anaheim_ca/DC10UA51445.pdf
Urban Crossroads, 2022a	Urban Crossroads. Air Quality Analysis. May 27, 2022. <i>Technical Appendix B</i>
Urban Crossroads, 2022b	Urban Crossroads. Energy Analysis. May 27, 2022. <i>Technical Appendix C</i>
Urban Crossroads, 2022c	Urban Crossroads. Greenhouse Gas Emissions Analysis. May 27, 2022. <i>Technical Appendix D</i>
Urban Crossroads, 2022d	Urban Crossroads. Noise Impact Analysis. May 31, 2022. <i>Technical Appendix E</i>
Urban Crossroads, 2022e	Urban Crossroads. Traffic Impact Analysis. May 27, 2022. <i>Technical Appendix G</i>



<i>Cited As:</i>	<i>Citation:</i>
Urban Crossroads, 2022f	Urban Crossroads. Vehicle Miles Traveled (VMT) Analysis. May 27, 2022. <i>Technical Appendix H</i>
USFWS, 2020a	United States Fish and Wildlife Service (USFWS). <i>Migratory Bird Treaty Act</i> . April 16, 2020. Available: https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php
USFWS, 2020b	United States Fish and Wildlife Service (USFWS). National Wetlands Inventory. 2020. Available: https://www.fws.gov/wetlands/data/mapper.html
USFWS, 2017	USFWS. ESA Basics. 2017. Available: https://www.dnr.wa.gov/publications/bc_tfw_efishingfed_20150130.pdf
Yorba Linda Public Library, 2022	Yorba Linda Public Library. 2022. Available: https://www.facebook.com/yorbalindapubliclibrary/
YLWD, 2021	Yorba Linda Water District (YLWD). 2020 Urban Water Management Plan. June, 2021. Available: https://www.dropbox.com/s/22j5247c66qvg3w/2020%20Urban%20Water%20Management%20Plan%20%28June%202021%29.pdf?dl=1



7.3 PERSONS CONSULTED/WRITTEN OR VERBAL COMMUNICATION

A. Public Service Correspondence

Orange County Sheriff's Department
Captain Jose Walehwa, Chief of Police Services

Yorba Linda Public Library
Carrie Lixey, Library Director

B. Native American Tribes

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson

Ewiiapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
Michael Garcia, Vice Chairperson

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Sala, Chairperson

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson

Gabrielino/Tongva Nation
Sandonne Goad, Chairperson

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
Christina Conley, Tribal Consultant and Administrator

Gabrielino-Tongva Tribe
Charles Alvarez

Juaneno Band of Mission Indians Acjachemen Nation - Belardes
Matias Belardes, Chairperson

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
Javaughn Miller, Tribal Administrator

Manzanita Band of Kumeyaay Nation
Angela Elliot Santos, Chairperson



Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson

Pala Band of Mission Indians
Shadta Gaughen, Tribal Historic Preservation Officer

Pechanga Band of Indians
Mark Macarro, Chairperson

Rincon Band of Luiseno Indians
Bo Mazzetti, Chairperson
Cheryl Madrigal, Tribal Historic, Preservation Officer

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson



Appendix G Traffic Impact Analysis

YORBA LINDA HOUSING ELEMENT & GENERAL PLAN UPDATE

TRAFFIC ANALYSIS

PREPARED BY: Charlene So | cso@urbanxroads.com
Aric Evatt | aevatt@urbanxroads.com



TABLE OF CONTENTS

Table of Contents	ii
Appendices.....	iv
List of Exhibits.....	v
List of Tables	vi
List of Abbreviated Terms	vii
1 Executive Summary.....	1
1.1 Introduction.....	1
1.2 Project Related Traffic Deficiencies and Improvements.....	1
1.3 Proposed Site Access and Circulation Recommendations	4
1.4 Analysis Scenarios	4
1.5 Study Area	4
1.6 Deficiencies	6
1.7 Recommendations	8
2 Introduction.....	11
2.1 Project Objectives	11
2.2 Analysis Overview	12
3 Methodologies	17
3.1 Level of Service.....	17
3.2 Intersection Capacity Analysis.....	17
3.3 Traffic Signal Warrant Analysis Methodology	20
3.4 Minimum Acceptable Levels of Service (LOS).....	21
3.5 Deficiency Criteria	22
4 Area Conditions	23
4.1 Existing Circulation Network	23
4.2 City of Yorba Linda General Plan Circulation Element	23
4.3 Bicycle, Equestrian, & Pedestrian Facilities	29
4.4 Transit Service.....	29
4.5 Existing (2022) Traffic Counts	29
4.6 Intersection Operations Analysis	34
4.7 Traffic Signal Warrants Analysis	35
5 Horizon Year (2045) Traffic Conditions.....	37
5.1 Volume Development for Horizon Year	37
5.2 Without Project Traffic Volume Forecasts	38
5.3 With Project Traffic Volume Forecasts	38

5.4 Intersection Operations Analysis 42
5.5 Traffic Signal Warrants Analysis 42
5.6 Long-Term Deficiencies and Recommended Improvements 42
6 Local and Regional Funding Mechanisms 47
6.1 City of Yorba Linda Traffic Impact Fee Program 47
6.2 Fair Share Contribution..... 48
7 Vehicle Miles Traveled 49
8 References..... 51

APPENDICES

Appendix 1.1: Approved Traffic Study Scoping Agreement

Appendix 4.1: Traffic Counts – March 2022

Appendix 4.2: Existing (2022) Conditions Intersection Operations Analysis Worksheets

Appendix 4.3: Existing (2022) Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 5.1: Post Processing Worksheets for Horizon Year (2045) Without Project

Appendix 5.2: Post Processing Worksheets for Horizon Year (2045) With Project

Appendix 5.3: Horizon Year (2045) Without Project Conditions Intersection Operations Analysis Worksheets

Appendix 5.4: Horizon Year (2045) With Project Conditions Intersection Operations Analysis Worksheets

Appendix 5.5: Horizon Year (2045) With Project Conditions Intersection Operations Analysis Worksheets With Improvements

LIST OF EXHIBITS

Exhibit 1-1: housing element site Location Map	2
Exhibit 1-2: Study Area.....	5
Exhibit 2-1: Potential Multifamily Sites Location Map	14
Exhibit 2-2: Detailed Potential Multifamily Housing Sites.....	15
Exhibit 4-1: Existing Number of Through Lanes and Intersection Controls	25
Exhibit 4-1: Existing Number of Through Lanes and Intersection Controls (continued).....	26
Exhibit 4-2: City of Yorba Linda General Plan Circulation Element.....	27
Exhibit 4-3: City of Yorba Linda General Plan Roadway Cross-Sections	28
Exhibit 4-4: City of Yorba Linda Bicycle Facilities.....	30
Exhibit 4-5: Existing Pedestrian Facilities	31
Exhibit 4-6: Existing Transit Routes.....	32
Exhibit 4-7: Existing (2022) Traffic Volumes	33
Exhibit 5-1: Horizon Year (2045) Without Project Traffic Volumes	39
Exhibit 5-2: Horizon Year (2045) With Project Traffic Volumes	40
Exhibit 5-3: Project Only Traffic Volumes.....	41
Exhibit 5-4: Horizon Year (2045) Intersection Improvements	46

LIST OF TABLES

Table 1-1: Summary of Housing Element Units PER Site	3
Table 1-2: Intersection Analysis Locations	6
Table 1-3: Summary of LOS.....	7
Table 1-4: Summary of Improvements.....	9
Table 2-1: Sites for Potential Rezoning to Multifamily.....	13
Table 3-1: Signalized Intersection LOS Thresholds with ICU	18
Table 3-2: Signalized Intersection LOS Thresholds with HCM.....	19
Table 3-3: Unsignalized Intersection LOS Thresholds	20
Table 3-4: Traffic Signal Warrant Analysis Locations	21
Table 4-1: Intersection Analysis for Existing (2022) Conditions	34
Table 5-1: Intersection Analysis for Horizon Year (2045) Conditions	44
Table 5-2: Intersection Analysis for Horizon Year (2045) Conditions With Improvements	45
Table 6-1: Current Traffic Impact Fees	47
Table 6-2: Project Fair Share Calculations.....	48

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
PHF	Peak Hour Factor
Project	Yorba Linda Housing Element & General Plan Update
SCAG	Southern California Association of Governments
sf	Square Feet
TA	Traffic Analysis
TIF	Traffic Impact Fee
v/c	Volume to Capacity
vphgpl	Vehicles per Hour Green per Lane
WP	With Project

This page intentionally left blank

1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Yorba Linda 2021 – 2029 Final Housing Element traffic analysis (TA) will analyze and identify potential traffic-related deficiencies resulting from the rezoning and revised General Plan land use development assumptions necessary to address the City of Yorba Linda's regional housing needs assessment (RHNA) allocation. The Housing Element proposes a rezoning program of 27 vacant or underutilized sites for multifamily residential use at densities of 10 to 35 units to the acre. The Yorba Linda 2021 – 2029 Final Housing Element will revise the General Plan land use and development intensities for the 27 sites to accommodate approximately 2,100 additional dwelling units for a total of 2,410 dwelling units (including the existing zoning).

The traffic analysis will evaluate the proposed development intensities expected for the 27 sites and assess the potential traffic deficiencies that result from the implementation of the rezoning and changes to land use. Exhibit 1-1 identifies the locations of each of the Housing Element sites summarized on Table 1-1. The City approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

1.2 PROJECT RELATED TRAFFIC DEFICENCIES AND IMPROVEMENTS

Based on either Highway Capacity Manual (HCM) 6th Edition or Intersection Capacity Utilization (ICU) methodologies established by the Cities of Yorba Linda, Placentia and Anaheim, the following intersections are anticipated to operate at a deficient level of service (LOS) during one or both peak hours:

- Rose Drive & Imperial Highway (#1)
- Prospect Avenue & Imperial Highway (#2)
- Imperial Highway & Yorba Linda Boulevard (#5)
- Lakeview Avenue & Buena Vista Avenue (#6)
- Kellogg Drive & Imperial Highway EB Ramps (#7)
- Weir Canyon Road/Yorba Linda Boulevard & Savi Ranch Parkway (#16)

Improvements have been recommended at the study area intersections which are anticipated to operate at a deficient LOS. Improvements identified are the minimum needed to achieve acceptable peak hour operations.

EXHIBIT 1-1: HOUSING ELEMENT SITE LOCATION MAP

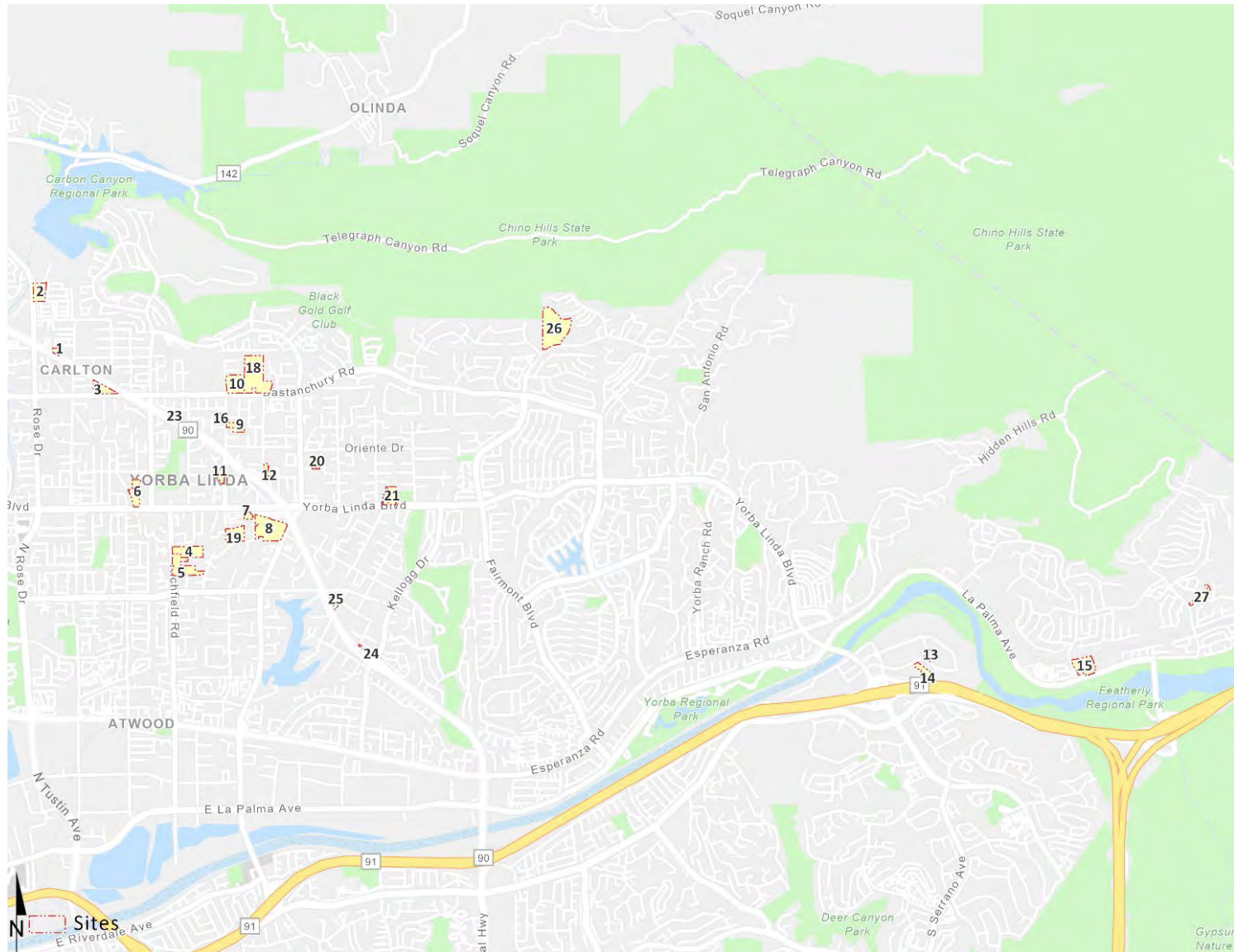


TABLE 1-1: SUMMARY OF HOUSING ELEMENT UNITS PER SITE

#	HE Site ID	Site	Current Zoning	Proposed Zoning	Acres	Total Net Unit Potential
1	S1-021	W. of 16951 Imperial Highway	CG	Commercial Mixed Use Overlay	1.76	62
2	S1-200	SEC Rose Dr. & Blake Rd.	RE	RM-20 w/ Affordable Overlay	5.94	208
3	S2-008	17151 Bastanchury Rd.	RE	Congregational Land Overlay	4.92	60
4	S3-012	5320 Richfield Rd.	RU	Congregational Land Overlay	9.48	55
5	S3-207	5300-5392 Richfield Rd.	RU	RM-20 w/ Affordable Overlay	9.7	340
6	S2-013	4861 Liverpool St.	RU	Congregational Land Overlay	6.2	40
7	S3-074	18132 Yorba Linda Bl.	CG	RM-20 w/ Affordable Overlay	0.42	15
8	S3-024	Friends Church Overflow Parking	RE	Congregational Land Overlay	17.45	48
9	S3-033	4382 Eureka Av.	RS	Congregational Land Overlay	3.88	30
10	S3-210	18111 Bastanchury Rd.	PD-26	Congregational Land Overlay	9.23	105
11	S3-082	4791 & 4811 Eureka Av.	CG	RM-20 w/ Affordable Overlay	1.75	61
12	S4-075	4742 Plumosa Dr.	CG	RM-20 w/ Affordable Overlay	1.62	57
13	S6-015	22722 Old Canal Rd.	PD	Affordable Housing Overlay	2.56	89
14	S6-020	22711 Oak Crest Circle	PD	RM-20 w/ Affordable Housing Overlay	10.35	143
15	S7-001	Bryant Ranch Shopping Center	CG	Commercial Mixed Use Overlay	9.15	320
16	S3-034	4341 Eureka Av.	RS	RM	2.19	22
18	S3-203	18101-18251 Bastanchury Rd.	PD	PD	22.83	228
19	S3-205A	5225 & 5227 Highland Av.	RE	RM	7.08	71
20	S4-200	18597-18602 Altrudy Ln.	RS	RM-20	2	40
21	S4-204A	19045 Yorba Linda Bl.	RE	Congregational Land Overlay	1.85	17
	S4-204B	19081-19111 Yorba Linda Bl.	RE	RM-20	3.9	78
23	S3-211	17651 Imperial Highway	RS	RM	2.32	23
24	S4-053	SWC of Kellogg Dr. & Grandview Av.	RE	RM	0.98	10
25	S4-060	5541 S. Ohio St.	RE	RM	0.96	10
	S4-201	5531 S. Ohio St.	RE	RM	1.82	18
26	S5-008	Fairmont Bl.	PD	RM	23.01	230
27	S7-005	NEC of Camino del Bryant & Meadowland	RU	RM	3.06	30
TOTAL					166.41	2,410

1.3 PROPOSED SITE ACCESS AND CIRCULATION RECOMMENDATIONS

Given the number of Housing Element sites and lack of detailed site plans available, a detailed review of site access was not evaluated as part of this analysis. However, it is anticipated that implementing projects on each of the Housing Element sites will need to conduct focused traffic analyses that meet the City's standards which will provide a review of potential intersection operational deficiencies in conjunction with a detailed review of site access.

1.4 ANALYSIS SCENARIOS

For the purposes of this traffic analysis, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2022) Conditions
- Horizon Year (2045) Without Project Conditions
- Horizon Year (2045) With Project Conditions

All study area intersections will be evaluated using either ICU or HCM methodologies, depending on the types of intersections and its jurisdiction (for a detailed discussion see Section 3.2 *Intersection Capacity Analysis*).

1.4.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. For a detailed discussion on the existing traffic counts, see Section 4.5 *Existing (2022) Traffic Counts*.

1.4.2 HORIZON YEAR (2045) CONDITIONS

Traffic projections for Horizon Year (2045) conditions were derived from the Orange County Transportation Analysis Model (OCTAM) using accepted procedures for model forecast refinement and smoothing. The Horizon Year conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs can accommodate the long-range cumulative traffic at the target LOS identified in the City of Yorba Linda (lead agency) General Plan. Each of the applicable transportation fee programs are discussed in more detail in Section 6 *Local and Regional Funding Mechanisms*.

1.5 STUDY AREA

To ensure that this TA satisfies the City of Yorba Linda's traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by City of Yorba Linda staff prior to the preparation of this report. This agreement provides an outline of the Project study area and analysis methodology. The agreement approved by the City is included in Appendix 1.1 of this TA. The 19 study area intersections shown on Exhibit 1-2 and listed in Table 1-2 were selected for evaluation in this TA based on consultation with City of Yorba Linda staff.

EXHIBIT 1-2: STUDY AREA

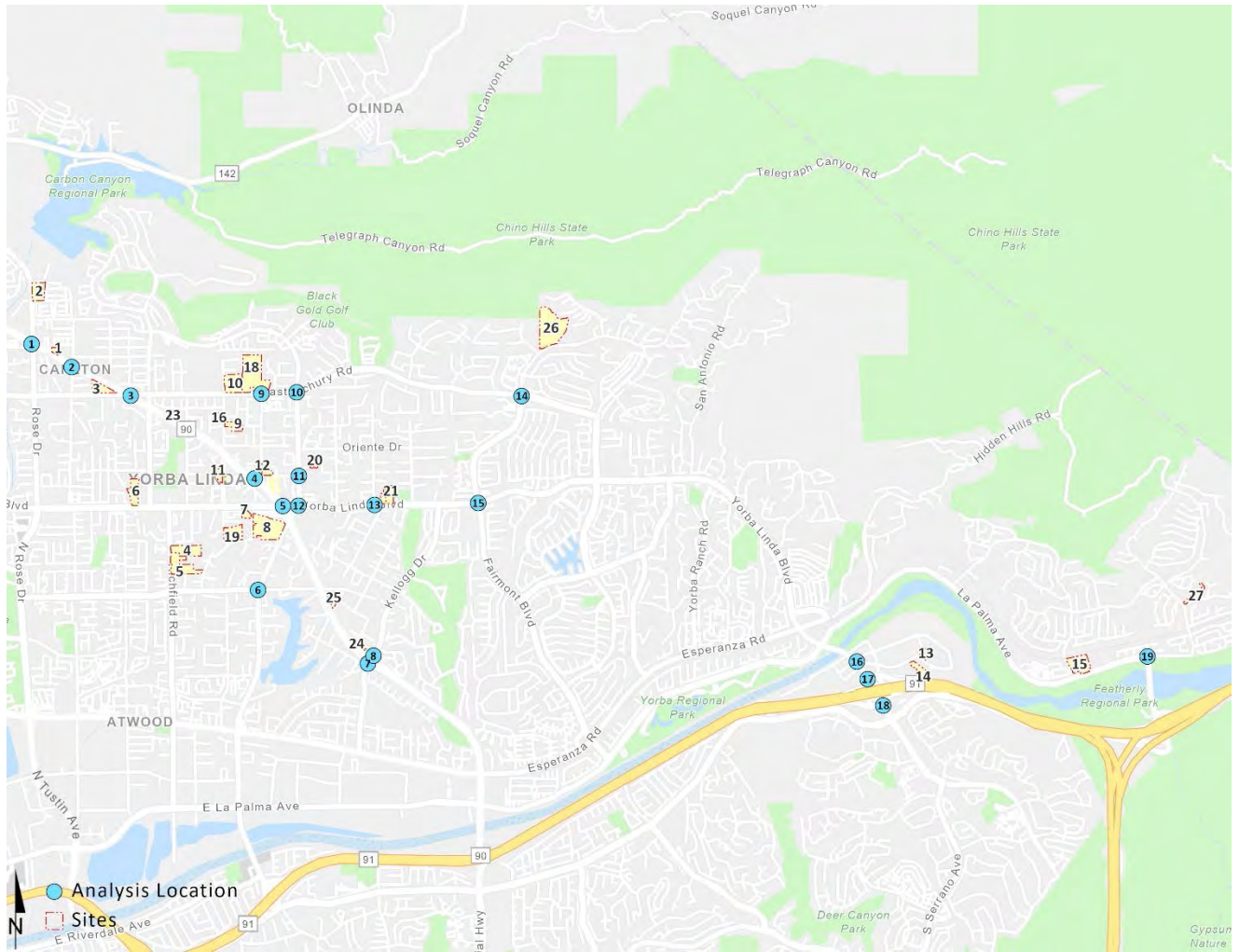


TABLE 1-2: INTERSECTION ANALYSIS LOCATIONS

#	Intersections	Jurisdiction
1	Rose Dr. & Imperial Highway	Placentia
2	Prospect Av. & Imperial Highway	Placentia/CalTrans
3	Imperial Highway & Bastanchury Rd.	Yorba Linda
4	Imperial Highway & Lemon Dr.	Yorba Linda
5	Imperial Highway & Yorba Linda Bl.	Yorba Linda
6	Lakeview Av. & Buena Vista Av.	Yorba Linda
7	Imperial Highway EB Ramps & Kellogg Dr.	Anaheim
8	Imperial Highway NB Ramps & Kellogg Dr.	Yorba Linda/CalTrans
9	Plumosa Dr. & Bastanchury Rd.	Yorba Linda
10	Lakeview Av. & Bastanchury Rd.	Yorba Linda
11	Lakeview Av. & Lemon Dr.	Yorba Linda
12	Lakeview Av. & Yorba Linda Bl.	Yorba Linda
13	Ohio St. & Yorba Linda Bl.	Yorba Linda
14	Fairmont Bl. & Bastanchury Rd.	Yorba Linda
15	Fairmont Bl. & Yorba Linda Bl.	Yorba Linda
16	Weir Canyon Road/Yorba Linda Bl. & Savi Ranch Pkwy.	Yorba Linda
17	Yorba Linda Bl. & SR-91 WB Ramps	Anaheim/CalTrans
18	Yorba Linda Bl. & SR-91 EB Ramps	Yorba Linda/CalTrans
19	Gypsum Canyon Rd. & La Palma Av.	Yorba Linda

1.6 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 3 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *Horizon Year (2045) Traffic Conditions* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Table 1-3.

1.6.1 EXISTING (2022) CONDITIONS

The following study area intersections are currently operating at an unacceptable LOS during the weekday AM and PM peak hours under Existing traffic conditions:

- Lakeview Avenue & Buena Vista Avenue (#6) – LOS F AM and LOS E PM peak hours
- Kellogg Drive & Imperial Highway EB Ramps (#7) – LOS F AM and PM peak hours

1.6.2 HORIZON YEAR (2045) CONDITIONS

The following study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2045) Without Project traffic conditions:

- Rose Drive & Imperial Highway (#1) – LOS E PM peak hour only
- Prospect Avenue & Imperial Highway (#2) – LOS E AM peak hour only
- Lakeview Avenue & Buena Vista Avenue (#6) – LOS F AM PM peak hours
- Kellogg Drive & Imperial Highway EB Ramps (#7) – LOS F AM and PM peak hours
- Weir Canyon Road/Yorba Lind Boulevard & Savi Ranch Parkway (#16) – LOS F PM peak hour only

The following additional intersection is anticipated to operate at an unacceptable LOS with the addition of Project traffic in addition to those listed above for Horizon Year (2045) Without Project traffic conditions:

- Imperial Highway & Yorba Linda Boulevard (#5) – LOS E PM peak hour only

TABLE 1-3: SUMMARY OF LOS

#	Intersection	Existing (2022)		2045 Without Project		2045 With Project	
		AM	PM	AM	PM	AM	PM
1	Rose Dr. & Imperial Highway	●	●	●	●	●	●
2	Prospect Av. & Imperial Highway	●	●	●	●	●	●
3	Imperial Highway & Bastanchury Rd.	●	●	●	●	●	●
4	Imperial Highway & Lemon Dr.	●	●	●	●	●	●
5	Imperial Highway & Yorba Linda Bl.	●	●	●	●	●	●
6	Lakeview Av. & Buena Vista Av.	●	●	●	●	●	●
7	Kellogg Dr. & Imperial Highway EB Ramps	●	●	●	●	●	●
8	Kellogg Dr. & Imperial Highway WB Ramps	●	●	●	●	●	●
9	Plumosa Dr. & Bastanchury Rd.	●	●	●	●	●	●
10	Lakeview Av. & Bastanchury Rd.	●	●	●	●	●	●
11	Lakeview Av. & Lemon Dr.	●	●	●	●	●	●
12	Lakeview Av. & Yorba Linda Bl.	●	●	●	●	●	●
13	Ohio St. & Yorba Linda Bl.	●	●	●	●	●	●
14	Fairmont Bl. & Bastanchury Rd.	●	●	●	●	●	●
15	Fairmont Bl. & Yorba Linda Bl.	●	●	●	●	●	●
16	Weir Canyon Rd. & Savi Ranch Pkwy.	●	●	●	●	●	●
17	Weir Canyon Rd. & SR-91 WB Ramps	●	●	●	●	●	●
18	Weir Canyon Rd. & SR-91 EB Ramps	●	●	●	●	●	●
19	Gypsum Canyon Rd. & La Palma Av.	●	●	●	●	●	●

● LOS=A-D
● LOS=E
● LOS=F

1.7 RECOMMENDATIONS

The improvements needed to address the cumulative deficiencies identified under Horizon Year (2045) With Project traffic conditions are summarized in Table 1-4. For those improvements listed in Table 1-4 not constructed as part of the Project, the Project's contributions towards deficient intersections are fulfilled through payment of fair share and/or fees for the applicable pre-existing fee programs (see Section 6 *Local and Regional Funding Mechanisms*). Although Table 1-4 provides the project's fair share percentage towards each mitigation measure, the cost and scope of the improvements will be developed in conjunction with the Traffic Impact Fee (TIF) Update.

TABLE 1-4: SUMMARY OF IMPROVEMENTS

#	Intersection Location	Jurisdiction	Horizon Year (2045) With Project	Improvements in TIF? ¹	Project Responsibility ²	Fair Share % ³
1	Rose Dr. & Imperial Highway	Placentia	- Modify the TS to implement split phasings on NB/SB	No	Fair Share	23.8%
5	Imperial Highway & Yorba Linda Bl.	Yorba Linda	- Modify the TS to implement split phasings on EB/WB	No	Fair Share	11.3%
6	Lakeview Av. & Buena Vista Av.	Yorba Linda	Install a traffic signal	Yes	None	34.1%
7	Kellogg Dr. & Imperial Highway EB	Anaheim	Install a traffic signal	No	Fair Share	82.3%
16	Weir Canyon Rd. & Savi Ranch Pkwy.	Yorba Linda	- Add a 3rd WB left turn lane - Modify the TS to implement overlap phasing on WB right turn	No No	None (CIP) Fair Share	25.5%

¹ Improvements included in City's Traffic Impact Fee (TIF) fee programs.

² Identifies the Project's responsibility to construct an improvement or contribute fair share towards the implementation of the improvements shown.

³ Program improvements constructed by project may be eligible for fee credit, at discretion of the City. See Table 6-2 for Fair Share Calculations.

This page intentionally left blank

2 INTRODUCTION

2.1 PROJECT OBJECTIVES

The Yorba Linda 2021 – 2029 Final Housing Element has been prepared by the City in compliance with the update cycle of jurisdictions within the Southern California Association of Governments (SCAG) region to address the legal mandate that requires each local government to adequately plan to meet the existing and projected housing needs of all economic segments of the local community. The overarching goals of the Yorba Linda 2021-2029 Final Housing Element includes:

1. Goal 1 (Conserve and Improve Existing Housing): Maintain and enhance the quality and affordability of existing housing and residential neighborhoods. This Goal includes policies that focus on housing design principals, property and housing conditions, multifamily housing acquisition and improvement, rental assistance, protection of existing affordable housing, and tenant protections.
2. Goal 2 (Provision of Affordable Housing): Assist in development and provision of affordable housing. The policies under this goal focus on housing diversity, affordable housing incentives, financial resources, public/private partnerships, homeownership assistance, housing sustainability, and affordable housing education and support.
3. Goal 3 (Adequate Housing Sites): Provide adequate housing sites to accommodate regional housing needs and achieve a variety and diversity of housing. This Goal includes policies that focus on offering a variety of housing choices, mixed use, repurposing obsolete commercial, affordable housing overlay, housing on land owned by religious institutions, town center, accessory dwelling units, and future annexations.
4. Goal 4 (Remove Governmental Constraints): Reduce governmental constraints to housing production and improvement while maintaining community character. The policies under this goal focus on providing flexible development standards, objective standards, regulatory incentives for affordable housing, and efficient development processing.
5. Goal 5 (Equal Housing Opportunities and Special Needs): Promote equal housing opportunities for all residential, including Yorba Linda's special needs populations. This Goal includes policies that focus on fair housing, housing for persons with disabilities, housing for persons with development disabilities, housing options for seniors, and homeless housing and services.

This traffic analysis (TA) will analyze and identify potential traffic-related deficiencies resulting from the rezoning and revised General Plan land use development assumptions necessary to address the City of Yorba Linda's regional housing needs assessment (RHNA) allocation. The Housing Element proposes a rezoning program of 27 vacant or underutilized sites for multifamily residential use at densities of 10 to 35 units to the acre. The Yorba Linda 2021 – 2029 Final Housing Element will revise the General Plan land use and development intensities for the 27 sites to accommodate approximately 2,100 additional dwelling units for a total of 2,410 dwelling units (including the existing zoning) as shown in Table 2-1.

The Without Project scenario represents the currently adopted land use intensities based on the City of Yorba Linda's 2016 General Plan Update (last comprehensive update in 2016 and reflected in the Orange County Transportation Analysis Model). The With Project scenario reflects buildout of the proposed Final Housing Element (i.e., rezoning of the 27 vacant or underutilized sites to multifamily residential use). Exhibit 2-1 illustrates the locations of the Yorba Linda Housing Element sites from a regional perspective. Exhibit 2-2 illustrates the detailed locations of the 27 housing sites which are proposed to be rezoned.

2.2 ANALYSIS OVERVIEW

The study area for this TA is comprised of the roadways and intersections in the immediate Project area and includes those locations that could potentially be affected by Project traffic (e.g., located in close proximity to one or more of the rezone sites). The specific intersections identified for analysis includes all facilities where peak hour intersection volume-to-capacity (v/c) ratios could increase by more than one percent as a result of the Project. This is the deficiency threshold designated by the City of Yorba Linda for use in traffic studies.

The TA evaluates existing and long-range traffic conditions for the following scenarios:

- Existing (2022) Conditions – Existing volumes obtained from recent traffic counts (2022) and existing traffic controls and lane configurations
- Horizon Year (2045) Without Project – Traffic volumes and transportation system representing the area-wide growth anticipated between 2016 and 2045 based on currently adopted City of Yorba Linda General Plan land use assumptions plus reasonably foreseeable development projects as provided by the City of Yorba Linda.
- Horizon Year (2045) With Project – 2045 conditions with the Final Housing Element land use assumptions.

TABLE 2-1: SITES FOR POTENTIAL REZONING TO MULTIFAMILY

#	HE Site ID	Site	Current Zoning	Proposed Zoning	Acres	Total Net Unit Potential
1	S1-021	W. of 16951 Imperial Highway	CG	Commercial Mixed Use Overlay	1.76	62
2	S1-200	SEC Rose Dr. & Blake Rd.	RE	RM-20 w/ Affordable Overlay	5.94	208
3	S2-008	17151 Bastanchury Rd.	RE	Congregational Land Overlay	4.92	60
4	S3-012	5320 Richfield Rd.	RU	Congregational Land Overlay	9.48	55
5	S3-207	5300-5392 Richfield Rd.	RU	RM-20 w/ Affordable Overlay	9.7	340
6	S2-013	4861 Liverpool St.	RU	Congregational Land Overlay	6.2	40
7	S3-074	18132 Yorba Linda Bl.	CG	RM-20 w/ Affordable Overlay	0.42	15
8	S3-024	Friends Church Overflow Parking	RE	Congregational Land Overlay	17.45	48
9	S3-033	4382 Eureka Av.	RS	Congregational Land Overlay	3.88	30
10	S3-210	18111 Bastanchury Rd.	PD-26	Congregational Land Overlay	9.23	105
11	S3-082	4791 & 4811 Eureka Av.	CG	RM-20 w/ Affordable Overlay	1.75	61
12	S4-075	4742 Plumosa Dr.	CG	RM-20 w/ Affordable Overlay	1.62	57
13	S6-015	22722 Old Canal Rd.	PD	Affordable Housing Overlay	2.56	89
14	S6-020	22711 Oak Crest Circle	PD	RM-20 w/ Affordable Housing Overlay	10.35	143
15	S7-001	Bryant Ranch Shopping Center	CG	Commercial Mixed Use Overlay	9.15	320
16	S3-034	4341 Eureka Av.	RS	RM	2.19	22
18	S3-203	18101-18251 Bastanchury Rd.	PD	PD	22.83	228
19	S3-205A	5225 & 5227 Highland Av.	RE	RM	7.08	71
20	S4-200	18597-18602 Altrudy Ln.	RS	RM-20	2	40
21	S4-204A	19045 Yorba Linda Bl.	RE	Congregational Land Overlay	1.85	17
	S4-204B	19081-19111 Yorba Linda Bl.	RE	RM-20	3.9	78
23	S3-211	17651 Imperial Highway	RS	RM	2.32	23
24	S4-053	SWC of Kellogg Dr. & Grandview Av.	RE	RM	0.98	10
25	S4-060	5541 S. Ohio St.	RE	RM	0.96	10
	S4-201	5531 S. Ohio St.	RE	RM	1.82	18
26	S5-008	Fairmont Bl.	PD	RM	23.01	230
27	S7-005	NEC of Camino del Bryant & Meadowland	RU	RM	3.06	30
TOTAL					166.41	2,410

EXHIBIT 2-1: POTENTIAL MULTIFAMILY SITES LOCATION MAP

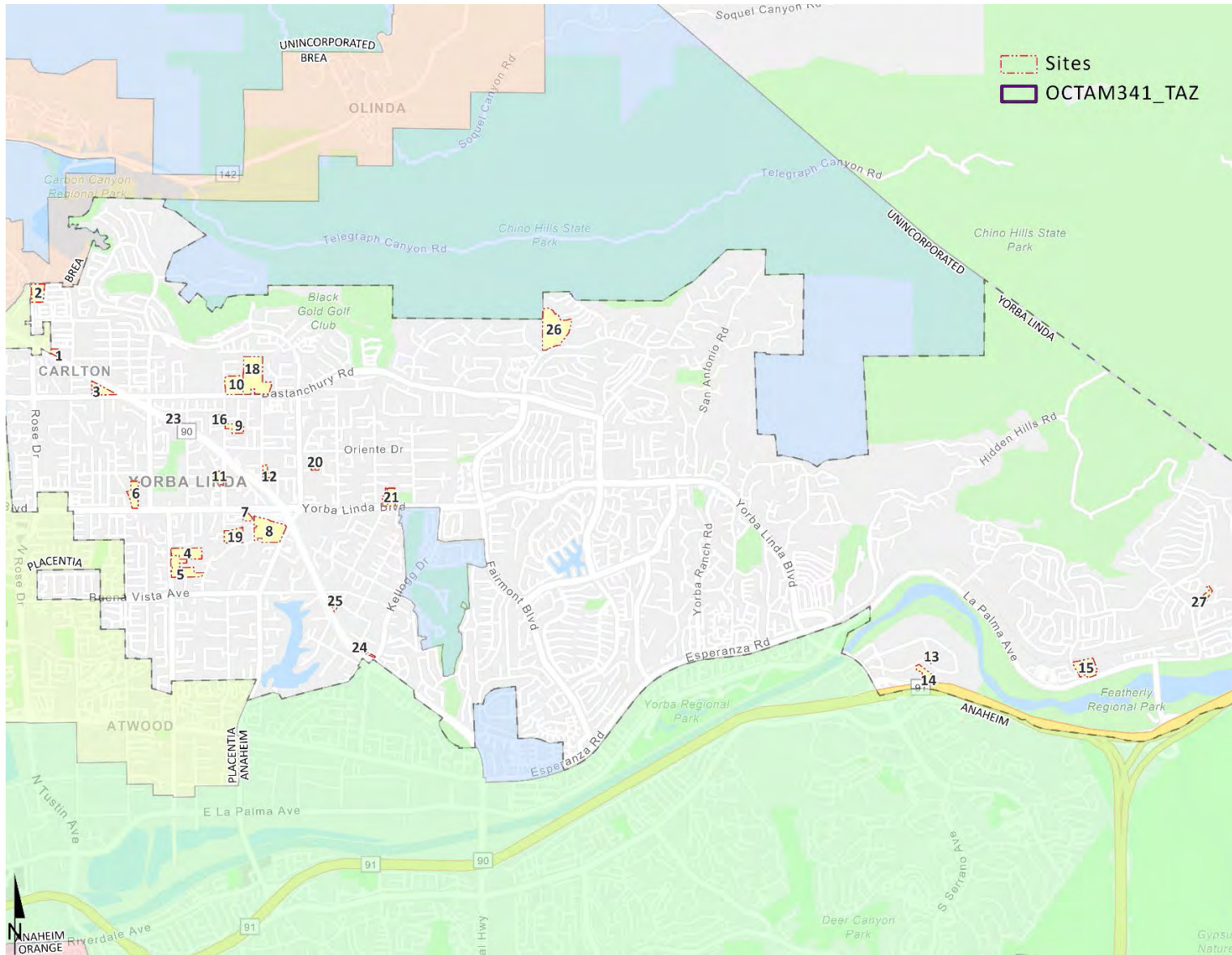


EXHIBIT 2-2: DETAILED POTENTIAL MULTIFAMILY HOUSING SITES



This page intentionally left blank

3 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Yorba Linda's Traffic Study Guidelines.

3.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

3.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. LOS analysis was conducted to determine existing traffic conditions using the Intersection Capacity Utilization (ICU) methodology for signalized study intersections. (1) The Highway Capacity Manual (HCM) (6th Edition) methodology was used to determine LOS's for unsignalized intersections and Caltrans' facility. The HCM methodology expresses the LOS at an intersection in terms of average control delay time for the various intersection approaches. (2) The HCM uses different procedures depending on the type of intersection control.

3.2.1 SIGNALIZED INTERSECTIONS

The City of Yorba Linda requires study area intersections to be evaluated through intersection capacity utilization (ICU) analysis which compares forecasts peak hour traffic volumes to intersection capacity. The traffic modeling software package Traffix (Version 8) has been utilized to analyze signalized intersections in ICU. Lane capacities of 1,700 vehicles per hour of green time have been assumed for the ICU calculations, with 0.10 lost time factor (clearance) and inherent vehicle delay between cycles with an assumed signal cycle of 100 seconds. The City of Brea, City of Placentia and City of Anaheim ICU analysis is consistent with the City of Yorba Linda analysis as are the thresholds; therefore, the same assumptions were applied for intersections in all jurisdictions. Table 3-1 presents the ICU level of service thresholds utilized for this traffic study. A project is deemed to have an adverse effect on an intersection if the project results in deterioration of the LOS to an unacceptable LOS or an increase in the ICU value of 0.01 if the intersection currently operates at LOS E or F under without project conditions. LOS designation as described on Table 3-1.

TABLE 3-1: SIGNALIZED INTERSECTION LOS THRESHOLDS WITH ICU

Level of Services	ICU
A	<0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	> 1.00

Source: City of Yorba Linda, City of Brea, City of Placentia and City of Anaheim

Analysis of Caltrans operated facilities (i.e., Kellogg Drive at Imperial Highway and Weir Canyon Road at the SR-91 Freeway) was conducted in Synchro (Version 11) through the application of the Highway Capacity Manual (HCM) 6th Edition methodology for signalized intersections. Lane configurations and various other parameters such as signal timing was based on current operating characteristics as obtained from field review and signal timing worksheets provided by District 12 staff. Future lane configurations were assumed the same as existing conditions for the 2045 No Project and 2045 With Project scenarios. Table 3-2 presents the signalized intersection delay and LOS standards throughout the study area.

Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., $PHF = \frac{[Hourly Volume]}{[4 \times Peak\ 15\text{-minute\ Flow\ Rate}]}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (2)

TABLE 3-2: SIGNALIZED INTERSECTION LOS THRESHOLDS WITH HCM

Description	Average Control Delay (Seconds), $V/C \leq 1.0$	Level of Service, $V/C \leq 1.0^1$
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 6th Edition

¹ If V/C is greater than 1.0 then LOS is F per HCM.

3.2.2 UNSIGNALIZED INTERSECTIONS

The City of Yorba Linda requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (2) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 3-3). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 3-3: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0 ¹
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

¹ If V/C is greater than 1.0 then LOS is F per HCM.

3.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (3)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (3) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Rural warrants have been used as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or greater while the urban warrants have been used for locations where the major roadway has speeds less than 40 miles per hour.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the following study area intersection shown on Table 3-4:

TABLE 3-4: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection Location	Jurisdiction
6	Lakeview Av. & Buena Vista Av.	Yorba Linda
7	Kellogg Dr. & Imperial Highway SB Ramps	Anaheim

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 4 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *Horizon Year (2045) Traffic Conditions* of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

3.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum Acceptable LOS and associated definitions of intersection deficiencies has been obtained from each of the applicable surrounding jurisdictions.

3.4.1 CITY OF YORBA LINDA

According to the City of Yorba Linda, City of Anaheim, and City of Placentia’s Traffic Impact Analysis Guidelines, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours. (4)

3.4.2 CALTRANS

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the State Highway System (SHS). However, LOS D has been utilized as the target LOS for Caltrans facilities, consistent with the City of Yorba Linda.

3.5 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. Per the City's TIA Guidelines: a) A deficient intersection is defined where the intersection Without Project is at an acceptable LOS and With Project falls below an acceptable LOS, or b) intersection threshold with at LOS E or F with 1% increase V/C ratio With Project traffic condition as compared to Without Project traffic condition. (4) In all cases, the feasibility of the proposed improvements must be demonstrated, and the availability of right-of-way must be verified. The TA will also calculate the project's fair share towards each mitigation measure. However, the cost and scope of the improvements will be developed in conjunction with the TIF Update.

4 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Yorba Linda General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

4.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Yorba Linda staff (Appendix 1.1), the study area includes a total of 19 intersections as shown previously on Exhibit 1-2. Exhibit 4-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

4.2 CITY OF YORBA LINDA GENERAL PLAN CIRCULATION ELEMENT

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Yorba Linda General Plan Circulation Element, are described subsequently. Exhibit 4-2 shows the City of Yorba Linda General Plan Circulation Element and Exhibit 4-3 illustrates the City of Yorba Linda General Plan roadway cross-sections.

The study area roadway that is classified as a Smart Street (6-Lane) is identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Smart Street includes three lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadway within the City of Yorba Linda is classified as a Smart Street (6-Lane):

- Imperial Highway from the City Limit to Yorba Linda Boulevard

The study area roadway that is classified as a Smart Street (4-Lane) is identified as having a 96-foot right-of-way and 80-foot curb-to-curb measurement. Smart Street include two lanes of travel in each direction and a 12-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Smart Street (4-Lane):

- Imperial Highway from Yorba Linda Boulevard to Kellogg Drive

The study area roadway that is classified as a Modified Major identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Modified Major includes three lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Modified Major:

- Yorba Linda Boulevard from City Limit to Fairmont Boulevard

The study area roadway that is classified as a Primary Arterial identified as having a 100-foot right-of-way and 84-foot curb-to-curb measurement. Primary Arterial includes two lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Primary Arterial:

- Lakeview Avenue from Yorba Linda Boulevard to City Limit

- Fairmont Boulevard
- Yorba Linda Boulevard from Fairmont Boulevard to City Limit

The study area roadway that is classified as a Modified Primary Arterial identified as having an 80-foot right-of-way and 64-foot curb-to-curb measurement. Modified Primary Arterial includes two lanes of travel in each direction and a 14-foot curbed and/or landscaped median. The following study area roadways within the City of Yorba Linda are classified as a Modified Primary Arterial:

- Bastanchury Road
- Rose Drive
- La Palma Avenue from City Limit to Gypsum Canyon Road
- Savi Ranch Parkway from Yorba Linda Boulevard to Old Canal Road

The study area roadway that is classified as a Secondary Arterial identified as having an 80-foot right-of-way and 64-foot curb-to-curb measurement. Secondary Arterial includes two lanes of travel in each direction. The following study area roadways within the City of Yorba Linda are classified as a Secondary Arterial:

- Buena Vista Avenue
- Lakeview Avenue from north of Bastanchury Road to Yorba Linda Boulevard
- Kellogg Drive
- Gypsum Canyon Road

The study area roadway that is classified as a Collector identified as having a 60-foot right-of-way and 40-foot curb-to-curb measurement. Collector includes one lane of travel in each direction. The following study area roadways within the City of Yorba Linda are classified as a Collector:

- Prospect Avenue

**EXHIBIT 4-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS
(CONTINUED)**

1 <i>Rose Dr. & Imperial Hwy. (SR-90)</i>	2 <i>Prospect Av. & Imperial Hwy. (SR-90)</i>	3 <i>Imperial Hwy. (SR-90) & Bastanchury Rd.</i>	4 <i>Imperial Hwy. (SR-90) & Lemon Dr.</i>	5 <i>Imperial Hwy. (SR-90) & Yorba Linda Bl.</i>
6 <i>Lakeview Av. & Buena Vista Av.</i>	7 <i>Kellogg Dr. & Imperial Hwy. (SR-90) SB Ramps</i>	8 <i>Kellogg Dr. & Imperial Hwy. (SR-90) NB Ramps</i>	9 <i>Plumosa Dr. & Bastanchury Rd.</i>	10 <i>Lakeview Av. & Bastanchury Rd.</i>
11 <i>Lakeview Av. & Lemon Dr.</i>	12 <i>Lakeview Av. & Yorba Linda Bl.</i>	13 <i>Ohio St. & Yorba Linda Bl.</i>	14 <i>Fairmont Bl. & Bastanchury Rd.</i>	15 <i>Fairmont Bl. & Yorba Linda Bl.</i>
16 <i>Yorba Linda Bl. & Savi Ranch Pkwy.</i>	17 <i>Weir Canyon Rd. & SR-91 WB Ramps</i>	18 <i>Weir Canyon Rd. & SR-91 WB Ramps</i>	19 <i>Bryan Ranch Rd. / Gypsum Canyon Rd. & LaPalma Av.</i>	







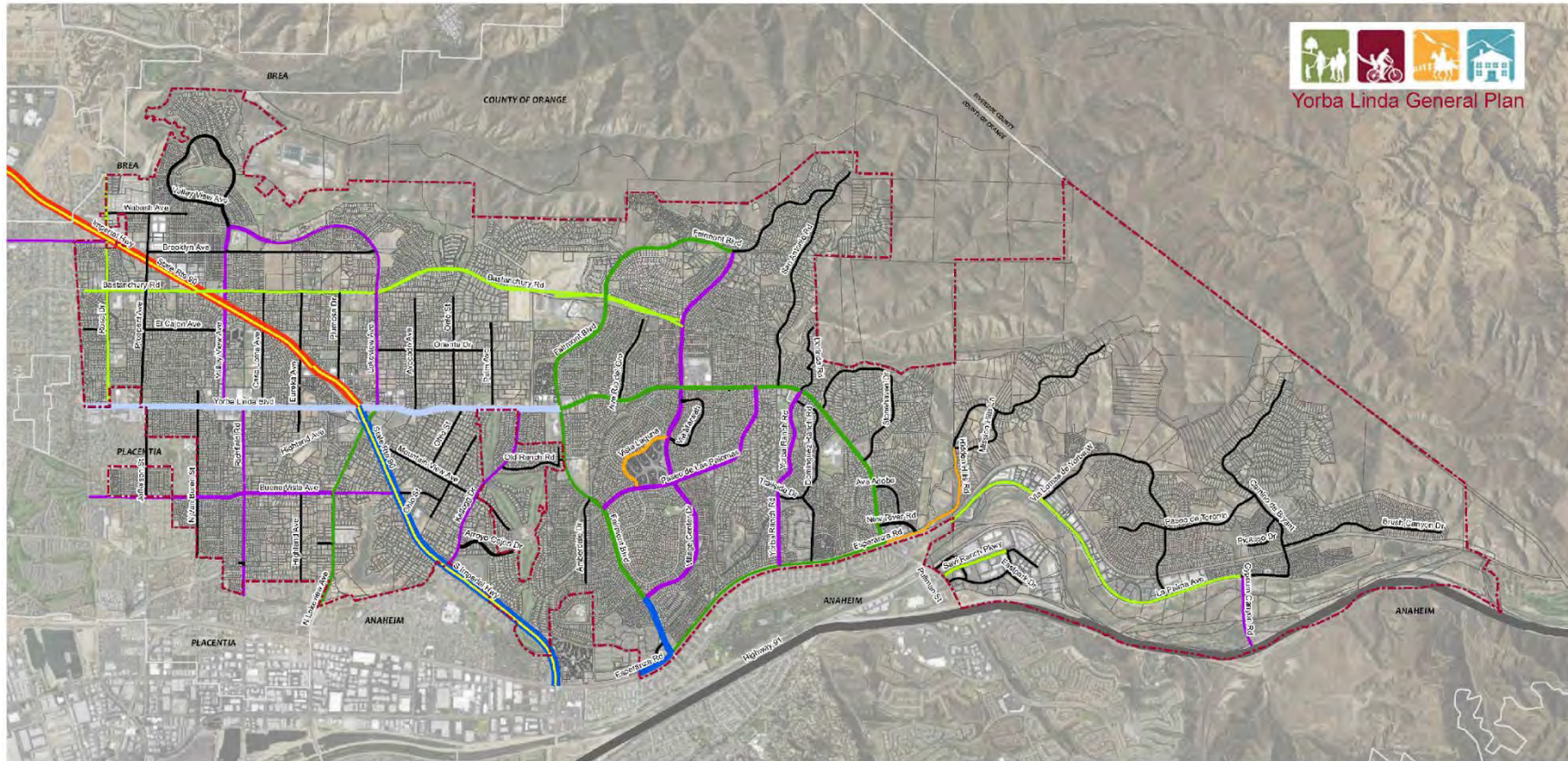
-  = Traffic Signal
-  = All Way Stop
-  = Stop Sign
- 4** = Number of Lanes
- D** = Divided
- U** = Undivided
- RTO** = Right Turn Overlap
-  = Channelized Yield
-  = Free Right Turn
-  = Raised Right Turn Median

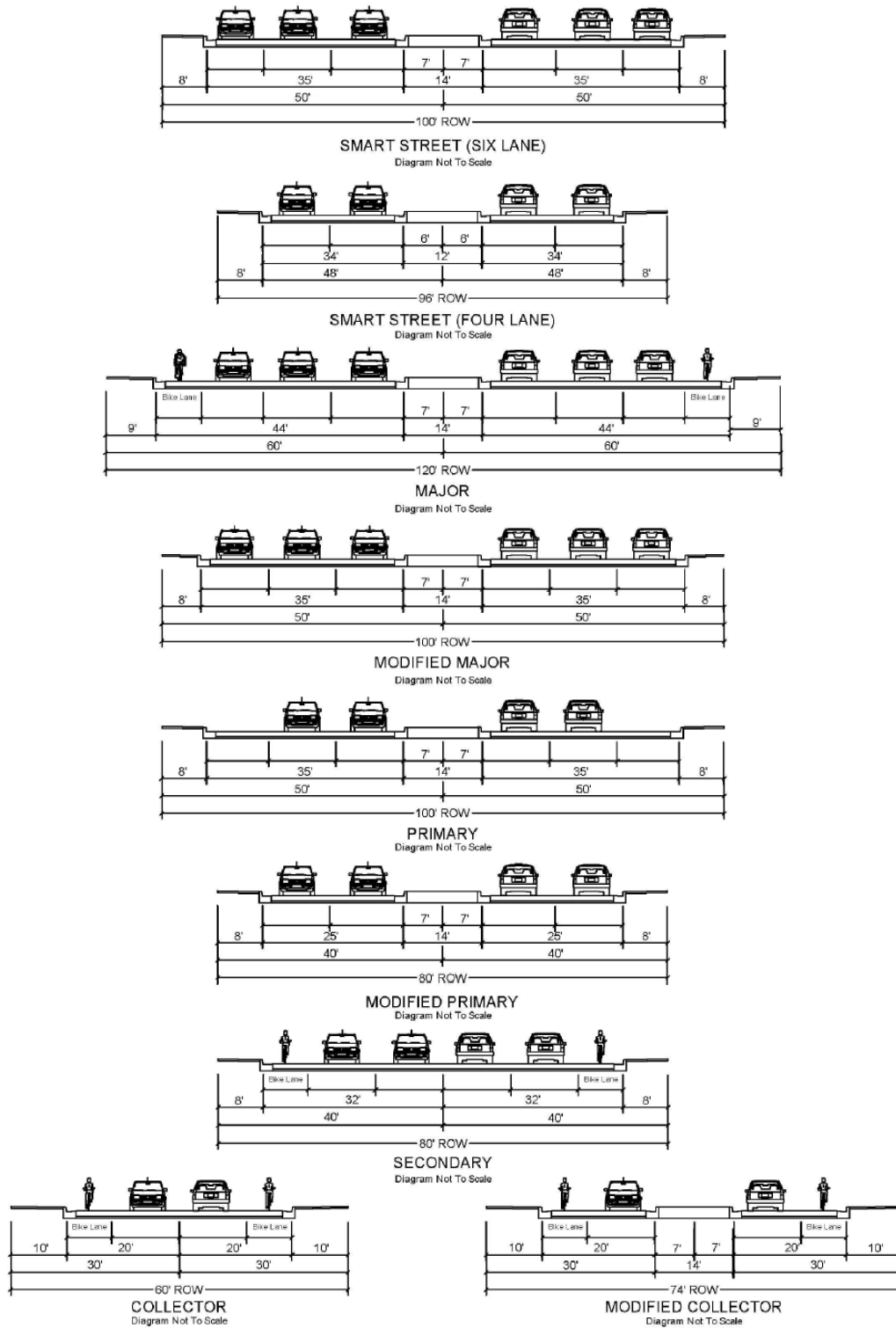
EXHIBIT 4-2: CITY OF YORBA LINDA GENERAL PLAN CIRCULATION ELEMENT



- City Boundary
- Smart Street 6 Lane
- Smart Street 4 Lane
- Major 6 Lane
- Modified Major 6 Lane
- Primary 4 Lane
- Modified Primary 4 Lane
- Secondary 4 Lane
- Collector 2 Lane
- Modified Collector 2 Lane



EXHIBIT 4-3: CITY OF YORBA LINDA GENERAL PLAN ROADWAY CROSS-SECTIONS



4.3 BICYCLE, EQUESTRIAN, & PEDESTRIAN FACILITIES

Exhibit 4-4 illustrates the City of Yorba Linda existing and future planned bicycle facilities per the City's Bicycle Plan (2016). Existing pedestrian facilities within the study area are shown on Exhibit 4-5. Field observations and traffic counts conducted in March 2022 indicate light pedestrian and bicycle activity within the study area.

4.4 TRANSIT SERVICE

The study area within the City of Yorba Linda is currently served by Orange County Transportation Authority (OCTA), a public transit agency serving various jurisdictions within Orange County. Based on a review of the existing transit routes within the vicinity of the proposed Project, Route 26 currently runs along Yorba Linda, from Rose Drive to Lakeview Avenue; while Route 38 runs along Yorba Linda from north side to south side of SR-91. Transit service is reviewed and updated by OCTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Existing transit routes in the vicinity of the study area are illustrated on Exhibit 4-6.

4.5 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in March 2022. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

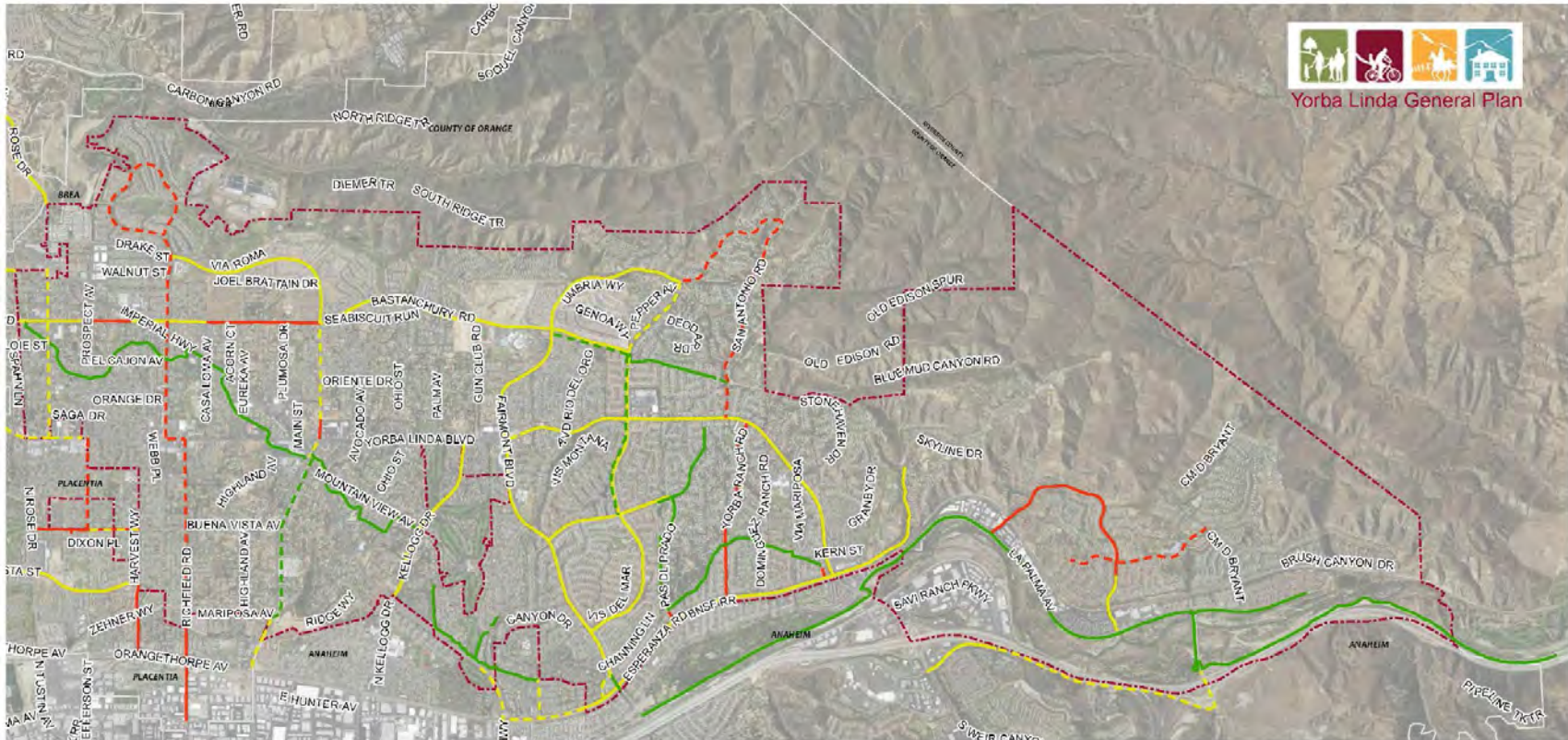
The 2022 weekday AM and PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and nearby schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 4.1.

Existing weekday ADT volumes are shown on Exhibit 4-7. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 10.88 = \text{Leg Volume}$$

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 9.19 percent. As such, the above equation utilizing a factor of 10.88 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of 9.19 percent (i.e., $1/0.0919 = 10.88$) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday ADT and AM/PM peak hour intersection volumes are also shown on Exhibit 4-7.

EXHIBIT 4-4: CITY OF YORBA LINDA BICYCLE FACILITIES



Bikeways

- City Boundary
- Class I, Existing
- Class I, Proposed
- Class II, Existing
- Class II, Proposed
- Class III, Existing
- Class III, Proposed



EXHIBIT 4-5: EXISTING PEDESTRIAN FACILITIES

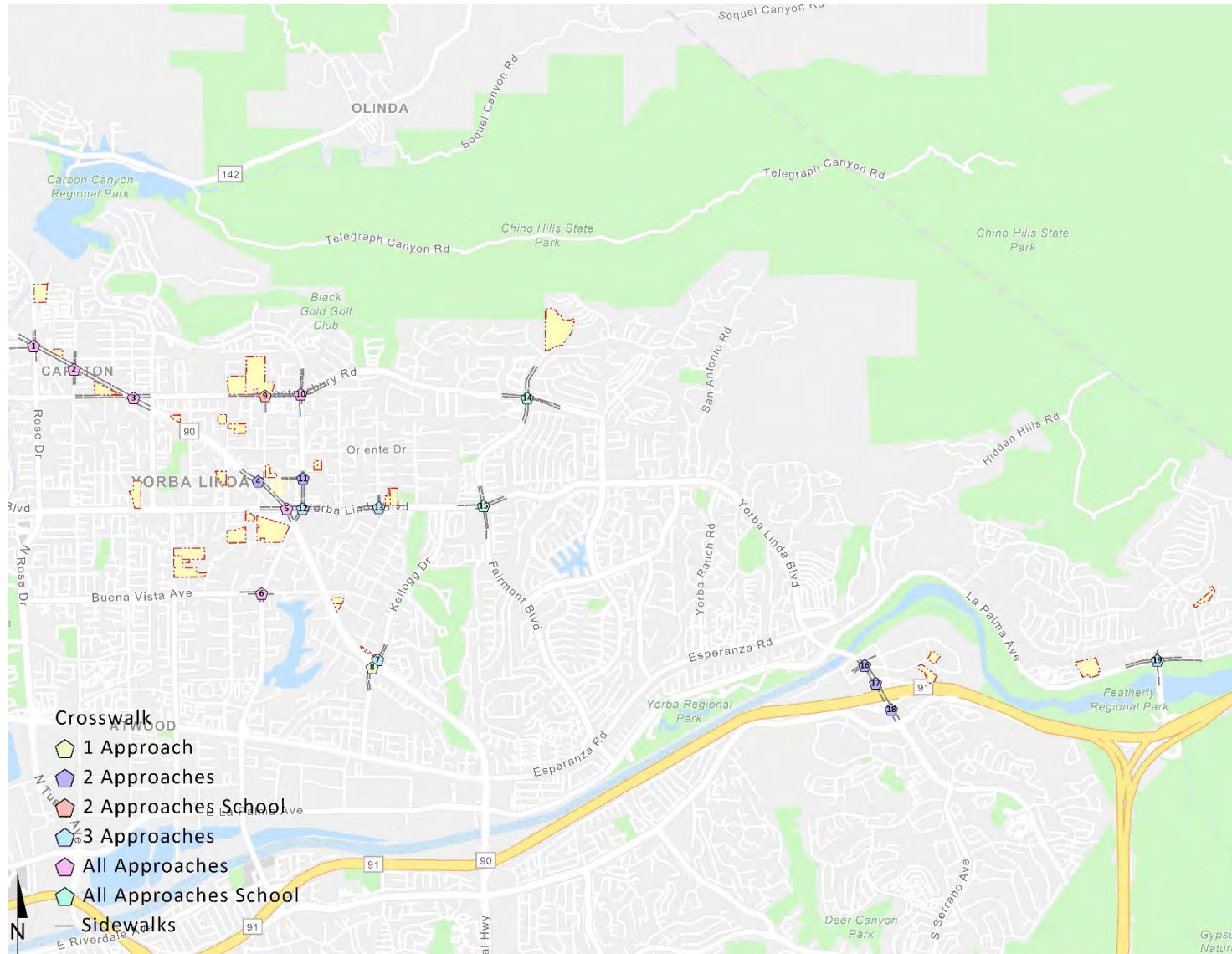


EXHIBIT 4-6: EXISTING TRANSIT ROUTES

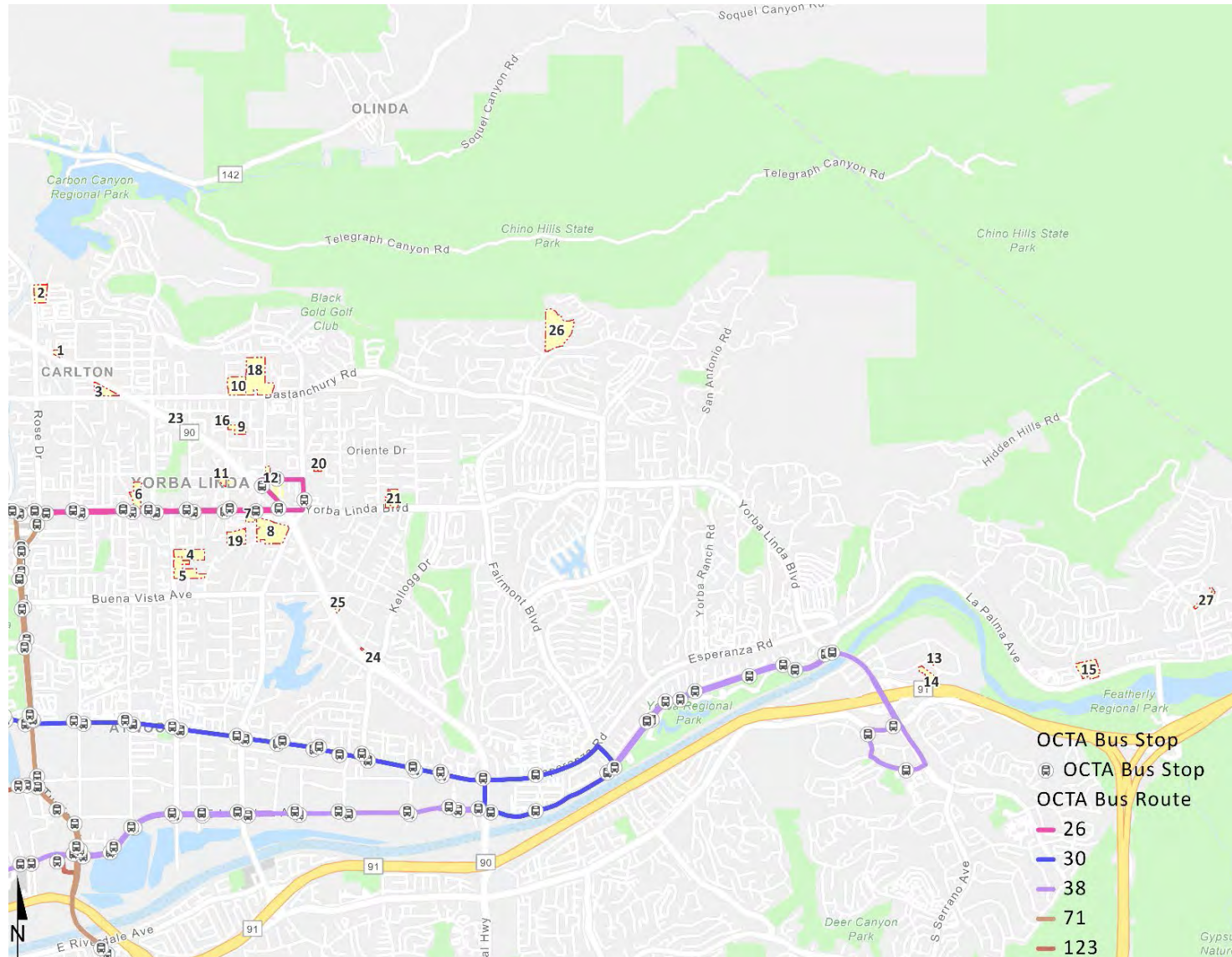
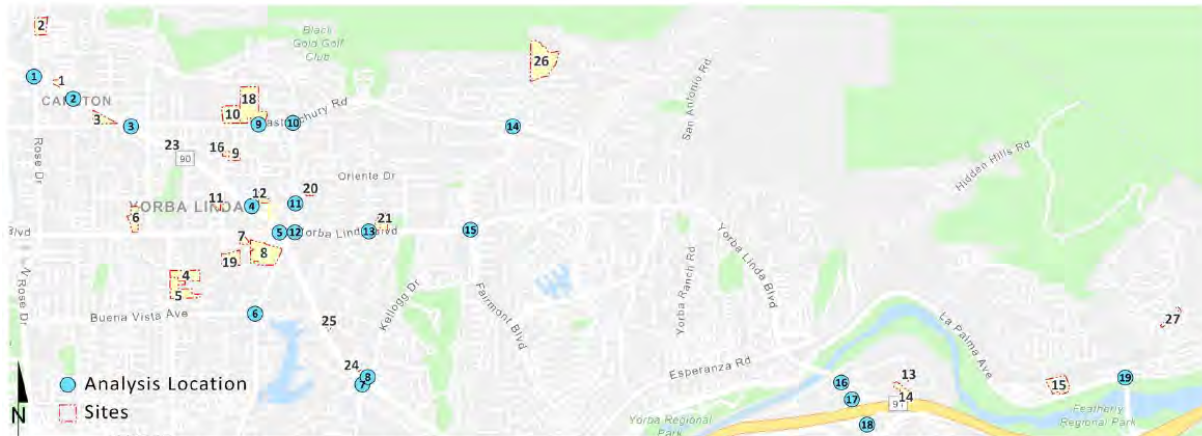


EXHIBIT 4-7: EXISTING (2022) TRAFFIC VOLUMES



<p>1 Rose Dr. & Imperial Hwy.</p> <p>24,050 26(25) ↓ 393(310) ↓ 650(816) ↓ ↑ 400(652) ↑ 991(875) 193(146) ↑ 28(42) ↓ 979(1250) → 147(42) ↓ 117(197) ↑ 156(365) ↑ 141(86) ↑ 12,450</p>	<p>2 Prospect Av. & Imperial Hwy.</p> <p>6,500 127(140) ↓ 82(100) ↓ 65(73) ↓ ↑ 911(72) ↑ 1481(1616) 42(20) ↑ 147(105) ↓ 1373(1927) → 24(105) ↓ 40(45) ↓ 95(107) ↓ 8(11) ↓ 4,200</p>	<p>3 Imperial Hwy. & Bastanchury Rd.</p> <p>38,900 3(3) ↓ 129(1,494) ↓ 220(496) ↓ ↑ 478(354) ↑ 524(292) 1(9) ↑ 18(18) ↓ 349(415) → 296(369) ↓ 305(249) ↓ 131(1210) ↓ 3(12) ↓ 36,350</p>	<p>4 Imperial Hwy. & Lemon Dr.</p> <p>35,800 4(19) ↓ 148(1,667) ↓ 20(108) ↓ ↑ 72(156) 3(10) ↑ 43(70) ↑ 3(18) ↓ 1(4) → 1(15) ↓ 1325(1325) ↑ 33(62) ↓ 34,150</p>	<p>5 Imperial Hwy. & Yorba Linda Bl.</p> <p>34,000 37(67) ↓ 1018(1025) ↓ 336(586) ↓ ↑ 438(445) ↑ 525(555) 200(158) ↑ 26(90) ↓ 326(565) → 316(313) ↓ 318(301) ↓ 926(915) ↑ 198(211) ↓ 31,800</p>
<p>6 Lakeview Av. & Buena Vista Av.</p> <p>14,000 101(135) ↓ 582(394) ↓ 48(35) ↓ ↑ 72(49) ↑ 127(46) 88(34) ↑ 139(223) ↓ 113(88) ↓ 73(67) ↓ 52(91) ↑ 295(453) ↑ 56(56) ↑ 3,350</p>	<p>7 Kellogg Dr. & Imperial Hwy. EB Ramps</p> <p>10,800 465(268) ↓ 280(243) ↓ 18(73) ↓ 267(153) ↓ 435(409) ↑ 144(102) ↑ 3,750</p>	<p>8 Kellogg Dr. & Imperial Hwy. WB Ramps</p> <p>11,900 73(46) ↓ 618(407) ↓ ↑ 286(308) 127(104) ↑ 159(151) ↓ 294(331) ↑ 4,500</p>	<p>9 Plumosa Dr. & Bastanchury Rd.</p> <p>250 15,650 ↑ 785(585) 70(22) ↑ 527(779) → 58(54) ↓ 102(24) ↑ 108(29) ↑ 1,400</p>	<p>10 Lakeview Av. & Bastanchury Rd.</p> <p>4,650 59(20) ↓ 133(91) ↓ 108(66) ↓ ↑ 99(81) ↑ 722(480) 224(144) ↑ 31(38) ↓ 488(619) ↓ 144(127) ↓ 120(90) ↓ 120(90) ↑ 191(230) ↓ 17,600</p>
<p>11 Lakeview Av. & Lemon Dr.</p> <p>9,850 36(63) ↓ 476(354) ↓ 17(75) ↓ 1(1) → 53(120) ↓ 38(91) ↓ 288(414) ↑ 2(1) ↑ Nominal</p>	<p>12 Lakeview Av. & Yorba Linda Bl.</p> <p>12,350 105(143) ↓ 284(271) ↓ 91(183) ↓ 142(171) ↓ 672(1073) → 196(107) ↓ 89(84) ↓ 888(867) ↓ 318(175) ↓ 135(187) ↓ 178(284) ↑ 196(265) ↑ 28,800</p>	<p>13 Ohio St. & Yorba Linda Bl.</p> <p>1,600 20(15) ↓ 70(47) ↓ ↑ 50(70) 726(1331) ↑ 20(13) ↓ 1066(951) → 26,100</p>	<p>14 Fairmont Bl. & Bastanchury Rd.</p> <p>5,800 225(120) ↓ 239(86) ↓ 38(30) ↓ ↑ 19(35) ↑ 448(367) 112(46) ↑ 97(155) ↓ 346(429) → 180(202) ↓ 168(120) ↓ 177(109) ↑ 40(37) ↑ 10,250</p>	<p>15 Fairmont Bl. & Yorba Linda Bl.</p> <p>8,050 286(207) ↓ 222(130) ↓ 105(125) ↓ ↑ 93(53) ↑ 743(733) 100(49) ↑ 166(214) ↓ 494(984) → 146(196) ↓ 264(171) ↓ 220(10) ↑ 54(47) ↓ 21,650</p>
<p>16 Weir Canyon Rd. & Savi Ranch Pkwy.</p> <p>41,900 212(250) ↓ 1059(1165) ↓ 227(339) ↓ ↑ 168(528) 247(541) ↑ 99(175) ↓ 205(380) ↓ 256(119) ↓ 981(1394) ↑ 683(465) ↓ 20,350</p>	<p>17 Weir Canyon Rd. & SR-91 WB Ramps</p> <p>44,200 325(611) ↓ 1186(1475) ↓ ↑ 534(634) 357(523) ↑ 1384(1344) ↓ 405(340) ↓ 16,300</p>	<p>18 Weir Canyon Rd. & SR-91 EB Ramps</p> <p>40,050 683(281) ↓ 860(1717) ↓ 708(348) ↓ 560(688) ↓ ↑ 534(634) 478(638) ↑ 6,950</p>	<p>19 Gypsum Canyon Rd. & La Palma Av.</p> <p>550 17(5) ↓ 13(8) ↓ 7(2) ↓ ↑ 7(4) ↑ 283(178) 339(137) ↑ 15(26) ↓ 136(443) ↓ 174(866) ↓ 194(72) ↓ 6(4) ↑ 123(64) ↑ 9,000</p>	<p>##(##) AM(PM) Peak Hour Intersection Volumes ## Average Daily Trips</p>

4.6 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 3.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 4-1, which indicates the following existing study area intersections are currently operating at un-acceptable LOS during the peak hours:

- Lakeview Avenue & Buena Vista Avenue (#6) – LOS F AM and LOS E PM peak hours
- Kellogg Drive & Imperial Highway EB Ramps (#7) – LOS F AM and PM peak hours

The intersection operations analysis worksheets are included in Appendix 4.2 of this TA.

TABLE 4-1: INTERSECTION ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Intersection	Traffic Control ³	Delay ¹ (secs.)		Level of Service		ICU ² (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Rose Dr. & Imperial Highway	TS	Not Applicable ⁴				0.652	0.856	B	D
2	Prospect Av. & Imperial Highway	TS	Not Applicable ⁴				0.869	0.678	D	B
3	Imperial Highway & Bastanchury Rd.	TS	Not Applicable ⁴				0.735	0.719	C	C
4	Imperial Highway & Lemon Dr.	TS	Not Applicable ⁴				0.462	0.585	A	A
5	Imperial Highway & Yorba Linda Bl.	TS	Not Applicable ⁴				0.723	0.768	C	C
6	Lakeview Av. & Buena Vista Av.	AWS	93.4	47.7	F	E	Not Applicable ⁵			
7	Kellogg Dr. & Imperial Highway EB Ramps	CSS	>200.0	51.7	F	F	Not Applicable ⁵			
8	Kellogg Dr. & Imperial Highway WB Ramps	TS	15.9	11.5	B	B	Not Applicable ⁶			
9	Plumosa Dr. & Bastanchury Rd.	TS	Not Applicable ⁴				0.391	0.375	A	A
10	Lakeview Av. & Bastanchury Rd.	TS	Not Applicable ⁴				0.594	0.578	A	A
11	Lakeview Av. & Lemon Dr.	TS	Not Applicable ⁴				0.305	0.349	A	A
12	Lakeview Av. & Yorba Linda Bl.	TS	Not Applicable ⁴				0.611	0.611	B	B
13	Ohio St. & Yorba Linda Bl.	TS	Not Applicable ⁴				0.350	0.410	A	A
14	Fairmont Bl. & Bastanchury Rd.	TS	Not Applicable ⁴				0.552	0.454	A	A
15	Fairmont Bl. & Yorba Linda Bl.	TS	Not Applicable ⁴				0.570	0.507	A	A
16	Weir Canyon Rd. & Savi Ranch Pkwy.	TS	Not Applicable ⁴				0.767	0.844	A	D
17	Weir Canyon Rd. & SR-91 WB Ramps	TS	11.4	14.1	B	B	Not Applicable ⁶			
18	Weir Canyon Rd. & SR-91 EB Ramps	TS	14.6	11.3	B	B	Not Applicable ⁶			
19	Gypsum Canyon Rd. & La Palma Av.	TS	Not Applicable ⁴				0.455	0.696	A	B

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

¹ Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

³ AWS = All-way Stop; CSS = Cross-Street Stop; TS = Traffic Signal; **CSS** = Improvement

⁴ ICU reported for signalized intersections only.

⁵ HCM reported for unsignalized intersections only (also a Caltrans facility).

⁶ Although signalized, intersection is a Caltrans facility. Therefore, only HCM has been reported.

4.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The following unsignalized intersections currently warrant a traffic signal for Existing traffic conditions:

- Lakeview Avenue & Buena Vista Avenue (#6)
- Kellogg Drive & Imperial Highway SB Ramps (#7)

Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 4.3 of this TA.

This page intentionally left blank.

5 HORIZON YEAR (2045) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2045) Without and With Project traffic forecasts, and the resulting intersection operations analyses.

5.1 VOLUME DEVELOPMENT FOR HORIZON YEAR

Traffic projections for Horizon Year (2045) Without Project and With Project conditions were derived from the Orange County Transportation Analysis Model (OCTAM) Version 5.5 maintained by the Orange County Transportation Authority (OCTA). To develop future traffic forecast volumes in the vicinity of the 27 sites proposed to be rezoned to multifamily residential use, changes in population related to each proposed site were added to the OCTAM models and rerun. To identify trips generated for use in the OCTAM, residential units do not require a conversion rate as they translate directly to dwelling units. Additional variables are used to further define the characteristics of the residential component, such as population per household, median income, etc. Residential based trips are calculated based on the trip rate for each dwelling unit and associated data. Based on the citywide land use data and the regional socioeconomic growth projections, future trip activity is estimated and assigned to the roadway circulation system. The Department of Finance (2021) identifies Yorba Linda with 2.94 persons per household. Model output is post-processed based on established postprocessing methodologies. The post-processor applies the model's projected growth to each turning movement for both Horizon Year (2045) Without and With Project scenarios, forecasting a value that reflects future growth.

The traffic forecasts reflect the area-wide growth anticipated between Existing (2022) conditions and Horizon Year (2045) traffic conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2045) peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location in March 2022. The OCTAM has a base (validation) year of 2016 and a horizon (future forecast) year of 2045. The difference in model volumes (2045-2016) defines the growth in traffic over the 24-year period.

The refined future peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The OCTAM uses an AM peak period-to-peak hour factor of 0.36 and a PM peak period-to-peak hour factor of 0.27. These factors represent the relationship of the highest single AM peak hour to the modeled 3-hour AM peak period (an even distribution would result in a factor of 0.33) and the highest single PM peak hour to the modeled 4-hour PM peak period (an even distribution would result in a factor of 0.25).

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing or Opening Year Cumulative traffic conditions were not assumed as part of this analysis. As such, in conjunction with the addition of cumulative projects that are not consistent with the General Plan, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year (2045) forecasts. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2045) peak hour forecasts.

The future Horizon Year (2045) Without Project and With Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Post processing has been performed for the weekday AM and PM peak hours only as these are the only time periods where traffic model data was readily available. The post processed volumes for Horizon Year (2045) Without and With Project traffic conditions are provided in Appendices 5.1 and 5.2, respectively.

5.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

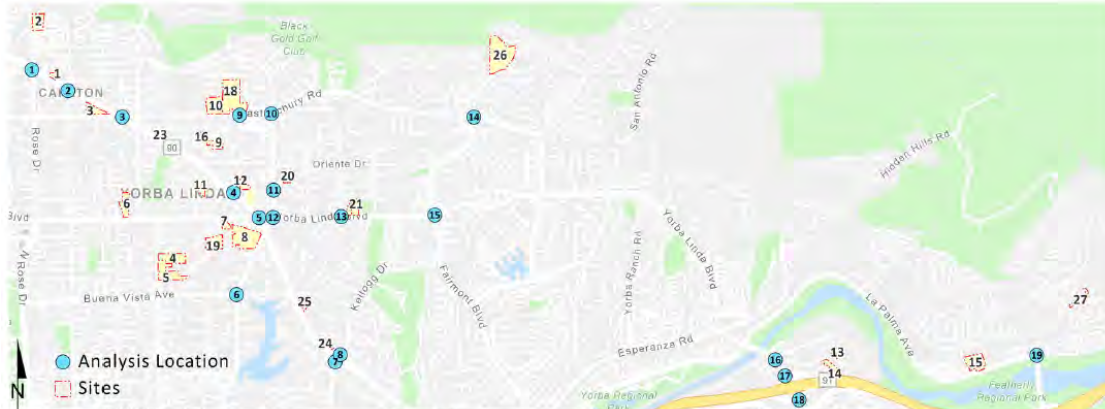
This scenario includes the refined post-process volumes obtained from the OCTAM (included in Appendix 5.1 of this TA). The weekday ADT and AM/PM peak hour volumes which can be expected for Horizon Year (2045) Without Project traffic conditions are shown on Exhibit 5-1.

5.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the OCTAM, with changes to reflect the traffic generated by the proposed Project (included in Appendix 5.2) of this TA. The weekday ADT and AM/PM peak hour volumes which can be expected for Horizon Year (2045) With Project traffic conditions are shown on Exhibit 5-2.

Project only ADT and AM/PM peak hour intersection turning movement volumes were developed based on the net change between With and Without Project forecast volumes and are shown on Exhibit 5-3.

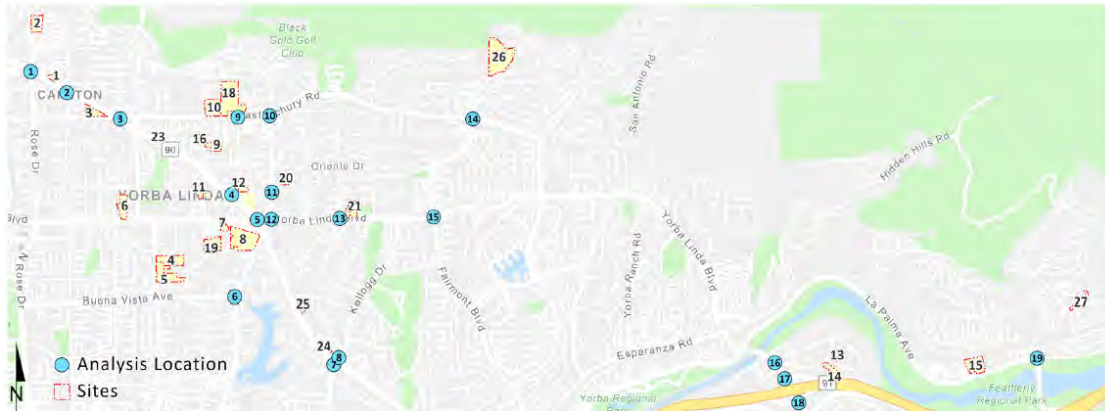
EXHIBIT 5-1: HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC VOLUMES



1	2	3	4	5
Rose Dr. & Imperial Hwy. 32,150 32(27) 459(339) 781(825) 519(726) 1008(960) 185(165) 38(46) 999(1288) 146(47) 29,100	Prospect Av. & Imperial Hwy. 46,500 7,050 139(152) 90(108) 71(79) 998(78) 1622(1750) 46(22) 99(49) 104(116) 9(12) 4,550	Imperial Hwy. & Bastanchury Rd. 44,200 3(3) 1416(1477) 245(587) 635(394) 639(345) 2(10) 17(18) 394(516) 329(383) 282(292) 1325(1338) 4(16) 40,200	Imperial Hwy. & Lemon Dr. 22,350 38,800 4(21) 1622(1805) 22(117) 79(169) 3(11) 47(76) 3(19) 1(4) 1(16) 4,850	Imperial Hwy. & Yorba Linda Bl. 24,450 37,850 39(71) 1180(1121) 343(518) 384(460) 475(566) 200(167) 27(100) 335(515) 369(353) 365(354) 1031(1090) 221(207) 37,000
Lakeview Av. & Buena Vista Av. 16,300 2,400 208(164) 726(430) 82(33) 71(71) 112(47) 47(31) 187(312) 112(68) 53(59) 8,150	Kellogg Dr. & Imperial Hwy. EB Ramps 10,200 446(248) 413(241) 23(94) 0(1) 256(155) 435(430) 167(90) 3,550	Kellogg Dr. & Imperial Hwy. WB Ramps 11,050 107(46) 761(402) 257(375) 98(87) 163(125) 295(999) 3,500	Plumosa Dr. & Bastanchury Rd. 250 16,900 860(633) 77(24) 112(26) 1(0) 118(31) 17,000	Lakeview Av. & Bastanchury Rd. 19,850 4,250 65(49) 127(84) 108(66) 105(82) 895(503) 240(145) 30(40) 506(698) 143(132) 129(91) 129(91) 186(241) 19,100
Lakeview Av. & Lemon Dr. 10,650 39(68) 521(383) 0(3) 1(0) 19(81) 1(1) 58(130) 4,100	Lakeview Av. & Yorba Linda Bl. 14,350 93(155) 387(311) 89(195) 156(163) 660(964) 269(103) 99(86) 805(852) 444(182) 132(239) 215(378) 211(333) 26,950	Ohio St. & Yorba Linda Bl. 1,350 12(11) 69(50) 49(62) 742(1319) 12(8) 1086(930) 25,600	Fairmont Bl. & Bastanchury Rd. 6,450 281(130) 260(90) 39(30) 17(35) 479(361) 104(44) 97(172) 343(426) 190(212) 218(149) 189(139) 42(42) 10,050	Fairmont Bl. & Yorba Linda Bl. 21,950 9,350 277(156) 270(176) 113(140) 93(92) 750(686) 127(82) 141(252) 472(924) 157(222) 302(238) 249(26) 69(97) 13,550
Weir Canyon Rd. & Savi Ranch Pkwy. 45,350 232(271) 1160(1261) 249(367) 184(572) 271(586) 108(189) 225(411) 10,900	Weir Canyon Rd. & SR-91 WB Ramps 40,850 346(620) 1309(1639) 580(613) 386(629) 1521(1529) 410(343) 39,550	Weir Canyon Rd. & SR-91 EB Ramps 39,600 713(286) 982(1882) 648(333) 508(580) 1283(1539) 420(572) 11,650	Gypsum Canyon Rd. & La Palma Av. 6,000 15,550 1(1) 39(19) 1(1) 2(1) 203(100) 635(359) 1(3) 75(423) 266(915) 286(283) 27(34) 253(471) 8,900	22,600

##(##) AM(PM) Peak Hour Intersection Volumes
 ## Average Daily Trips

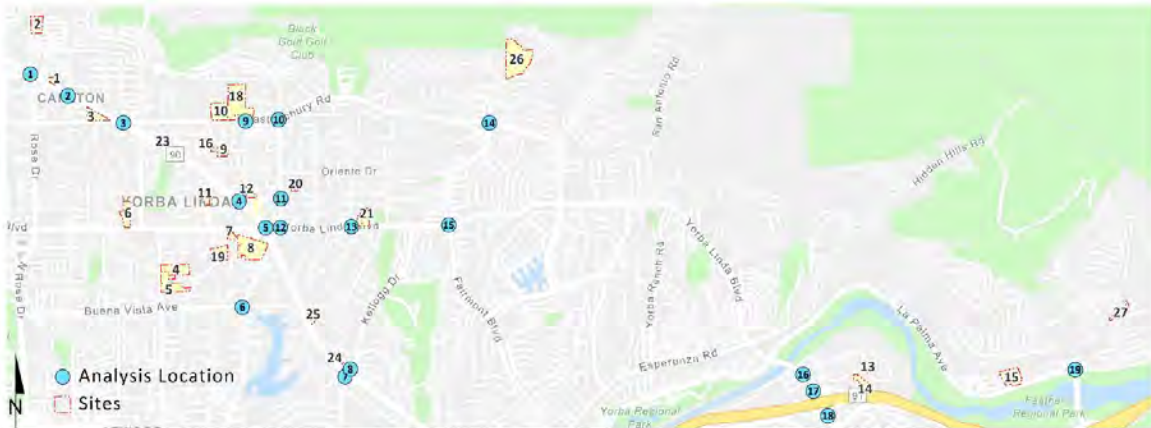
EXHIBIT 5-2: HORIZON YEAR (2045) WITH PROJECT TRAFFIC VOLUMES



<p>1 Rose Dr. & Imperial Hwy.</p> <p>33,350 31(26) 470(345) 768(902) 558(725) 1011(966) 199(171) 39(42) 989(1299) 150(44) 128(238) 233(444) 154(109) 29,700</p>	<p>2 Prospect Av. & Imperial Hwy.</p> <p>48,400 7,200 143(156) 92(111) 73(81) 1024(80) 1665(1795) 47(22) 165(117) 1543(2141) 27(117) 45(50) 107(119) 9(12) 4,700</p>	<p>3 Imperial Hwy. & Bastanchury Rd.</p> <p>44,950 3(3) 1401(1477) 249(630) 645(405) 728(350) 2(10) 16(19) 399(553) 324(383) 313(287) 1306(1327) 4(17) 40,350</p>	<p>4 Imperial Hwy. & Lemon Dr.</p> <p>39,800 4(21) 1665(1852) 22(120) 81(173) 3(11) 48(78) 3(20) 1(4) 1(17) 1489(4472) 37(69) 37,950</p>	<p>5 Imperial Hwy. & Yorba Linda Bl.</p> <p>37,900 39(71) 1187(1110) 337(525) 391(457) 490(568) 208(165) 27(100) 340(530) 384(355) 365(361) 1015(1103) 217(214) 37,550</p>
<p>6 Lakeview Av. & Buena Vista Av.</p> <p>17,400 214(182) 761(457) 73(29) 61(67) 111(51) 48(32) 201(340) 122(66) 68(71) 58(96) 318(593) 45(36) 10,000</p>	<p>7 Kellogg Dr. & Imperial Hwy. EB Ramps</p> <p>10,750 489(261) 459(242) 26(92) 0(1) 263(159) 445(458) 158(97) 10,000</p>	<p>8 Kellogg Dr. & Imperial Hwy. WB Ramps</p> <p>11,600 113(45) 850(413) 263(389) 98(90) 159(130) 312(420) 10,750</p>	<p>9 Plumosa Dr. & Bastanchury Rd.</p> <p>300 17,350 882(650) 79(24) 592(866) 65(60) 115(27) 1(0) 121(32) 17,450</p>	<p>10 Lakeview Av. & Bastanchury Rd.</p> <p>4,300 67(21) 131(88) 102(62) 102(75) 913(521) 246(142) 33(42) 524(715) 162(151) 140(108) 140(108) 184(243) 10,350</p>
<p>11 Lakeview Av. & Lemon Dr.</p> <p>10,950 40(70) 535(393) 0(3) 19(83) 1(1) 60(133) 43(101) 324(460) 2(1) 11,900</p>	<p>12 Lakeview Av. & Yorba Linda Bl.</p> <p>Nominal 15,800 105(157) 419(330) 95(202) 97(97) 816(852) 431(191) 157(180) 654(973) 270(107) 139(238) 217(423) 211(339) 17,500</p>	<p>13 Ohio St. & Yorba Linda Bl.</p> <p>1,500 14(13) 67(48) 55(69) 736(1327) 15(11) 1073(932) 24,150</p>	<p>14 Fairmont Bl. & Bastanchury Rd.</p> <p>10,000 6,600 291(132) 279(89) 40(29) 17(36) 476(362) 107(43) 97(182) 339(431) 194(216) 212(150) 186(140) 41(41) 7,400</p>	<p>15 Fairmont Bl. & Yorba Linda Bl.</p> <p>22,200 9,700 284(159) 281(174) 115(138) 96(98) 772(692) 132(81) 143(275) 475(928) 162(225) 297(239) 246(27) 67(94) 13,800</p>
<p>16 Weir Canyon Rd. & Savi Ranch Pkwy.</p> <p>46,550 238(278) 1190(1294) 253(377) 189(587) 278(601) 288(132) 1103(1549) 765(517) 49,100</p>	<p>17 Weir Canyon Rd. & SR-91 WB Ramps</p> <p>42,450 358(649) 1340(1669) 620(616) 368(622) 1535(1582) 410(341) 6,250</p>	<p>18 Weir Canyon Rd. & SR-91 EB Ramps</p> <p>40,250 707(290) 1001(2001) 651(371) 499(562) 1295(1552) 440(580) 11,950</p>	<p>19 Gypsum Canyon Rd. & La Palma Av.</p> <p>6,150 17,950 1(1) 39(18) 1(1) 2(1) 217(103) 749(396) 1(3) 76(467) 263(871) 272(279) 27(34) 273(576) 48,300</p>	<p>9,250 24,750</p>

##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

EXHIBIT 5-3: PROJECT ONLY TRAFFIC VOLUMES



1 Rose Dr. & Imperial Hwy. 1,200 600 1,950 800	2 Prospect Av. & Imperial Hwy. 200 1,150 100	3 Imperial Hwy. & Bastanchury Rd. 750 2,000 150	4 Imperial Hwy. & Lemon Dr. 1,000 150 950	5 Imperial Hwy. & Yorba Linda Bl. Nominal 750 550
6 Lakeview Av. & Buena Vista Av. 1,100 1,850	7 Kellogg Dr. & Imperial Hwy. WB Ramps Nominal 550 1,150	8 Kellogg Dr. & Imperial Hwy. WB Ramps 550 Nominal 550	9 Plumbosa Dr. & Bastanchury Rd. 100 450 Nominal	10 Lakeview Av. & Bastanchury Rd. Nominal 600 1,250
11 Lakeview Av. & Lemon Dr. 300 100	12 Lakeview Av. & Yorba Linda Bl. 1,450 750 300	13 Ohio St. & Yorba Linda Bl. 100 Nominal 550	14 Fairmont Bl. & Bastanchury Rd. 150 550	15 Fairmont Bl. & Yorba Linda Bl. 350 250
16 Weir Canyon Rd. & Savi Ranch Pkwy. 1,200 300	17 Weir Canyon Rd. & SR-91 WB Ramps 1,600 600 1,250	18 Weir Canyon Rd. & SR-91 WB Ramps 650 300	19 Gypsum Canyon Rd. & La Palma Av. 150 2,400 2,100	

###(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

5.4 INTERSECTION OPERATIONS ANALYSIS

5.4.1 HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2045) Without Project conditions with roadway and intersection geometrics consistent with existing traffic conditions. As shown on Table 5-1, the following study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2045) Without Project traffic conditions:

- Rose Drive & Imperial Highway (#1) – LOS E PM peak hour only
- Prospect Avenue & Imperial Highway (#2) – LOS E AM peak hour only
- Lakeview Avenue & Buena Vista Avenue (#6) – LOS F AM PM peak hours
- Kellogg Drive & Imperial Highway EB Ramps (#7) – LOS F AM and PM peak hours
- Weir Canyon Road/Yorba Linda Boulevard & Savi Ranch Parkway (#16) – LOS F PM peak hour only

The intersection operations analysis worksheets for Horizon Year (2045) Without Project traffic conditions are included in Appendix 5.3 of this TA.

5.4.2 HORIZON YEAR (2045) WITH PROJECT TRAFFIC CONDITIONS

The following study area intersection is anticipated to also operate at an unacceptable LOS with the addition of Project traffic as shown on Table 5-1, in addition to the locations previously identified for Horizon Year (2045) Without Project traffic conditions:

- Imperial Highway & Yorba Linda Boulevard (#5) – LOS E PM peak hour only

The intersection operations analysis worksheets for Horizon Year (2045) With Project traffic conditions are included in Appendix 5.4 of this TA.

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for Horizon Year (2045) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The unsignalized study area intersections were found to meet peak hour volume-based traffic signal warrants under existing traffic conditions, as such, no traffic signal warrant analysis has been performed for Horizon Year (2045) Without and With Project traffic conditions.

5.6 LONG-TERM DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of Horizon Year (2045) deficiencies and recommended improvements. Based on the City of Yorba Linda deficiency criteria discussed in Section 3.4 Minimum Acceptable LOS and Section 3.5 Intersection Deficiency Criteria, the following intersections were found to be deficient:

- Rose Drive & Imperial Highway (#1)

- Prospect Avenue & Imperial Highway (#2)
- Imperial Highway & Yorba Linda Boulevard (#5)
- Lakeview Avenue & Buena Vista Avenue (#6)
- Kellogg Drive & Imperial Highway EB Ramps (#7)
- Weir Canyon Road/Yorba Linda Boulevard & Savi Ranch Parkway (#16)

Improvements necessary to improve traffic deficiencies back to acceptable levels and the effectiveness of the proposed recommended improvements is presented in Table 5-2 and shown on Exhibit 5-4. Table 5-2 summarizes the LOS results with the proposed traffic control improvements (see Appendix 5.5 for the analysis worksheets).

The improvements recommended above are related to the changes in the Housing Element Update. However, there are other studies which have been referenced for consistency for some of the recommended improvements at overlapping study area locations that would be needed to meet the City LOS requirements. The Savi Ranch Mobility Study 2018 is one such report referenced for improvements at the intersection of Weir Canyon Road/Yorba Linda Boulevard at Savi Ranch Parkway.

TABLE 5-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS

#	Intersection	Traffic Control ³	2045 Without Project								2045 With Project								Change in V/C ⁷	
			Delay ¹ (secs.)		Level of Service		ICU ² (v/c)		Level of Service		Delay ¹ (secs.)		Level of Service		ICU ² (v/c)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Rose Dr. & Imperial Highway	TS	Not Applicable ⁴		0.740	0.926	C	E	Not Applicable ⁴		0.768	0.947	C	E	3.8%	2.3%				
2	Prospect Av. & Imperial Highway	TS	Not Applicable ⁴		0.942	0.726	E	C	Not Applicable ⁴		0.964	0.742	E	C	2.3%	2.2%				
3	Imperial Highway & Bastanchury Rd.	TS	Not Applicable ⁴		0.844	0.805	D	D	Not Applicable ⁴		0.856	0.827	D	D	1.4%	2.7%				
4	Imperial Highway & Lemon Dr.	TS	Not Applicable ⁴		0.496	0.625	A	B	Not Applicable ⁴		0.507	0.639	A	B	2.2%	2.2%				
5	Imperial Highway & Yorba Linda Bl.	TS	Not Applicable ⁴		0.888	0.848	D	D	Not Applicable ⁴		0.903	0.850	E	D	1.7%	0.2%				
6	Lakeview Av. & Buena Vista Av.	AWS	173.7	110.7	F	F	Not Applicable ⁵		195.4	137.7	F	F	Not Applicable ⁵		12.5%	24.4%				
7	Kellogg Dr. & Imperial Highway EB Ramps	CSS	>200.0	64.6	F	F	Not Applicable ⁵		>200.0	72.1	F	F	Not Applicable ⁵		--	11.6%				
8	Kellogg Dr. & Imperial Highway WB Ramps	TS	23.0	11.2	C	B	Not Applicable ⁶		33.2	11.3	C	B	Not Applicable ⁶		44.3%	0.9%				
9	Plumosa Dr. & Bastanchury Rd.	TS	Not Applicable ⁴		0.419	0.394	A	A	Not Applicable ⁴		0.427	0.402	A	A	1.9%	2.0%				
10	Lakeview Av. & Bastanchury Rd.	TS	Not Applicable ⁴		0.605	0.610	B	B	Not Applicable ⁴		0.615	0.618	B	B	1.7%	1.3%				
11	Lakeview Av. & Lemon Dr.	TS	Not Applicable ⁴		0.324	0.369	A	A	Not Applicable ⁴		0.330	0.376	A	A	1.9%	1.9%				
12	Lakeview Av. & Yorba Linda Bl.	TS	Not Applicable ⁴		0.723	0.624	C	B	Not Applicable ⁴		0.730	0.637	C	B	1.0%	2.1%				
13	Ohio St. & Yorba Linda Bl.	TS	Not Applicable ⁴		0.354	0.405	A	A	Not Applicable ⁴		0.350	0.408	A	A	-1.1%	0.7%				
14	Fairmont Bl. & Bastanchury Rd.	TS	Not Applicable ⁴		0.611	0.482	B	A	Not Applicable ⁴		0.616	0.490	B	A	0.8%	1.7%				
15	Fairmont Bl. & Yorba Linda Bl.	TS	Not Applicable ⁴		0.596	0.574	A	A	Not Applicable ⁴		0.607	0.589	B	A	1.8%	2.6%				
16	Weir Canyon Rd. & Savi Ranch Pkwy.	TS	Not Applicable ⁴		0.638	0.905	B	E	Not Applicable ⁴		0.652	0.926	B	E	2.2%	2.3%				
17	Weir Canyon Rd. & SR-91 WB Ramps	TS	11.9	14.5	B	B	Not Applicable ⁶		12.4	14.4	B	B	Not Applicable ⁶		4.2%	-0.7%				
18	Weir Canyon Rd. & SR-91 EB Ramps	TS	13.1	9.8	B	A	Not Applicable ⁶		13.1	9.7	B	A	Not Applicable ⁶		0.0%	-1.0%				
19	Gypsum Canyon Rd. & La Palma Av.	TS	Not Applicable ⁵		0.654	0.861	B	D	Not Applicable ⁵		0.721	0.856	C	D	10.2%	-0.6%				

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

¹ Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

³ AWS = All-way Stop; CSS = Cross-Street Stop; TS = Traffic Signal; **CSS** = Improvement

⁴ ICU reported for signalized intersections only.

⁵ HCM reported for unsignalized intersections only (also a Caltrans facility).

⁶ Although signalized, intersection is a Caltrans facility. Therefore, only HCM has been reported.

⁷ **Bold** text identifies locations and peak hours where the change in V/C meets the City's deficiency criteria.

TABLE 5-2: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control ⁴	Intersection Approach Lanes ¹												HCM Delay ² (sec)		Level of Service		ICU ³ (v/c)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R	L	T	R					
1	Rose Dr. & Imperial Highway																					
	Without Improvements	TS	2	2	1	2	2	1	1	3	0	2	3	1	Not Applicable ⁵		0.768	0.947	C	E		
	With Improvements ⁸	TS	2	2	1	2	2	1	1	3	0	2	3	1	Not Applicable ⁵		0.655	0.728	B	C		
2	Prospect Av. & Imperial Highway																					
	Without Improvements	TS	1	1	0	1	1	0	1	3	0	1	3	0	Not Applicable ⁵		0.964	0.742	E	C		
	With Improvements ¹¹	TS	1	1	0	1	1	0	1	3	0	1	3	0	Not Applicable ⁵		--	--	--	--		
5	Imperial Highway & Yorba Linda Bl.																					
	Without Improvements	TS	1	3	0	2	3	0	1	3	0	1	3	2>	Not Applicable ⁵		0.903	0.850	E	D		
	With Improvements ⁹	TS	1	3	0	2	3	0	1	3	0	1	3	2>	Not Applicable ⁵		0.884	0.864	D	D		
6	Lakeview Av. & Buena Vista Av.																					
	Without Improvements	AWS	1	1	1	1	2	0	1	1	0	1	1	0	195.4	137.7	F	F		Not Applicable ⁶		
	With Improvements	TS	1	1	1	1	2	0	1	1	0	1	1	0	Not Applicable ⁵		0.640	0.735	B	C		
7	Kellogg Dr. & Imperial Highway EB Ramps																					
	Without Improvements	CSS	0	2	0	1	2	0	1	0	1	0	0	0	>200.0	72.1	F	F		Not Applicable ⁶		
	With Improvements ⁷	TS	0	2	0	1	2	0	1	0	1	0	0	0	Not Applicable ⁵		0.702	0.499	C	A		
16	Weir Canyon Rd. & Savi Ranch Pkwy.																					
	Without Improvements	TS	1	3	1	1	3	1	1	0	2	2	0	2	Not Applicable ⁵		0.652	0.926	B	E		
	With Improvements ¹⁰	TS	1	3	1	1	3	1	1	0	2	3	0	2>	Not Applicable ⁵		0.625	0.867	B	D		

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap Phasing; **1** = Improvement

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

⁴ TS = Traffic Signal; AWS = All-Way Stop; CSS = Cross-Street Stop

⁵ ICU reported for signalized intersections only.

⁶ HCM reported for unsignalized intersections only.

⁷ Although signalized, intersection is a Caltrans facility. Therefore, only HCM has been reported.

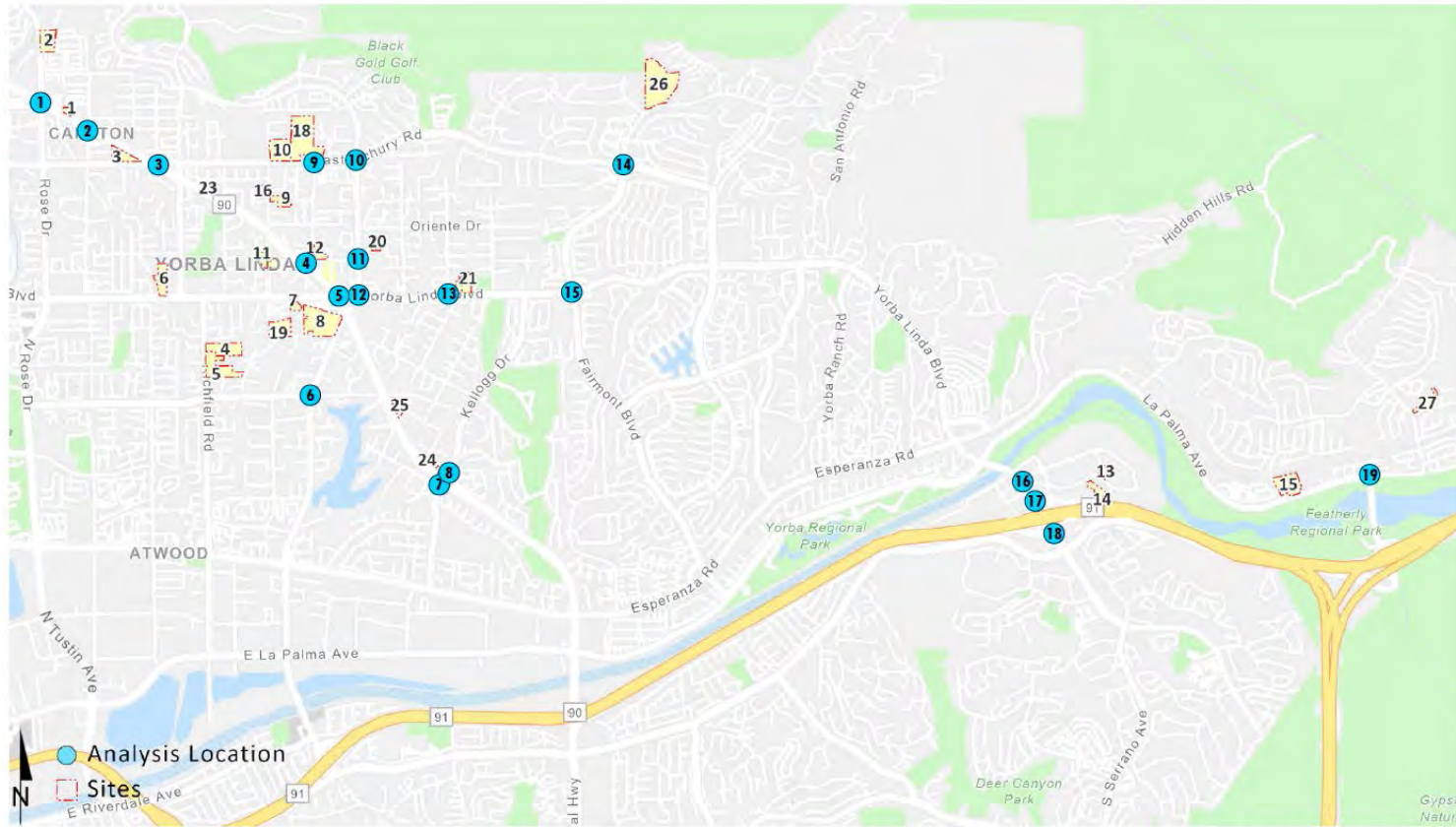
⁸ Modify signal phasing of SB/NB from Protected to split phasing

⁹ Modify signal phasing of EB/WB from Protected to split phasing

¹⁰ Modify signal phasing to provide overlapped phase

¹¹ No feasible solution

EXHIBIT 5-4: HORIZON YEAR (2045) INTERSECTION IMPROVEMENTS



1	2	5	6	7	16
Rose Dr. & Imperial Hwy. (SR-90)	Prospect Av. & Imperial Hwy. (SR-90)	Imperial Hwy. (SR-90) & Yorba Linda Bl.	Lakeview Av. & Buena Vista Av.	Kellogg Dr. & Imperial Hwy. (SR-90) SB Ramps	Yorba Linda Bl. & Savi Ranch Pkwy.

- = Existing Traffic Signal
- = Traffic Signal Improvement
- = All Way Stop
- RTO** = Right Turn Overlap
- = Channelized Yield
- 1** = Modify Traffic Signal to Provide NB/SB Split Phasing
- 2** = Modify Traffic Signal to Provide EB/WB Split Phasing
- 3** = No Feasible Solution
- = Lane Improvement

6 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Yorba Linda are funded through a combination of project mitigation, development impact fee programs or fair share contributions, such as the City of Yorba Linda Traffic Impact Fee (TIF) program. Identification and timing of needed improvements is determined through local jurisdictions based upon a variety of factors.

6.1 CITY OF YORBA LINDA TRAFFIC IMPACT FEE PROGRAM

The City of Yorba Linda has created its own local TIF program to impose and collect fees from new residential, commercial, office, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The fee schedule was adopted on June 15, 1993. The fee schedule and project transportation impacts fees are shown on Table 6-1. Under the City's TIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the TIF program.

The TIF fees is currently under City's review. Thus, the cost per unit as shown on Table 6-1 may change due to this review.

TABLE 6-1: CURRENT TRAFFIC IMPACT FEES

Fee Reference	Cost
Circulation (Streets, Signals, and Bridges) System:	
Residential	\$600/unit
Industrial	\$0.15/SF
Office	\$0.48/SF
Commercial	\$1.98/SF

The timing to use the TIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of implementing the improvements listed in its facilities list. The City also uses this data to ensure that the improvements listed on the facilities list are constructed before the LOS falls below the LOS performance standards adopted by the City. In this way, the improvements are constructed before the LOS falls below the City's LOS performance thresholds.

The Project Applicant will be subject to the City's TIF fee program and will pay the requisite City TIF fees at the rates then in effect pursuant to the City's ordinance. The Project Applicant's payment of the requisite TIF at the rates then in effect, pursuant to the City TIF Program, would satisfy the Project's proportional mitigation requirements at potentially affected TIF-funded facilities.

6.2 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs (e.g., TIF), construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City of Yorba Linda's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 6-2 for the applicable deficient intersections shown previously in Table 1-4. Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate. The cost and scope of the improvements will be developed in conjunction with the TIF Update.

TABLE 6-2: PROJECT FAIR SHARE CALCULATIONS

#	Intersection	Horizon Year				Project % of New Traffic	
		Existing	Project Only	(2045) With Project	Net New Traffic		
1	Rose Dr. & Imperial Highway	AM:	4,221	100	4,730	509	19.6%
		PM:	4,806	120	5,311	505	23.8%
2	Prospect Av. & Imperial Highway	AM:	4,395	126	4,940	545	23.1%
		PM:	4,321	122	4,801	480	25.5%
5	Imperial Highway & Yorba Linda Bl.	AM:	4,664	31	5,000	336	9.2%
		PM:	5,231	37	5,559	328	11.3%
6	Lakeview Av. & Buena Vista Av.	AM:	1,746	69	2,080	334	20.7%
		PM:	1,671	119	2,020	349	34.1%
7	Kellogg Dr. & Imperial Highway EB Ramps	AM:	1,609	100	1,840	231	43.3%
		PM:	1,248	51	1,310	62	82.3%
16	Weir Canyon Rd. & Savi Ranch Pkwy.	AM:	4,135	118	4,648	513	23.1%
		PM:	5,356	152	5,951	595	25.5%

BOLD = Denotes highest fair share percentage.

7 VEHICLE MILES TRAVELED

The VMT report has been prepared under a separate cover.

This page intentionally left blank.

8 REFERENCES

1. **Husch, David and Albeck, John.** *Intersection Capacity Utilization: Evaluation Procedures for Intersections and Interchanges*. Albany, California : Trafficware, 2003 Edition.
2. **Transportation Research Board.** *Highway Capacity Manual (HCM)*. 6th Edition. Washington, D.C. : National Academy of Sciences, 2016. 978-0-309-16077-3.
3. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD)*. 2014, Updated March 30, 2021 (Revision 6).
4. **The City of Yorba Linda.** *City of Yorba Linda TIA Guidelines*. Yorba Linda : s.n., May 2020.

This page intentionally left blank

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

This Page Intentionally Left Blank



March 4, 2022

Mr. Tony Wang
City of Yorba Linda
4845 Casa Loma Avenue
Yorba Linda, CA 92886

SUBJECT: YORBA LINDA HOUSING ELEMENT & GENERAL PLAN UPDATE TRAFFIC ANALYSIS SCOPING AGREEMENT

Dear Mr. Tony Wang:

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for Yorba Linda Housing Element & General Plan Update (**Project**), located in the City of Yorba Linda. This letter describes the proposed analysis methodology that has been used to establish the draft proposed Project study area and analysis locations.

PROJECT DESCRIPTION

The Yorba Linda 2021 – 2029 Draft Housing Element traffic study will analyze and identify potential traffic-related deficiencies resulting from the rezoning and revised General Plan land use development assumptions necessary to address the City of Yorba Linda’s regional housing needs assessment (RHNA) allocation. The Housing Element proposes a rezoning program of 25 vacant or underutilized sites for multi-family residential use at densities of 10 to 35 units to the acre. The Yorba Linda 2021 – 2029 Draft Housing Element will revise the General Plan land use and development intensities for the 25 sites to accommodate approximately 2,100 additional dwelling units for a total of 2,410 dwelling units (including the existing zoning).

The traffic study will evaluate the proposed development intensities expected for the 25 sites and assess the potential traffic deficiencies that result from the implementation of the rezoning and changes to land use. Exhibit 1 identifies the locations of each of the Housing Element sites summarized on Table 2. Detailed locations of each site are provided in Attachment A.

EXHIBIT 1: HOUSING ELEMENT SITE LOCATION MAP

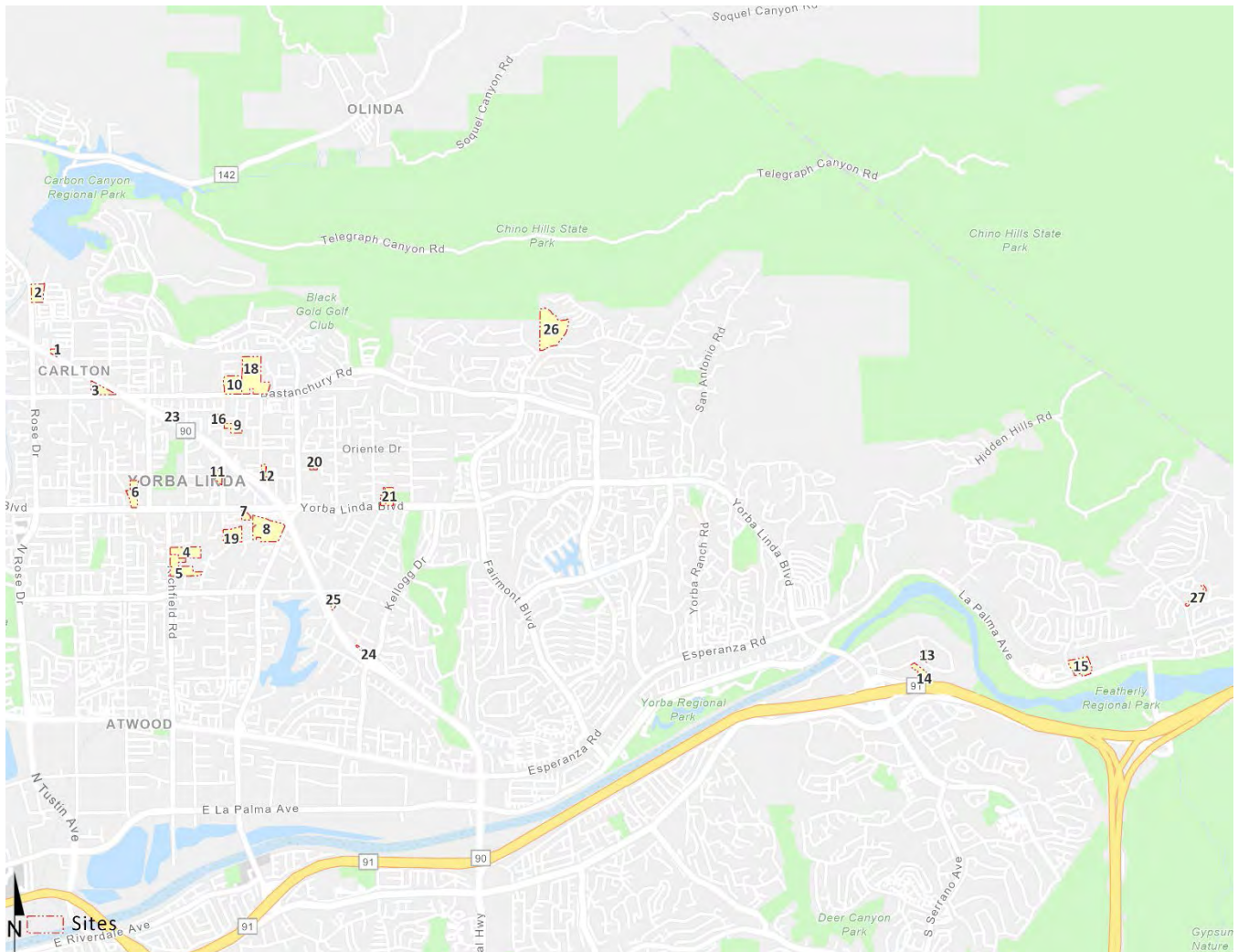


TABLE 2: SUMMARY OF HOUSING ELEMENT SITES

#	HE Site ID	Site	Current Zoning	Proposed Zoning	Acres	Total Net Unit Potential
1	S1-021	W. of 16951 Imperial Highway	CG	Commercial Mixed Use Overlay	1.76	62
2	S1-200	SEC Rose Dr. & Blake Rd.	RE	RM-20 w/ Affordable Overlay	5.94	208
3	S2-008	17151 Bastanchury Rd.	RE	Congregational Land Overlay	4.92	60
4	S3-012	5320 Richfield Rd.	RU	Congregational Land Overlay	9.48	55
5	S3-207	5300-5392 Richfield Rd.	RU	RM-20 w/ Affordable Overlay	9.7	340
6	S2-013	4861 Liverpool St.	RU	Congregational Land Overlay	6.2	40
7	S3-074	18132 Yorba Linda Bl.	CG	RM-20 w/ Affordable Overlay	0.42	15
8	S3-024	Friends Church Overflow Parking	RE	Congregational Land Overlay	17.45	48
9	S3-033	4382 Eureka Av.	RS	Congregational Land Overlay	3.88	30
10	S3-210	18111 Bastanchury Rd.	PD-26	Congregational Land Overlay	9.23	105
11	S3-082	4791 & 4811 Eureka Av.	CG	RM-20 w/ Affordable Overlay	1.75	61
12	S4-075	4742 Plumosa Dr.	CG	RM-20 w/ Affordable Overlay	1.62	57
13	S6-015	22722 Old Canal Rd.	PD	Affordable Housing Overlay	2.56	89
14	S6-020	22711 Oak Crest Circle	PD	RM-20 w/ Affordable Housing Overlay	10.35	143
15	S7-001	Bryant Ranch Shopping Center	CG	Commercial Mixed Use Overlay	9.15	320
16	S3-034	4341 Eureka Av.	RS	RM	2.19	22
18	S3-203	18101-18251 Bastanchury Rd.	PD	PD	22.83	228
19	S3-205A	5225 & 5227 Highland Av.	RE	RM	7.08	71
20	S4-200	18597-18602 Altrudy Ln.	RS	RM-20	2	40
21	S4-204A	19045 Yorba Linda Bl.	RE	Congregational Land Overlay	1.85	17
	S4-204B	19081-19111 Yorba Linda Bl.	RE	RM-20	3.9	78
23	S3-211	17651 Imperial Highway	RS	RM	2.32	23
24	S4-053	SWC of Kellogg Dr. & Grandview Av.	RE	RM	0.98	10
25	S4-060	5541 S. Ohio St.	RE	RM	0.96	10
	S4-201	5531 S. Ohio St.	RE	RM	1.82	18
26	S5-008	Fairmont Bl.	PD	RM	23.01	230
27	S7-005	NEC of Camino del Bryant & Meadowland	RU	RM	3.06	30
TOTAL					166.41	2,410

ANALYSIS SCENARIOS

Consistent with the City’s Guidelines (Traffic Impact Analysis (TIA) Guidelines, May 2020), intersection analysis will be provided for the following analysis scenarios:

- Existing (2022) Conditions
- Horizon Year (2045) Without Project
- Horizon Year (2045) With Project (Preferred Project)
- Optional: Horizon Year (2045) With Project (Up to 2 Alternatives)

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 6th Edition and Intersection Capacity Utilization (ICU) methodologies. ICU calculations shall use 1,700 vehicles per hour as the capacity.

The Without Project scenario represents the currently adopted land use intensities based on the City of Yorba Linda General Plan as well as key cumulative development projects in the Cities of Yorba Linda and Brea. The With Project scenario reflects buildout of the proposed Draft Housing Element (i.e., rezoning of the 27 vacant or underutilized sites to multi-family residential use with densities ranging from 10 to

30 units to the acre). Specifically, the latest version of the OCTAM traffic model will be updated to include the proposed zoning changes (for the Preferred Project, plus 2 Alternatives). The study area that is proposed to be evaluated is shown on Exhibit 2 and listed on Table 3.

EXHIBIT 2: STUDY AREA

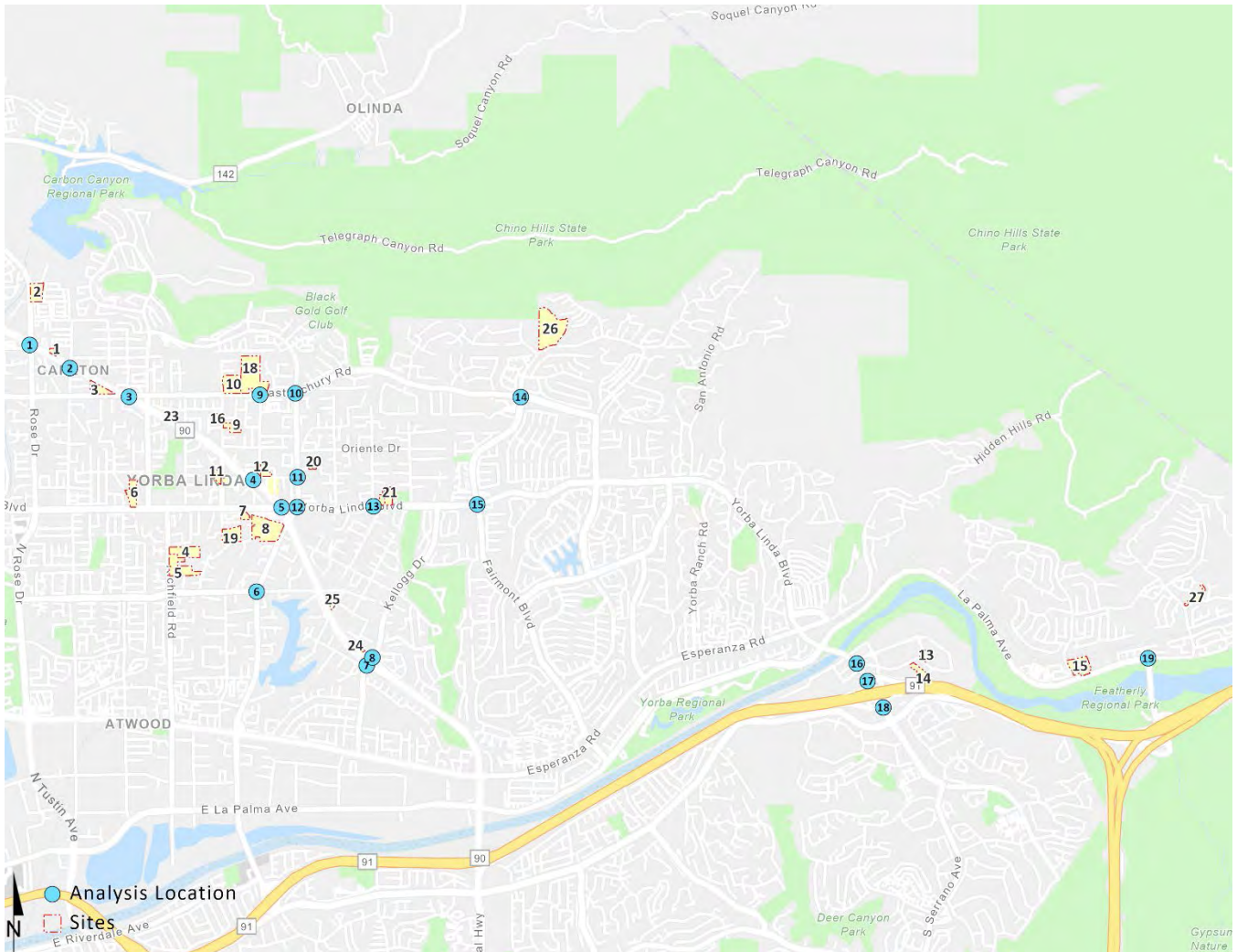


TABLE 3: LIST OF STUDY AREA INTERSECTIONS

#	Intersections
1	Rose Dr. & Imperial Highway
2	Prospect Av. & Imperial Highway
3	Imperial Highway & Bastanchury Rd.
4	Imperial Highway & Lemon Dr.
5	Imperial Highway & Yorba Linda Bl.
6	Lakeview Av. & Buena Vista Av.
7	Imperial Highway SB Ramps & Kellogg Dr.
8	Imperial Highway NB Ramps & Kellogg Dr.
9	Plumosa Dr. & Bastanchury Rd.
10	Lakeview Av. & Bastanchury Rd.
11	Lakeview Av. & Lemon Dr.
12	Lakeview Av. & Yorba Linda Bl.
13	Ohio St. & Yorba Linda Bl.
14	Fairmont Bl. & Bastanchury Rd.
15	Fairmont Bl. & Yorba Linda Bl.
16	Yorba Linda Bl. & Savi Ranch Pkwy.
17	Yorba Linda Bl. & SR-91 WB Ramps
18	Yorba Linda Bl. & SR-91 EB Ramps
19	Gypsum Canyon Rd. & La Palma Av.

TRAFFIC COUNTS

Traffic counts (classified by vehicle type) will be conducted during a typical Tuesday, Wednesday, or Thursday when local schools are in session and operating on a typical bell schedule. No adjustments are proposed to the new traffic counts for the baseline traffic condition.

TRANSPORTATION EFFECTS

Per the City’s Guidelines: The project traffic volumes resulting in a 1% increase in the volume-to-capacity ratio of a deficient intersection (LOS E or F) as compared to the No Project condition will require intersection improvements. Any study intersection that identifies a deficiency based on the City’s Guidelines will also identify intersection improvements needed to maintain acceptable LOS. The fair share cost for the identified improvements in the cumulative condition will also be calculated.

Mr. Tony Wang
City of Yorba Linda
March 4, 2022
Page 6 of 6

VEHICLE MILES TRAVELED (VMT)

Up to 27 housing element sites (a total of 15 sites were originally scoped for this effort) will be evaluated as part of a “project level” VMT analysis comparing VMT per service population for the proposed Housing Element to the City’s adopted VMT impact thresholds as described in the City Guidelines.

VMT per service population will be calculated for the following analysis scenarios:

- Baseline (2016) With Project (Housing Element sites) Conditions (using the OCTAM 2016 base year model)
- Horizon Year (2045) With Project (using the OCTAM 2045 cumulative year model)

If potential impacts are identified, Urban Crossroads will provide a list of potential VMT reduction measures consistent with the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA 2021). As this analysis is in support of a programmatic level environmental document, the list of mitigation measures will be provided that are applicable to residential development projects, however, future implementing projects will need to conduct its own project-level VMT analysis and if required VMT reduction mitigation as needed to achieve the City of Yorba Linda’s impact thresholds.

Urban Crossroads, Inc. is pleased to submit this letter documenting the scoping assumptions for the Yorba Linda Housing Element & General Plan Update. If you have any questions, please contact me directly at (949) 861-0177.

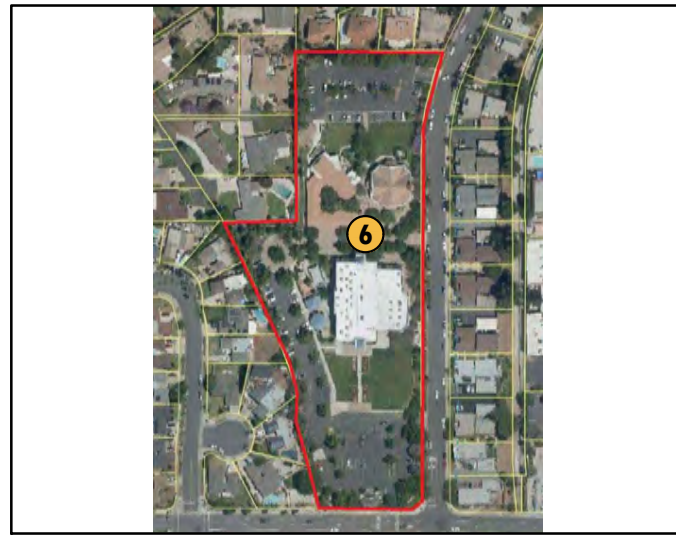
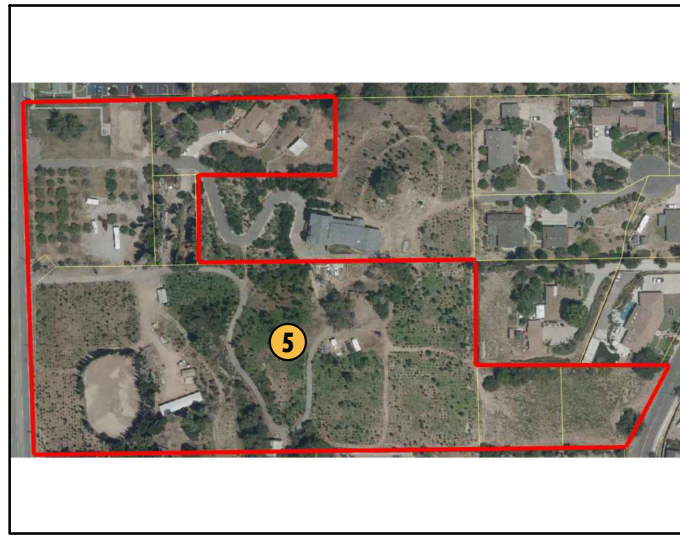
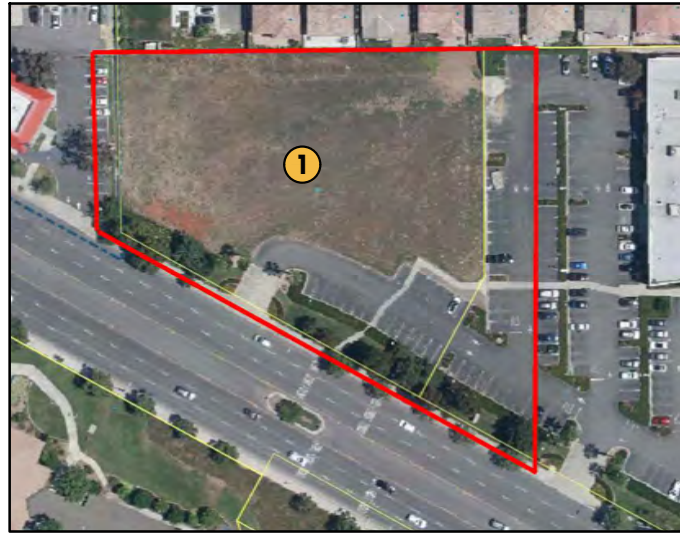
Respectfully submitted,

URBAN CROSSROADS, INC.

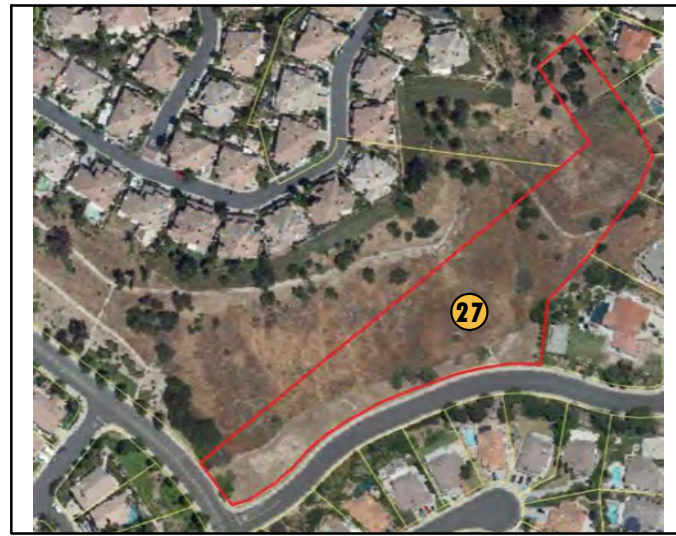
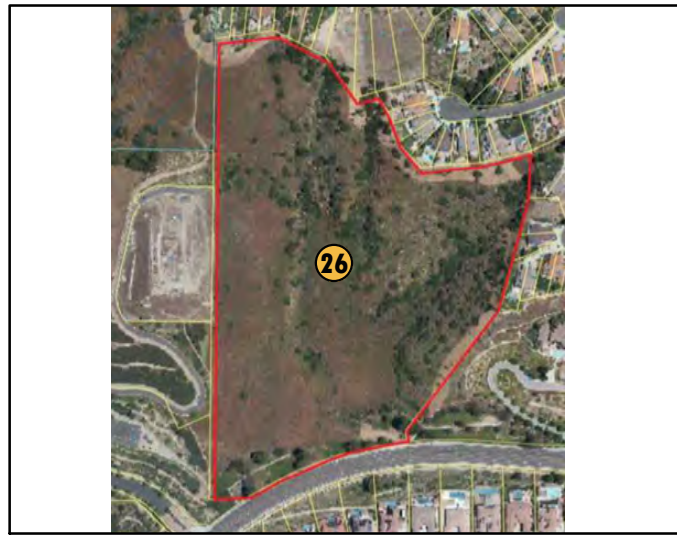


Charlene So, PE
Principal

ATTACHMENT A: LOCATIONS OF HOUSING ELEMENT SITES







APPENDIX 4.1: TRAFFIC COUNTS – MARCH 2022

This Page Intentionally Left Blank

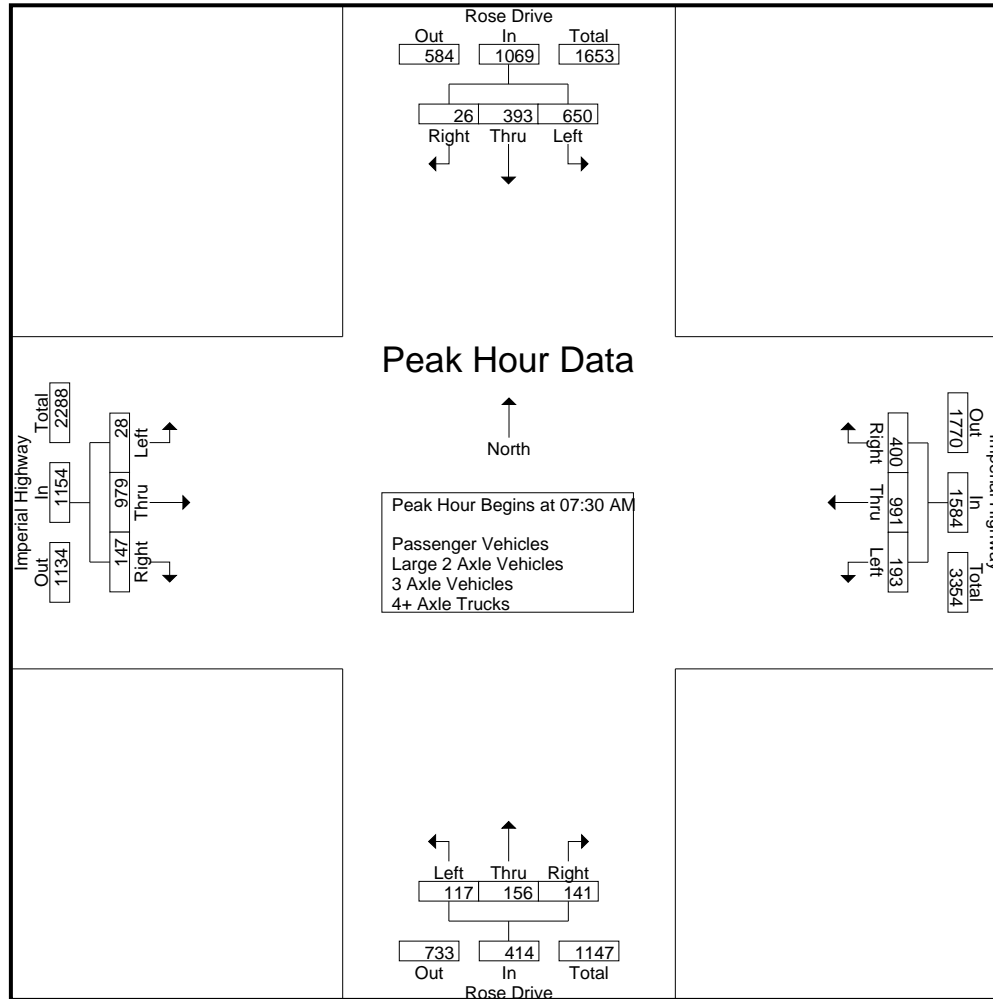
City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	108	124	3	0	235	30	181	61	16	272	22	30	25	12	77	1	172	29	3	202	31	786	817
07:15 AM	131	96	5	3	232	46	207	82	25	335	23	25	14	8	62	4	228	30	4	262	40	891	931
07:30 AM	177	112	5	1	294	72	245	102	30	419	23	24	40	23	87	5	298	39	0	342	54	1142	1196
07:45 AM	178	103	5	1	286	39	256	97	29	392	33	46	38	25	117	6	266	41	2	313	57	1108	1165
Total	594	435	18	5	1047	187	889	342	100	1418	101	125	117	68	343	16	964	139	9	1119	182	3927	4109
08:00 AM	163	88	8	6	259	38	255	112	28	405	26	46	29	18	101	12	203	40	11	255	63	1020	1083
08:15 AM	132	90	8	5	230	44	235	89	29	368	35	40	34	22	109	5	212	27	6	244	62	951	1013
08:30 AM	177	76	4	0	257	27	238	102	26	367	40	32	20	8	92	7	205	36	8	248	42	964	1006
08:45 AM	133	74	6	4	213	44	212	81	30	337	33	41	23	13	97	4	180	35	13	219	60	866	926
Total	605	328	26	15	959	153	940	384	113	1477	134	159	106	61	399	28	800	138	38	966	227	3801	4028
Grand Total	1199	763	44	20	2006	340	1829	726	213	2895	235	284	223	129	742	44	1764	277	47	2085	409	7728	8137
Apprch %	59.8	38	2.2			11.7	63.2	25.1			31.7	38.3	30.1			2.1	84.6	13.3					
Total %	15.5	9.9	0.6		26	4.4	23.7	9.4		37.5	3	3.7	2.9		9.6	0.6	22.8	3.6		27	5	95	
Passenger Vehicles	1186	753	42		2001	327	1787	716		3042	226	277	219		850	43	1686	265		2041	0	0	7934
% Passenger Vehicles	98.9	98.7	95.5	100	98.8	96.2	97.7	98.6	99.5	97.9	96.2	97.5	98.2	99.2	97.6	97.7	95.6	95.7	100	95.7	0	0	97.5
Large 2 Axle Vehicles	12	5	1		18	12	26	8		46	7	4	2		13	1	44	10		55	0	0	132
% Large 2 Axle Vehicles	1	0.7	2.3	0	0.9	3.5	1.4	1.1	0	1.5	3	1.4	0.9	0	1.5	2.3	2.5	3.6	0	2.6	0	0	1.6
3 Axle Vehicles	0	4	1		5	0	7	2		10	2	3	2		8	0	13	2		15	0	0	38
% 3 Axle Vehicles	0	0.5	2.3	0	0.2	0	0.4	0.3	0.5	0.3	0.9	1.1	0.9	0.8	0.9	0	0.7	0.7	0	0.7	0	0	0.5
4+ Axle Trucks	1	1	0		2	1	9	0		10	0	0	0		0	0	21	0		21	0	0	33
% 4+ Axle Trucks	0.1	0.1	0	0	0.1	0.3	0.5	0	0	0.3	0	0	0	0	0	0	1.2	0	0	1	0	0	0.4

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	177	112	5	294	72	245	102	419	23	24	40	87	5	298	39	342	1142
07:45 AM	178	103	5	286	39	256	97	392	33	46	38	117	6	266	41	313	1108
08:00 AM	163	88	8	259	38	255	112	405	26	46	29	101	12	203	40	255	1020
08:15 AM	132	90	8	230	44	235	89	368	35	40	34	109	5	212	27	244	951
Total Volume	650	393	26	1069	193	991	400	1584	117	156	141	414	28	979	147	1154	4221
% App. Total	60.8	36.8	2.4		12.2	62.6	25.3		28.3	37.7	34.1		2.4	84.8	12.7		
PHF	.913	.877	.813	.909	.670	.968	.893	.945	.836	.848	.881	.885	.583	.821	.896	.844	.924



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:45 AM				07:15 AM				
+0 mins.	131	96	5	232	72	245	102	419	33	46	38	117	4	228	30	262	
+15 mins.	177	112	5	294	39	256	97	392	26	46	29	101	5	298	39	342	
+30 mins.	178	103	5	286	38	255	112	405	35	40	34	109	6	266	41	313	
+45 mins.	163	88	8	259	44	235	89	368	40	32	20	92	12	203	40	255	
Total Volume	649	399	23	1071	193	991	400	1584	134	164	121	419	27	995	150	1172	
% App. Total	60.6	37.3	2.1		12.2	62.6	25.3		32	39.1	28.9		2.3	84.9	12.8		
PHF	.912	.891	.719	.911	.670	.968	.893	.945	.838	.891	.796	.895	.563	.835	.915	.857	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

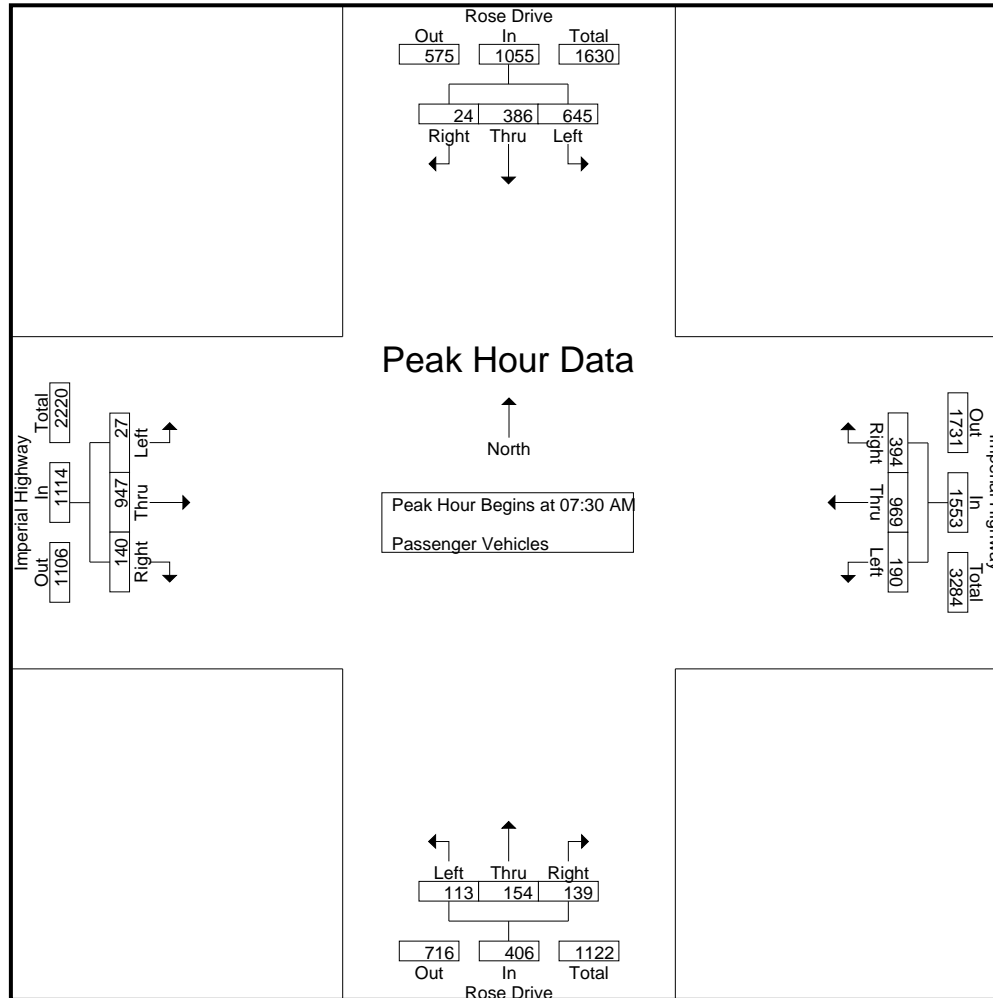
Groups Printed- Passenger Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	106	124	3	0	233	30	181	61	16	272	22	28	25	12	75	1	161	29	3	191	31	771	802
07:15 AM	129	95	5	3	229	43	202	79	25	324	22	25	13	8	60	4	219	28	4	251	40	864	904
07:30 AM	177	109	5	1	291	71	239	101	30	411	22	24	40	23	86	5	290	36	0	331	54	1119	1173
07:45 AM	175	101	4	1	280	39	249	94	29	382	33	46	36	24	115	6	259	41	2	306	56	1083	1139
Total	587	429	17	5	1033	183	871	335	100	1389	99	123	114	67	336	16	929	134	9	1079	181	3837	4018
08:00 AM	161	88	8	6	257	37	253	112	28	402	23	46	29	18	98	12	192	37	11	241	63	998	1061
08:15 AM	132	88	7	5	227	43	228	87	28	358	35	38	34	22	107	4	206	26	6	236	61	928	989
08:30 AM	174	75	4	0	253	27	231	102	26	360	38	29	19	8	86	7	195	33	8	235	42	934	976
08:45 AM	132	73	6	4	211	37	204	80	30	321	31	41	23	13	95	4	164	35	13	203	60	830	890
Total	599	324	25	15	948	144	916	381	112	1441	127	154	105	61	386	27	757	131	38	915	226	3690	3916
Grand Total	1186	753	42	20	1981	327	1787	716	212	2830	226	277	219	128	722	43	1686	265	47	1994	407	7527	7934
Apprch %	59.9	38	2.1			11.6	63.1	25.3			31.3	38.4	30.3			2.2	84.6	13.3					
Total %	15.8	10	0.6		26.3	4.3	23.7	9.5		37.6	3	3.7	2.9		9.6	0.6	22.4	3.5		26.5	5.1	94.9	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	177	109	5	291	71	239	101	411	22	24	40	86	5	290	36	331	1119
07:45 AM	175	101	4	280	39	249	94	382	33	46	36	115	6	259	41	306	1083
08:00 AM	161	88	8	257	37	253	112	402	23	46	29	98	12	192	37	241	998
08:15 AM	132	88	7	227	43	228	87	358	35	38	34	107	4	206	26	236	928
Total Volume	645	386	24	1055	190	969	394	1553	113	154	139	406	27	947	140	1114	4128
% App. Total	61.1	36.6	2.3		12.2	62.4	25.4		27.8	37.9	34.2		2.4	85	12.6		
PHF	.911	.885	.750	.906	.669	.958	.879	.945	.807	.837	.869	.883	.563	.816	.854	.841	.922

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	177	109	5	291	71	239	101	411	22	24	40	86	5	290	36	331	
+15 mins.	175	101	4	280	39	249	94	382	33	46	36	115	6	259	41	306	
+30 mins.	161	88	8	257	37	253	112	402	23	46	29	98	12	192	37	241	
+45 mins.	132	88	7	227	43	228	87	358	35	38	34	107	4	206	26	236	
Total Volume	645	386	24	1055	190	969	394	1553	113	154	139	406	27	947	140	1114	
% App. Total	61.1	36.6	2.3		12.2	62.4	25.4		27.8	37.9	34.2		2.4	85	12.6		
PHF	.911	.885	.750	.906	.669	.958	.879	.945	.807	.837	.869	.883	.563	.816	.854	.841	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

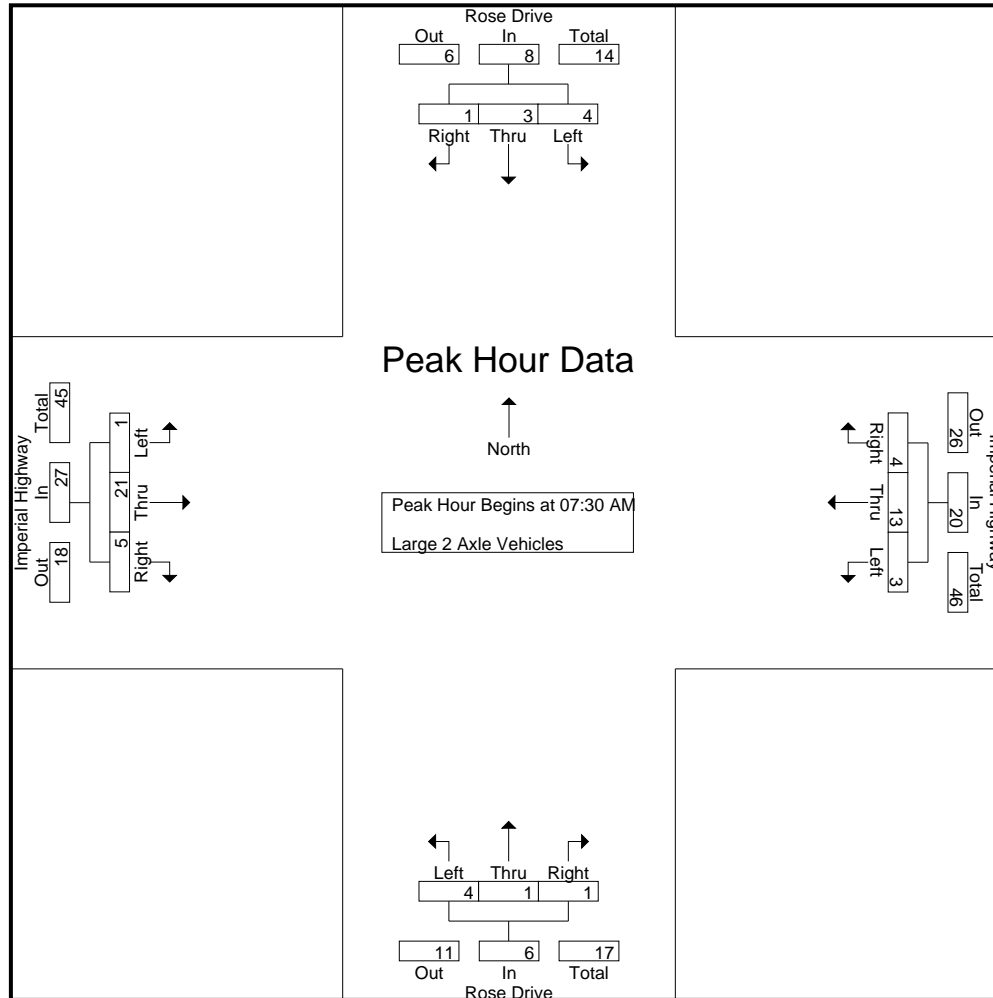
Groups Printed- Large 2 Axle Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	6	6
07:15 AM	2	0	0	0	2	2	3	3	0	8	0	0	0	0	0	0	5	2	0	7	0	0	17	17
07:30 AM	0	1	0	0	1	1	6	1	0	8	1	0	0	0	1	0	5	3	0	8	0	0	18	18
07:45 AM	2	1	0	0	3	0	4	3	0	7	0	0	1	0	1	0	6	0	0	6	0	0	17	17
Total	6	2	0	0	8	3	13	7	0	23	1	0	1	0	2	0	20	5	0	25	0	0	58	58
08:00 AM	2	0	0	0	2	1	0	0	0	1	3	0	0	0	3	0	7	1	0	8	0	0	14	14
08:15 AM	0	1	1	0	2	1	3	0	0	4	0	1	0	0	1	1	3	1	0	5	0	0	12	12
08:30 AM	3	1	0	0	4	0	5	0	0	5	1	3	1	0	5	0	8	3	0	11	0	0	25	25
08:45 AM	1	1	0	0	2	7	5	1	0	13	2	0	0	0	2	0	6	0	0	6	0	0	23	23
Total	6	3	1	0	10	9	13	1	0	23	6	4	1	0	11	1	24	5	0	30	0	0	74	74
Grand Total	12	5	1	0	18	12	26	8	0	46	7	4	2	0	13	1	44	10	0	55	0	0	132	132
Apprch %	66.7	27.8	5.6			26.1	56.5	17.4			53.8	30.8	15.4			1.8	80	18.2						
Total %	9.1	3.8	0.8		13.6	9.1	19.7	6.1		34.8	5.3	3	1.5		9.8	0.8	33.3	7.6		41.7	0	0	100	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	1	6	1	8	1	0	0	1	0	5	3	8	18
07:45 AM	2	1	0	3	0	4	3	7	0	0	1	1	0	6	0	6	17
08:00 AM	2	0	0	2	1	0	0	1	3	0	0	3	0	7	1	8	14
08:15 AM	0	1	1	2	1	3	0	4	0	1	0	1	1	3	1	5	12
Total Volume	4	3	1	8	3	13	4	20	4	1	1	6	1	21	5	27	61
% App. Total	50	37.5	12.5		15	65	20		66.7	16.7	16.7		3.7	77.8	18.5		
PHF	.500	.750	.250	.667	.750	.542	.333	.625	.333	.250	.250	.500	.250	.750	.417	.844	.847

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	1	6	1	8	1	0	0	1	0	5	3	8	
+15 mins.	2	1	0	3	0	4	3	7	0	0	1	1	0	6	0	6	
+30 mins.	2	0	0	2	1	0	0	1	3	0	0	3	0	7	1	8	
+45 mins.	0	1	1	2	1	3	0	4	0	1	0	1	1	3	1	5	
Total Volume	4	3	1	8	3	13	4	20	4	1	1	6	1	21	5	27	
% App. Total	50	37.5	12.5		15	65	20		66.7	16.7	16.7		3.7	77.8	18.5		
PHF	.500	.750	.250	.667	.750	.542	.333	.625	.333	.250	.250	.500	.250	.750	.417	.844	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

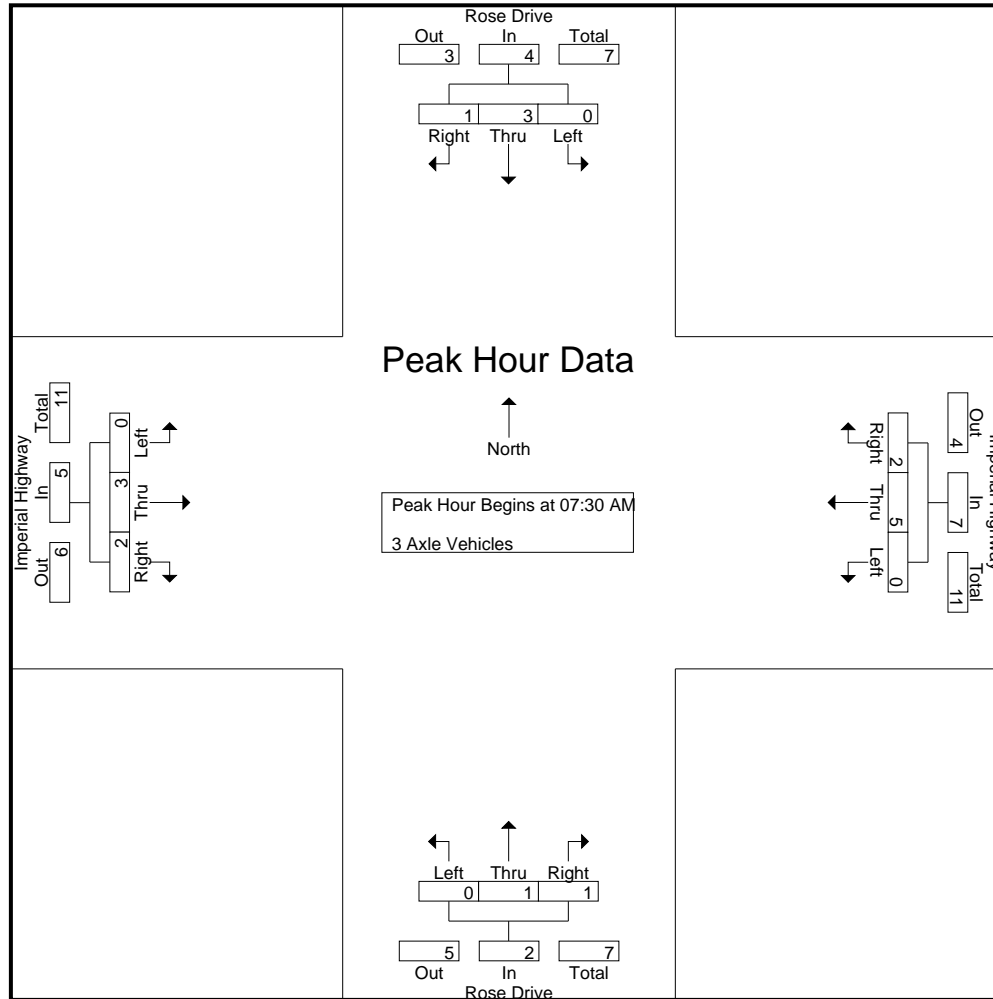
Groups Printed- 3 Axle Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2	2	0	0	2	
07:15 AM	0	1	0	0	1	0	1	0	0	1	1	0	1	0	2	0	1	0	0	1	0	0	5	5	0	5	5	
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2	0	2	2	
07:45 AM	0	1	1	0	2	0	2	0	0	2	0	0	1	1	1	0	0	0	0	0	0	0	5	5	1	5	6	
Total	0	3	1	0	4	0	3	0	0	3	1	2	2	1	5	0	2	0	0	2	0	2	14	14	1	14	15	
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2	0	4	0	0	5	5	0	5	5	
08:15 AM	0	1	0	0	1	0	2	2	1	4	0	1	0	0	1	0	0	0	0	0	0	0	6	6	1	6	7	
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	0	3	3	0	3	3	
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	8	8	0	8	8	
Total	0	1	0	0	1	0	4	2	1	6	1	1	0	0	2	0	11	2	0	13	0	11	22	22	1	22	23	
Grand Total	0	4	1	0	5	0	7	2	1	9	2	3	2	1	7	0	13	2	0	15	0	13	36	36	2	36	38	
Apprch %	0	80	20			0	77.8	22.2			28.6	42.9	28.6			0	86.7	13.3			0	86.7	13.3					
Total %	0	11.1	2.8		13.9	0	19.4	5.6		25	5.6	8.3	5.6		19.4	0	36.1	5.6		41.7	0	36.1	5.6		41.7	5.3	94.7	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
07:45 AM	0	1	1	2	0	2	0	2	0	0	1	1	0	0	0	0	5
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	5
08:15 AM	0	1	0	1	0	2	2	4	0	1	0	1	0	0	0	0	6
Total Volume	0	3	1	4	0	5	2	7	0	1	1	2	0	3	2	5	18
% App. Total	0	75	25		0	71.4	28.6		0	50	50		0	60	40		
PHF	.000	.750	.250	.500	.000	.625	.250	.438	.000	.250	.250	.500	.000	.375	.250	.313	.750

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	1	1	2	0	2	0	2	0	0	1	1	0	0	0	0	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	
+45 mins.	0	1	0	1	0	2	2	4	0	1	0	1	0	0	0	0	
Total Volume	0	3	1	4	0	5	2	7	0	1	1	2	0	3	2	5	
% App. Total	0	75	25		0	71.4	28.6		0	50	50		0	60	40		
PHF	.000	.750	.250	.500	.000	.625	.250	.438	.000	.250	.250	.500	.000	.375	.250	.313	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

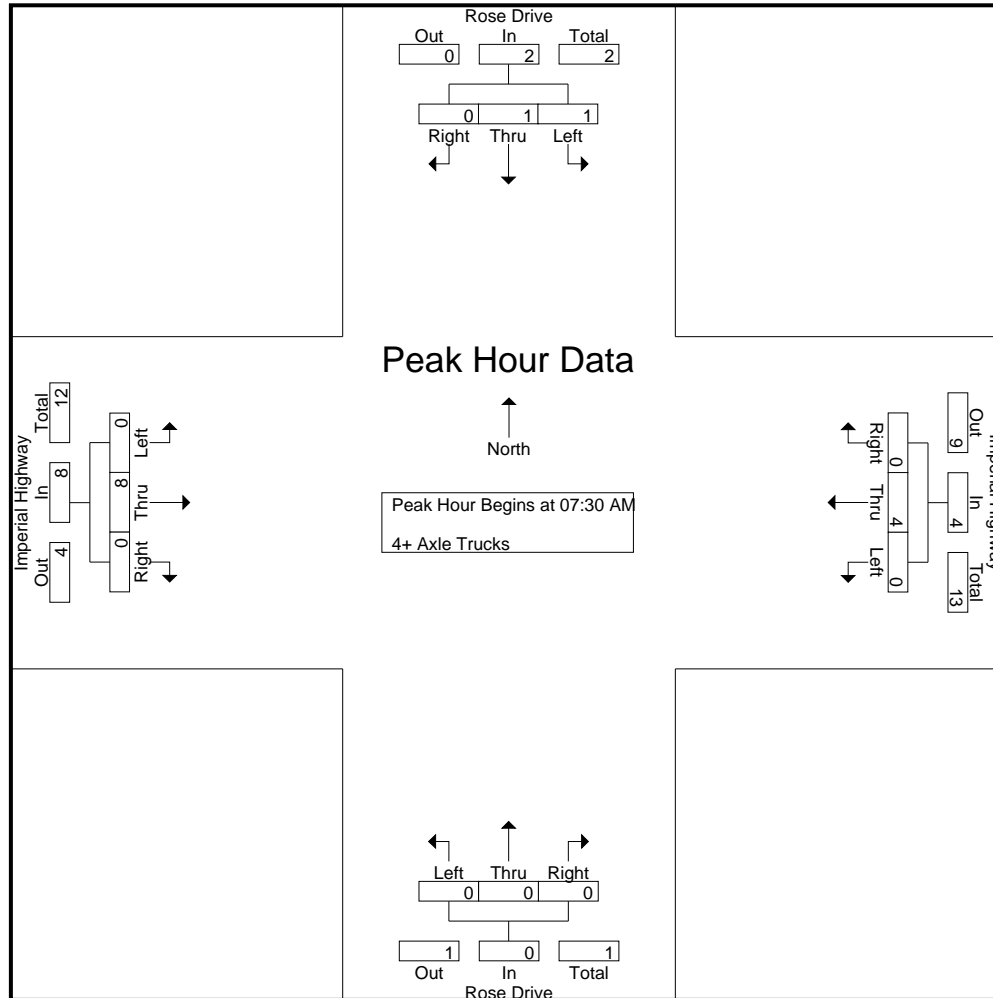
Groups Printed- 4+ Axle Trucks

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	7	7
07:15 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	5	5
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	3
07:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	3	3
Total	1	1	0	0	2	1	2	0	0	3	0	0	0	0	0	0	13	0	0	13	0	18	18
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	5	5
08:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	5	5
Total	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	15	15
Grand Total	1	1	0	0	2	1	9	0	0	10	0	0	0	0	0	0	21	0	0	21	0	33	33
Apprch %	50	50	0			10	90	0			0	0	0			0	100	0			0		
Total %	3	3	0		6.1	3	27.3	0		30.3	0	0	0		0	0	63.6	0		63.6	0	100	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
07:45 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total Volume	1	1	0	2	0	4	0	4	0	0	0	0	0	8	0	8	14
% App. Total	50	50	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.250	.000	.500	.000	.500	.000	.500	.000	.000	.000	.000	.000	.667	.000	.667	.700

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	
+15 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	
Total Volume	1	1	0	2	0	4	0	4	0	0	0	0	0	8	0	8	
% App. Total	50	50	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.250	.000	.500	.000	.500	.000	.500	.000	.000	.000	.000	.000	.667	.000	.667	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

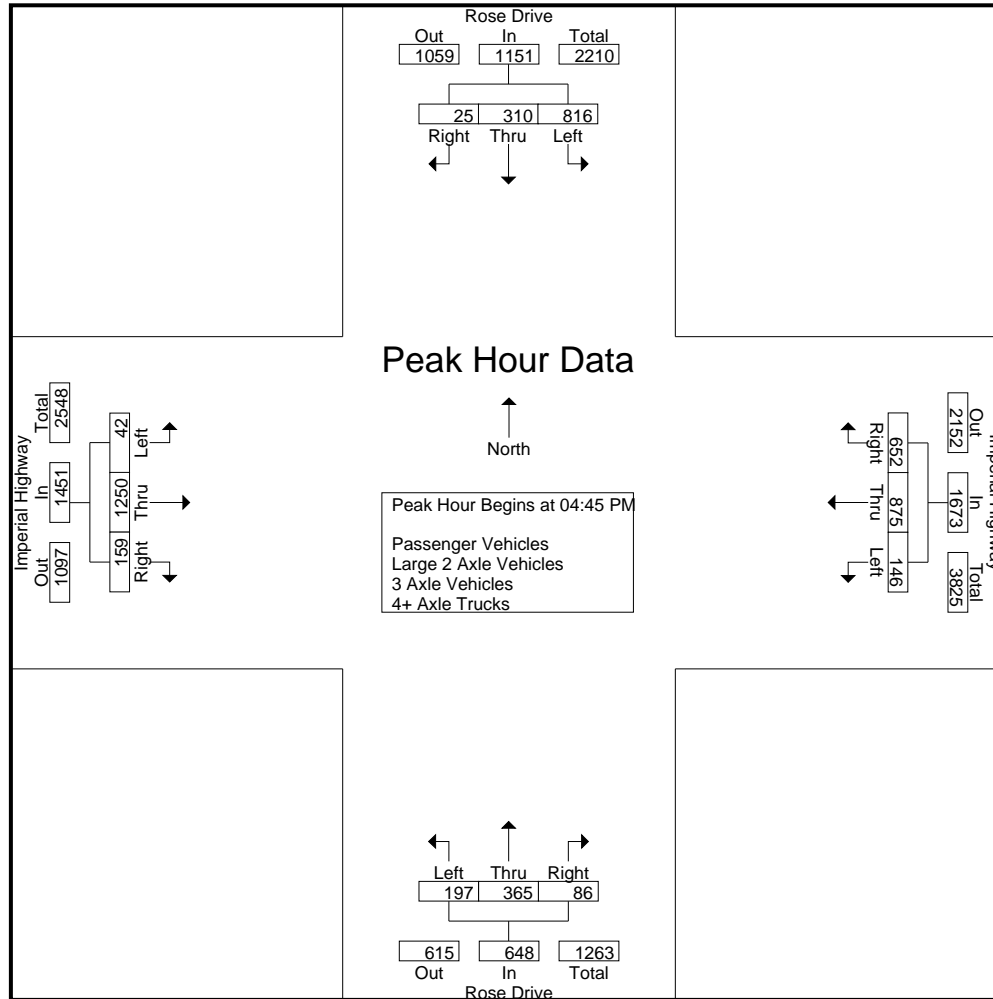
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	193	108	1	0	302	41	188	122	27	351	46	89	19	11	154	17	262	53	9	332	47	1139	1186
04:15 PM	201	75	4	1	280	37	212	157	45	406	31	81	25	17	137	12	267	46	7	325	70	1148	1218
04:30 PM	208	64	2	1	274	39	192	155	41	386	38	90	18	7	146	9	274	44	4	327	53	1133	1186
04:45 PM	187	79	5	2	271	31	222	132	32	385	52	116	21	6	189	6	299	44	5	349	45	1194	1239
Total	789	326	12	4	1127	148	814	566	145	1528	167	376	83	41	626	44	1102	187	25	1333	215	4614	4829
05:00 PM	238	82	5	2	325	47	205	169	51	421	61	89	18	12	168	14	313	37	5	364	70	1278	1348
05:15 PM	211	72	6	0	289	31	228	170	51	429	36	81	23	8	140	12	346	39	4	397	63	1255	1318
05:30 PM	180	77	9	6	266	37	220	181	47	438	48	79	24	12	151	10	292	39	3	341	68	1196	1264
05:45 PM	218	67	13	7	298	30	190	137	38	357	45	88	17	5	150	14	269	35	9	318	59	1123	1182
Total	847	298	33	15	1178	145	843	657	187	1645	190	337	82	37	609	50	1220	150	21	1420	260	4852	5112
Grand Total	1636	624	45	19	2305	293	1657	1223	332	3173	357	713	165	78	1235	94	2322	337	46	2753	475	9466	9941
Apprch %	71	27.1	2			9.2	52.2	38.5			28.9	57.7	13.4			3.4	84.3	12.2					
Total %	17.3	6.6	0.5		24.4	3.1	17.5	12.9		33.5	3.8	7.5	1.7		13	1	24.5	3.6		29.1	4.8	95.2	
Passenger Vehicles	1632	619	45		2315	288	1639	1215		3471	355	708	165		1306	93	2304	333		2775	0	0	9867
% Passenger Vehicles	99.8	99.2	100	100	99.6	98.3	98.9	99.3	99.1	99	99.4	99.3	100	100	99.5	98.9	99.2	98.8	97.8	99.1	0	0	99.3
Large 2 Axle Vehicles	3	4	0		7	5	11	7		26	1	5	0		6	0	10	4		15	0	0	54
% Large 2 Axle Vehicles	0.2	0.6	0	0	0.3	1.7	0.7	0.6	0.9	0.7	0.3	0.7	0	0	0.5	0	0.4	1.2	2.2	0.5	0	0	0.5
3 Axle Vehicles	1	1	0		2	0	1	0		1	1	0	0		1	0	4	0		4	0	0	8
% 3 Axle Vehicles	0.1	0.2	0	0	0.1	0	0.1	0	0	0	0.3	0	0	0	0.1	0	0.2	0	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	6	1		7	0	0	0		0	1	4	0		5	0	0	12
% 4+ Axle Trucks	0	0	0	0	0	0	0.4	0.1	0	0.2	0	0	0	0	0	1.1	0.2	0	0	0.2	0	0	0.1

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	187	79	5	271	31	222	132	385	52	116	21	189	6	299	44	349	1194
05:00 PM	238	82	5	325	47	205	169	421	61	89	18	168	14	313	37	364	1278
05:15 PM	211	72	6	289	31	228	170	429	36	81	23	140	12	346	39	397	1255
05:30 PM	180	77	9	266	37	220	181	438	48	79	24	151	10	292	39	341	1196
Total Volume	816	310	25	1151	146	875	652	1673	197	365	86	648	42	1250	159	1451	4923
% App. Total	70.9	26.9	2.2		8.7	52.3	39		30.4	56.3	13.3		2.9	86.1	11		
PHF	.857	.945	.694	.885	.777	.959	.901	.955	.807	.787	.896	.857	.750	.903	.903	.914	.963

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	238	82	5	325	31	222	132	385	52	116	21	189	6	299	44	349	
+15 mins.	211	72	6	289	47	205	169	421	61	89	18	168	14	313	37	364	
+30 mins.	180	77	9	266	31	228	170	429	36	81	23	140	12	346	39	397	
+45 mins.	218	67	13	298	37	220	181	438	48	79	24	151	10	292	39	341	
Total Volume	847	298	33	1178	146	875	652	1673	197	365	86	648	42	1250	159	1451	
% App. Total	71.9	25.3	2.8		8.7	52.3	39		30.4	56.3	13.3		2.9	86.1	11		
PHF	.890	.909	.635	.906	.777	.959	.901	.955	.807	.787	.896	.857	.750	.903	.903	.914	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

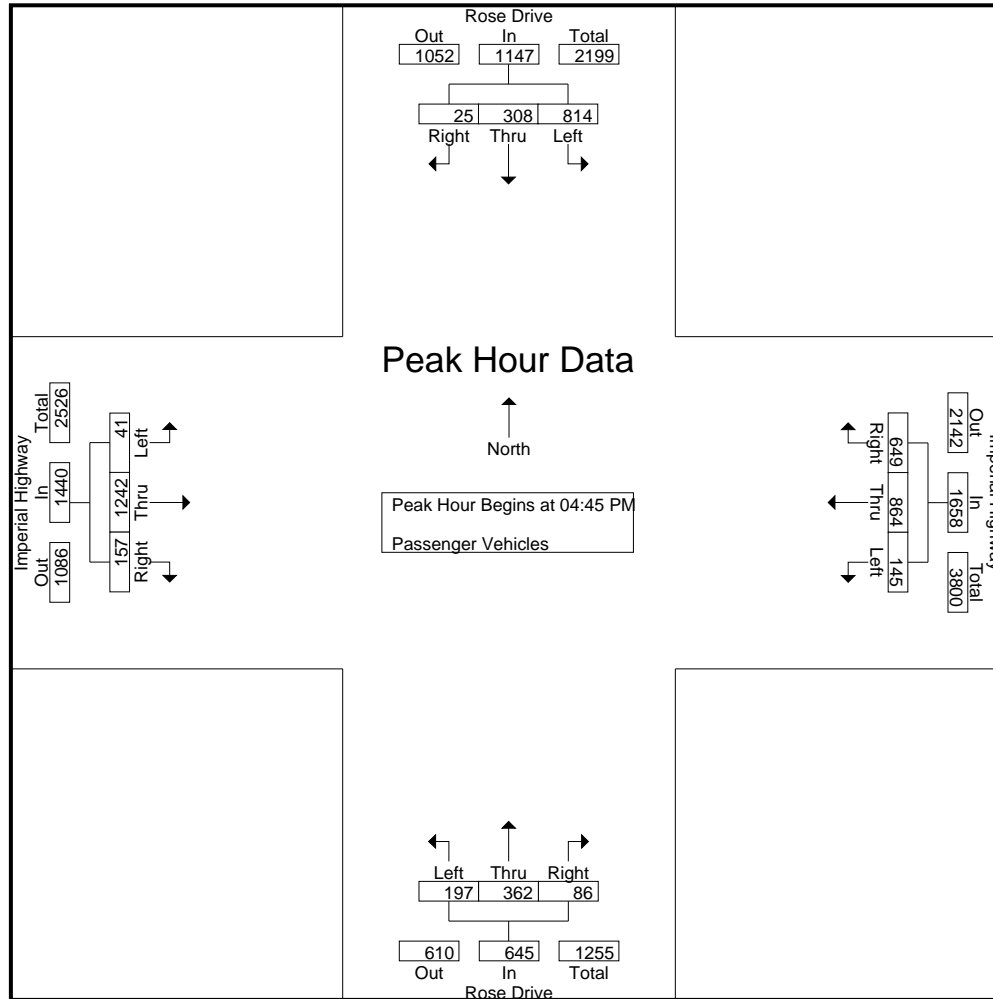
Groups Printed- Passenger Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	192	108	1	0	301	41	186	122	27	349	45	89	19	11	153	17	259	52	8	328	46	1131	1177
04:15 PM	201	72	4	1	277	34	207	154	43	395	31	81	25	17	137	12	263	45	7	320	68	1129	1197
04:30 PM	207	64	2	1	273	39	192	153	40	384	37	89	18	7	144	9	272	44	4	325	52	1126	1178
04:45 PM	187	78	5	2	270	31	217	132	32	380	52	113	21	6	186	6	298	44	5	348	45	1184	1229
Total	787	322	12	4	1121	145	802	561	142	1508	165	372	83	41	620	44	1092	185	24	1321	211	4570	4781
05:00 PM	236	82	5	2	323	47	205	169	51	421	61	89	18	12	168	13	310	35	5	358	70	1270	1340
05:15 PM	211	71	6	0	288	30	225	169	51	424	36	81	23	8	140	12	343	39	4	394	63	1246	1309
05:30 PM	180	77	9	6	266	37	217	179	47	433	48	79	24	12	151	10	291	39	3	340	68	1190	1258
05:45 PM	218	67	13	7	298	29	190	137	38	356	45	87	17	5	149	14	268	35	9	317	59	1120	1179
Total	845	297	33	15	1175	143	837	654	187	1634	190	336	82	37	608	49	1212	148	21	1409	260	4826	5086
Grand Total	1632	619	45	19	2296	288	1639	1215	329	3142	355	708	165	78	1228	93	2304	333	45	2730	471	9396	9867
Apprch %	71.1	27	2			9.2	52.2	38.7			28.9	57.7	13.4			3.4	84.4	12.2					
Total %	17.4	6.6	0.5		24.4	3.1	17.4	12.9		33.4	3.8	7.5	1.8		13.1	1	24.5	3.5		29.1	4.8	95.2	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	187	78	5	270	31	217	132	380	52	113	21	186	6	298	44	348	1184
05:00 PM	236	82	5	323	47	205	169	421	61	89	18	168	13	310	35	358	1270
05:15 PM	211	71	6	288	30	225	169	424	36	81	23	140	12	343	39	394	1246
05:30 PM	180	77	9	266	37	217	179	433	48	79	24	151	10	291	39	340	1190
Total Volume	814	308	25	1147	145	864	649	1658	197	362	86	645	41	1242	157	1440	4890
% App. Total	71	26.9	2.2		8.7	52.1	39.1		30.5	56.1	13.3		2.8	86.2	10.9		
PHF	.862	.939	.694	.888	.771	.960	.906	.957	.807	.801	.896	.867	.788	.905	.892	.914	.963

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	187	78	5	270	31	217	132	380	52	113	21	186	6	298	44	348	
+15 mins.	236	82	5	323	47	205	169	421	61	89	18	168	13	310	35	358	
+30 mins.	211	71	6	288	30	225	169	424	36	81	23	140	12	343	39	394	
+45 mins.	180	77	9	266	37	217	179	433	48	79	24	151	10	291	39	340	
Total Volume	814	308	25	1147	145	864	649	1658	197	362	86	645	41	1242	157	1440	
% App. Total	71	26.9	2.2		8.7	52.1	39.1		30.5	56.1	13.3		2.8	86.2	10.9		
PHF	.862	.939	.694	.888	.771	.960	.906	.957	.807	.801	.896	.867	.788	.905	.892	.914	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

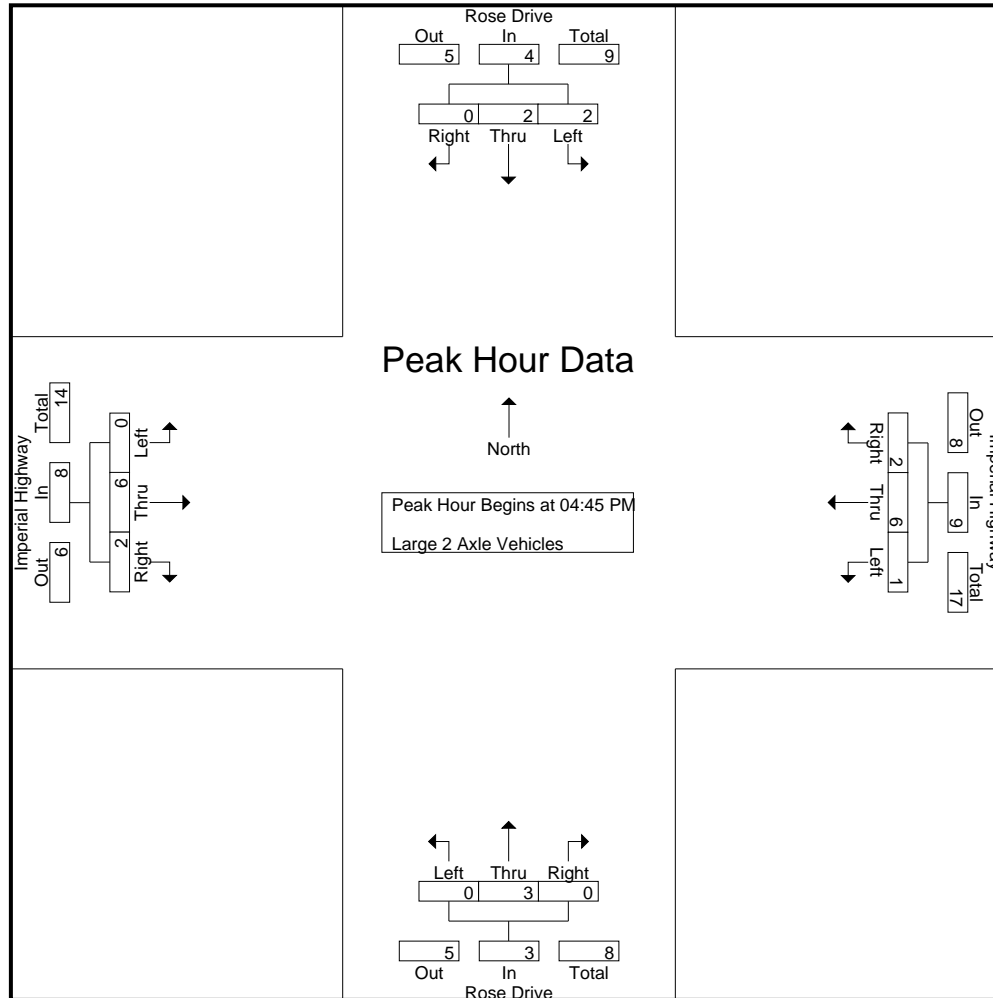
Groups Printed- Large 2 Axle Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	1	1	1	2	1	5	6
04:15 PM	0	2	0	0	2	3	3	3	2	9	0	0	0	0	0	0	1	1	0	2	2	13	15
04:30 PM	1	0	0	0	1	0	0	2	1	2	0	1	0	0	1	0	1	0	0	1	1	5	6
04:45 PM	0	1	0	0	1	0	3	0	0	3	0	3	0	0	3	0	1	0	0	1	0	8	8
Total	1	3	0	0	4	3	8	5	3	16	1	4	0	0	5	0	4	2	1	6	4	31	35
05:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	6	6
05:15 PM	0	1	0	0	1	1	2	1	0	4	0	0	0	0	0	0	3	0	0	3	0	8	8
05:30 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	3	3
Total	2	1	0	0	3	2	3	2	0	7	0	1	0	0	1	0	6	2	0	8	0	19	19
Grand Total	3	4	0	0	7	5	11	7	3	23	1	5	0	0	6	0	10	4	1	14	4	50	54
Apprch %	42.9	57.1	0			21.7	47.8	30.4			16.7	83.3	0			0	71.4	28.6					
Total %	6	8	0		14	10	22	14		46	2	10	0		12	0	20	8		28	7.4	92.6	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	3	0	3	0	3	0	3	0	1	0	1	8
05:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	4	6
05:15 PM	0	1	0	1	1	2	1	4	0	0	0	0	0	3	0	3	8
05:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
Total Volume	2	2	0	4	1	6	2	9	0	3	0	3	0	6	2	8	24
% App. Total	50	50	0		11.1	66.7	22.2		0	100	0		0	75	25		
PHF	.250	.500	.000	.500	.250	.500	.500	.563	.000	.250	.000	.250	.000	.500	.250	.500	.750

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	1	0	1	0	3	0	3	0	3	0	3	0	1	0	1	
+15 mins.	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	4	
+30 mins.	0	1	0	1	1	2	1	4	0	0	0	0	0	3	0	3	
+45 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	
Total Volume	2	2	0	4	1	6	2	9	0	3	0	3	0	6	2	8	
% App. Total	50	50	0		11.1	66.7	22.2		0	100	0		0	75	25		
PHF	.250	.500	.000	.500	.250	.500	.500	.563	.000	.250	.000	.250	.000	.500	.250	.500	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

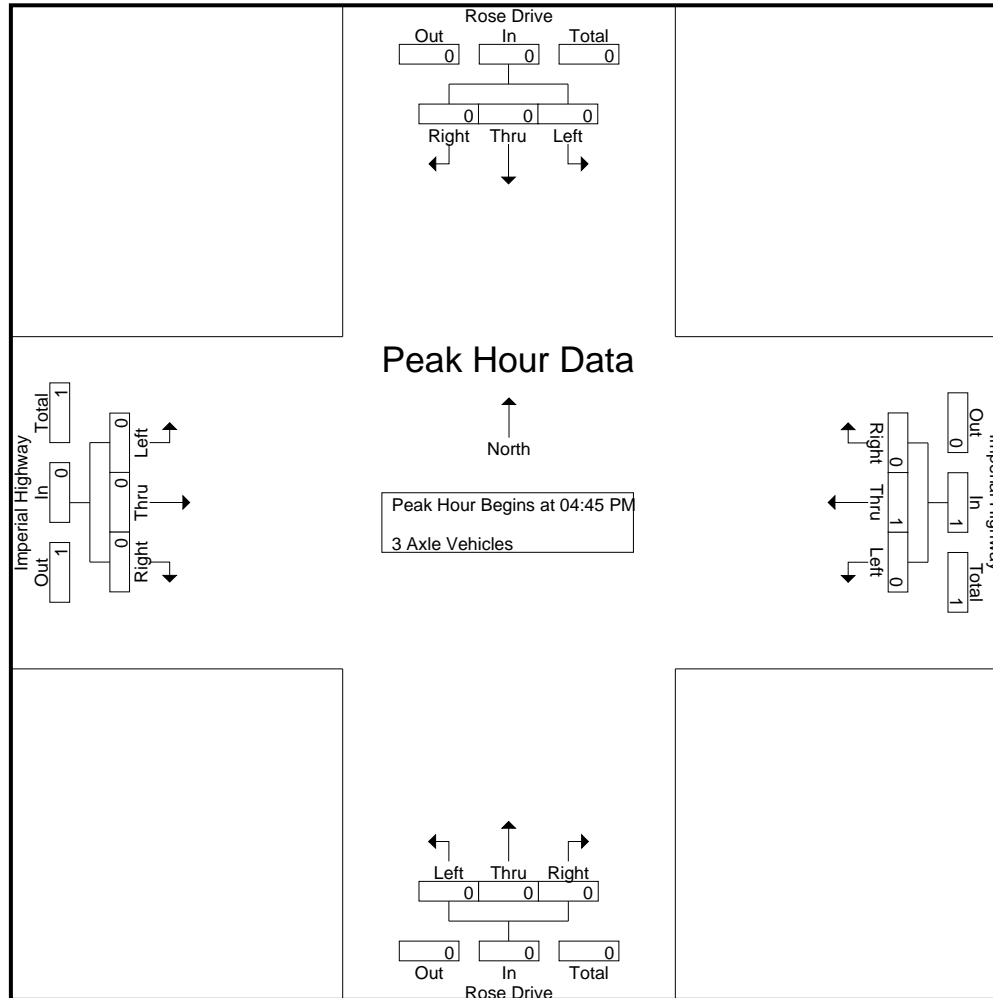
Groups Printed- 3 Axle Vehicles

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total		
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total					
04:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	4	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	8	8
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	8	8
Apprch %	50	50	0			0	100	0			100	0	0			0	100	0			0				
Total %	12.5	12.5	0		25	0	12.5	0		12.5	12.5	0	0		12.5	0	50	0		50	0		100		

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0	0	0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.250	

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

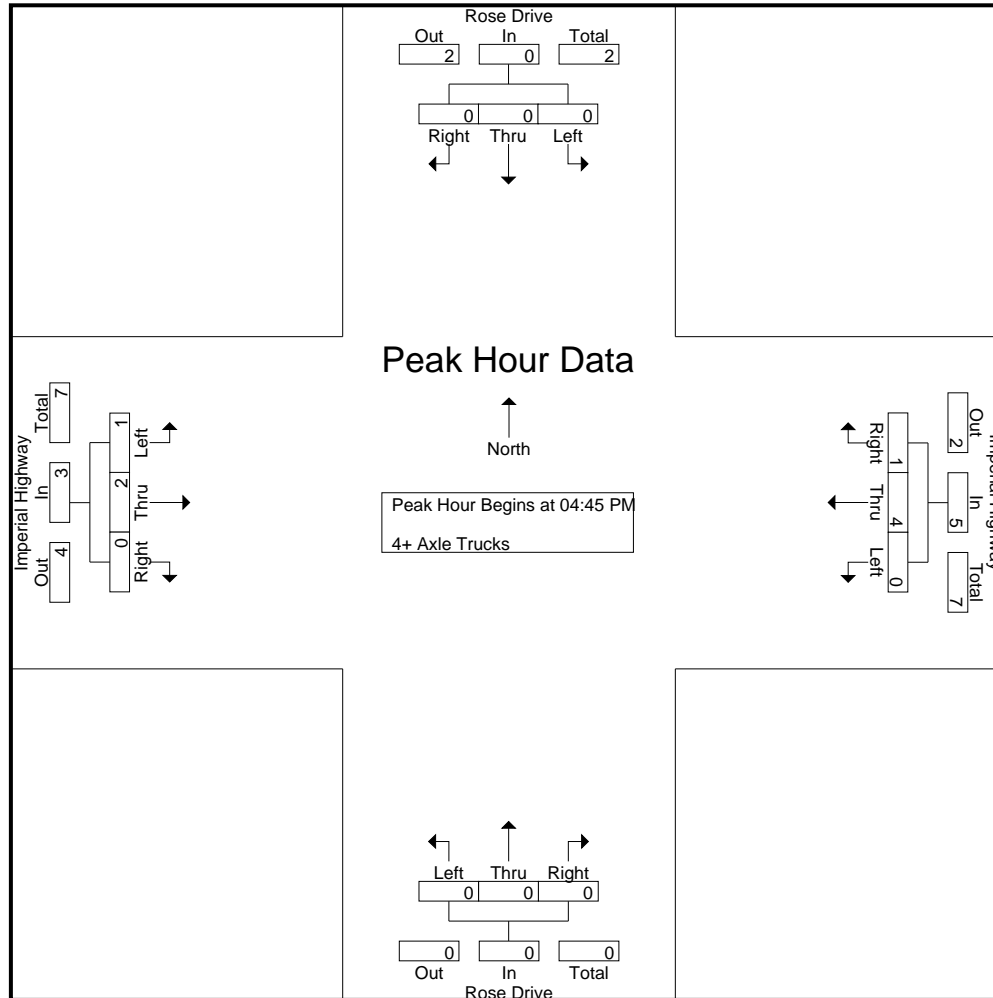
Groups Printed- 4+ Axle Trucks

Start Time	Rose Drive Southbound					Imperial Highway Westbound					Rose Drive Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2
04:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	2	2
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	4	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	1	2	0	0	3	0	0	7	7
Grand Total	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	1	4	0	0	5	0	0	12	12
Apprch %	0	0	0			0	85.7	14.3			0	0	0			20	80	0						
Total %	0	0	0			0	50	8.3		58.3	0	0	0		0	8.3	33.3	0		41.7	0	0	100	

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1	4
Total Volume	0	0	0	0	0	4	1	5	0	0	0	0	1	2	0	3	8
% App. Total	0	0	0		0	80	20		0	0	0		33.3	66.7	0		
PHF	.000	.000	.000	.000	.000	.500	.250	.417	.000	.000	.000	.000	.250	.500	.000	.375	.500

City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Placentia
 N/S: Rose Drive
 E/W: Imperial Highway
 Weather: Clear

File Name : 01_PLA_Rose_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Rose Drive Southbound				Imperial Highway Westbound				Rose Drive Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	0	1
Total Volume	0	0	0	0	0	4	1	5	0	0	0	0	1	2	0	3	3
% App. Total	0	0	0	0	0	80	20		0	0	0		33.3	66.7	0		
PHF	.000	.000	.000	.000	.000	.500	.250	.417	.000	.000	.000	.000	.250	.500	.000	.375	

Location: Placentia
 N/S: Rose Drive
 E/W: Imperial Highway



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Rose Drive	East Leg Imperial Highway	South Leg Rose Drive	West Leg Imperial Highway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	1	0	1
7:15 AM	0	0	1	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	2

	North Leg Rose Drive	East Leg Imperial Highway	South Leg Rose Drive	West Leg Imperial Highway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	1	0	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	2	2
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	3	4

Location: Placentia
 N/S: Rose Drive
 E/W: Imperial Highway



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Rose Drive			Westbound Imperial Highway			Northbound Rose Drive			Eastbound Imperial Highway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	2
TOTAL VOLUMES:	0	2	0	0	0	0	0	2	0	0	0	1	5

	Southbound Rose Drive			Westbound Imperial Highway			Northbound Rose Drive			Eastbound Imperial Highway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	0	0	1	0	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	3	0	0	0	0	0	3	0	0	1	1	9

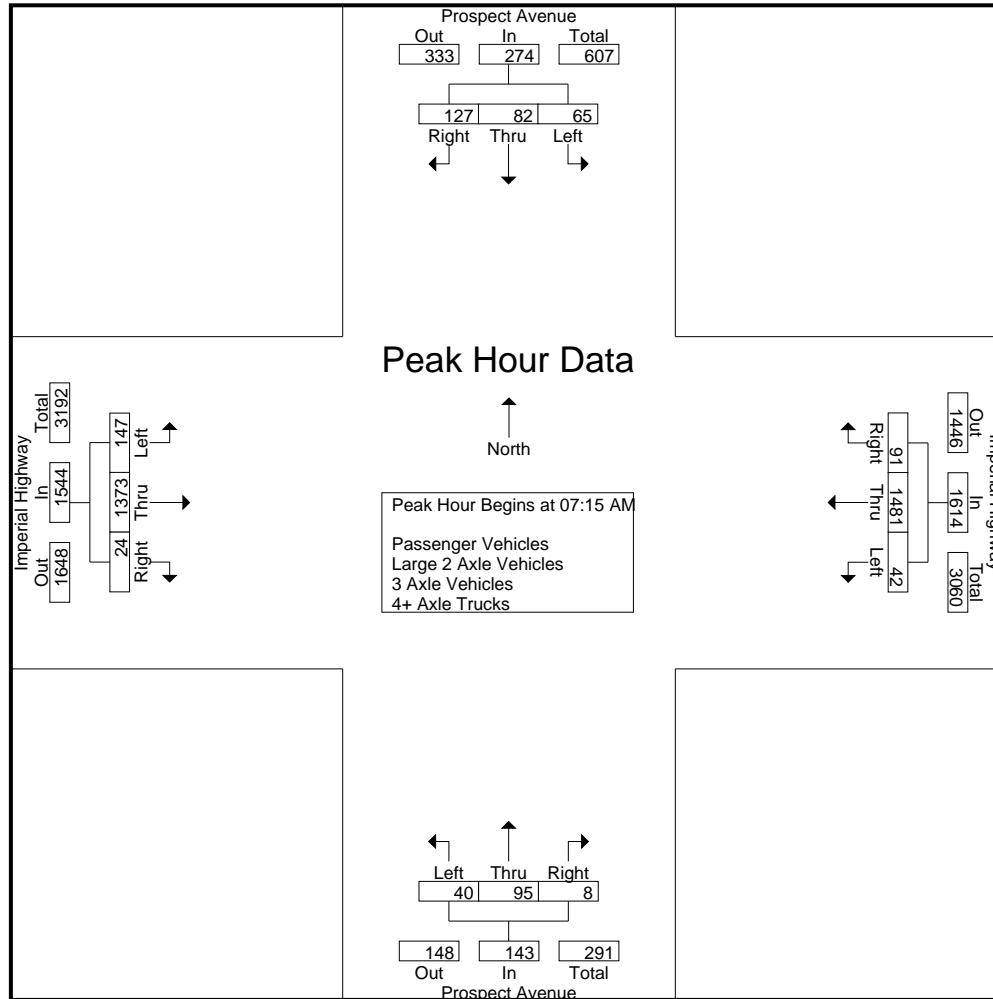
City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Prosp_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	12	15	11	5	38	0	278	5	0	283	13	6	3	2	22	12	260	2	1	274	8	617	625
07:15 AM	5	22	18	11	45	0	351	16	2	367	14	14	3	2	31	22	322	6	0	350	15	793	808
07:30 AM	16	29	41	19	86	16	404	34	7	454	12	31	1	0	44	56	372	4	0	432	26	1016	1042
07:45 AM	21	10	32	12	63	18	365	23	1	406	9	28	3	0	40	43	338	9	2	390	15	899	914
Total	54	76	102	47	232	34	1398	78	10	1510	48	79	10	4	137	133	1292	21	3	1446	64	3325	3389
08:00 AM	23	21	36	16	80	8	361	18	1	387	5	22	1	0	28	26	341	5	1	372	18	867	885
08:15 AM	13	13	24	11	50	3	365	11	0	379	6	11	5	3	22	13	299	6	0	318	14	769	783
08:30 AM	19	3	24	16	46	2	324	17	0	343	9	14	5	4	28	6	310	7	1	323	21	740	761
08:45 AM	9	14	20	7	43	1	337	18	3	356	9	21	1	0	31	23	264	5	1	292	11	722	733
Total	64	51	104	50	219	14	1387	64	4	1465	29	68	12	7	109	68	1214	23	3	1305	64	3098	3162
Grand Total	118	127	206	97	451	48	2785	142	14	2975	77	147	22	11	246	201	2506	44	6	2751	128	6423	6551
Apprch %	26.2	28.2	45.7			1.6	93.6	4.8			31.3	59.8	8.9			7.3	91.1	1.6					
Total %	1.8	2	3.2		7	0.7	43.4	2.2		46.3	1.2	2.3	0.3		3.8	3.1	39	0.7		42.8	2	98	
Passenger Vehicles	118	125	204		544	48	2700	138		2900	76	143	22		252	200	2385	42		2633	0	0	6329
% Passenger Vehicles	100	98.4	99	100	99.3	100	96.9	97.2	100	97	98.7	97.3	100	100	98.1	99.5	95.2	95.5	100	95.5	0	0	96.6
Large 2 Axle Vehicles	0	2	2		4	0	66	2		68	1	2	0		3	1	84	1		86	0	0	161
% Large 2 Axle Vehicles	0	1.6	1	0	0.7	0	2.4	1.4	0	2.3	1.3	1.4	0	0	1.2	0.5	3.4	2.3	0	3.1	0	0	2.5
3 Axle Vehicles	0	0	0		0	0	10	0		10	0	2	0		2	0	15	1		16	0	0	28
% 3 Axle Vehicles	0	0	0	0	0	0	0.4	0	0	0.3	0	1.4	0	0	0.8	0	0.6	2.3	0	0.6	0	0	0.4
4+ Axle Trucks	0	0	0		0	0	9	2		11	0	0	0		0	0	22	0		22	0	0	33
% 4+ Axle Trucks	0	0	0	0	0	0	0.3	1.4	0	0.4	0	0	0	0	0	0	0.9	0	0	0.8	0	0	0.5

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	22	18	45	0	351	16	367	14	14	3	31	22	322	6	350	793
07:30 AM	16	29	41	86	16	404	34	454	12	31	1	44	56	372	4	432	1016
07:45 AM	21	10	32	63	18	365	23	406	9	28	3	40	43	338	9	390	899
08:00 AM	23	21	36	80	8	361	18	387	5	22	1	28	26	341	5	372	867
Total Volume	65	82	127	274	42	1481	91	1614	40	95	8	143	147	1373	24	1544	3575
% App. Total	23.7	29.9	46.4		2.6	91.8	5.6		28	66.4	5.6		9.5	88.9	1.6		
PHF	.707	.707	.774	.797	.583	.916	.669	.889	.714	.766	.667	.813	.656	.923	.667	.894	.880



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:15 AM				07:15 AM				
+0 mins.	16	29	41	86	16	404	34	454	14	14	3	31	22	322	6	350	
+15 mins.	21	10	32	63	18	365	23	406	12	31	1	44	56	372	4	432	
+30 mins.	23	21	36	80	8	361	18	387	9	28	3	40	43	338	9	390	
+45 mins.	13	13	24	50	3	365	11	379	5	22	1	28	26	341	5	372	
Total Volume	73	73	133	279	45	1495	86	1626	40	95	8	143	147	1373	24	1544	
% App. Total	26.2	26.2	47.7		2.8	91.9	5.3		28	66.4	5.6		9.5	88.9	1.6		
PHF	.793	.629	.811	.811	.625	.925	.632	.895	.714	.766	.667	.813	.656	.923	.667	.894	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

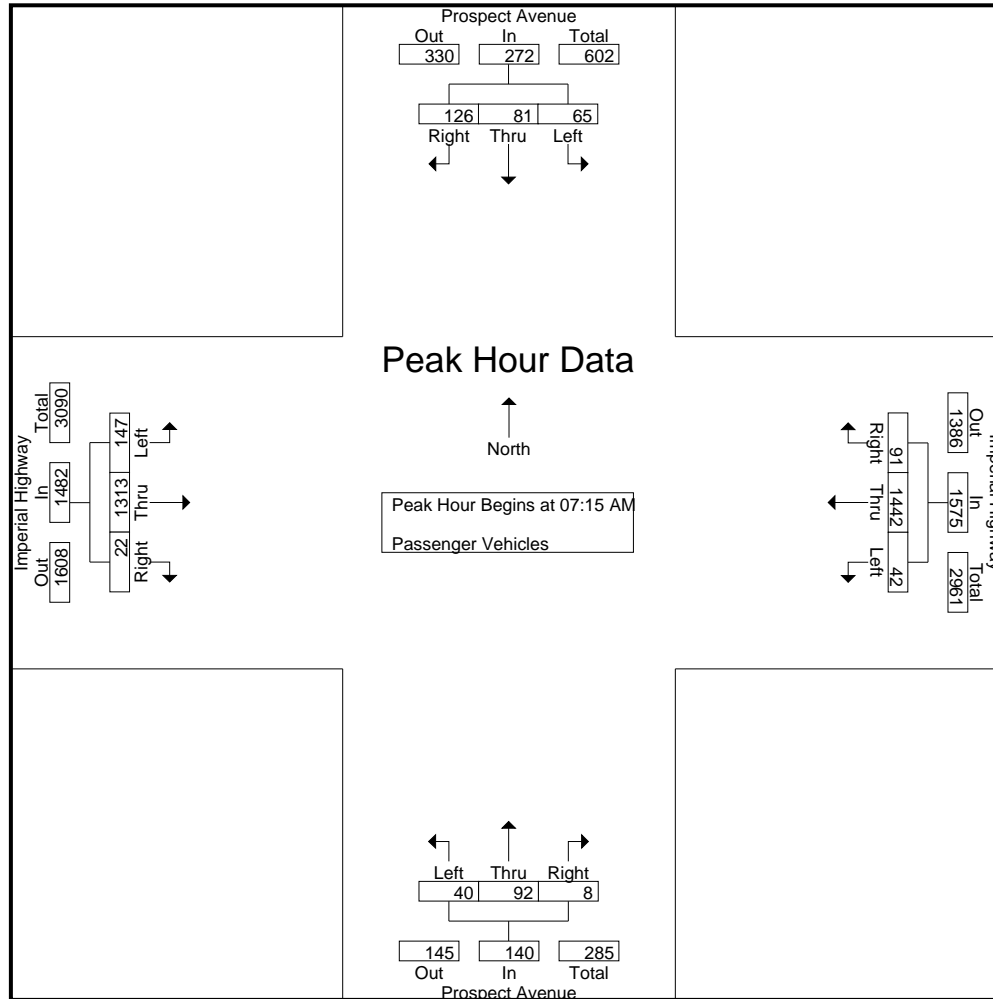
Groups Printed- Passenger Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	12	15	11	5	38	0	273	5	0	278	13	6	3	2	22	11	246	2	1	259	8	597	605
07:15 AM	5	21	18	11	44	0	341	16	2	357	14	13	3	2	30	22	305	6	0	333	15	764	779
07:30 AM	16	29	40	19	85	16	394	34	7	444	12	30	1	0	43	56	356	4	0	416	26	988	1014
07:45 AM	21	10	32	12	63	18	350	23	1	391	9	28	3	0	40	43	325	7	2	375	15	869	884
Total	54	75	101	47	230	34	1358	78	10	1470	48	77	10	4	135	132	1232	19	3	1383	64	3218	3282
08:00 AM	23	21	36	16	80	8	357	18	1	383	5	21	1	0	27	26	327	5	1	358	18	848	866
08:15 AM	13	13	23	11	49	3	356	11	0	370	6	11	5	3	22	13	289	6	0	308	14	749	763
08:30 AM	19	3	24	16	46	2	312	16	0	330	8	13	5	4	26	6	295	7	1	308	21	710	731
08:45 AM	9	13	20	7	42	1	317	15	3	333	9	21	1	0	31	23	242	5	1	270	11	676	687
Total	64	50	103	50	217	14	1342	60	4	1416	28	66	12	7	106	68	1153	23	3	1244	64	2983	3047
Grand Total	118	125	204	97	447	48	2700	138	14	2886	76	143	22	11	241	200	2385	42	6	2627	128	6201	6329
Apprch %	26.4	28	45.6			1.7	93.6	4.8			31.5	59.3	9.1			7.6	90.8	1.6					
Total %	1.9	2	3.3		7.2	0.8	43.5	2.2		46.5	1.2	2.3	0.4		3.9	3.2	38.5	0.7		42.4	2	98	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	21	18	44	0	341	16	357	14	13	3	30	22	305	6	333	764
07:30 AM	16	29	40	85	16	394	34	444	12	30	1	43	56	356	4	416	988
07:45 AM	21	10	32	63	18	350	23	391	9	28	3	40	43	325	7	375	869
08:00 AM	23	21	36	80	8	357	18	383	5	21	1	27	26	327	5	358	848
Total Volume	65	81	126	272	42	1442	91	1575	40	92	8	140	147	1313	22	1482	3469
% App. Total	23.9	29.8	46.3		2.7	91.6	5.8		28.6	65.7	5.7		9.9	88.6	1.5		
PHF	.707	.698	.788	.800	.583	.915	.669	.887	.714	.767	.667	.814	.656	.922	.786	.891	.878

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	5	21	18	44	0	341	16	357	14	13	3	30	22	305	6	333	
+15 mins.	16	29	40	85	16	394	34	444	12	30	1	43	56	356	4	416	
+30 mins.	21	10	32	63	18	350	23	391	9	28	3	40	43	325	7	375	
+45 mins.	23	21	36	80	8	357	18	383	5	21	1	27	26	327	5	358	
Total Volume	65	81	126	272	42	1442	91	1575	40	92	8	140	147	1313	22	1482	
% App. Total	23.9	29.8	46.3		2.7	91.6	5.8		28.6	65.7	5.7		9.9	88.6	1.5		
PHF	.707	.698	.788	.800	.583	.915	.669	.887	.714	.767	.667	.814	.656	.922	.786	.891	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

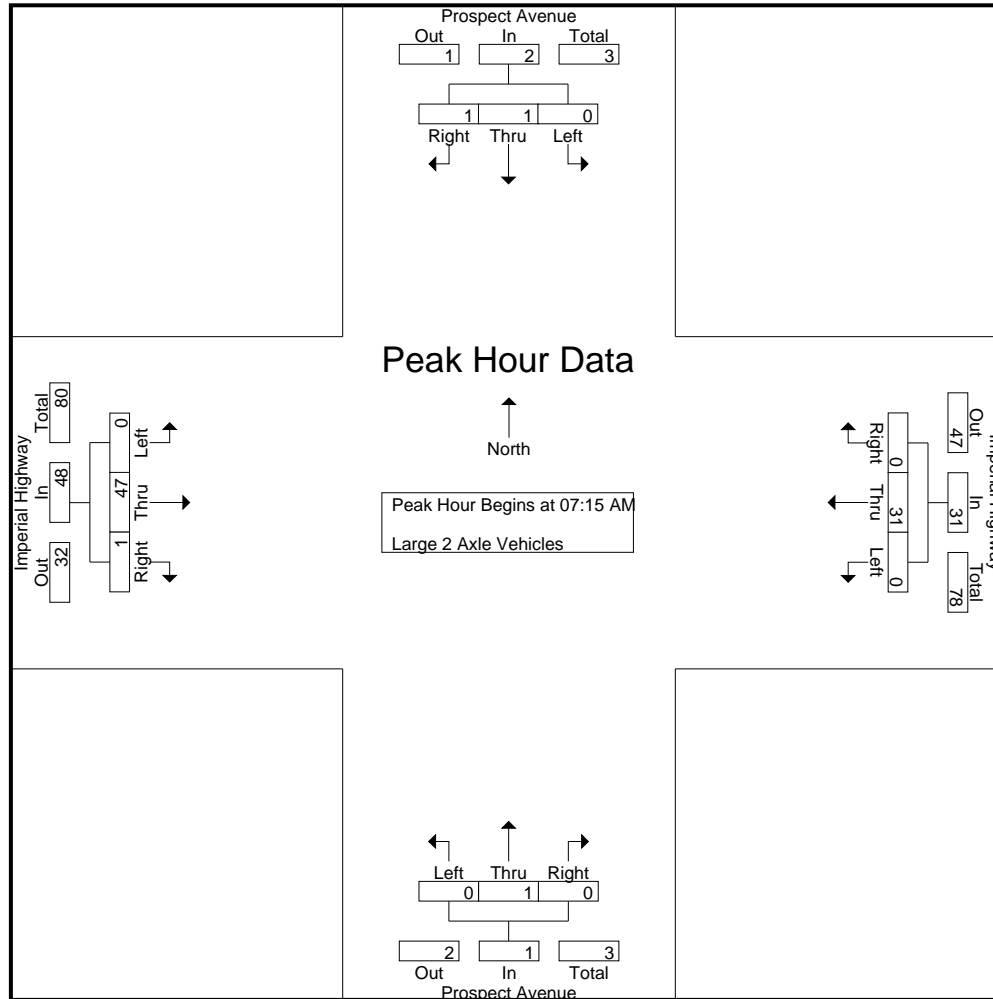
Groups Printed- Large 2 Axle Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	7	0	0	8	0	0	13	13
07:15 AM	0	1	0	0	1	0	8	0	0	8	0	0	0	0	0	0	12	0	0	12	0	0	21	21
07:30 AM	0	0	1	0	1	0	9	0	0	9	0	1	0	0	1	0	13	0	0	13	0	0	24	24
07:45 AM	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	11	1	0	12	0	0	24	24
Total	0	1	1	0	2	0	34	0	0	34	0	1	0	0	1	1	43	1	0	45	0	0	82	82
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	11	0	0	11	0	0	13	13
08:15 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	10	10
08:30 AM	0	0	0	0	0	0	9	1	0	10	1	1	0	0	2	0	12	0	0	12	0	0	24	24
08:45 AM	0	1	0	0	1	0	18	1	0	19	0	0	0	0	0	0	12	0	0	12	0	0	32	32
Total	0	1	1	0	2	0	32	2	0	34	1	1	0	0	2	0	41	0	0	41	0	0	79	79
Grand Total	0	2	2	0	4	0	66	2	0	68	1	2	0	0	3	1	84	1	0	86	0	0	161	161
Apprch %	0	50	50			0	97.1	2.9			33.3	66.7	0			1.2	97.7	1.2						
Total %	0	1.2	1.2		2.5	0	41	1.2		42.2	0.6	1.2	0		1.9	0.6	52.2	0.6		53.4	0	0	100	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	8	0	8	0	0	0	0	0	12	0	12	21
07:30 AM	0	0	1	1	0	9	0	9	0	1	0	1	0	13	0	13	24
07:45 AM	0	0	0	0	0	12	0	12	0	0	0	0	0	11	1	12	24
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	11	0	11	13
Total Volume	0	1	1	2	0	31	0	31	0	1	0	1	0	47	1	48	82
% App. Total	0	50	50		0	100	0		0	100	0		0	97.9	2.1		
PHF	.000	.250	.250	.500	.000	.646	.000	.646	.000	.250	.000	.250	.000	.904	.250	.923	.854

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	8	0	8	0	0	0	0	0	12	0	12	
+15 mins.	0	0	1	1	0	9	0	9	0	1	0	1	0	13	0	13	
+30 mins.	0	0	0	0	0	12	0	12	0	0	0	0	0	11	1	12	
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	11	0	11	
Total Volume	0	1	1	2	0	31	0	31	0	1	0	1	0	47	1	48	
% App. Total	0	50	50		0	100	0		0	100	0		0	97.9	2.1		
PHF	.000	.250	.250	.500	.000	.646	.000	.646	.000	.250	.000	.250	.000	.904	.250	.923	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

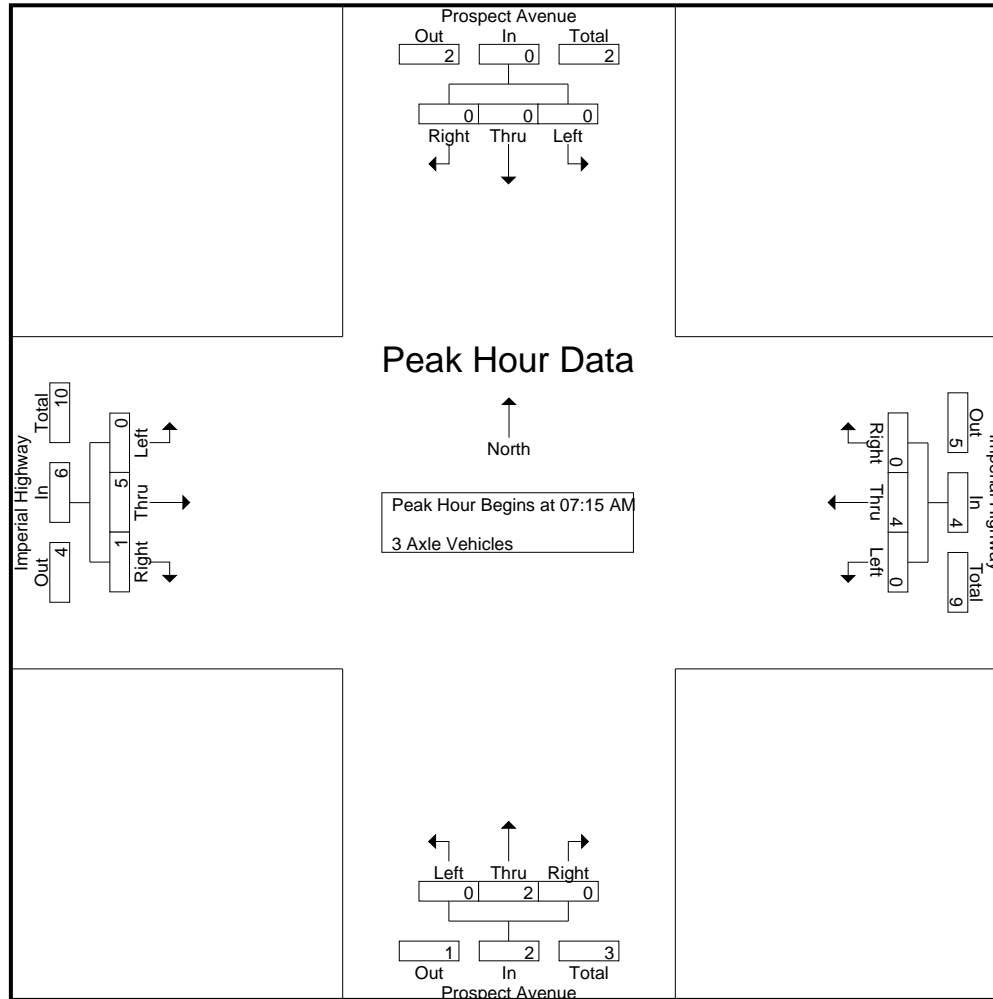
Groups Printed- 3 Axle Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	4	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	3
Total	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	0	3	1	0	4	0	0	0	0	0	0	8	8
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	4	4
08:15 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	8	8
Total	0	0	0	0	0	0	7	0	0	7	0	1	0	0	1	0	12	0	0	12	0	0	0	0	0	0	20	20
Grand Total	0	0	0	0	0	0	10	0	0	10	0	2	0	0	2	0	15	1	0	16	0	0	0	0	0	0	28	28
Apprch %	0	0	0			0	100	0			0	100	0			0	93.8	6.2										
Total %	0	0	0			0	35.7	0		35.7	0	7.1	0		7.1	0	53.6	3.6		57.1	0	0				0	100	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	2	0	2	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
08:00 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	2	0	2	4
Total Volume	0	0	0	0	0	4	0	4	0	2	0	2	0	5	1	6	12
% App. Total	0	0	0		0	100	0		0	100	0		0	83.3	16.7		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.500	.000	.500	.000	.625	.250	.750	.750

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	1	0	1	0	1	0	1	0	2	0	2	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	
+45 mins.	0	0	0	0	0	1	0	1	0	1	0	1	0	2	0	2	
Total Volume	0	0	0	0	0	4	0	4	0	2	0	2	0	5	1	6	
% App. Total	0	0	0	0	0	100	0	0	0	100	0	0	0	83.3	16.7	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.500	.000	.500	.000	.625	.250	.750	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

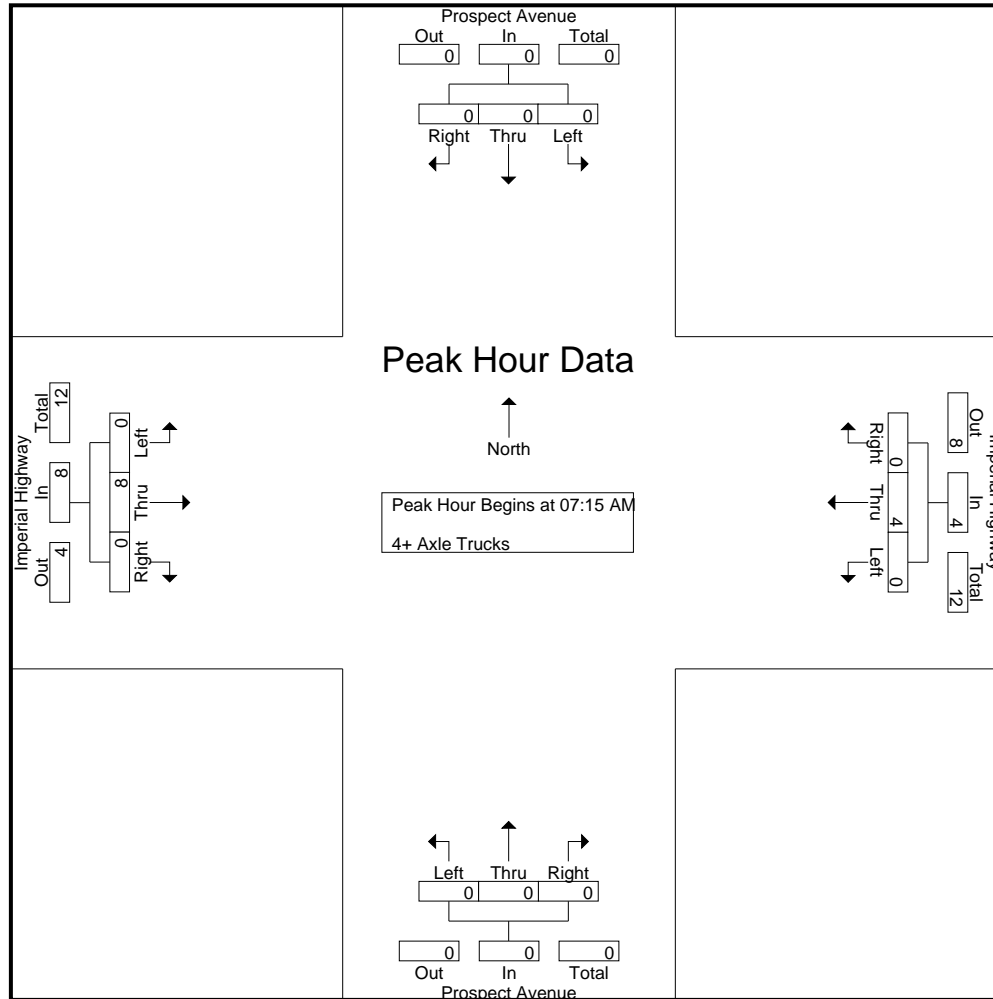
Groups Printed- 4+ Axle Trucks

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	7	7
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	4	4
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	14	0	0	14	0	17	17
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	6	6
08:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	3	0	0	3	0	6	6
Total	0	0	0	0	0	0	6	2	0	8	0	0	0	0	0	0	8	0	0	8	0	16	16
Grand Total	0	0	0	0	0	0	9	2	0	11	0	0	0	0	0	0	22	0	0	22	0	33	33
Apprch %	0	0	0			0	81.8	18.2			0	0	0			0	100	0			0	100	
Total %	0	0	0			0	27.3	6.1		33.3	0	0	0		0	0	66.7	0		66.7	0	100	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	8	0	8	12
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	1.00	.000	1.00	.000	.000	.000	.000	.000	.667	.000	.667	.750

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	8	0	8	
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	1.000	.000	1.000	.000	.000	.000	.000	.000	.667	.000	.667	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Pro Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

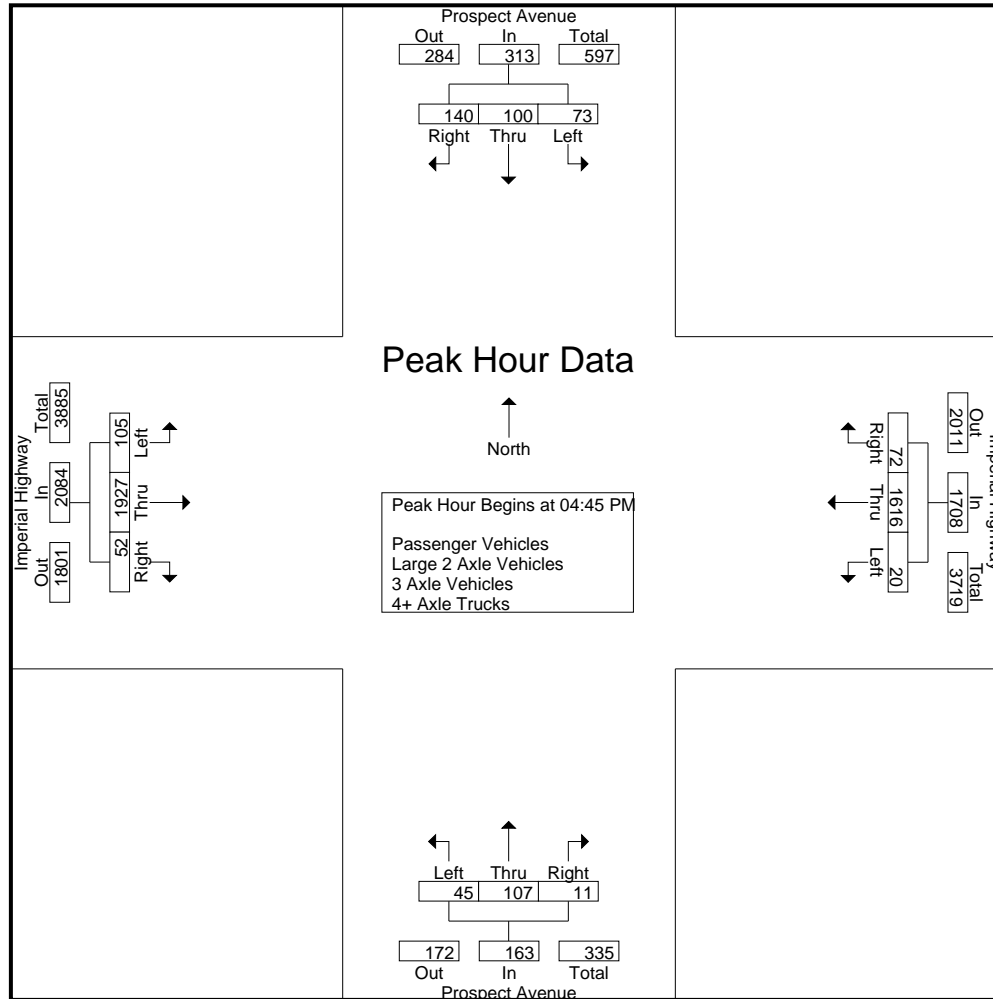
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	23	21	18	7	62	4	370	17	3	391	7	17	4	2	28	16	402	10	0	428	12	909	921
04:15 PM	26	15	36	15	77	6	385	28	1	419	5	42	5	1	52	35	376	8	1	419	18	967	985
04:30 PM	29	29	42	18	100	7	351	17	3	375	11	23	2	2	36	25	430	22	5	477	28	988	1016
04:45 PM	22	16	33	18	71	6	385	25	3	416	9	36	6	4	51	28	473	10	2	511	27	1049	1076
Total	100	81	129	58	310	23	1491	87	10	1601	32	118	17	9	167	104	1681	50	8	1835	85	3913	3998
05:00 PM	21	43	43	11	107	3	395	17	2	415	5	26	2	0	33	23	456	16	2	495	15	1050	1065
05:15 PM	13	16	34	16	63	8	415	16	0	439	22	26	2	0	50	27	539	10	1	576	17	1128	1145
05:30 PM	17	25	30	8	72	3	421	14	0	438	9	19	1	1	29	27	459	16	0	502	9	1041	1050
05:45 PM	21	17	15	10	53	5	363	16	1	384	9	15	3	1	27	25	410	12	0	447	12	911	923
Total	72	101	122	45	295	19	1594	63	3	1676	45	86	8	2	139	102	1864	54	3	2020	53	4130	4183
Grand Total	172	182	251	103	605	42	3085	150	13	3277	77	204	25	11	306	206	3545	104	11	3855	138	8043	8181
Apprch %	28.4	30.1	41.5			1.3	94.1	4.6			25.2	66.7	8.2			5.3	92	2.7					
Total %	2.1	2.3	3.1		7.5	0.5	38.4	1.9		40.7	1	2.5	0.3		3.8	2.6	44.1	1.3		47.9	1.7	98.3	
Passenger Vehicles	167	181	244		693	42	3051	148		3254	77	202	25		315	203	3527	104		3845	0	0	8107
% Passenger Vehicles	97.1	99.5	97.2	98.1	97.9	100	98.9	98.7	100	98.9	100	99	100	100	99.4	98.5	99.5	100	100	99.5	0	0	99.1
Large 2 Axle Vehicles	5	0	6		13	0	29	1		30	0	2	0		2	2	10	0		12	0	0	57
% Large 2 Axle Vehicles	2.9	0	2.4	1.9	1.8	0	0.9	0.7	0	0.9	0	1	0	0	0.6	1	0.3	0	0	0.3	0	0	0.7
3 Axle Vehicles	0	1	0		1	0	1	1		2	0	0	0		0	0	5	0		5	0	0	8
% 3 Axle Vehicles	0	0.5	0	0	0.1	0	0	0.7	0	0.1	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	1		1	0	4	0		4	0	0	0		0	1	3	0		4	0	0	9
% 4+ Axle Trucks	0	0	0.4	0	0.1	0	0.1	0	0	0.1	0	0	0	0	0	0.5	0.1	0	0	0.1	0	0	0.1

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	22	16	33	71	6	385	25	416	9	36	6	51	28	473	10	511	1049
05:00 PM	21	43	43	107	3	395	17	415	5	26	2	33	23	456	16	495	1050
05:15 PM	13	16	34	63	8	415	16	439	22	26	2	50	27	539	10	576	1128
05:30 PM	17	25	30	72	3	421	14	438	9	19	1	29	27	459	16	502	1041
Total Volume	73	100	140	313	20	1616	72	1708	45	107	11	163	105	1927	52	2084	4268
% App. Total	23.3	31.9	44.7		1.2	94.6	4.2		27.6	65.6	6.7		5	92.5	2.5		
PHF	.830	.581	.814	.731	.625	.960	.720	.973	.511	.743	.458	.799	.938	.894	.813	.905	.946

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Pros_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:45 PM				04:15 PM				04:45 PM				
+0 mins.	26	15	36	77	6	385	25	416	5	42	5	52	28	473	10	511	
+15 mins.	29	29	42	100	3	395	17	415	11	23	2	36	23	456	16	495	
+30 mins.	22	16	33	71	8	415	16	439	9	36	6	51	27	539	10	576	
+45 mins.	21	43	43	107	3	421	14	438	5	26	2	33	27	459	16	502	
Total Volume	98	103	154	355	20	1616	72	1708	30	127	15	172	105	1927	52	2084	
% App. Total	27.6	29	43.4		1.2	94.6	4.2		17.4	73.8	8.7		5	92.5	2.5		
PHF	.845	.599	.895	.829	.625	.960	.720	.973	.682	.756	.625	.827	.938	.894	.813	.905	

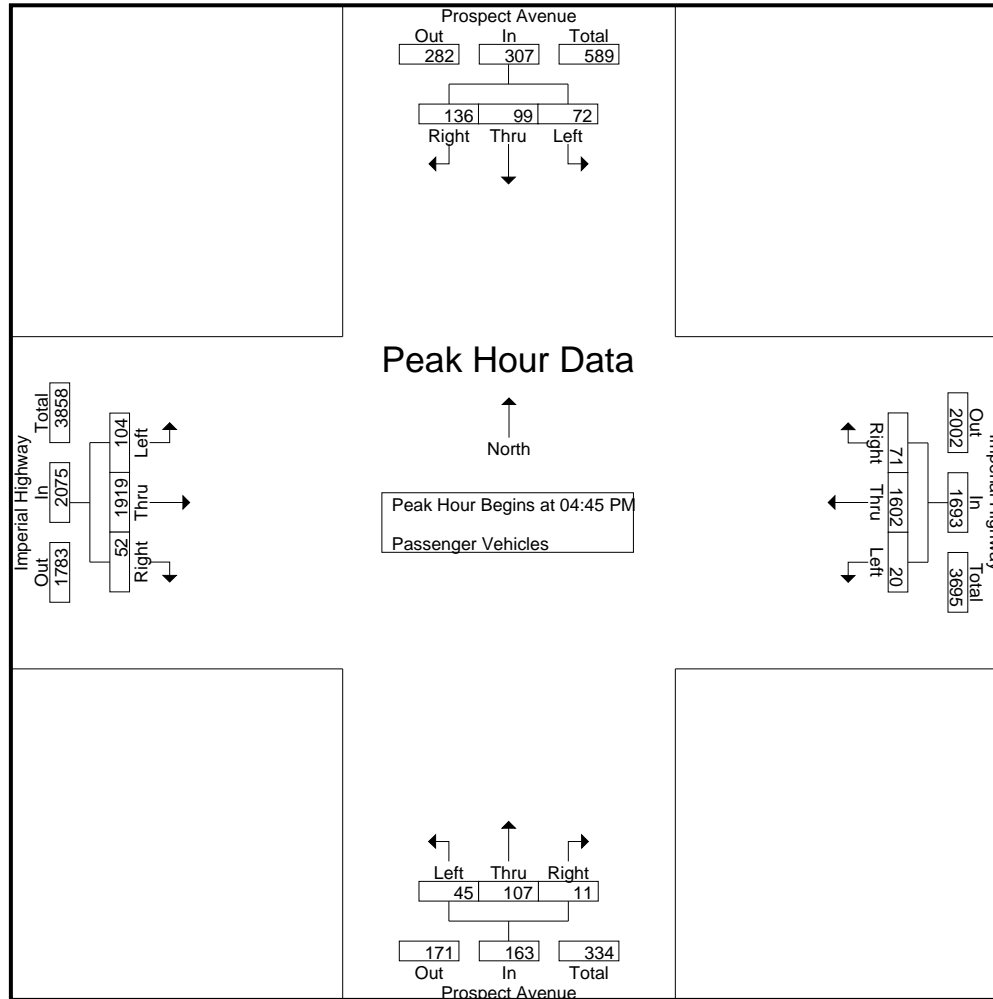
City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	23	21	17	6	61	4	363	17	3	384	7	16	4	2	27	14	400	10	0	424	11	896	907
04:15 PM	25	15	34	15	74	6	379	28	1	413	5	41	5	1	51	35	372	8	1	415	18	953	971
04:30 PM	26	29	42	18	97	7	346	16	3	369	11	23	2	2	36	25	427	22	5	474	28	976	1004
04:45 PM	21	16	31	17	68	6	381	24	3	411	9	36	6	4	51	27	472	10	2	509	26	1039	1065
Total	95	81	124	56	300	23	1469	85	10	1577	32	116	17	9	165	101	1671	50	8	1822	83	3864	3947
05:00 PM	21	42	43	11	106	3	393	17	2	413	5	26	2	0	33	23	453	16	2	492	15	1044	1059
05:15 PM	13	16	32	16	61	8	411	16	0	435	22	26	2	0	50	27	537	10	1	574	17	1120	1137
05:30 PM	17	25	30	8	72	3	417	14	0	434	9	19	1	1	29	27	457	16	0	500	9	1035	1044
05:45 PM	21	17	15	10	53	5	361	16	1	382	9	15	3	1	27	25	409	12	0	446	12	908	920
Total	72	100	120	45	292	19	1582	63	3	1664	45	86	8	2	139	102	1856	54	3	2012	53	4107	4160
Grand Total	167	181	244	101	592	42	3051	148	13	3241	77	202	25	11	304	203	3527	104	11	3834	136	7971	8107
Apprch %	28.2	30.6	41.2			1.3	94.1	4.6			25.3	66.4	8.2			5.3	92	2.7					
Total %	2.1	2.3	3.1		7.4	0.5	38.3	1.9		40.7	1	2.5	0.3		3.8	2.5	44.2	1.3		48.1	1.7	98.3	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	21	16	31	68	6	381	24	411	9	36	6	51	27	472	10	509	1039
05:00 PM	21	42	43	106	3	393	17	413	5	26	2	33	23	453	16	492	1044
05:15 PM	13	16	32	61	8	411	16	435	22	26	2	50	27	537	10	574	1120
05:30 PM	17	25	30	72	3	417	14	434	9	19	1	29	27	457	16	500	1035
Total Volume	72	99	136	307	20	1602	71	1693	45	107	11	163	104	1919	52	2075	4238
% App. Total	23.5	32.2	44.3		1.2	94.6	4.2		27.6	65.6	6.7		5	92.5	2.5		
PHF	.857	.589	.791	.724	.625	.960	.740	.973	.511	.743	.458	.799	.963	.893	.813	.904	.946



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:45 PM				04:30 PM				04:45 PM				
+0 mins.	26	29	42	97	6	381	24	411	11	23	2	36	27	472	10	509	
+15 mins.	21	16	31	68	3	393	17	413	9	36	6	51	23	453	16	492	
+30 mins.	21	42	43	106	8	411	16	435	5	26	2	33	27	537	10	574	
+45 mins.	13	16	32	61	3	417	14	434	22	26	2	50	27	457	16	500	
Total Volume	81	103	148	332	20	1602	71	1693	47	111	12	170	104	1919	52	2075	
% App. Total	24.4	31	44.6		1.2	94.6	4.2		27.6	65.3	7.1		5	92.5	2.5		
PHF	.779	.613	.860	.783	.625	.960	.740	.973	.534	.771	.500	.833	.963	.893	.813	.904	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

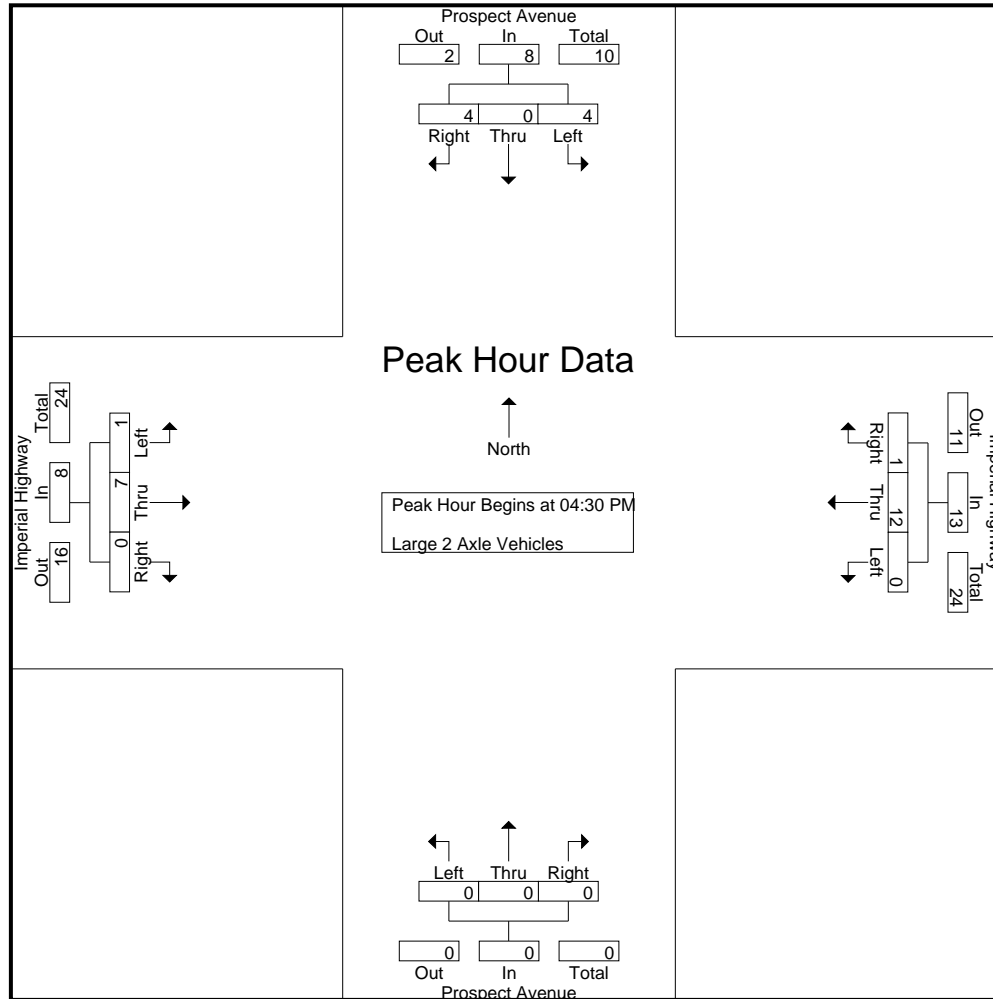
Groups Printed- Large 2 Axle Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	1	1	1	0	7	0	0	7	0	1	0	0	1	1	0	0	0	1	1	10	11
04:15 PM	1	0	1	0	2	0	5	0	0	5	0	1	0	0	1	0	1	0	0	1	0	9	9
04:30 PM	3	0	0	0	3	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	9	9
04:45 PM	1	0	2	1	3	0	3	1	0	4	0	0	0	0	0	1	1	0	0	2	1	9	10
Total	5	0	4	2	9	0	19	1	0	20	0	2	0	0	2	2	4	0	0	6	2	37	39
05:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
05:15 PM	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	7	7
05:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
05:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
Total	0	0	2	0	2	0	10	0	0	10	0	0	0	0	0	0	6	0	0	6	0	18	18
Grand Total	5	0	6	2	11	0	29	1	0	30	0	2	0	0	2	2	10	0	0	12	2	55	57
Apprch %	45.5	0	54.5			0	96.7	3.3			0	100	0			16.7	83.3	0					
Total %	9.1	0	10.9		20	0	52.7	1.8		54.5	0	3.6	0		3.6	3.6	18.2	0		21.8	3.5	96.5	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	3	0	0	3	0	4	0	4	0	0	0	0	0	2	0	2	9
04:45 PM	1	0	2	3	0	3	1	4	0	0	0	0	1	1	0	2	9
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:15 PM	0	0	2	2	0	3	0	3	0	0	0	0	0	2	0	2	7
Total Volume	4	0	4	8	0	12	1	13	0	0	0	0	1	7	0	8	29
% App. Total	50	0	50		0	92.3	7.7		0	0	0		12.5	87.5	0		
PHF	.333	.000	.500	.667	.000	.750	.250	.813	.000	.000	.000	.000	.250	.875	.000	1.00	.806

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Pros_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	3	0	0	3	0	4	0	4	0	0	0	0	0	2	0	2	
+15 mins.	1	0	2	3	0	3	1	4	0	0	0	0	1	1	0	2	
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	
+45 mins.	0	0	2	2	0	3	0	3	0	0	0	0	0	2	0	2	
Total Volume	4	0	4	8	0	12	1	13	0	0	0	0	1	7	0	8	
% App. Total	50	0	50		0	92.3	7.7		0	0	0		12.5	87.5	0		
PHF	.333	.000	.500	.667	.000	.750	.250	.813	.000	.000	.000	.000	.250	.875	.000	1.000	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

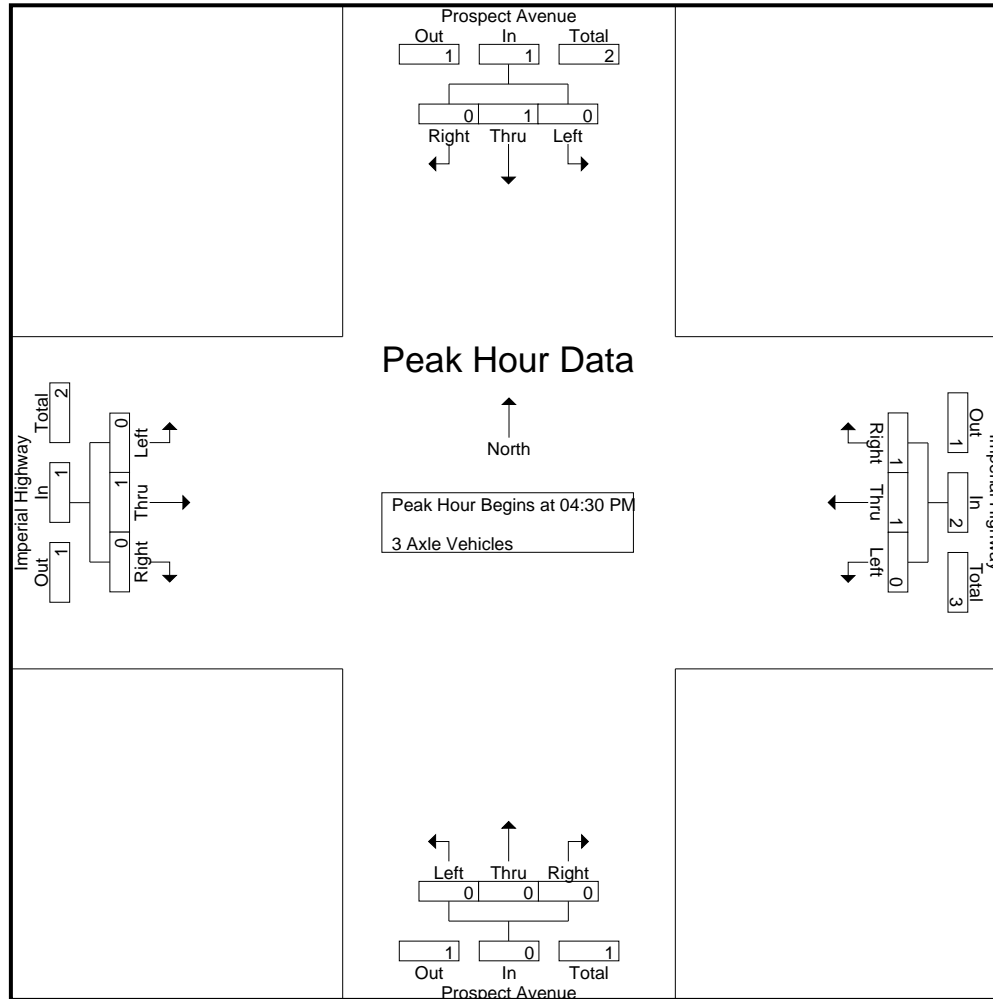
Groups Printed- 3 Axle Vehicles

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3	3
04:30 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	5	0	0	5	0	0	7	7
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	0	0	1	0	1	1	0	2	0	0	0	0	0	0	5	0	0	5	0	0	8	8
Apprch %	0	100	0			0	50	50			0	0	0			0	100	0			0	0		
Total %	0	12.5	0		12.5	0	12.5	12.5		25	0	0	0		0	0	62.5	0		62.5	0	0	100	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	1	1	2	0	0	0	0	0	1	0	1	4
% App. Total	0	100	0		0	50	50		0	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000	.000	.250	.000	.250	.333

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	1	1	2	0	0	0	0	0	1	0	1	
% App. Total	0	100	0		0	50	50		0	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

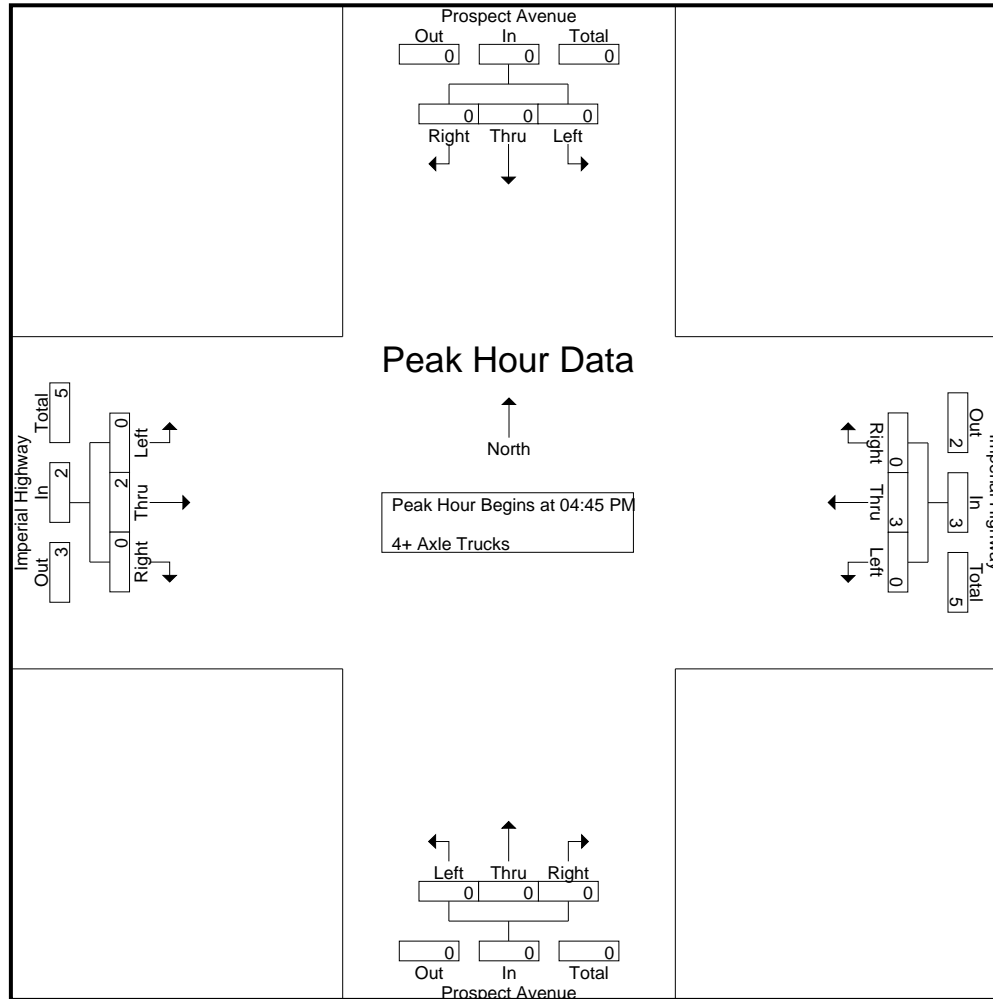
Groups Printed- 4+ Axle Trucks

Start Time	Prospect Avenue Southbound					Imperial Highway Westbound					Prospect Avenue Northbound					Imperial Highway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	2
04:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	0	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
Grand Total	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	1	3	0	0	4	0	9	9
Apprch %	0	0	100			0	100	0			0	0	0			25	75	0			0		
Total %	0	0	11.1		11.1	0	44.4	0		44.4	0	0	0		0	11.1	33.3	0		44.4	0	100	

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
% App. Total	0	0	0	0	0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.625

City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway
 Weather: Clear

File Name : 02_YLA_Proc_Imp PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Prospect Avenue Southbound				Imperial Highway Westbound				Prospect Avenue Northbound				Imperial Highway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:45 PM				04:30 PM				04:45 PM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	0	2
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.000

Location: Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Prospect Avenue	East Leg Imperial Highway	South Leg Prospect Avenue	West Leg Imperial Highway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	1	1	0	1	3
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	1	2	0	3	6

	North Leg Prospect Avenue	East Leg Imperial Highway	South Leg Prospect Avenue	West Leg Imperial Highway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	2	0	3	7
4:15 PM	0	1	0	1	2
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	2	2
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	1	1	0	2
TOTAL VOLUMES:	2	4	1	6	13

Location: Yorba Linda
 N/S: Prospect Avenue
 E/W: Imperial Highway



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Prospect Avenue			Westbound Imperial Highway			Northbound Prospect Avenue			Eastbound Imperial Highway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	3	0	0	0	0	4

	Southbound Prospect Avenue			Westbound Imperial Highway			Northbound Prospect Avenue			Eastbound Imperial Highway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	1	0	2	0	0	0	0	6

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

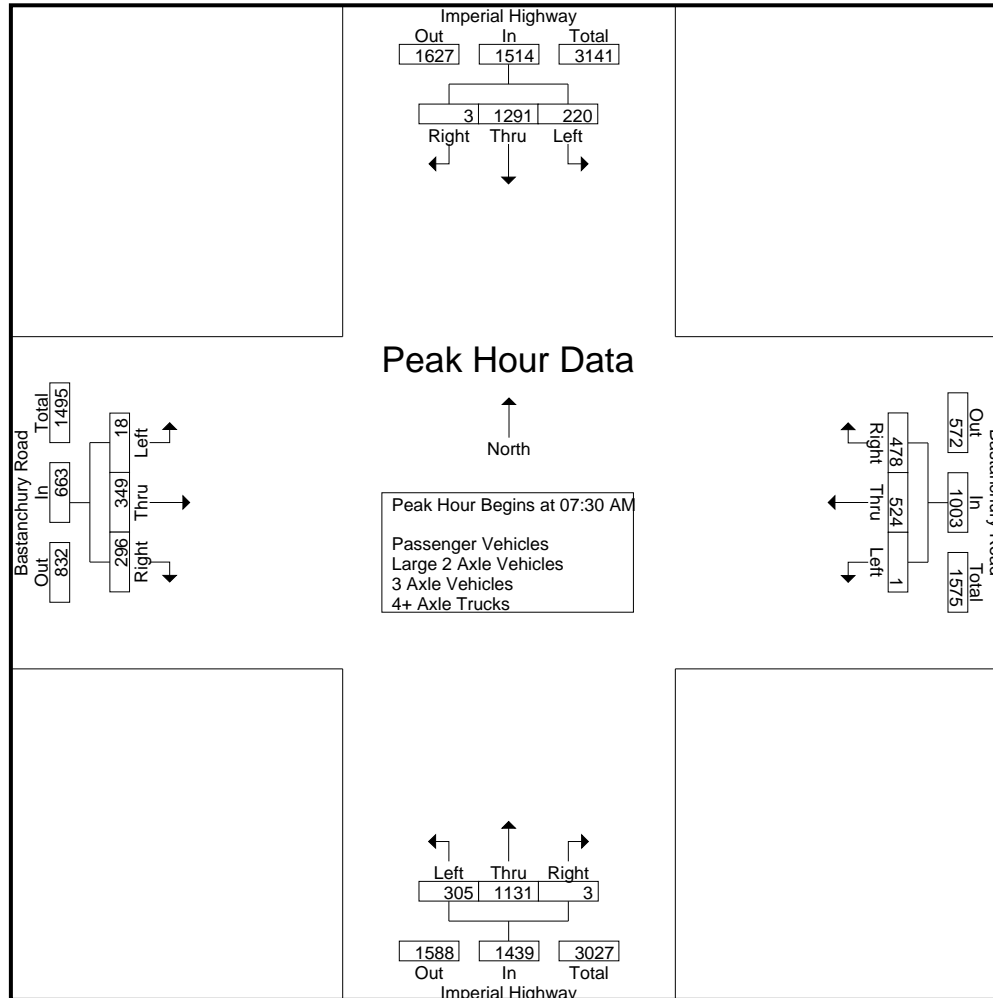
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	30	233	1	0	264	0	54	97	53	151	32	199	1	0	232	1	38	21	11	60	64	707	771
07:15 AM	41	285	0	0	326	0	106	117	52	223	66	221	0	0	287	3	42	49	26	94	78	930	1008
07:30 AM	58	326	0	0	384	1	189	140	50	330	102	279	0	0	381	2	90	56	14	148	64	1243	1307
07:45 AM	58	354	1	0	413	0	110	105	29	215	64	300	1	0	365	6	96	88	20	190	49	1183	1232
Total	187	1198	2	0	1387	1	459	459	184	919	264	999	2	0	1265	12	266	214	71	492	255	4063	4318
08:00 AM	57	327	2	0	386	0	108	116	23	224	78	272	2	0	352	8	83	64	16	155	39	1117	1156
08:15 AM	47	284	0	0	331	0	117	117	37	234	61	280	0	0	341	2	80	88	27	170	64	1076	1140
08:30 AM	69	288	2	0	359	1	79	126	49	206	42	218	1	0	261	2	42	69	36	113	85	939	1024
08:45 AM	63	293	1	0	357	0	74	94	48	168	69	255	1	0	325	1	63	49	20	113	68	963	1031
Total	236	1192	5	0	1433	1	378	453	157	832	250	1025	4	0	1279	13	268	270	99	551	256	4095	4351
Grand Total	423	2390	7	0	2820	2	837	912	341	1751	514	2024	6	0	2544	25	534	484	170	1043	511	8158	8669
Apprch %	15	84.8	0.2			0.1	47.8	52.1			20.2	79.6	0.2			2.4	51.2	46.4					
Total %	5.2	29.3	0.1		34.6	0	10.3	11.2		21.5	6.3	24.8	0.1		31.2	0.3	6.5	5.9		12.8	5.9	94.1	
Passenger Vehicles	415	2304	7		2726	1	832	904		2075	507	1968	6		2481	25	519	477		1190	0	0	8472
% Passenger Vehicles	98.1	96.4	100	0	96.7	50	99.4	99.1	99.1	99.2	98.6	97.2	100	0	97.5	100	97.2	98.6	99.4	98.1	0	0	97.7
Large 2 Axle Vehicles	7	49	0		56	1	5	7		16	4	40	0		44	0	14	6		21	0	0	137
% Large 2 Axle Vehicles	1.7	2.1	0	0	2	50	0.6	0.8	0.9	0.8	0.8	2	0	0	1.7	0	2.6	1.2	0.6	1.7	0	0	1.6
3 Axle Vehicles	1	14	0		15	0	0	1		1	2	7	0		9	0	1	1		2	0	0	27
% 3 Axle Vehicles	0.2	0.6	0	0	0.5	0	0	0.1	0	0	0.4	0.3	0	0	0.4	0	0.2	0.2	0	0.2	0	0	0.3
4+ Axle Trucks	0	23	0		23	0	0	0		0	1	9	0		10	0	0	0		0	0	0	33
% 4+ Axle Trucks	0	1	0	0	0.8	0	0	0	0	0	0.2	0.4	0	0	0.4	0	0	0	0	0	0	0	0.4

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	58	326	0	384	1	189	140	330	102	279	0	381	2	90	56	148	1243
07:45 AM	58	354	1	413	0	110	105	215	64	300	1	365	6	96	88	190	1183
08:00 AM	57	327	2	386	0	108	116	224	78	272	2	352	8	83	64	155	1117
08:15 AM	47	284	0	331	0	117	117	234	61	280	0	341	2	80	88	170	1076
Total Volume	220	1291	3	1514	1	524	478	1003	305	1131	3	1439	18	349	296	663	4619
% App. Total	14.5	85.3	0.2		0.1	52.2	47.7		21.2	78.6	0.2		2.7	52.6	44.6		
PHF	.948	.912	.375	.916	.250	.693	.854	.760	.748	.943	.375	.944	.563	.909	.841	.872	.929

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	58	326	0	384	1	189	140	330	102	279	0	381	2	90	56	148	
+15 mins.	58	354	1	413	0	110	105	215	64	300	1	365	6	96	88	190	
+30 mins.	57	327	2	386	0	108	116	224	78	272	2	352	8	83	64	155	
+45 mins.	47	284	0	331	0	117	117	234	61	280	0	341	2	80	88	170	
Total Volume	220	1291	3	1514	1	524	478	1003	305	1131	3	1439	18	349	296	663	
% App. Total	14.5	85.3	0.2		0.1	52.2	47.7		21.2	78.6	0.2		2.7	52.6	44.6		
PHF	.948	.912	.375	.916	.250	.693	.854	.760	.748	.943	.375	.944	.563	.909	.841	.872	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

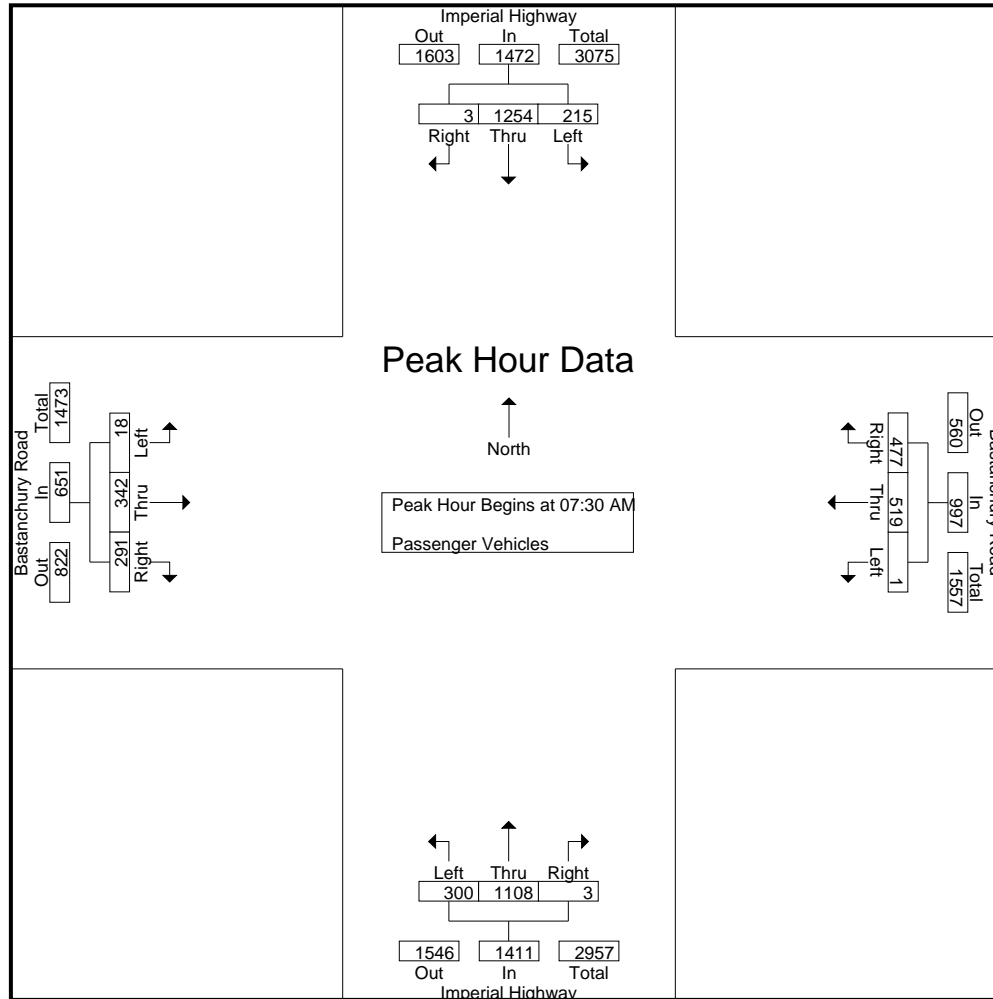
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	29	221	1	0	251	0	54	96	52	150	32	196	1	0	229	1	37	21	11	59	63	689	752
07:15 AM	40	275	0	0	315	0	106	116	52	222	65	214	0	0	279	3	39	49	26	91	78	907	985
07:30 AM	56	318	0	0	374	1	187	140	50	328	101	277	0	0	378	2	88	55	14	145	64	1225	1289
07:45 AM	56	345	1	0	402	0	109	105	29	214	64	289	1	0	354	6	94	86	20	186	49	1156	1205
Total	181	1159	2	0	1342	1	456	457	183	914	262	976	2	0	1240	12	258	211	71	481	254	3977	4231
08:00 AM	56	316	2	0	374	0	107	116	23	223	74	271	2	0	347	8	83	62	16	153	39	1097	1136
08:15 AM	47	275	0	0	322	0	116	116	37	232	61	271	0	0	332	2	77	88	27	167	64	1053	1117
08:30 AM	69	280	2	0	351	0	79	123	48	202	42	210	1	0	253	2	39	67	35	108	83	914	997
08:45 AM	62	274	1	0	337	0	74	92	47	166	68	240	1	0	309	1	62	49	20	112	67	924	991
Total	234	1145	5	0	1384	0	376	447	155	823	245	992	4	0	1241	13	261	266	98	540	253	3988	4241
Grand Total	415	2304	7	0	2726	1	832	904	338	1737	507	1968	6	0	2481	25	519	477	169	1021	507	7965	8472
Apprch %	15.2	84.5	0.3			0.1	47.9	52			20.4	79.3	0.2			2.4	50.8	46.7					
Total %	5.2	28.9	0.1		34.2	0	10.4	11.3		21.8	6.4	24.7	0.1		31.1	0.3	6.5	6		12.8	6	94	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	56	318	0	374	1	187	140	328	101	277	0	378	2	88	55	145	1225
07:45 AM	56	345	1	402	0	109	105	214	64	289	1	354	6	94	86	186	1156
08:00 AM	56	316	2	374	0	107	116	223	74	271	2	347	8	83	62	153	1097
08:15 AM	47	275	0	322	0	116	116	232	61	271	0	332	2	77	88	167	1053
Total Volume	215	1254	3	1472	1	519	477	997	300	1108	3	1411	18	342	291	651	4531
% App. Total	14.6	85.2	0.2		0.1	52.1	47.8		21.3	78.5	0.2		2.8	52.5	44.7		
PHF	.960	.909	.375	.915	.250	.694	.852	.760	.743	.958	.375	.933	.563	.910	.827	.875	.925

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	56	318	0	374	1	187	140	328	101	277	0	378	2	88	55	145	
+15 mins.	56	345	1	402	0	109	105	214	64	289	1	354	6	94	86	186	
+30 mins.	56	316	2	374	0	107	116	223	74	271	2	347	8	83	62	153	
+45 mins.	47	275	0	322	0	116	116	232	61	271	0	332	2	77	88	167	
Total Volume	215	1254	3	1472	1	519	477	997	300	1108	3	1411	18	342	291	651	
% App. Total	14.6	85.2	0.2		0.1	52.1	47.8		21.3	78.5	0.2		2.8	52.5	44.7		
PHF	.960	.909	.375	.915	.250	.694	.852	.760	.743	.958	.375	.933	.563	.910	.827	.875	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

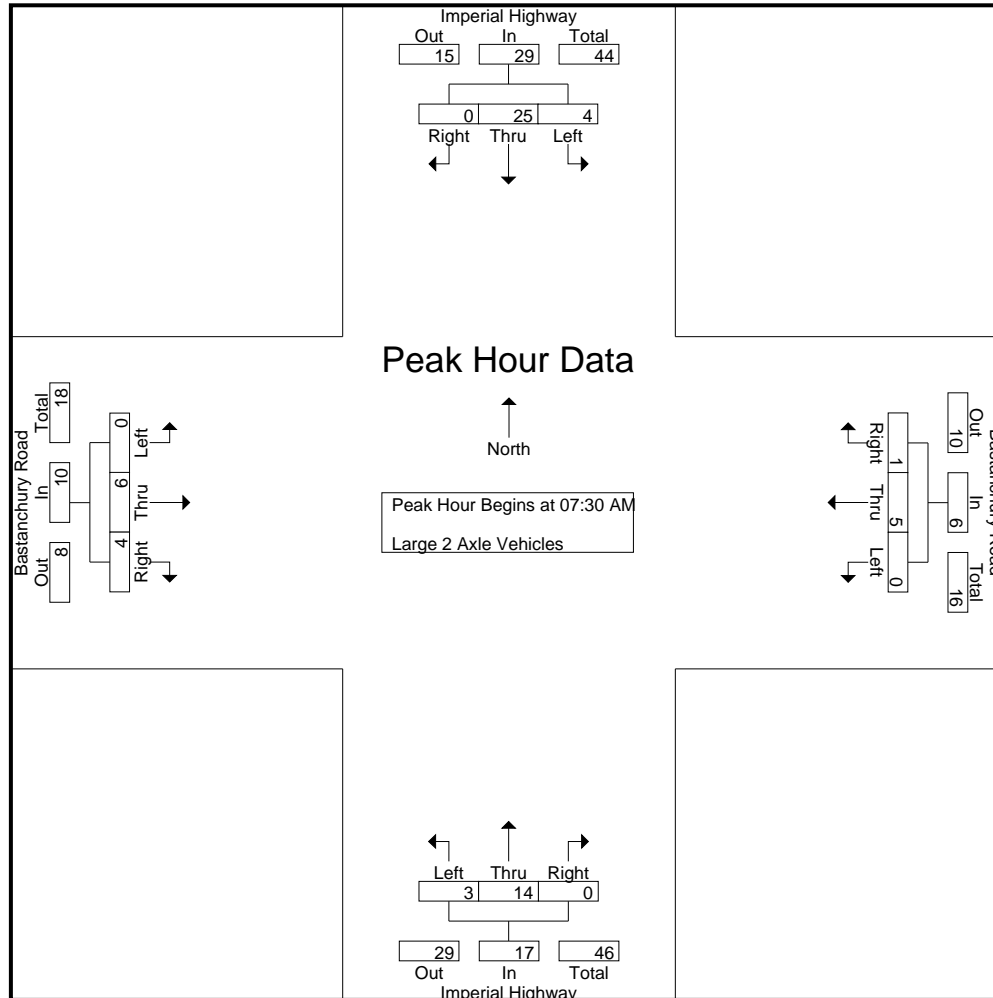
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	1	6	0	0	7	0	0	1	1	1	0	3	0	0	3	0	1	0	0	1	1	12	13
07:15 AM	1	4	0	0	5	0	0	1	0	1	1	5	0	0	6	0	3	0	0	3	0	15	15
07:30 AM	1	6	0	0	7	0	2	0	0	2	1	2	0	0	3	0	1	0	0	1	0	13	13
07:45 AM	2	7	0	0	9	0	1	0	0	1	0	8	0	0	8	0	2	2	0	4	0	22	22
Total	5	23	0	0	28	0	3	2	1	5	2	18	0	0	20	0	7	2	0	9	1	62	63
08:00 AM	1	8	0	0	9	0	1	0	0	1	2	0	0	0	2	0	0	2	0	2	0	14	14
08:15 AM	0	4	0	0	4	0	1	1	0	2	0	4	0	0	4	0	3	0	0	3	0	13	13
08:30 AM	0	5	0	0	5	1	0	3	1	4	0	6	0	0	6	0	3	2	1	5	2	20	22
08:45 AM	1	9	0	0	10	0	0	1	1	1	0	12	0	0	12	0	1	0	0	1	1	24	25
Total	2	26	0	0	28	1	2	5	2	8	2	22	0	0	24	0	7	4	1	11	3	71	74
Grand Total	7	49	0	0	56	1	5	7	3	13	4	40	0	0	44	0	14	6	1	20	4	133	137
Apprch %	12.5	87.5	0			7.7	38.5	53.8			9.1	90.9	0			0	70	30					
Total %	5.3	36.8	0		42.1	0.8	3.8	5.3		9.8	3	30.1	0		33.1	0	10.5	4.5		15	2.9	97.1	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	6	0	7	0	2	0	2	1	2	0	3	0	1	0	1	13
07:45 AM	2	7	0	9	0	1	0	1	0	8	0	8	0	2	2	4	22
08:00 AM	1	8	0	9	0	1	0	1	2	0	0	2	0	0	2	2	14
08:15 AM	0	4	0	4	0	1	1	2	0	4	0	4	0	3	0	3	13
Total Volume	4	25	0	29	0	5	1	6	3	14	0	17	0	6	4	10	62
% App. Total	13.8	86.2	0		0	83.3	16.7		17.6	82.4	0		0	60	40		
PHF	.500	.781	.000	.806	.000	.625	.250	.750	.375	.438	.000	.531	.000	.500	.500	.625	.705

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	1	6	0	7	0	2	0	2	1	2	0	3	0	1	0	1	
+15 mins.	2	7	0	9	0	1	0	1	0	8	0	8	0	2	2	4	
+30 mins.	1	8	0	9	0	1	0	1	2	0	0	2	0	0	2	2	
+45 mins.	0	4	0	4	0	1	1	2	0	4	0	4	0	3	0	3	
Total Volume	4	25	0	29	0	5	1	6	3	14	0	17	0	6	4	10	
% App. Total	13.8	86.2	0		0	83.3	16.7		17.6	82.4	0		0	60	40		
PHF	.500	.781	.000	.806	.000	.625	.250	.750	.375	.438	.000	.531	.000	.500	.500	.625	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

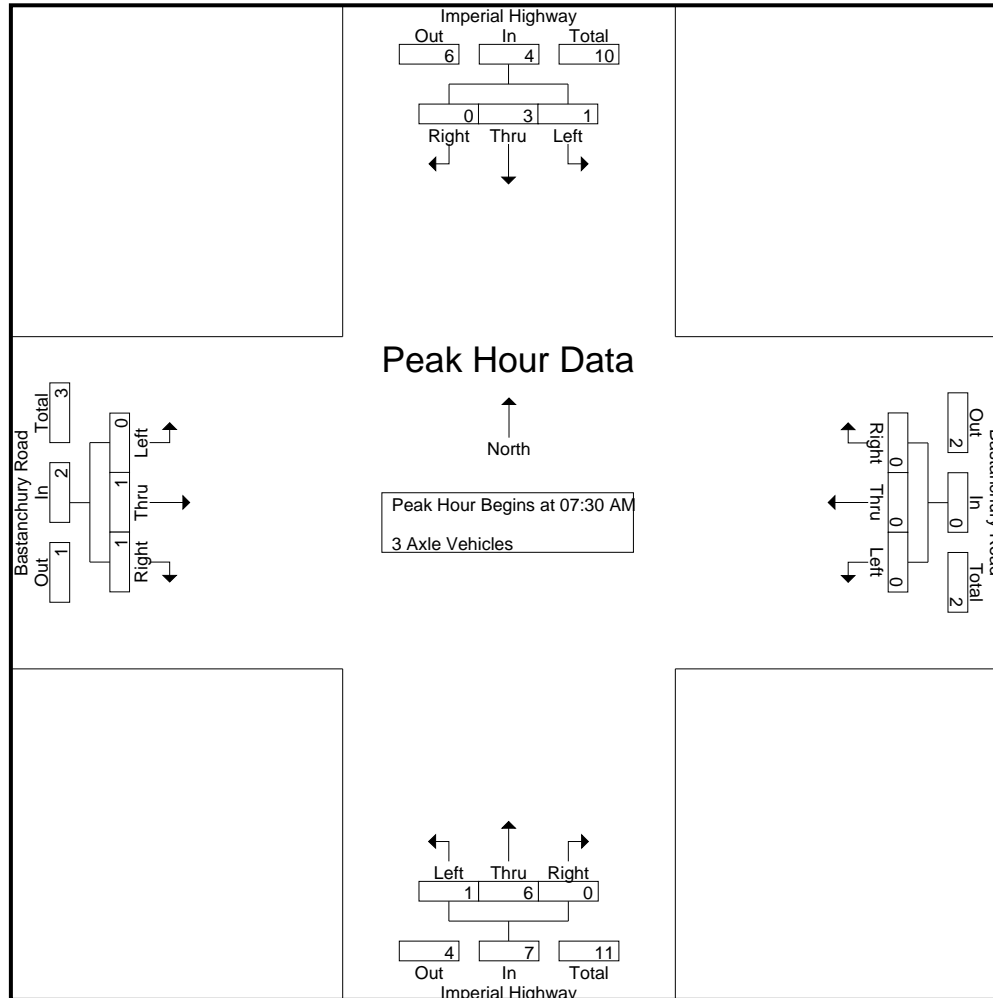
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2	0	3	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	0	0	0	0	2	0	7	7
08:00 AM	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
08:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
08:45 AM	0	7	0	0	7	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	9	9
Total	0	13	0	0	13	0	0	1	0	1	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	20	20
Grand Total	1	14	0	0	15	0	0	1	0	1	2	7	0	0	9	0	1	1	0	2	0	0	0	0	2	0	27	27
Apprch %	6.7	93.3	0			0	0	100			22.2	77.8	0			0	50	50			0	0	0	0	0	0	0	0
Total %	3.7	51.9	0		55.6	0	0	3.7		3.7	7.4	25.9	0		33.3	0	3.7	3.7		7.4	0	0	0	0	0	0	100	100

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:00 AM	0	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0	4
08:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total Volume	1	3	0	4	0	0	0	0	1	6	0	7	0	1	1	2	13
% App. Total	25	75	0		0	0	0		14.3	85.7	0		0	50	50		
PHF	.250	.375	.000	.500	.000	.000	.000	.000	.250	.500	.000	.583	.000	.250	.250	.250	.813

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	2	
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	
+30 mins.	0	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	
Total Volume	1	3	0	4	0	0	0	0	1	6	0	7	0	1	1	2	
% App. Total	25	75	0		0	0	0		14.3	85.7	0		0	50	50		
PHF	.250	.375	.000	.500	.000	.000	.000	.000	.250	.500	.000	.583	.000	.250	.250	.250	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 1

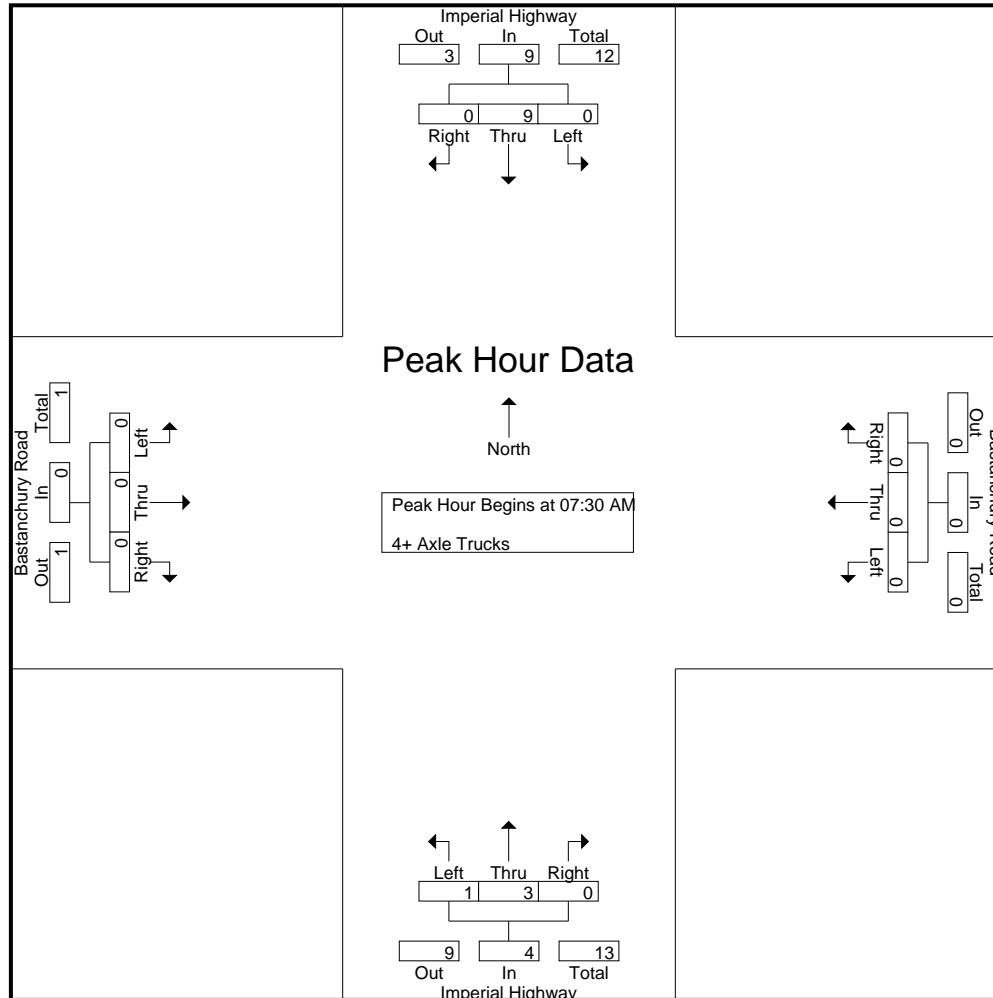
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	6
07:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
07:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	15	0	0	15	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	17	17
08:00 AM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	6
Total	0	8	0	0	8	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0	16	16
Grand Total	0	23	0	0	23	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	0	33	33
Apprch %	0	100	0			0	0	0			10	90	0			0	0	0			0	0	0			0		
Total %	0	69.7	0		69.7	0	0	0		0	3	27.3	0		30.3	0	0	0		0	0	0	0		0	0	100	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3
08:00 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
08:15 AM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	6
Total Volume	0	9	0	9	0	0	0	0	1	3	0	4	0	0	0	0	0	0	0	0	13
% App. Total	0	100	0		0	0	0		25	75	0		0	0	0		0	0	0		
PHF	.000	.563	.000	.563	.000	.000	.000	.000	.250	.375	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.542

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	
Total Volume	0	9	0	9	0	0	0	0	1	3	0	4	0	0	0	0	
% App. Total	0	100	0		0	0	0		25	75	0		0	0	0		
PHF	.000	.563	.000	.563	.000	.000	.000	.000	.250	.375	.000	.500	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

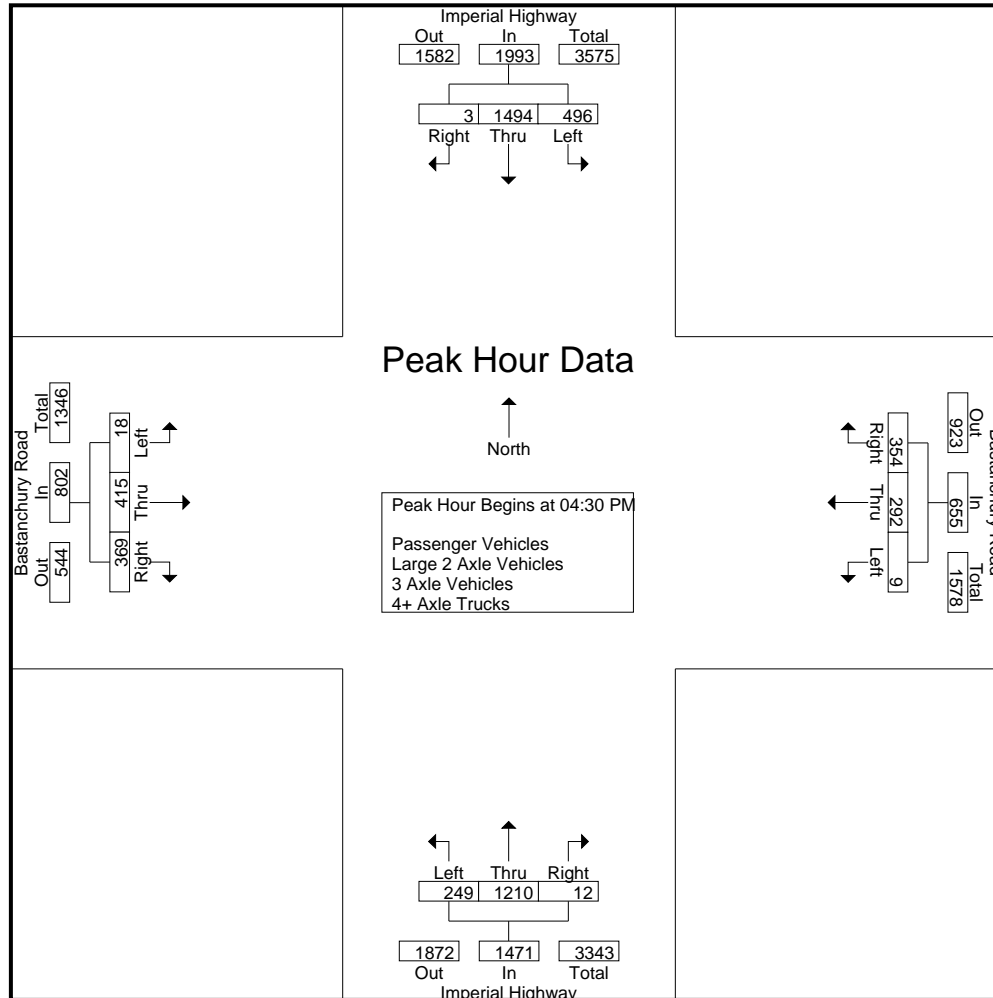
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	95	308	1	0	404	0	72	85	37	157	57	287	3	0	347	6	108	73	13	187	50	1095	1145
04:15 PM	105	318	0	0	423	1	60	106	38	167	48	291	3	0	342	6	89	67	18	162	56	1094	1150
04:30 PM	114	356	0	0	470	3	76	92	34	171	64	295	4	0	363	6	107	86	16	199	50	1203	1253
04:45 PM	110	362	0	0	472	2	76	81	21	159	60	292	3	0	355	4	110	98	34	212	55	1198	1253
Total	424	1344	1	0	1769	6	284	364	130	654	229	1165	13	0	1407	22	414	324	81	760	211	4590	4801
05:00 PM	127	352	2	0	481	1	70	92	22	163	54	320	3	0	377	7	102	102	22	211	44	1232	1276
05:15 PM	145	424	1	0	570	3	70	89	27	162	71	303	2	0	376	1	96	83	10	180	37	1288	1325
05:30 PM	132	327	1	0	460	3	72	89	24	164	57	317	1	0	375	2	106	61	9	169	33	1168	1201
05:45 PM	108	351	4	0	463	3	58	86	40	147	49	260	2	0	311	0	117	54	8	171	48	1092	1140
Total	512	1454	8	0	1974	10	270	356	113	636	231	1200	8	0	1439	10	421	300	49	731	162	4780	4942
Grand Total	936	2798	9	0	3743	16	554	720	243	1290	460	2365	21	0	2846	32	835	624	130	1491	373	9370	9743
Apprch %	25	74.8	0.2			1.2	42.9	55.8			16.2	83.1	0.7			2.1	56	41.9					
Total %	10	29.9	0.1		39.9	0.2	5.9	7.7		13.8	4.9	25.2	0.2		30.4	0.3	8.9	6.7		15.9	3.8	96.2	
Passenger Vehicles	934	2780	9		3723	16	548	711		1516	459	2344	21		2824	31	831	621		1613	0	0	9676
% Passenger Vehicles	99.8	99.4	100	0	99.5	100	98.9	98.8	99.2	98.9	99.8	99.1	100	0	99.2	96.9	99.5	99.5	100	99.5	0	0	99.3
Large 2 Axle Vehicles	2	9	0		11	0	1	8		11	0	15	0		15	1	2	2		5	0	0	42
% Large 2 Axle Vehicles	0.2	0.3	0	0	0.3	0	0.2	1.1	0.8	0.7	0	0.6	0	0	0.5	3.1	0.2	0.3	0	0.3	0	0	0.4
3 Axle Vehicles	0	5	0		5	0	3	1		4	1	2	0		3	0	2	1		3	0	0	15
% 3 Axle Vehicles	0	0.2	0	0	0.1	0	0.5	0.1	0	0.3	0.2	0.1	0	0	0.1	0	0.2	0.2	0	0.2	0	0	0.2
4+ Axle Trucks	0	4	0		4	0	2	0		2	0	4	0		4	0	0	0		0	0	0	10
% 4+ Axle Trucks	0	0.1	0	0	0.1	0	0.4	0	0	0.1	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0.1

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	114	356	0	470	3	76	92	171	64	295	4	363	6	107	86	199	1203
04:45 PM	110	362	0	472	2	76	81	159	60	292	3	355	4	110	98	212	1198
05:00 PM	127	352	2	481	1	70	92	163	54	320	3	377	7	102	102	211	1232
05:15 PM	145	424	1	570	3	70	89	162	71	303	2	376	1	96	83	180	1288
Total Volume	496	1494	3	1993	9	292	354	655	249	1210	12	1471	18	415	369	802	4921
% App. Total	24.9	75	0.2		1.4	44.6	54		16.9	82.3	0.8		2.2	51.7	46		
PHF	.855	.881	.375	.874	.750	.961	.962	.958	.877	.945	.750	.975	.643	.943	.904	.946	.955

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:15 PM				04:45 PM				04:30 PM				
+0 mins.	114	356	0	470	1	60	106	167	60	292	3	355	6	107	86	199	
+15 mins.	110	362	0	472	3	76	92	171	54	320	3	377	4	110	98	212	
+30 mins.	127	352	2	481	2	76	81	159	71	303	2	376	7	102	102	211	
+45 mins.	145	424	1	570	1	70	92	163	57	317	1	375	1	96	83	180	
Total Volume	496	1494	3	1993	7	282	371	660	242	1232	9	1483	18	415	369	802	
% App. Total	24.9	75	0.2		1.1	42.7	56.2		16.3	83.1	0.6		2.2	51.7	46		
PHF	.855	.881	.375	.874	.583	.928	.875	.965	.852	.963	.750	.983	.643	.943	.904	.946	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

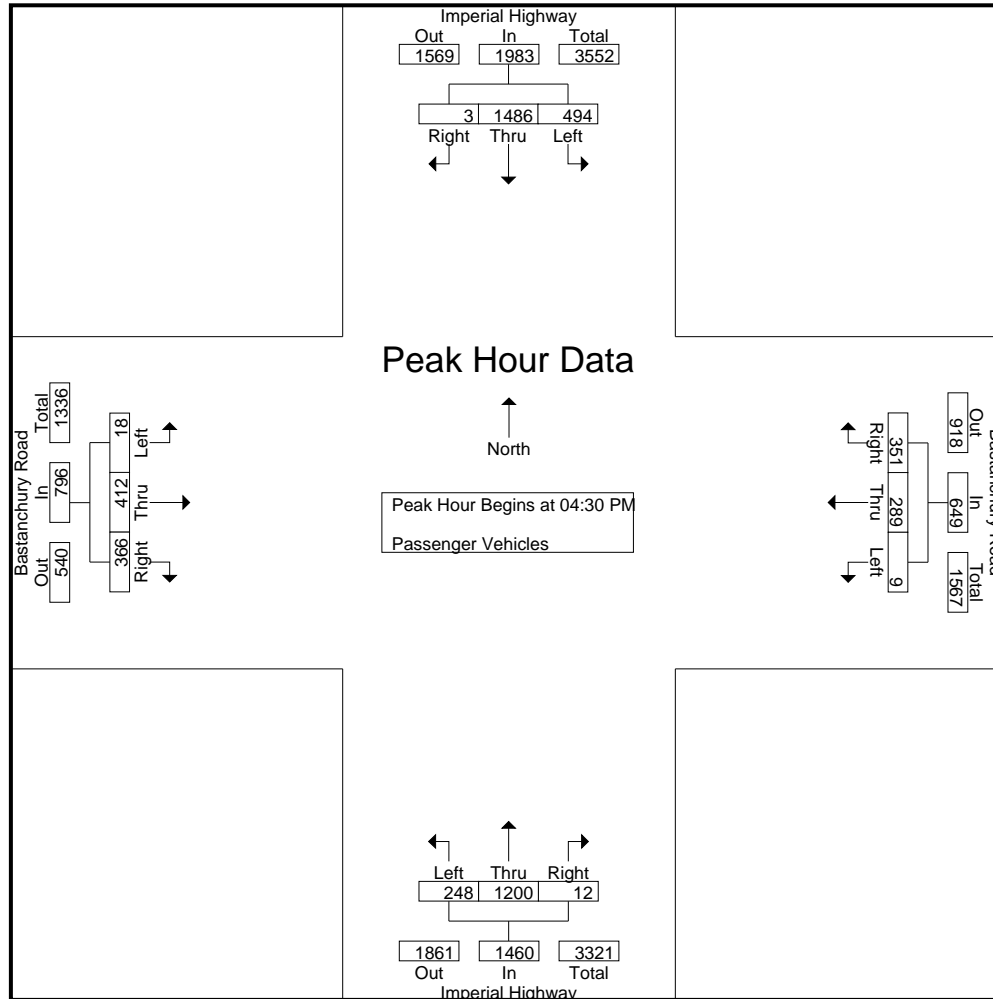
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	95	305	1	0	401	0	71	83	37	154	57	284	3	0	344	5	108	73	13	186	50	1085	1135
04:15 PM	105	314	0	0	419	1	60	104	37	165	48	286	3	0	337	6	89	67	18	162	55	1083	1138
04:30 PM	113	354	0	0	467	3	76	91	34	170	63	293	4	0	360	6	106	86	16	198	50	1195	1245
04:45 PM	110	359	0	0	469	2	76	80	21	158	60	289	3	0	352	4	109	96	34	209	55	1188	1243
Total	423	1332	1	0	1756	6	283	358	129	647	228	1152	13	0	1393	21	412	322	81	755	210	4551	4761
05:00 PM	126	350	2	0	478	1	67	92	22	160	54	319	3	0	376	7	101	101	22	209	44	1223	1267
05:15 PM	145	423	1	0	569	3	70	88	27	161	71	299	2	0	372	1	96	83	10	180	37	1282	1319
05:30 PM	132	325	1	0	458	3	71	89	24	163	57	314	1	0	372	2	105	61	9	168	33	1161	1194
05:45 PM	108	350	4	0	462	3	57	84	39	144	49	260	2	0	311	0	117	54	8	171	47	1088	1135
Total	511	1448	8	0	1967	10	265	353	112	628	231	1192	8	0	1431	10	419	299	49	728	161	4754	4915
Grand Total	934	2780	9	0	3723	16	548	711	241	1275	459	2344	21	0	2824	31	831	621	130	1483	371	9305	9676
Apprch %	25.1	74.7	0.2			1.3	43	55.8			16.3	83	0.7			2.1	56	41.9					
Total %	10	29.9	0.1		40	0.2	5.9	7.6		13.7	4.9	25.2	0.2		30.3	0.3	8.9	6.7		15.9	3.8	96.2	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	113	354	0	467	3	76	91	170	63	293	4	360	6	106	86	198	1195
04:45 PM	110	359	0	469	2	76	80	158	60	289	3	352	4	109	96	209	1188
05:00 PM	126	350	2	478	1	67	92	160	54	319	3	376	7	101	101	209	1223
05:15 PM	145	423	1	569	3	70	88	161	71	299	2	372	1	96	83	180	1282
Total Volume	494	1486	3	1983	9	289	351	649	248	1200	12	1460	18	412	366	796	4888
% App. Total	24.9	74.9	0.2		1.4	44.5	54.1		17	82.2	0.8		2.3	51.8	46		
PHF	.852	.878	.375	.871	.750	.951	.954	.954	.873	.940	.750	.971	.643	.945	.906	.952	.953

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	113	354	0	467	3	76	91	170	63	293	4	360	6	106	86	198	
+15 mins.	110	359	0	469	2	76	80	158	60	289	3	352	4	109	96	209	
+30 mins.	126	350	2	478	1	67	92	160	54	319	3	376	7	101	101	209	
+45 mins.	145	423	1	569	3	70	88	161	71	299	2	372	1	96	83	180	
Total Volume	494	1486	3	1983	9	289	351	649	248	1200	12	1460	18	412	366	796	
% App. Total	24.9	74.9	0.2		1.4	44.5	54.1		17	82.2	0.8		2.3	51.8	46		
PHF	.852	.878	.375	.871	.750	.951	.954	.954	.873	.940	.750	.971	.643	.945	.906	.952	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

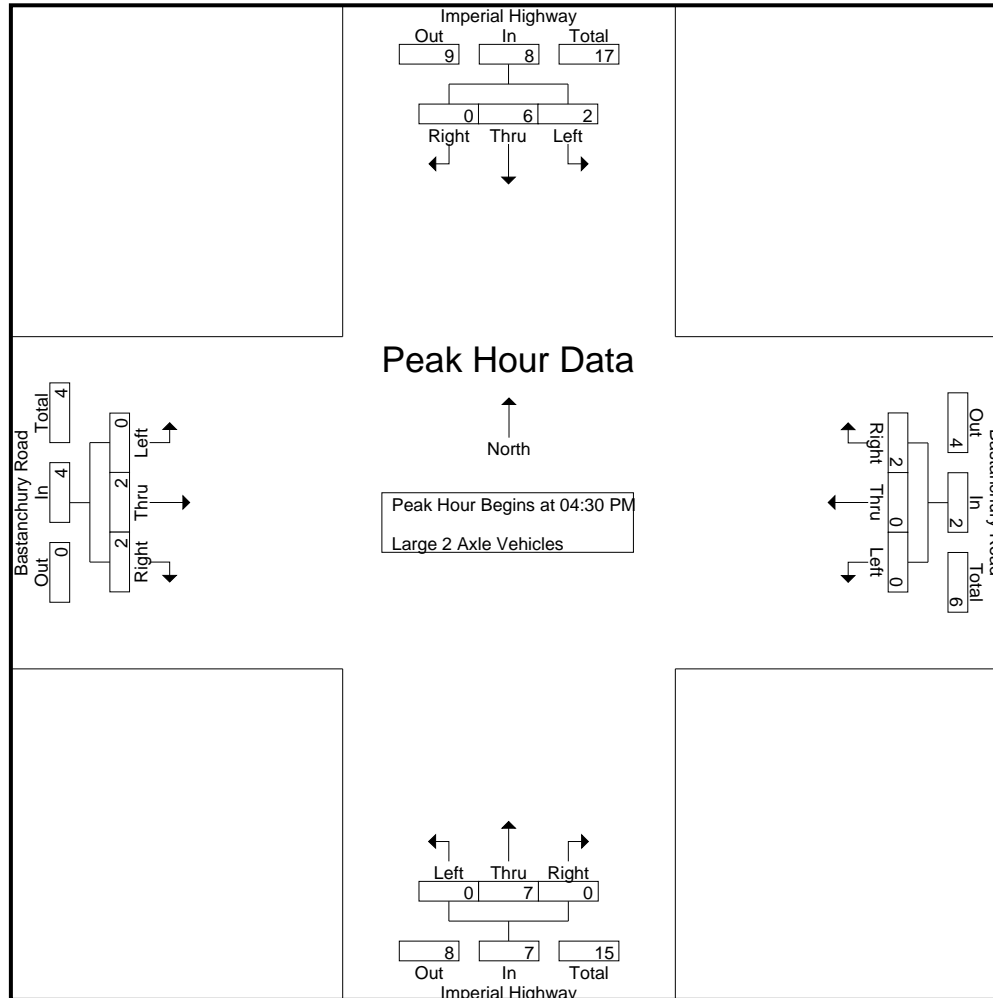
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	1	2	0	3	0	3	0	0	3	1	0	0	0	1	0	7	7
04:15 PM	0	1	0	0	1	0	0	2	1	2	0	3	0	0	3	0	0	0	0	0	1	6	7
04:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	4	4
04:45 PM	0	3	0	0	3	0	0	1	0	1	0	2	0	0	2	0	0	1	0	1	0	7	7
Total	1	5	0	0	6	0	1	5	1	6	0	9	0	0	9	1	1	1	0	3	1	24	25
05:00 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	0	5	5
05:15 PM	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	5	5
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
05:45 PM	0	1	0	0	1	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	1	3	4
Total	1	4	0	0	5	0	0	3	1	3	0	6	0	0	6	0	1	1	0	2	1	16	17
Grand Total	2	9	0	0	11	0	1	8	2	9	0	15	0	0	15	1	2	2	0	5	2	40	42
Apprch %	18.2	81.8	0			0	11.1	88.9			0	100	0			20	40	40					
Total %	5	22.5	0		27.5	0	2.5	20		22.5	0	37.5	0		37.5	2.5	5	5		12.5	4.8	95.2	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	1	0	2	0	0	0	0	0	1	0	1	0	1	0	1	4
04:45 PM	0	3	0	3	0	0	1	1	0	2	0	2	0	0	1	1	7
05:00 PM	1	1	0	2	0	0	0	0	0	1	0	1	0	1	1	2	5
05:15 PM	0	1	0	1	0	0	1	1	0	3	0	3	0	0	0	0	5
Total Volume	2	6	0	8	0	0	2	2	0	7	0	7	0	2	2	4	21
% App. Total	25	75	0		0	0	100		0	100	0		0	50	50		
PHF	.500	.500	.000	.667	.000	.000	.500	.500	.000	.583	.000	.583	.000	.500	.500	.500	.750

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	1	0	2	0	0	0	0	0	1	0	1	0	1	0	1	
+15 mins.	0	3	0	3	0	0	1	1	0	2	0	2	0	0	1	1	
+30 mins.	1	1	0	2	0	0	0	0	0	1	0	1	0	1	1	2	
+45 mins.	0	1	0	1	0	0	1	1	0	3	0	3	0	0	0	0	
Total Volume	2	6	0	8	0	0	2	2	0	7	0	7	0	2	2	4	
% App. Total	25	75	0		0	0	100		0	100	0		0	50	50		
PHF	.500	.500	.000	.667	.000	.000	.500	.500	.000	.583	.000	.583	.000	.500	.500	.500	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

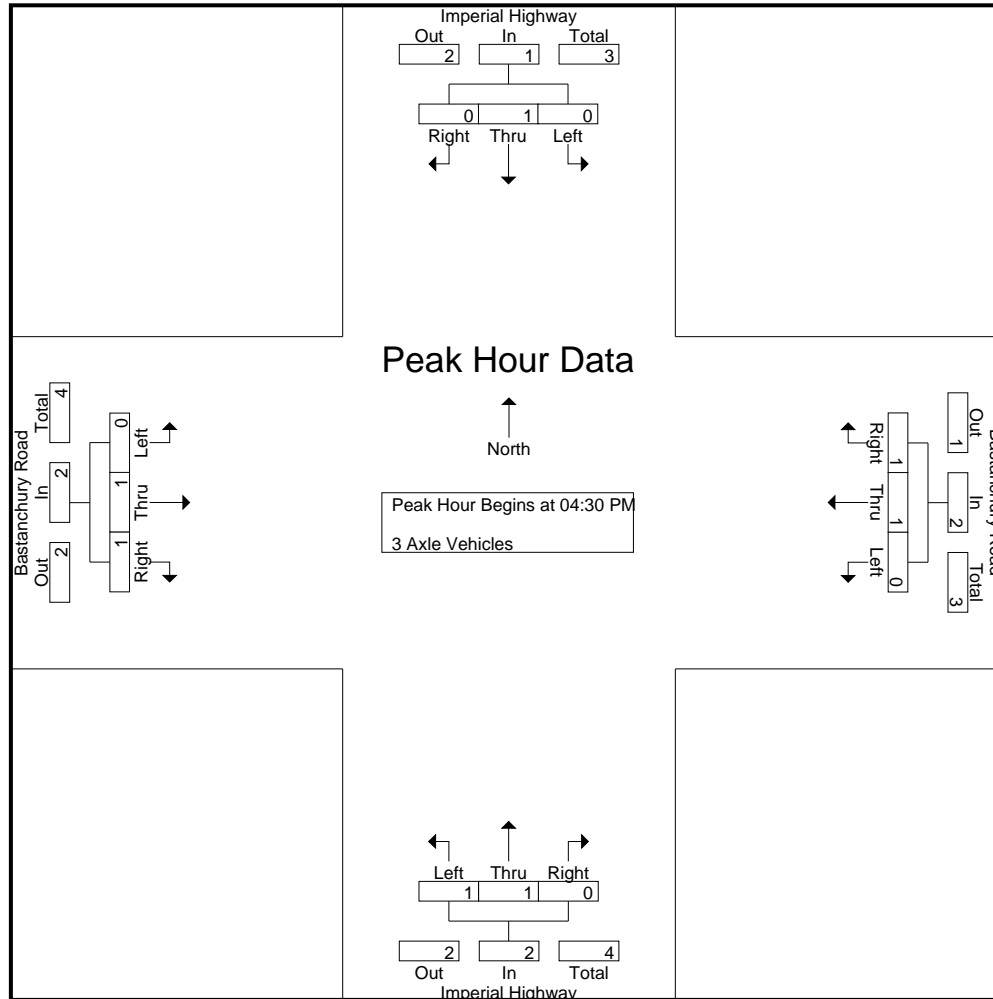
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	4
04:30 PM	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2	0	2	2
Total	0	5	0	0	5	0	0	1	0	1	1	2	0	0	3	0	1	1	0	2	0	0	0	0	2	0	11	11
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	2	2
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	4	4
Grand Total	0	5	0	0	5	0	3	1	0	4	1	2	0	0	3	0	2	1	0	3	0	0	0	0	3	0	15	15
Apprch %	0	100	0			0	75	25			33.3	66.7	0			0	66.7	33.3			0	0	0	0		0		
Total %	0	33.3	0		33.3	0	20	6.7		26.7	6.7	13.3	0		20	0	13.3	6.7		20	0	0	0	0		0	100	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	0	1	0	0	1	1	1	1	0	2	0	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	1	1	2	1	1	0	2	0	1	1	2	7
% App. Total	0	100	0		0	50	50		50	50	0		0	50	50		
PHF	.000	.250	.000	.250	.000	.250	.250	.500	.250	.250	.000	.250	.000	.250	.250	.250	.438

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	0	1	0	0	1	1	1	1	0	2	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	1	1	2	1	1	0	2	0	1	1	2	
% App. Total	0	100	0		0	50	50		50	50	0		0	50	50		
PHF	.000	.250	.000	.250	.000	.250	.250	.500	.250	.250	.000	.250	.000	.250	.250	.250	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

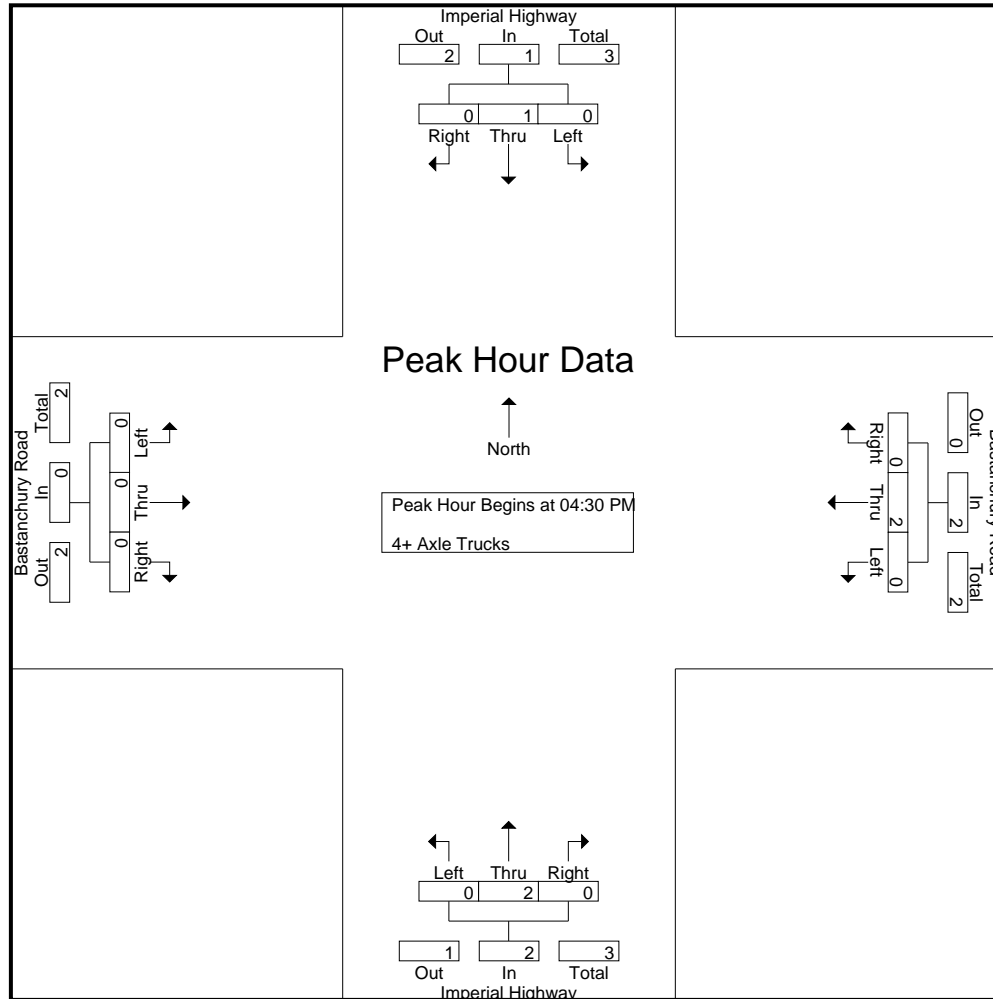
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Bastanchury Road Westbound					Imperial Highway Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
05:00 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	6
Grand Total	0	4	0	0	4	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	10	10
Apprch %	0	100	0			0	100	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	40	0		40	0	20	0		20	0	40	0		40	0	0	0		0	0	0	0		0	0	100	

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
05:00 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	1	0	1	0	2	0	2	0	2	0	2	0	0	0	0	5
% App. Total	0	100	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.417

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road
 Weather: Clear

File Name : 03_YLA_Imp_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Bastanchury Road Westbound				Imperial Highway Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	0	1	0	1	0	2	0	2	0	2	0	2	0	0	0	0	
% App. Total	0	100	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Imperial Highway Pedestrians	East Leg Bastanchury Road Pedestrians	South Leg Imperial Highway Pedestrians	West Leg Bastanchury Road Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Imperial Highway Pedestrians	East Leg Bastanchury Road Pedestrians	South Leg Imperial Highway Pedestrians	West Leg Bastanchury Road Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	1	2

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Imperial Highway			Westbound Bastanchury Road			Northbound Imperial Highway			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	2	0	0	1	0	0	0	0	3

	Southbound Imperial Highway			Westbound Bastanchury Road			Northbound Imperial Highway			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	1	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	0	1	0	1	0	4

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

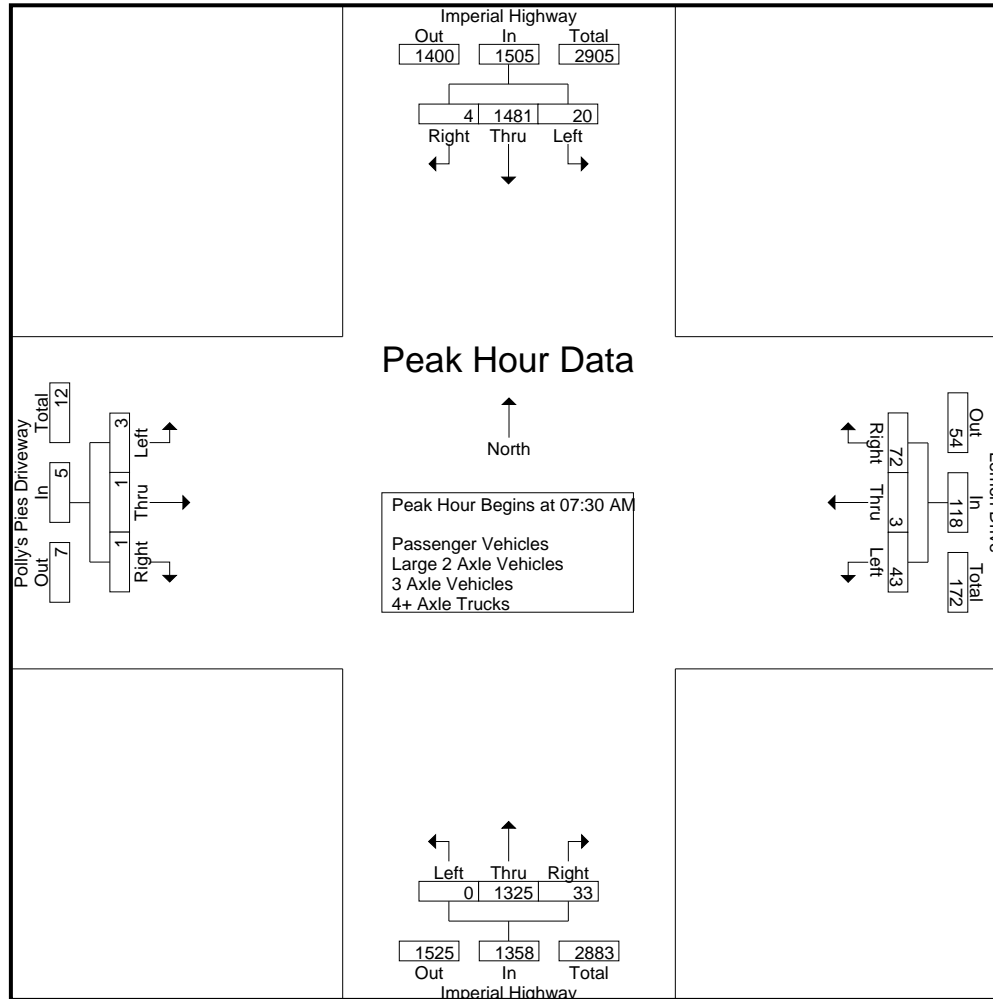
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	4	229	0	0	233	10	0	6	6	16	0	213	3	0	216	0	1	0	0	1	6	466	472
07:15 AM	6	309	3	0	318	7	0	11	11	18	0	259	6	0	265	0	0	0	0	0	11	601	612
07:30 AM	1	390	0	0	391	18	1	23	18	42	0	353	17	0	370	0	0	0	0	0	18	803	821
07:45 AM	5	409	1	0	415	13	0	16	14	29	0	355	2	0	357	2	0	0	0	2	14	803	817
Total	16	1337	4	0	1357	48	1	56	49	105	0	1180	28	0	1208	2	1	0	0	3	49	2673	2722
08:00 AM	8	342	1	0	351	7	2	19	14	28	0	300	9	0	309	1	0	0	0	1	14	689	703
08:15 AM	6	340	2	0	348	5	0	14	7	19	0	317	5	0	322	0	1	1	1	2	8	691	699
08:30 AM	9	281	2	0	292	7	0	34	23	41	0	237	5	1	242	0	1	1	1	2	25	577	602
08:45 AM	22	241	0	0	263	11	1	13	11	25	0	231	4	0	235	1	1	0	0	2	11	525	536
Total	45	1204	5	0	1254	30	3	80	55	113	0	1085	23	1	1108	2	3	2	2	7	58	2482	2540
Grand Total	61	2541	9	0	2611	78	4	136	104	218	0	2265	51	1	2316	4	4	2	2	10	107	5155	5262
Apprch %	2.3	97.3	0.3			35.8	1.8	62.4			0	97.8	2.2			40	40	20					
Total %	1.2	49.3	0.2		50.6	1.5	0.1	2.6		4.2	0	43.9	1		44.9	0.1	0.1	0		0.2	2	98	
Passenger Vehicles	61	2425	9		2495	71	4	128		300	0	2190	51		2242	4	4	2		12	0	0	5049
% Passenger Vehicles	100	95.4	100	0	95.6	91	100	94.1	93.3	93.2	0	96.7	100	100	96.8	100	100	100	100	100	0	0	96
Large 2 Axle Vehicles	0	78	0		78	6	0	7		19	0	57	0		57	0	0	0		0	0	0	154
% Large 2 Axle Vehicles	0	3.1	0	0	3	7.7	0	5.1	5.8	5.9	0	2.5	0	0	2.5	0	0	0	0	0	0	0	2.9
3 Axle Vehicles	0	14	0		14	0	0	1		2	0	7	0		7	0	0	0		0	0	0	23
% 3 Axle Vehicles	0	0.6	0	0	0.5	0	0	0.7	1	0.6	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0.4
4+ Axle Trucks	0	24	0		24	1	0	0		1	0	11	0		11	0	0	0		0	0	0	36
% 4+ Axle Trucks	0	0.9	0	0	0.9	1.3	0	0	0	0.3	0	0.5	0	0	0.5	0	0	0	0	0	0	0	0.7

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	390	0	391	18	1	23	42	0	353	17	370	0	0	0	0	803
07:45 AM	5	409	1	415	13	0	16	29	0	355	2	357	2	0	0	2	803
08:00 AM	8	342	1	351	7	2	19	28	0	300	9	309	1	0	0	1	689
08:15 AM	6	340	2	348	5	0	14	19	0	317	5	322	0	1	1	2	691
Total Volume	20	1481	4	1505	43	3	72	118	0	1325	33	1358	3	1	1	5	2986
% App. Total	1.3	98.4	0.3		36.4	2.5	61		0	97.6	2.4		60	20	20		
PHF	.625	.905	.500	.907	.597	.375	.783	.702	.000	.933	.485	.918	.375	.250	.250	.625	.930

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:45 AM				
+0 mins.	1	390	0	391	18	1	23	42	0	353	17	370	2	0	0	2	
+15 mins.	5	409	1	415	13	0	16	29	0	355	2	357	1	0	0	1	
+30 mins.	8	342	1	351	7	2	19	28	0	300	9	309	0	1	1	2	
+45 mins.	6	340	2	348	5	0	14	19	0	317	5	322	0	1	1	2	
Total Volume	20	1481	4	1505	43	3	72	118	0	1325	33	1358	3	2	2	7	
% App. Total	1.3	98.4	0.3		36.4	2.5	61		0	97.6	2.4		42.9	28.6	28.6		
PHF	.625	.905	.500	.907	.597	.375	.783	.702	.000	.933	.485	.918	.375	.500	.500	.875	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

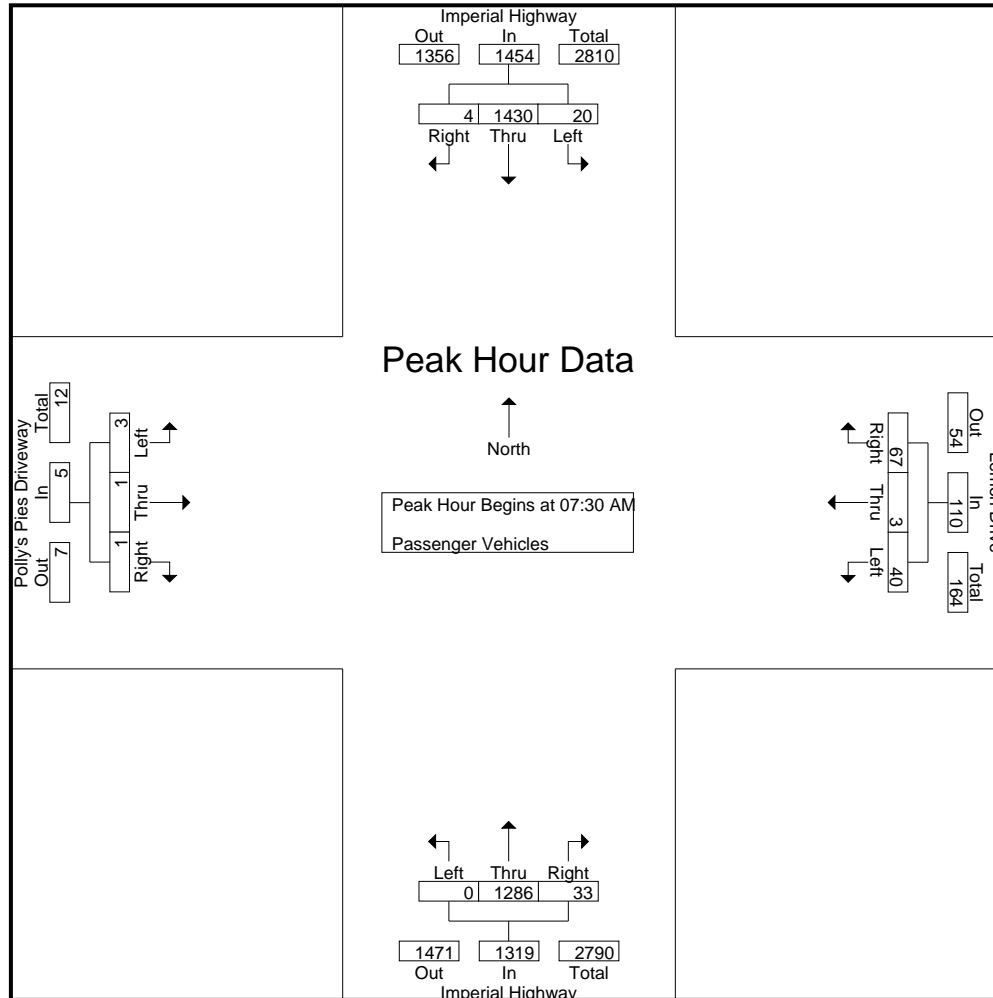
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	4	215	0	0	219	10	0	6	6	16	0	208	3	0	211	0	1	0	0	1	6	447	453
07:15 AM	6	295	3	0	304	6	0	11	11	17	0	249	6	0	255	0	0	0	0	0	11	576	587
07:30 AM	1	375	0	0	376	16	1	19	14	36	0	342	17	0	359	0	0	0	0	0	14	771	785
07:45 AM	5	397	1	0	403	13	0	16	14	29	0	345	2	0	347	2	0	0	0	2	14	781	795
Total	16	1282	4	0	1302	45	1	52	45	98	0	1144	28	0	1172	2	1	0	0	3	45	2575	2620
08:00 AM	8	333	1	0	342	6	2	18	14	26	0	293	9	0	302	1	0	0	0	1	14	671	685
08:15 AM	6	325	2	0	333	5	0	14	7	19	0	306	5	0	311	0	1	1	1	2	8	665	673
08:30 AM	9	269	2	0	280	6	0	31	20	37	0	225	5	1	230	0	1	1	1	2	22	549	571
08:45 AM	22	216	0	0	238	9	1	13	11	23	0	222	4	0	226	1	1	0	0	2	11	489	500
Total	45	1143	5	0	1193	26	3	76	52	105	0	1046	23	1	1069	2	3	2	2	7	55	2374	2429
Grand Total	61	2425	9	0	2495	71	4	128	97	203	0	2190	51	1	2241	4	4	2	2	10	100	4949	5049
Apprch %	2.4	97.2	0.4			35	2	63.1			0	97.7	2.3			40	40	20					
Total %	1.2	49	0.2		50.4	1.4	0.1	2.6		4.1	0	44.3	1		45.3	0.1	0.1	0	0.2		2	98	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	375	0	376	16	1	19	36	0	342	17	359	0	0	0	0	771
07:45 AM	5	397	1	403	13	0	16	29	0	345	2	347	2	0	0	2	781
08:00 AM	8	333	1	342	6	2	18	26	0	293	9	302	1	0	0	1	671
08:15 AM	6	325	2	333	5	0	14	19	0	306	5	311	0	1	1	2	665
Total Volume	20	1430	4	1454	40	3	67	110	0	1286	33	1319	3	1	1	5	2888
% App. Total	1.4	98.3	0.3		36.4	2.7	60.9		0	97.5	2.5		60	20	20		
PHF	.625	.901	.500	.902	.625	.375	.882	.764	.000	.932	.485	.919	.375	.250	.250	.625	.924

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	1	375	0	376	16	1	19	36	0	342	17	359	0	0	0	0	
+15 mins.	5	397	1	403	13	0	16	29	0	345	2	347	2	0	0	2	
+30 mins.	8	333	1	342	6	2	18	26	0	293	9	302	1	0	0	1	
+45 mins.	6	325	2	333	5	0	14	19	0	306	5	311	0	1	1	2	
Total Volume	20	1430	4	1454	40	3	67	110	0	1286	33	1319	3	1	1	5	
% App. Total	1.4	98.3	0.3		36.4	2.7	60.9		0	97.5	2.5		60	20	20		
PHF	.625	.901	.500	.902	.625	.375	.882	.764	.000	.932	.485	.919	.375	.250	.250	.625	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

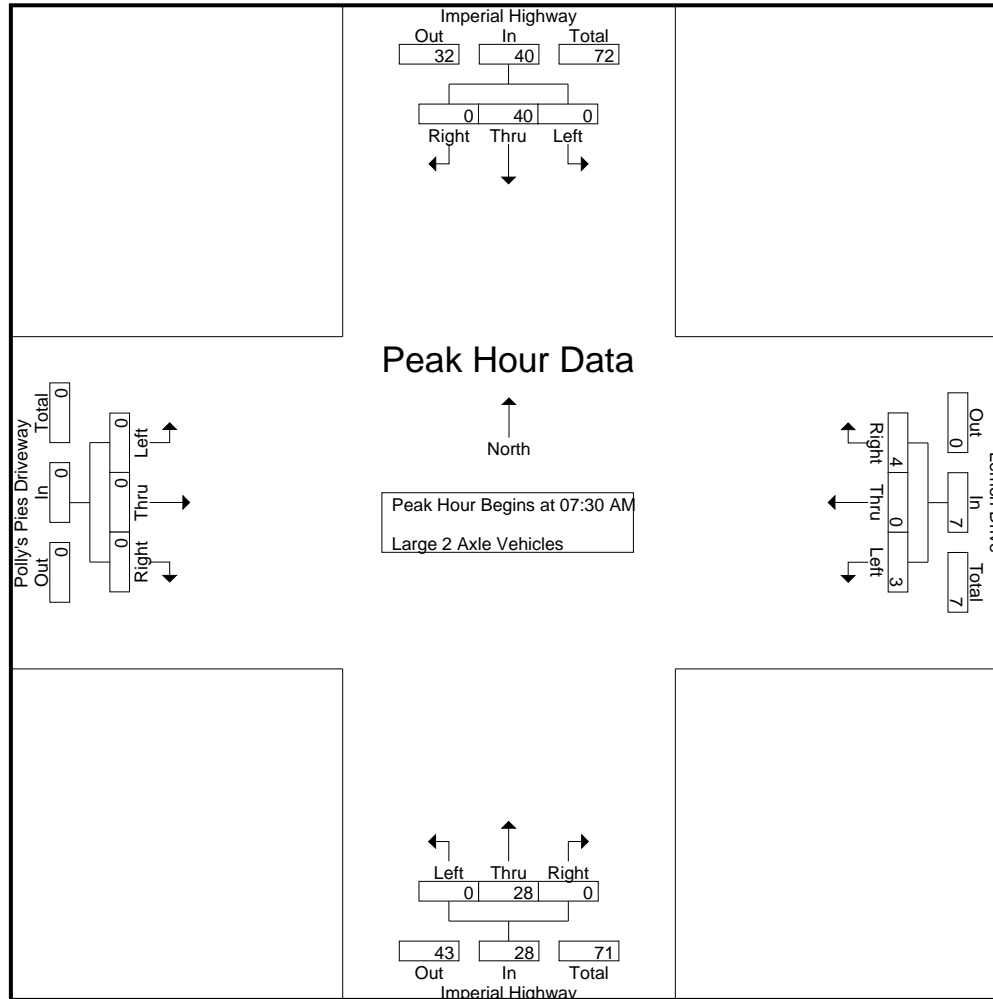
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	11	11
07:15 AM	0	7	0	0	7	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	16	16
07:30 AM	0	13	0	0	13	2	0	3	3	5	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	3	27	30
07:45 AM	0	10	0	0	10	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	18	18
Total	0	36	0	0	36	3	0	3	3	6	0	30	0	0	30	0	0	0	0	0	0	0	0	0	0	3	72	75
08:00 AM	0	7	0	0	7	1	0	1	0	2	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	14	14
08:15 AM	0	10	0	0	10	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	16	16
08:30 AM	0	8	0	0	8	1	0	3	3	4	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	3	21	24
08:45 AM	0	17	0	0	17	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	25	25
Total	0	42	0	0	42	3	0	4	3	7	0	27	0	0	27	0	0	0	0	0	0	0	0	0	0	3	76	79
Grand Total	0	78	0	0	78	6	0	7	6	13	0	57	0	0	57	0	0	0	0	0	0	0	0	0	0	6	148	154
Apprch %	0	100	0			46.2	0	53.8			0	100	0			0	0	0			0	0	0					
Total %	0	52.7	0		52.7	4.1	0	4.7		8.8	0	38.5	0		38.5	0	0	0		0	0	0	0		0	3.9	96.1	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	0	13	0	13	2	0	3	5	0	9	0	9	0	0	0	0	0	27
07:45 AM	0	10	0	10	0	0	0	0	0	8	0	8	0	0	0	0	0	18
08:00 AM	0	7	0	7	1	0	1	2	0	5	0	5	0	0	0	0	0	14
08:15 AM	0	10	0	10	0	0	0	0	0	6	0	6	0	0	0	0	0	16
Total Volume	0	40	0	40	3	0	4	7	0	28	0	28	0	0	0	0	0	75
% App. Total	0	100	0		42.9	0	57.1		0	100	0		0	0	0			
PHF	.000	.769	.000	.769	.375	.000	.333	.350	.000	.778	.000	.778	.000	.000	.000	.000	.000	.694

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	13	0	13	2	0	3	5	0	9	0	9	0	0	0	0	
+15 mins.	0	10	0	10	0	0	0	0	0	8	0	8	0	0	0	0	
+30 mins.	0	7	0	7	1	0	1	2	0	5	0	5	0	0	0	0	
+45 mins.	0	10	0	10	0	0	0	0	0	6	0	6	0	0	0	0	
Total Volume	0	40	0	40	3	0	4	7	0	28	0	28	0	0	0	0	
% App. Total	0	100	0		42.9	0	57.1		0	100	0		0	0	0		
PHF	.000	.769	.000	.769	.375	.000	.333	.350	.000	.778	.000	.778	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

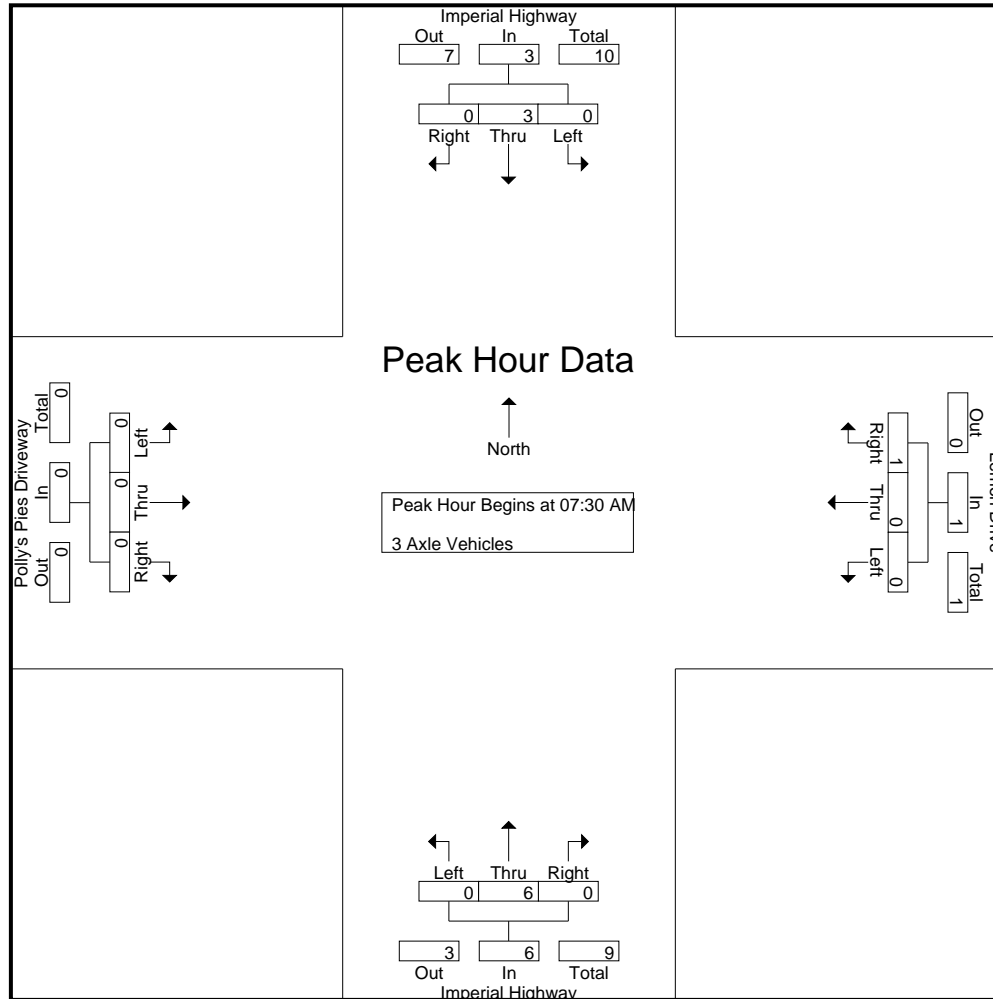
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
07:30 AM	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	2	0	0	2	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	1	6	7
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
08:30 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
08:45 AM	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Total	0	12	0	0	12	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	16	16
Grand Total	0	14	0	0	14	0	0	1	1	1	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	1	22	23
Apprch %	0	100	0			0	0	100			0	100	0			0	0	0			0	0	0					
Total %	0	63.6	0		63.6	0	0	4.5		4.5	0	31.8	0		31.8	0	0	0		0	0	0	0		0	4.3	95.7	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total Volume	0	3	0	3	0	0	1	1	0	6	0	6	0	0	0	0	10
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.000	.000	.625

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	
Total Volume	0	3	0	3	0	0	1	1	0	6	0	6	0	0	0	0	
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

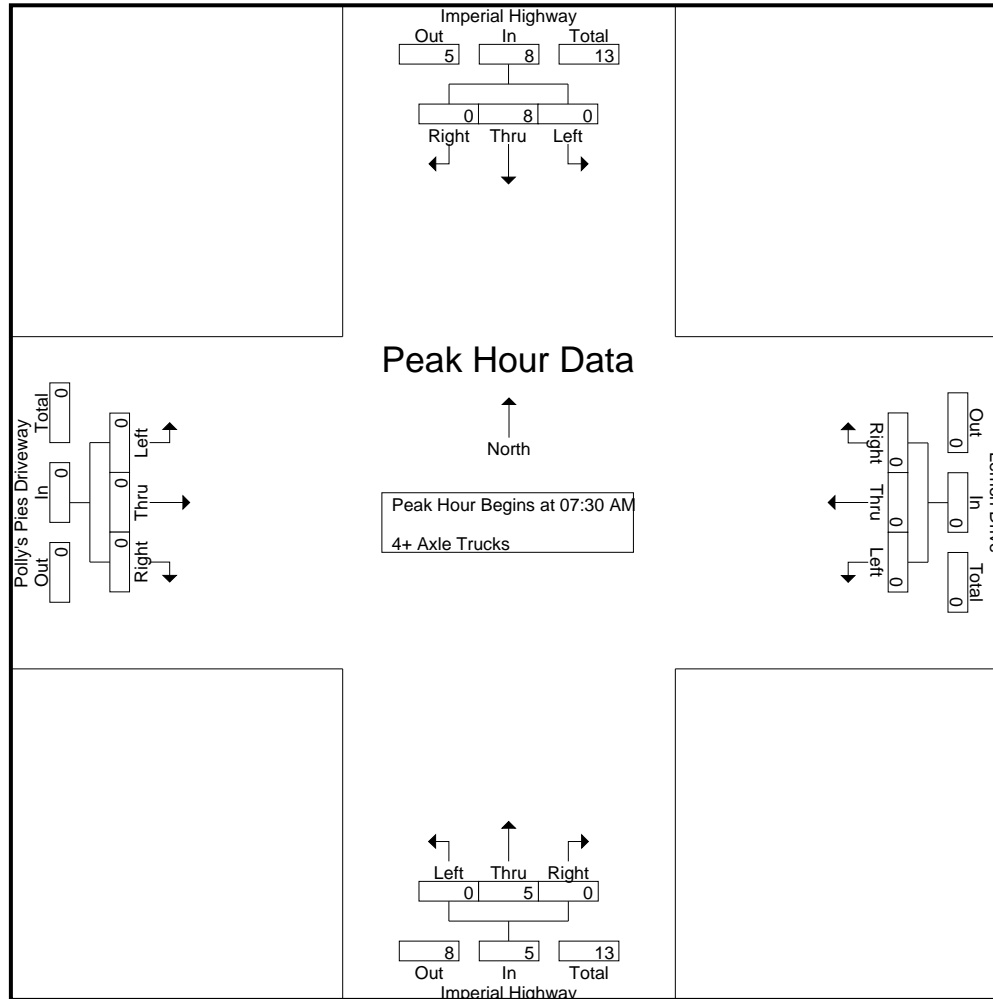
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
07:15 AM	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	7
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	3
07:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	17	0	0	17	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	20	20
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
08:45 AM	0	2	0	0	2	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	0	7	0	0	7	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	16	16
Grand Total	0	24	0	0	24	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	36	36
Apprch %	0	100	0			100	0	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	66.7	0		66.7	2.8	0	0		2.8	0	30.6	0		30.6	0	0	0		0	0	0	0		0	0	100	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
Total Volume	0	8	0	8	0	0	0	0	0	5	0	5	0	0	0	0	13
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.542

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	
Total Volume	0	8	0	8	0	0	0	0	0	5	0	5	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

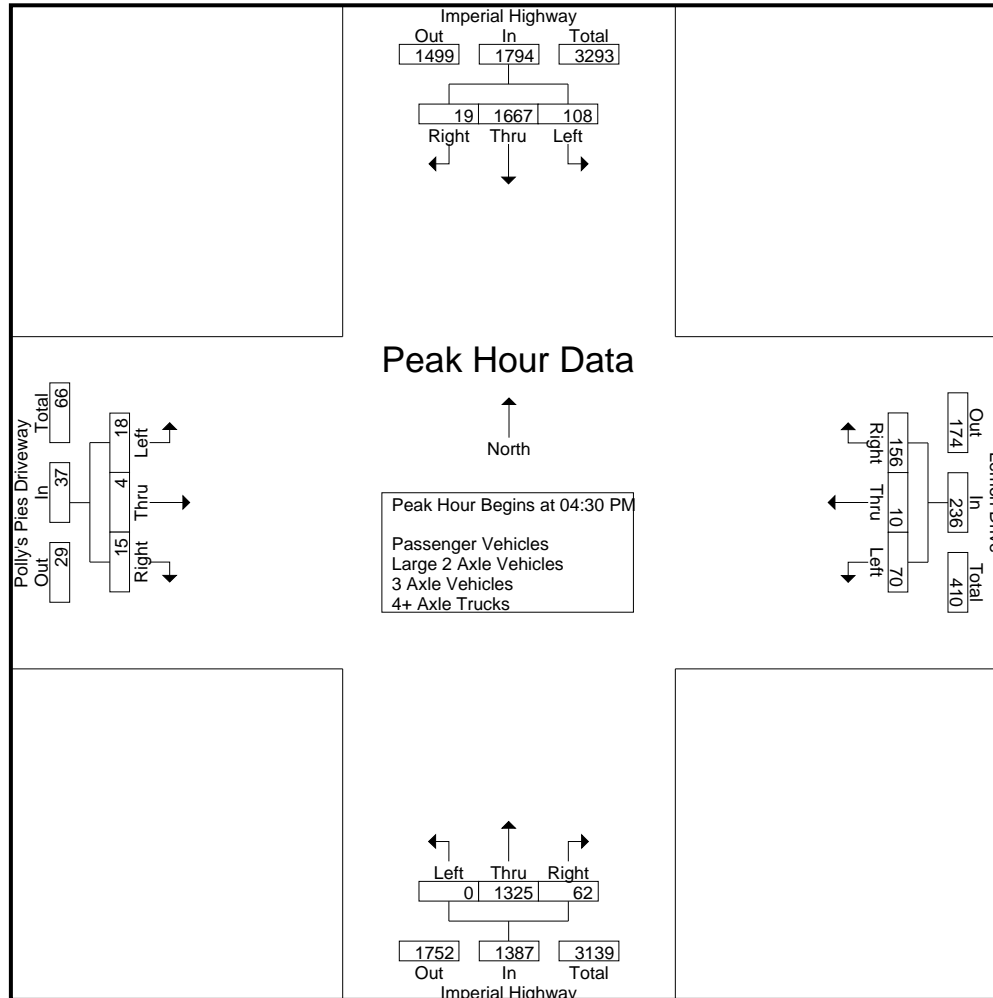
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	19	386	4	0	409	16	4	37	27	57	0	303	20	0	323	3	4	5	3	12	30	801	831
04:15 PM	30	352	3	0	385	18	2	34	20	54	0	332	12	0	344	3	0	3	2	6	22	789	811
04:30 PM	24	381	5	0	410	18	1	32	22	51	0	331	13	0	344	6	0	6	3	12	25	817	842
04:45 PM	33	438	4	0	475	21	6	41	25	68	0	318	12	1	330	4	1	1	1	6	27	879	906
Total	106	1557	16	0	1679	73	13	144	94	230	0	1284	57	1	1341	16	5	15	9	36	104	3286	3390
05:00 PM	34	414	6	0	454	17	1	45	32	63	0	341	19	1	360	5	2	3	3	10	36	887	923
05:15 PM	17	434	4	0	455	14	2	38	33	54	0	335	18	0	353	3	1	5	3	9	36	871	907
05:30 PM	20	389	10	1	419	16	2	28	21	46	0	306	17	0	323	5	2	1	0	8	22	796	818
05:45 PM	24	306	3	0	333	10	0	24	23	34	0	291	25	2	316	3	1	2	1	6	26	689	715
Total	95	1543	23	1	1661	57	5	135	109	197	0	1273	79	3	1352	16	6	11	7	33	120	3243	3363
Grand Total	201	3100	39	1	3340	130	18	279	203	427	0	2557	136	4	2693	32	11	26	16	69	224	6529	6753
Apprch %	6	92.8	1.2			30.4	4.2	65.3			0	94.9	5.1			46.4	15.9	37.7					
Total %	3.1	47.5	0.6		51.2	2	0.3	4.3		6.5	0	39.2	2.1	41.2	0.5	0.2	0.4		1.1		3.3	96.7	
Passenger Vehicles	199	3054	39		3293	125	18	277		621	0	2520	135		2659	32	11	25		83	0	0	6656
% Passenger Vehicles	99	98.5	100	100	98.6	96.2	100	99.3	99	98.6	0	98.6	99.3	100	98.6	100	100	96.2	93.8	97.6	0	0	98.6
Large 2 Axle Vehicles	2	32	0		34	5	0	2		9	0	29	1		30	0	0	0		0	0	0	73
% Large 2 Axle Vehicles	1	1	0	0	1	3.8	0	0.7	1	1.4	0	1.1	0.7	0	1.1	0	0	0	0	0	0	0	1.1
3 Axle Vehicles	0	8	0		8	0	0	0		0	0	3	0		3	0	0	1		2	0	0	13
% 3 Axle Vehicles	0	0.3	0	0	0.2	0	0	0	0	0	0	0.1	0	0	0.1	0	0	3.8	6.2	2.4	0	0	0.2
4+ Axle Trucks	0	6	0		6	0	0	0		0	0	5	0		5	0	0	0		0	0	0	11
% 4+ Axle Trucks	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0.2

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	24	381	5	410	18	1	32	51	0	331	13	344	6	0	6	12	817
04:45 PM	33	438	4	475	21	6	41	68	0	318	12	330	4	1	1	6	879
05:00 PM	34	414	6	454	17	1	45	63	0	341	19	360	5	2	3	10	887
05:15 PM	17	434	4	455	14	2	38	54	0	335	18	353	3	1	5	9	871
Total Volume	108	1667	19	1794	70	10	156	236	0	1325	62	1387	18	4	15	37	3454
% App. Total	6	92.9	1.1		29.7	4.2	66.1		0	95.5	4.5		48.6	10.8	40.5		
PHF	.794	.951	.792	.944	.833	.417	.867	.868	.000	.971	.816	.963	.750	.500	.625	.771	.974

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:15 PM				04:30 PM				04:30 PM				
+0 mins.	33	438	4	475	18	2	34	54	0	331	13	344	6	0	6	12	
+15 mins.	34	414	6	454	18	1	32	51	0	318	12	330	4	1	1	6	
+30 mins.	17	434	4	455	21	6	41	68	0	341	19	360	5	2	3	10	
+45 mins.	20	389	10	419	17	1	45	63	0	335	18	353	3	1	5	9	
Total Volume	104	1675	24	1803	74	10	152	236	0	1325	62	1387	18	4	15	37	
% App. Total	5.8	92.9	1.3		31.4	4.2	64.4		0	95.5	4.5		48.6	10.8	40.5		
PHF	.765	.956	.600	.949	.881	.417	.844	.868	.000	.971	.816	.963	.750	.500	.625	.771	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

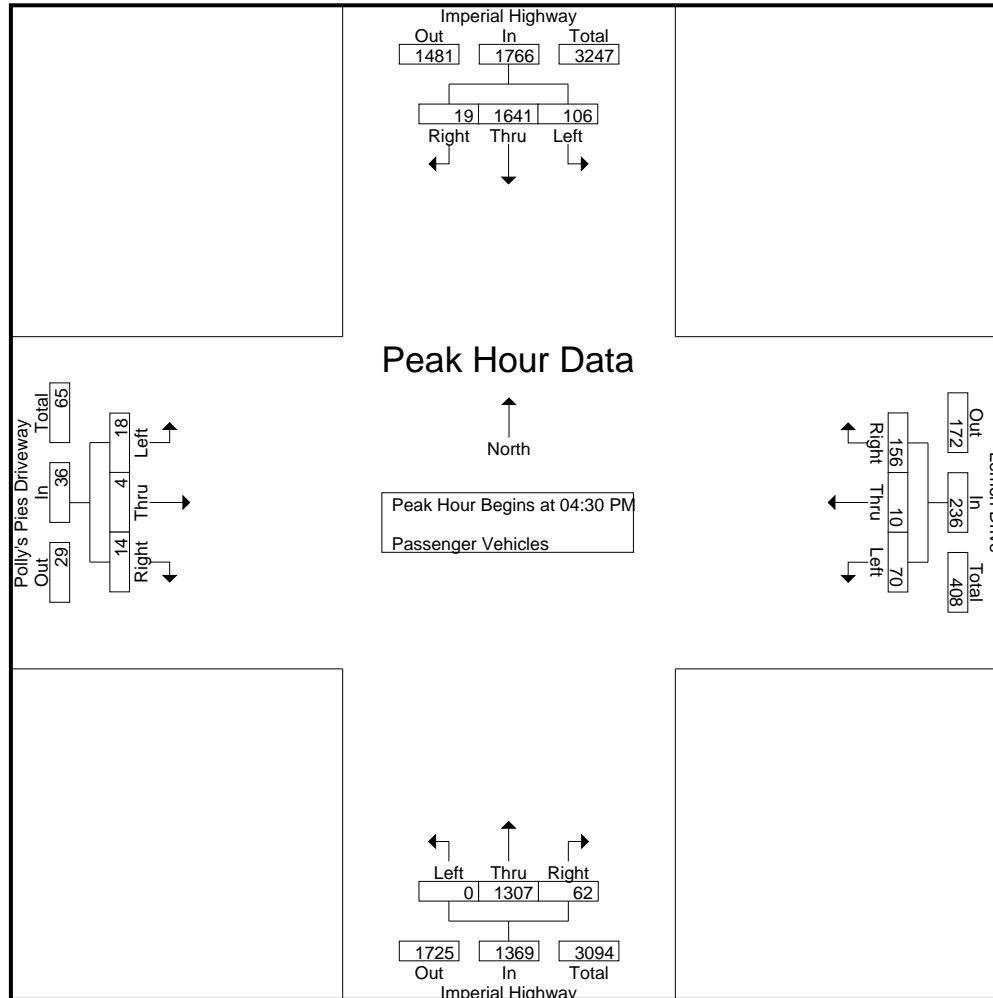
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	19	380	4	0	403	14	4	35	25	53	0	296	20	0	316	3	4	5	3	12	28	784	812
04:15 PM	30	347	3	0	380	17	2	34	20	53	0	325	11	0	336	3	0	3	2	6	22	775	797
04:30 PM	24	377	5	0	406	18	1	32	22	51	0	325	13	0	338	6	0	6	3	12	25	807	832
04:45 PM	32	430	4	0	466	21	6	41	25	68	0	317	12	1	329	4	1	1	1	6	27	869	896
Total	105	1534	16	0	1655	70	13	142	92	225	0	1263	56	1	1319	16	5	15	9	36	102	3235	3337
05:00 PM	33	406	6	0	445	17	1	45	32	63	0	336	19	1	355	5	2	2	2	9	35	872	907
05:15 PM	17	428	4	0	449	14	2	38	33	54	0	329	18	0	347	3	1	5	3	9	36	859	895
05:30 PM	20	383	10	1	413	15	2	28	21	45	0	301	17	0	318	5	2	1	0	8	22	784	806
05:45 PM	24	303	3	0	330	9	0	24	23	33	0	291	25	2	316	3	1	2	1	6	26	685	711
Total	94	1520	23	1	1637	55	5	135	109	195	0	1257	79	3	1336	16	6	10	6	32	119	3200	3319
Grand Total	199	3054	39	1	3292	125	18	277	201	420	0	2520	135	4	2655	32	11	25	15	68	221	6435	6656
Apprch %	6	92.8	1.2			29.8	4.3	66			0	94.9	5.1			47.1	16.2	36.8					
Total %	3.1	47.5	0.6		51.2	1.9	0.3	4.3		6.5	0	39.2	2.1		41.3	0.5	0.2	0.4		1.1	3.3	96.7	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	24	377	5	406	18	1	32	51	0	325	13	338	6	0	6	12	807
04:45 PM	32	430	4	466	21	6	41	68	0	317	12	329	4	1	1	6	869
05:00 PM	33	406	6	445	17	1	45	63	0	336	19	355	5	2	2	9	872
05:15 PM	17	428	4	449	14	2	38	54	0	329	18	347	3	1	5	9	859
Total Volume	106	1641	19	1766	70	10	156	236	0	1307	62	1369	18	4	14	36	3407
% App. Total	6	92.9	1.1		29.7	4.2	66.1		0	95.5	4.5		50	11.1	38.9		
PHF	.803	.954	.792	.947	.833	.417	.867	.868	.000	.972	.816	.964	.750	.500	.583	.750	.977

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	24	377	5	406	18	1	32	51	0	325	13	338	6	0	6	12	
+15 mins.	32	430	4	466	21	6	41	68	0	317	12	329	4	1	1	6	
+30 mins.	33	406	6	445	17	1	45	63	0	336	19	355	5	2	2	9	
+45 mins.	17	428	4	449	14	2	38	54	0	329	18	347	3	1	5	9	
Total Volume	106	1641	19	1766	70	10	156	236	0	1307	62	1369	18	4	14	36	
% App. Total	6	92.9	1.1		29.7	4.2	66.1		0	95.5	4.5		50	11.1	38.9		
PHF	.803	.954	.792	.947	.833	.417	.867	.868	.000	.972	.816	.964	.750	.500	.583	.750	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

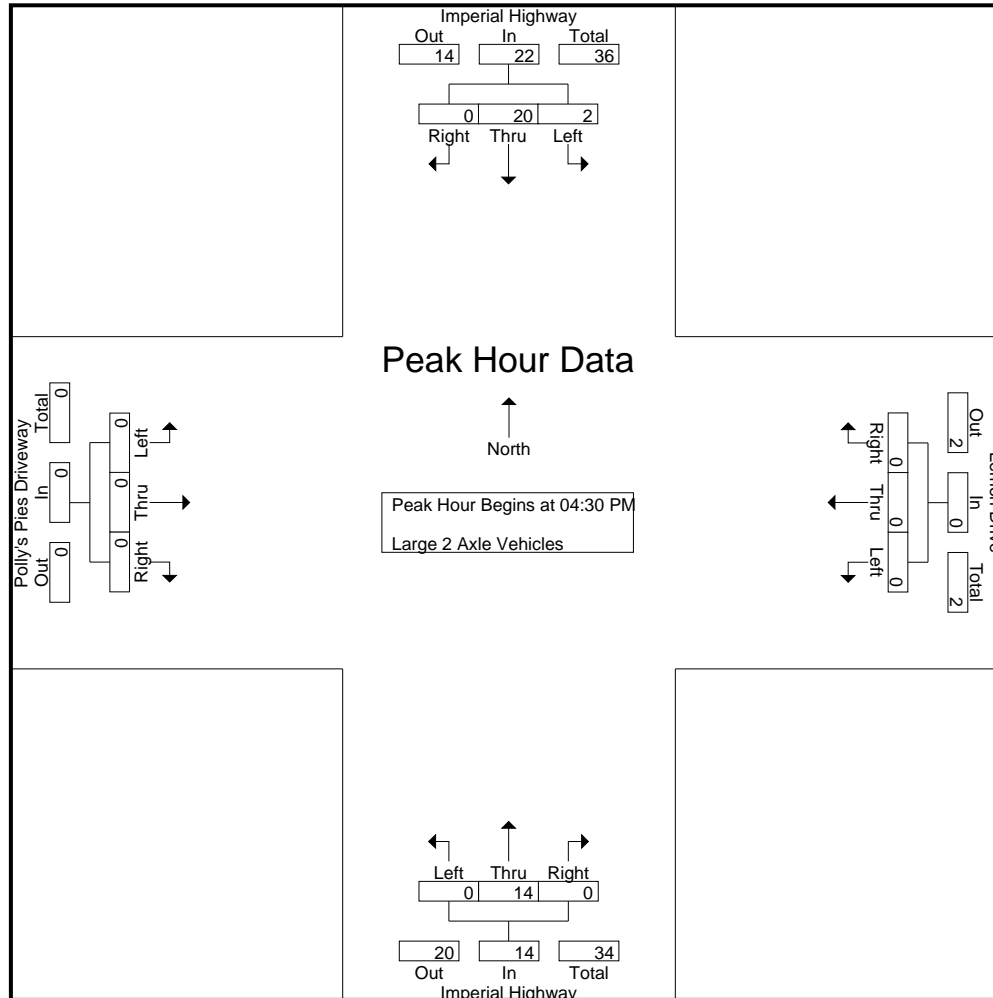
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	4	0	0	4	2	0	2	2	4	0	7	0	0	7	0	0	0	0	0	2	15	17
04:15 PM	0	3	0	0	3	1	0	0	0	1	0	4	1	0	5	0	0	0	0	0	0	9	9
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
04:45 PM	1	6	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8	8
Total	1	15	0	0	16	3	0	2	2	5	0	15	1	0	16	0	0	0	0	0	2	37	39
05:00 PM	1	7	0	0	8	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	13	13
05:15 PM	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	10
05:30 PM	0	3	0	0	3	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	8	8
05:45 PM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	1	17	0	0	18	2	0	0	0	2	0	14	0	0	14	0	0	0	0	0	0	34	34
Grand Total	2	32	0	0	34	5	0	2	2	7	0	29	1	0	30	0	0	0	0	0	2	71	73
Apprch %	5.9	94.1	0			71.4	0	28.6			0	96.7	3.3			0	0	0					
Total %	2.8	45.1	0		47.9	7	0	2.8		9.9	0	40.8	1.4		42.3	0	0	0		0	2.7	97.3	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:45 PM	1	6	0	7	0	0	0	0	0	1	0	1	0	0	0	0	8
05:00 PM	1	7	0	8	0	0	0	0	0	5	0	5	0	0	0	0	13
05:15 PM	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
Total Volume	2	20	0	22	0	0	0	0	0	14	0	14	0	0	0	0	36
% App. Total	9.1	90.9	0		0	0	0		0	100	0		0	0	0		
PHF	.500	.714	.000	.688	.000	.000	.000	.000	.000	.700	.000	.700	.000	.000	.000	.000	.692

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	
+15 mins.	1	6	0	7	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	1	7	0	8	0	0	0	0	0	5	0	5	0	0	0	0	
+45 mins.	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	
Total Volume	2	20	0	22	0	0	0	0	0	14	0	14	0	0	0	0	
% App. Total	9.1	90.9	0		0	0	0		0	100	0		0	0	0		
PHF	.500	.714	.000	.688	.000	.000	.000	.000	.000	.700	.000	.700	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

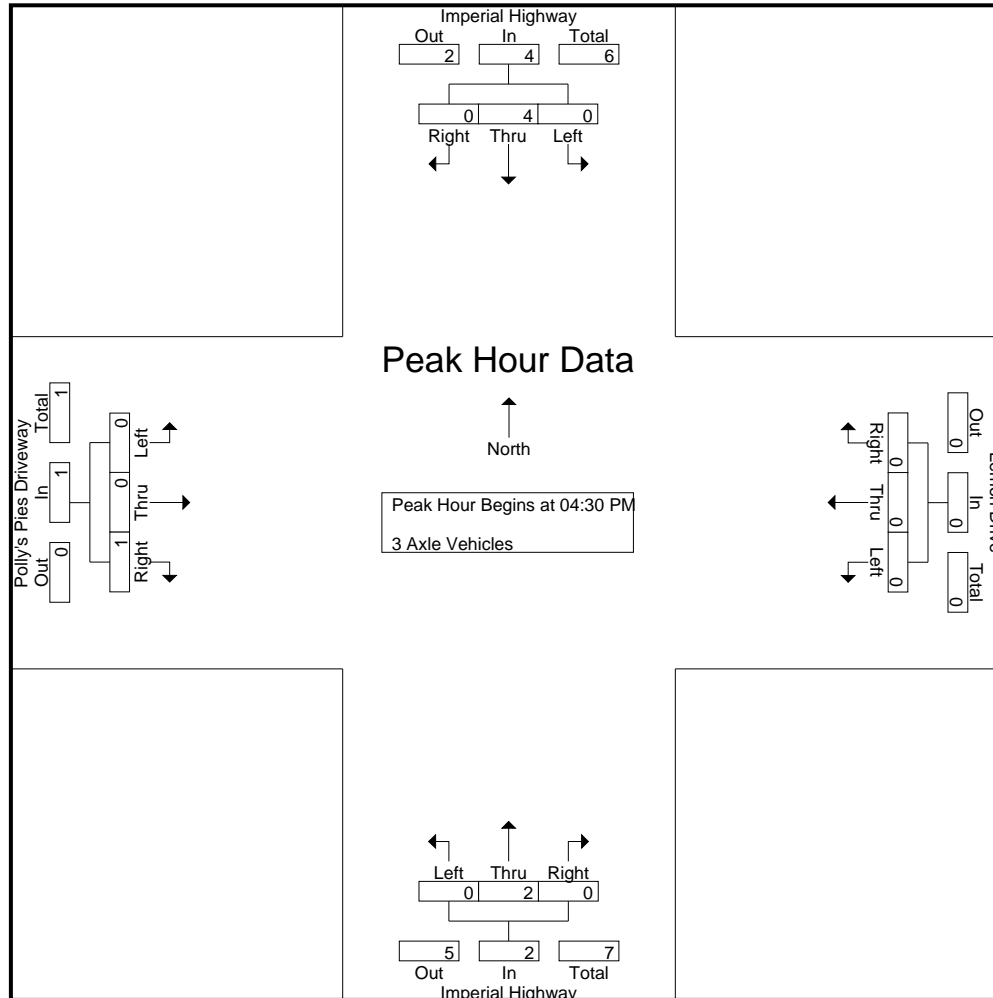
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	8	8
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	4	5
Grand Total	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	1	1	1	1	1	1	1	1	1	12	13
Apprch %	0	100	0			0	0	0			0	100	0			0	0	100										
Total %	0	66.7	0		66.7	0	0	0		0	0	25	0		25	0	0	8.3		8.3	7.7	92.3						

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	4	0	4	0	0	0	0	0	2	0	2	0	0	1	1	7
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250	.438

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	4	0	4	0	0	0	0	0	2	0	2	0	0	1	1	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

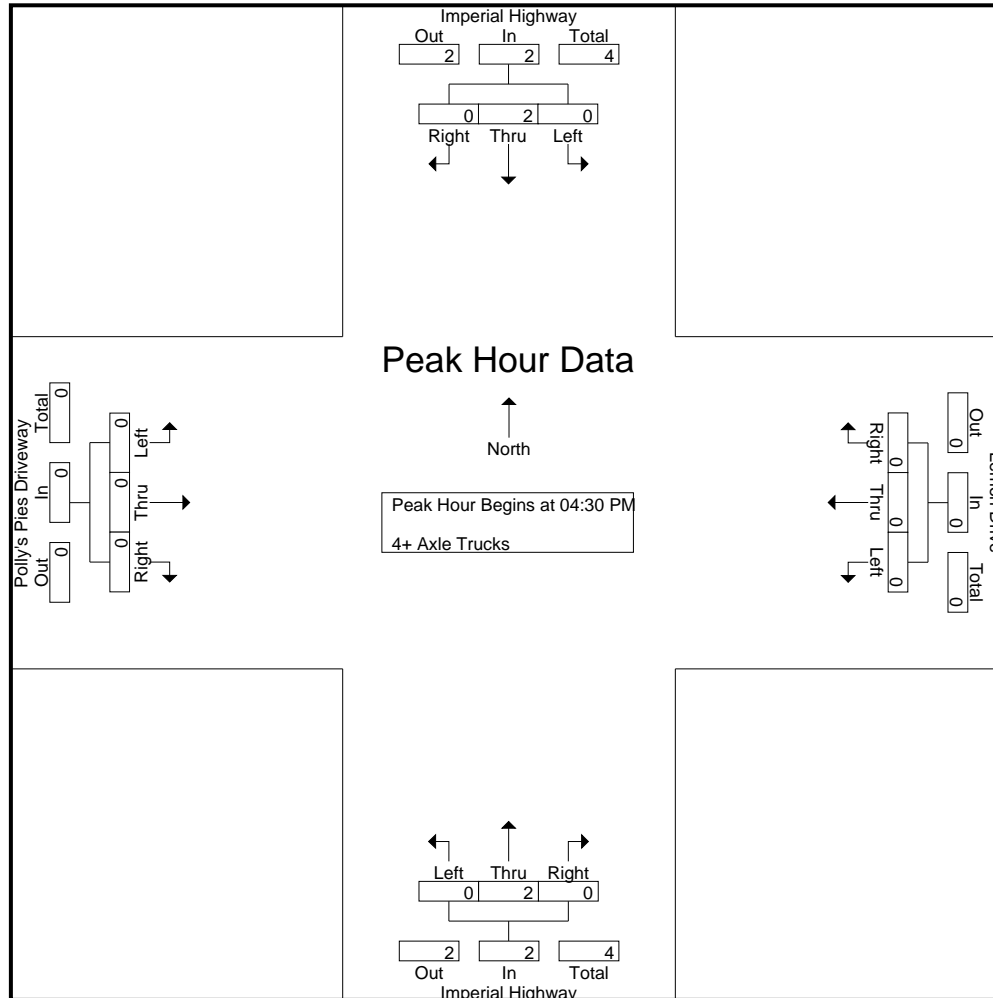
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Lemon Drive Westbound					Imperial Highway Northbound					Polly's Pies Driveway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	6
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5	5
Grand Total	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	11	11
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	54.5	0		54.5	0	0	0		0	0	45.5	0		45.5	0	0	0		0	0	0	0		0	0	100	

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	1.00

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive
 Weather: Clear

File Name : 04_YLA_Imp_Lem PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Lemon Drive Westbound				Imperial Highway Northbound				Polly's Pies Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Imperial Highway	East Leg Lemon Drive	South Leg Imperial Highway	West Leg Polly's Pies Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	2	3
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	3	4

	North Leg Imperial Highway	East Leg Lemon Drive	South Leg Imperial Highway	West Leg Polly's Pies Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	1	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	2	4
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	5	7

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Lemon Drive



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Imperial Highway			Westbound Lemon Drive			Northbound Imperial Highway			Eastbound Polly's Pies Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	1	0	1	0	0	0	0	2

	Southbound Imperial Highway			Westbound Lemon Drive			Northbound Imperial Highway			Eastbound Polly's Pies Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	0	0	3

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

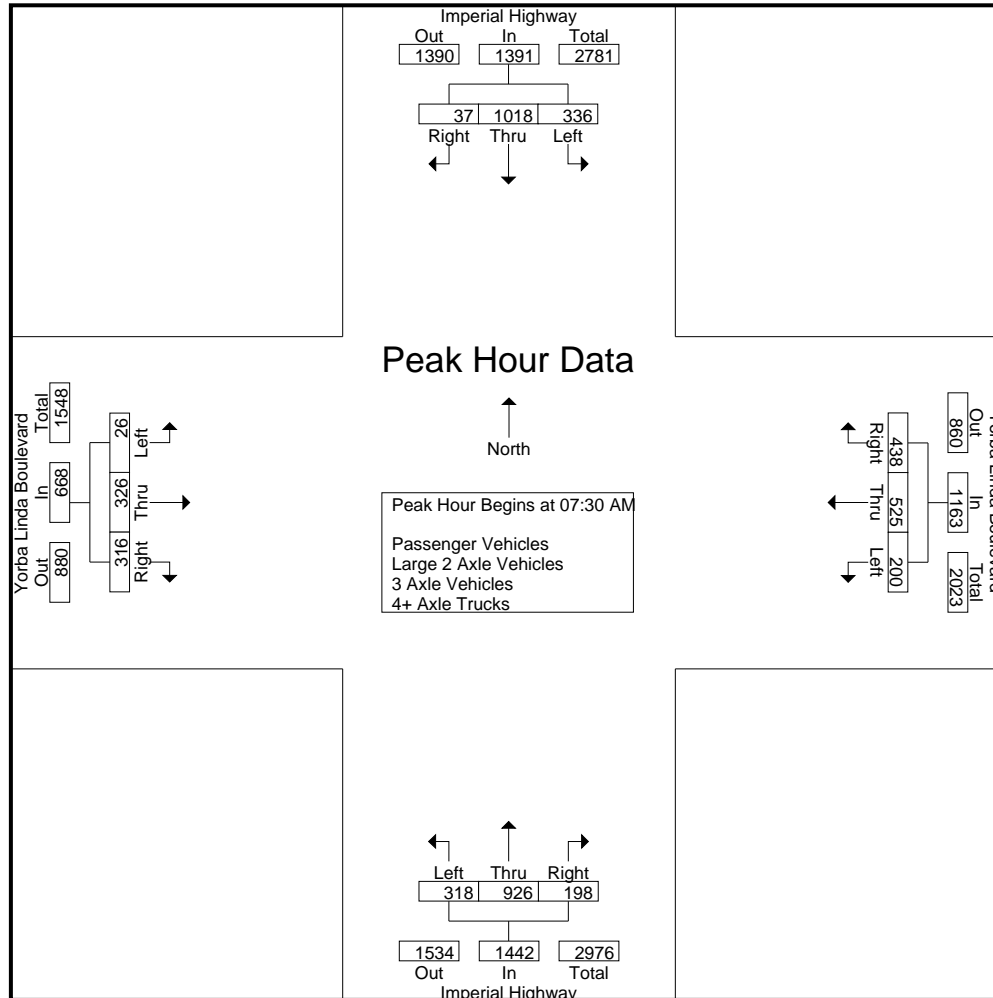
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	45	185	2	1	232	16	58	50	15	124	38	155	19	4	212	4	41	57	28	102	48	670	718
07:15 AM	57	243	6	2	306	25	94	78	24	197	52	179	23	12	254	3	50	74	25	127	63	884	947
07:30 AM	62	274	7	2	343	57	123	111	29	291	91	262	34	1	387	8	52	87	21	147	53	1168	1221
07:45 AM	91	302	17	2	410	56	121	113	49	290	89	259	55	6	403	4	87	91	33	182	90	1285	1375
Total	255	1004	32	7	1291	154	396	352	117	902	270	855	131	23	1256	19	230	309	107	558	254	4007	4261
08:00 AM	77	233	4	0	314	41	121	101	22	263	65	200	52	16	317	5	90	70	29	165	67	1059	1126
08:15 AM	106	209	9	2	324	46	160	113	52	319	73	205	57	29	335	9	97	68	21	174	104	1152	1256
08:30 AM	96	170	9	3	275	33	153	93	39	279	69	158	63	14	290	16	118	75	20	209	76	1053	1129
08:45 AM	79	181	11	2	271	35	149	92	46	276	69	203	47	9	319	16	108	65	18	189	75	1055	1130
Total	358	793	33	7	1184	155	583	399	159	1137	276	766	219	68	1261	46	413	278	88	737	322	4319	4641
Grand Total	613	1797	65	14	2475	309	979	751	276	2039	546	1621	350	91	2517	65	643	587	195	1295	576	8326	8902
Apprch %	24.8	72.6	2.6			15.2	48	36.8			21.7	64.4	13.9			5	49.7	45.3					
Total %	7.4	21.6	0.8		29.7	3.7	11.8	9		24.5	6.6	19.5	4.2		30.2	0.8	7.7	7.1		15.6	6.5	93.5	
Passenger Vehicles	592	1731	59		2395	301	961	734		2267	535	1567	340		2532	63	627	577		1461	0	0	8655
% Passenger Vehicles	96.6	96.3	90.8	92.9	96.2	97.4	98.2	97.7	98.2	97.9	98	96.7	97.1	98.9	97.1	96.9	97.5	98.3	99.5	98.1	0	0	97.2
Large 2 Axle Vehicles	17	32	6		56	5	15	12		36	7	34	8		50	1	11	7		20	0	0	162
% Large 2 Axle Vehicles	2.8	1.8	9.2	7.1	2.2	1.6	1.5	1.6	1.4	1.6	1.3	2.1	2.3	1.1	1.9	1.5	1.7	1.2	0.5	1.3	0	0	1.8
3 Axle Vehicles	1	9	0		10	1	1	2		5	0	7	1		8	0	0	3		3	0	0	26
% 3 Axle Vehicles	0.2	0.5	0	0	0.4	0.3	0.1	0.3	0.4	0.2	0	0.4	0.3	0	0.3	0	0	0.5	0	0.2	0	0	0.3
4+ Axle Trucks	3	25	0		28	2	2	3		7	4	13	1		18	1	5	0		6	0	0	59
% 4+ Axle Trucks	0.5	1.4	0	0	1.1	0.6	0.2	0.4	0	0.3	0.7	0.8	0.3	0	0.7	1.5	0.8	0	0	0.4	0	0	0.7

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	62	274	7	343	57	123	111	291	91	262	34	387	8	52	87	147	1168
07:45 AM	91	302	17	410	56	121	113	290	89	259	55	403	4	87	91	182	1285
08:00 AM	77	233	4	314	41	121	101	263	65	200	52	317	5	90	70	165	1059
08:15 AM	106	209	9	324	46	160	113	319	73	205	57	335	9	97	68	174	1152
Total Volume	336	1018	37	1391	200	525	438	1163	318	926	198	1442	26	326	316	668	4664
% App. Total	24.2	73.2	2.7		17.2	45.1	37.7		22.1	64.2	13.7		3.9	48.8	47.3		
PHF	.792	.843	.544	.848	.877	.820	.969	.911	.874	.884	.868	.895	.722	.840	.868	.918	.907

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				08:00 AM				
+0 mins.	62	274	7	343	57	123	111	291	91	262	34	387	5	90	70	165	
+15 mins.	91	302	17	410	56	121	113	290	89	259	55	403	9	97	68	174	
+30 mins.	77	233	4	314	41	121	101	263	65	200	52	317	16	118	75	209	
+45 mins.	106	209	9	324	46	160	113	319	73	205	57	335	16	108	65	189	
Total Volume	336	1018	37	1391	200	525	438	1163	318	926	198	1442	46	413	278	737	
% App. Total	24.2	73.2	2.7		17.2	45.1	37.7		22.1	64.2	13.7		6.2	56	37.7		
PHF	.792	.843	.544	.848	.877	.820	.969	.911	.874	.884	.868	.895	.719	.875	.927	.882	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

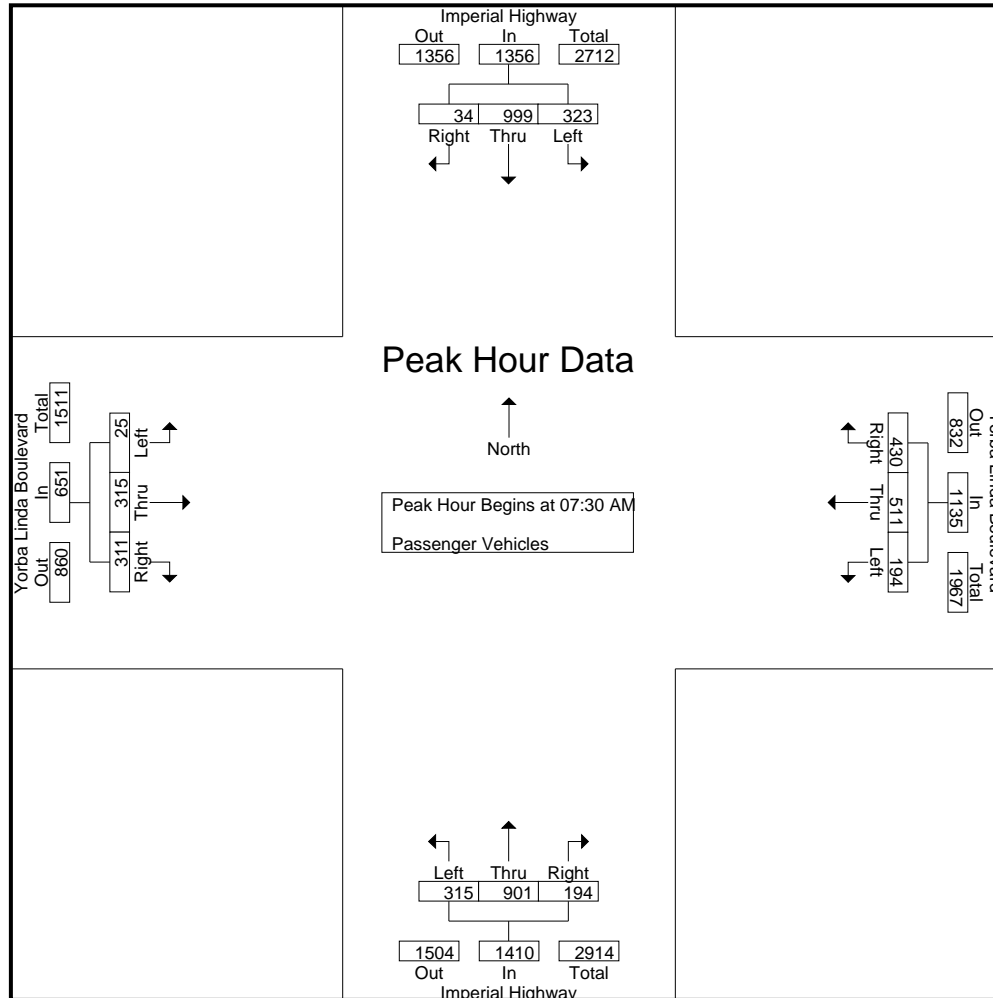
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	43	175	2	1	220	16	58	49	15	123	35	152	17	4	204	4	39	55	28	98	48	645	693
07:15 AM	56	232	4	1	292	23	93	78	24	194	50	170	22	11	242	2	49	74	25	125	61	853	914
07:30 AM	60	269	5	2	334	56	120	108	29	284	91	258	33	1	382	7	49	86	21	142	53	1142	1195
07:45 AM	86	299	17	2	402	55	117	112	48	284	87	252	54	6	393	4	84	90	33	178	89	1257	1346
Total	245	975	28	6	1248	150	388	347	116	885	263	832	126	22	1221	17	221	305	107	543	251	3897	4148
08:00 AM	74	228	3	0	305	40	119	100	22	259	65	194	51	16	310	5	86	69	29	160	67	1034	1101
08:15 AM	103	203	9	2	315	43	155	110	50	308	72	197	56	29	325	9	96	66	20	171	101	1119	1220
08:30 AM	92	161	9	3	262	33	151	87	37	271	66	152	62	14	280	16	118	75	20	209	74	1022	1096
08:45 AM	78	164	10	2	252	35	148	90	46	273	69	192	45	9	306	16	106	62	18	184	75	1015	1090
Total	347	756	31	7	1134	151	573	387	155	1111	272	735	214	68	1221	46	406	272	87	724	317	4190	4507
Grand Total	592	1731	59	13	2382	301	961	734	271	1996	535	1567	340	90	2442	63	627	577	194	1267	568	8087	8655
Apprch %	24.9	72.7	2.5			15.1	48.1	36.8			21.9	64.2	13.9			5	49.5	45.5					
Total %	7.3	21.4	0.7		29.5	3.7	11.9	9.1		24.7	6.6	19.4	4.2		30.2	0.8	7.8	7.1		15.7	6.6	93.4	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	60	269	5	334	56	120	108	284	91	258	33	382	7	49	86	142	1142
07:45 AM	86	299	17	402	55	117	112	284	87	252	54	393	4	84	90	178	1257
08:00 AM	74	228	3	305	40	119	100	259	65	194	51	310	5	86	69	160	1034
08:15 AM	103	203	9	315	43	155	110	308	72	197	56	325	9	96	66	171	1119
Total Volume	323	999	34	1356	194	511	430	1135	315	901	194	1410	25	315	311	651	4552
% App. Total	23.8	73.7	2.5		17.1	45	37.9		22.3	63.9	13.8		3.8	48.4	47.8		
PHF	.784	.835	.500	.843	.866	.824	.960	.921	.865	.873	.866	.897	.694	.820	.864	.914	.905

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	60	269	5	334	56	120	108	284	91	258	33	382	7	49	86	142	
+15 mins.	86	299	17	402	55	117	112	284	87	252	54	393	4	84	90	178	
+30 mins.	74	228	3	305	40	119	100	259	65	194	51	310	5	86	69	160	
+45 mins.	103	203	9	315	43	155	110	308	72	197	56	325	9	96	66	171	
Total Volume	323	999	34	1356	194	511	430	1135	315	901	194	1410	25	315	311	651	
% App. Total	23.8	73.7	2.5		17.1	45	37.9		22.3	63.9	13.8		3.8	48.4	47.8		
PHF	.784	.835	.500	.843	.866	.824	.960	.921	.865	.873	.866	.897	.694	.820	.864	.914	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

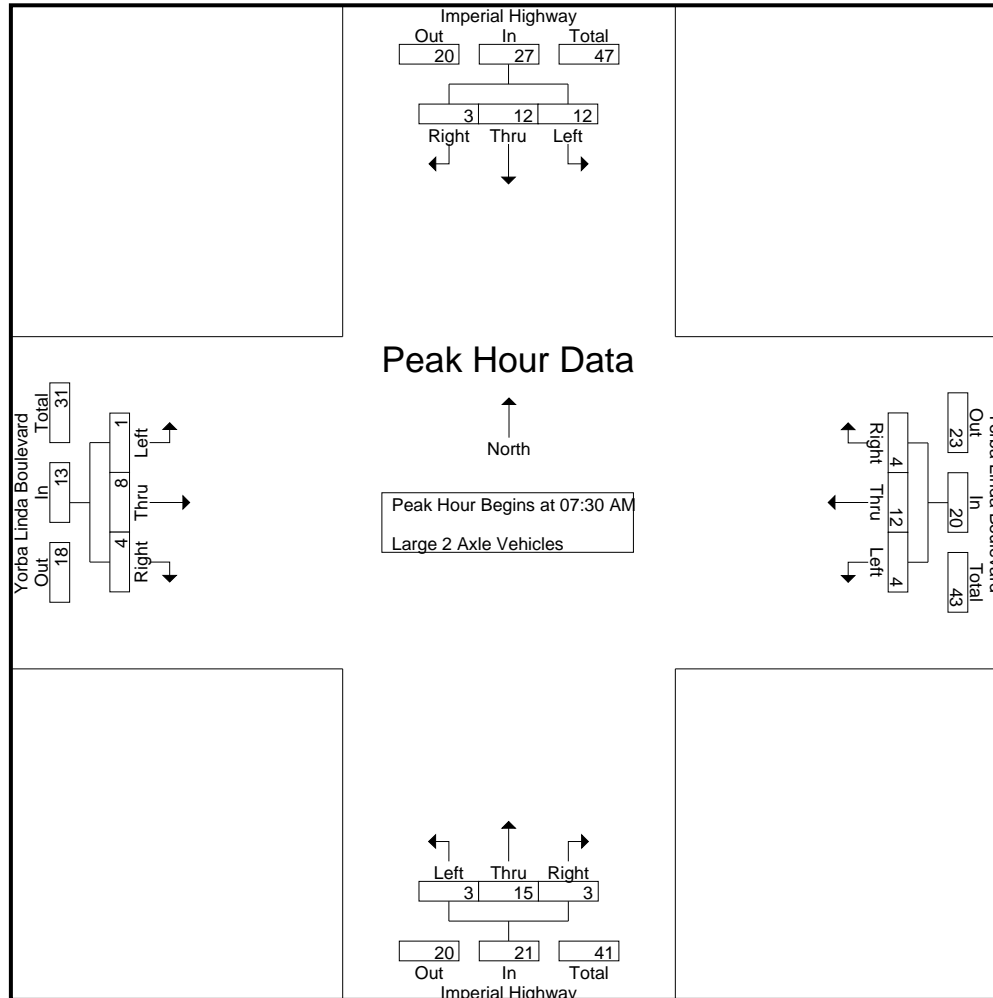
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	2	2	0	0	4	0	0	1	0	1	2	2	1	0	5	0	1	0	0	1	0	0	11	11
07:15 AM	1	4	2	1	7	1	1	0	0	2	0	7	1	1	8	0	1	0	0	1	2	18	20	20
07:30 AM	2	3	2	0	7	1	3	1	0	5	0	3	1	0	4	1	3	0	0	4	0	20	20	20
07:45 AM	4	2	0	0	6	1	3	1	1	5	2	5	0	0	7	0	2	1	0	3	1	21	22	22
Total	9	11	4	1	24	3	7	3	1	13	4	17	3	1	24	1	7	1	0	9	3	70	73	73
08:00 AM	3	4	1	0	8	1	2	0	0	3	0	4	1	0	5	0	3	1	0	4	0	20	20	20
08:15 AM	3	3	0	0	6	1	4	2	1	7	1	3	1	0	5	0	0	2	1	2	2	20	22	22
08:30 AM	1	4	0	0	5	0	1	6	2	7	2	2	1	0	5	0	0	0	0	0	2	17	19	19
08:45 AM	1	10	1	0	12	0	1	1	0	2	0	8	2	0	10	0	1	3	0	4	0	28	28	28
Total	8	21	2	0	31	2	8	9	3	19	3	17	5	0	25	0	4	6	1	10	4	85	89	89
Grand Total	17	32	6	1	55	5	15	12	4	32	7	34	8	1	49	1	11	7	1	19	7	155	162	162
Apprch %	30.9	58.2	10.9			15.6	46.9	37.5			14.3	69.4	16.3			5.3	57.9	36.8						
Total %	11	20.6	3.9		35.5	3.2	9.7	7.7		20.6	4.5	21.9	5.2		31.6	0.6	7.1	4.5		12.3	4.3	95.7		

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	3	2	7	1	3	1	5	0	3	1	4	1	3	0	4	20
07:45 AM	4	2	0	6	1	3	1	5	2	5	0	7	0	2	1	3	21
08:00 AM	3	4	1	8	1	2	0	3	0	4	1	5	0	3	1	4	20
08:15 AM	3	3	0	6	1	4	2	7	1	3	1	5	0	0	2	2	20
Total Volume	12	12	3	27	4	12	4	20	3	15	3	21	1	8	4	13	81
% App. Total	44.4	44.4	11.1		20	60	20		14.3	71.4	14.3		7.7	61.5	30.8		
PHF	.750	.750	.375	.844	1.00	.750	.500	.714	.375	.750	.750	.750	.250	.667	.500	.813	.964

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	2	3	2	7	1	3	1	5	0	3	1	4	1	3	0	4	
+15 mins.	4	2	0	6	1	3	1	5	2	5	0	7	0	2	1	3	
+30 mins.	3	4	1	8	1	2	0	3	0	4	1	5	0	3	1	4	
+45 mins.	3	3	0	6	1	4	2	7	1	3	1	5	0	0	2	2	
Total Volume	12	12	3	27	4	12	4	20	3	15	3	21	1	8	4	13	
% App. Total	44.4	44.4	11.1		20	60	20		14.3	71.4	14.3		7.7	61.5	30.8		
PHF	.750	.750	.375	.844	1.000	.750	.500	.714	.375	.750	.750	.750	.250	.667	.500	.813	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

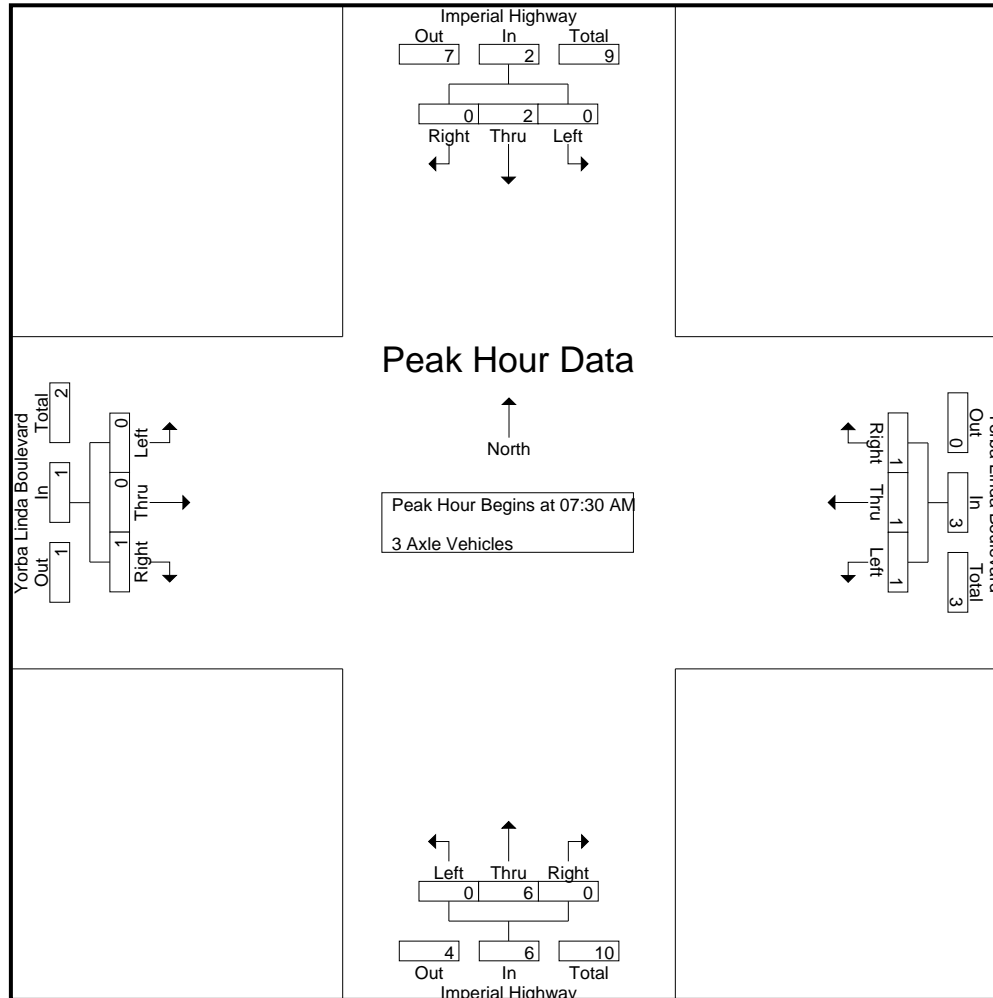
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	0	0	3	3
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	3	3
Total	0	1	0	0	1	0	1	0	0	1	0	3	1	0	4	0	0	3	0	3	0	0	9	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
08:15 AM	0	2	0	0	2	1	0	1	1	2	0	3	0	0	3	0	0	0	0	0	1	0	7	8
08:30 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
08:45 AM	0	4	0	0	4	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	1	8	0	0	9	1	0	2	1	3	0	4	0	0	4	0	0	0	0	0	1	0	16	17
Grand Total	1	9	0	0	10	1	1	2	1	4	0	7	1	0	8	0	0	3	0	3	1	0	25	26
Apprch %	10	90	0			25	25	50			0	87.5	12.5			0	0	100						
Total %	4	36	0		40	4	4	8		16	0	28	4		32	0	0	12		12	3.8		96.2	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	2	0	2	1	0	1	2	0	3	0	3	0	0	0	0	7
Total Volume	0	2	0	2	1	1	1	3	0	6	0	6	0	0	1	1	12
% App. Total	0	100	0		33.3	33.3	33.3		0	100	0		0	0	100		
PHF	.000	.250	.000	.250	.250	.250	.250	.375	.000	.500	.000	.500	.000	.000	.250	.250	.429

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+15 mins.	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	2	0	2	1	0	1	2	0	3	0	3	0	0	0	0	
Total Volume	0	2	0	2	1	1	1	3	0	6	0	6	0	0	1	1	
% App. Total	0	100	0		33.3	33.3	33.3		0	100	0		0	0	100		
PHF	.000	.250	.000	.250	.250	.250	.250	.375	.000	.500	.000	.500	.000	.000	.250	.250	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

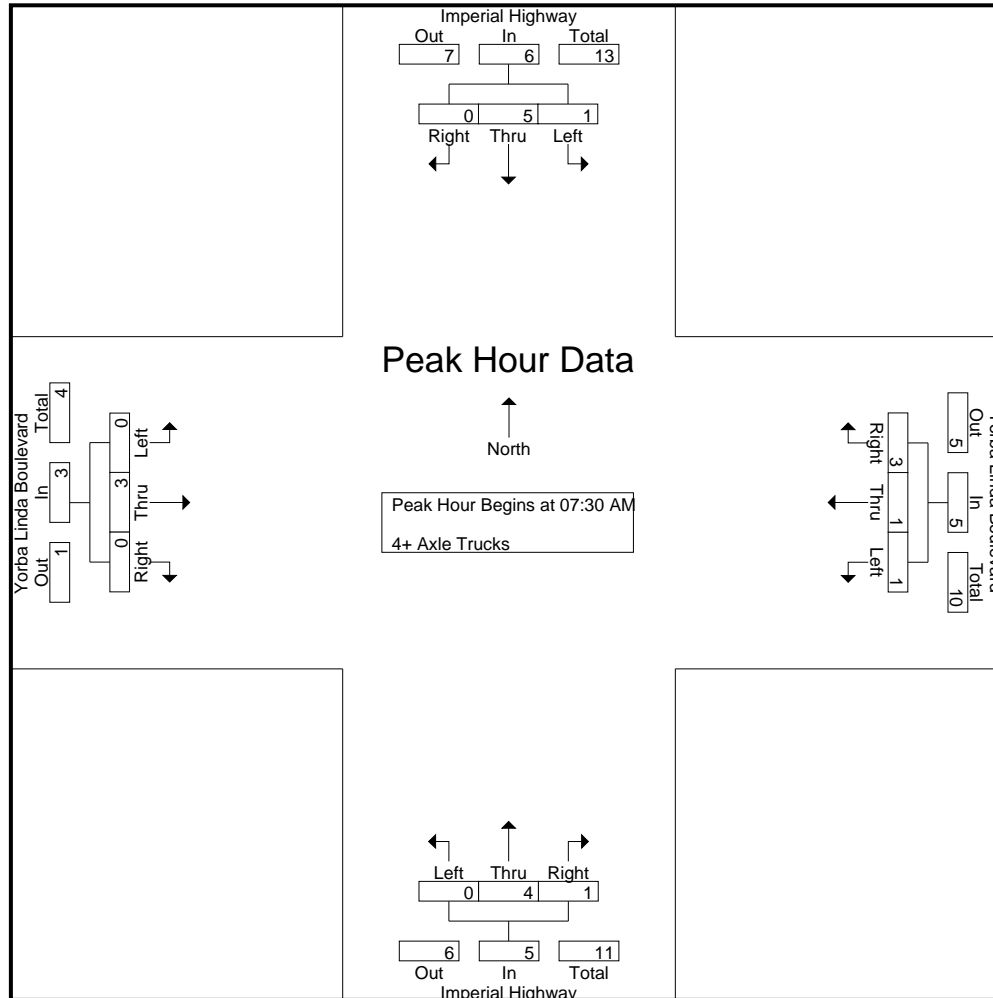
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	8	0	0	8	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	11	11
07:15 AM	0	6	0	0	6	1	0	0	0	1	2	1	0	0	3	1	0	0	0	1	0	0	11	11
07:30 AM	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	0	5	5
07:45 AM	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	4	4
Total	1	17	0	0	18	1	0	2	0	3	3	3	1	0	7	1	2	0	0	3	0	0	31	31
08:00 AM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	0	0	4	4
08:15 AM	0	1	0	0	1	1	1	0	0	2	0	2	0	0	2	0	1	0	0	1	0	0	6	6
08:30 AM	2	3	0	0	5	0	1	0	0	1	1	4	0	0	5	0	0	0	0	0	0	0	11	11
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	0	0	7	7
Total	2	8	0	0	10	1	2	1	0	4	1	10	0	0	11	0	3	0	0	3	0	0	28	28
Grand Total	3	25	0	0	28	2	2	3	0	7	4	13	1	0	18	1	5	0	0	6	0	0	59	59
Apprch %	10.7	89.3	0			28.6	28.6	42.9			22.2	72.2	5.6			16.7	83.3	0			0	0		
Total %	5.1	42.4	0		47.5	3.4	3.4	5.1		11.9	6.8	22	1.7		30.5	1.7	8.5	0		10.2	0	0	100	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	5
07:45 AM	1	1	0	2	0	0	0	0	0	0	1	1	0	1	0	1	4
08:00 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	1	4
08:15 AM	0	1	0	1	1	1	0	2	0	2	0	2	0	1	0	1	6
Total Volume	1	5	0	6	1	1	3	5	0	4	1	5	0	3	0	3	19
% App. Total	16.7	83.3	0		20	20	60		0	80	20		0	100	0		
PHF	.250	.625	.000	.750	.250	.250	.375	.625	.000	.500	.250	.625	.000	.750	.000	.750	.792

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	
+15 mins.	1	1	0	2	0	0	0	0	0	0	1	1	0	1	0	1	
+30 mins.	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	1	
+45 mins.	0	1	0	1	1	1	0	2	0	2	0	2	0	1	0	1	
Total Volume	1	5	0	6	1	1	3	5	0	4	1	5	0	3	0	3	
% App. Total	16.7	83.3	0		20	20	60		0	80	20		0	100	0		
PHF	.250	.625	.000	.750	.250	.250	.375	.625	.000	.500	.250	.625	.000	.750	.000	.750	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

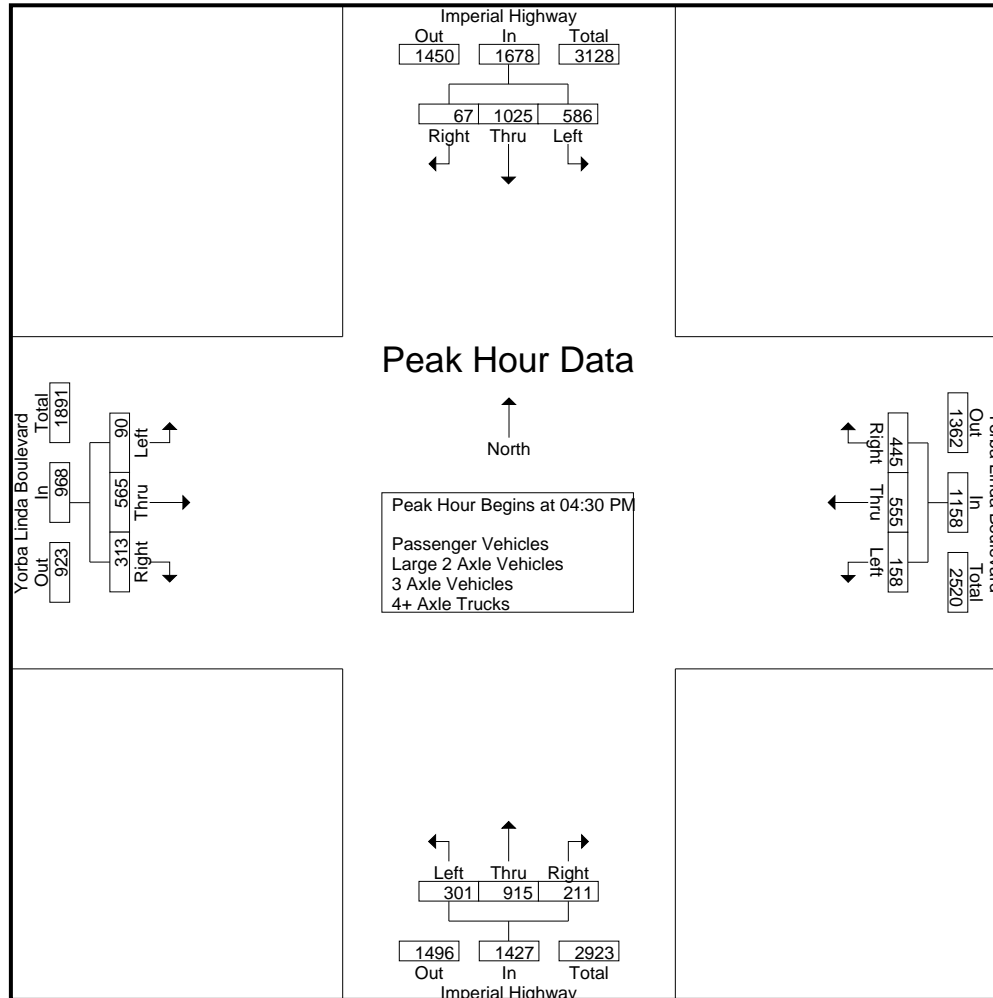
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	131	227	13	5	371	23	130	107	47	260	63	214	39	2	316	24	144	88	25	256	79	1203	1282
04:15 PM	139	233	10	1	382	42	136	118	60	296	58	218	51	14	327	17	157	90	32	264	107	1269	1376
04:30 PM	151	247	19	4	417	31	144	113	52	288	87	251	49	17	387	26	166	85	32	277	105	1369	1474
04:45 PM	143	253	17	6	413	53	146	103	50	302	61	190	44	10	295	25	132	60	11	217	77	1227	1304
Total	564	960	59	16	1583	149	556	441	209	1146	269	873	183	43	1325	92	599	323	100	1014	368	5068	5436
05:00 PM	147	242	17	2	406	39	115	102	46	256	77	249	65	3	391	18	138	81	15	237	66	1290	1356
05:15 PM	145	283	14	8	442	35	150	127	47	312	76	225	53	18	354	21	129	87	23	237	96	1345	1441
05:30 PM	116	239	8	3	363	51	137	96	36	284	82	198	57	27	337	32	160	80	18	272	84	1256	1340
05:45 PM	141	188	13	6	342	40	127	89	40	256	82	220	63	21	365	30	141	69	15	240	82	1203	1285
Total	549	952	52	19	1553	165	529	414	169	1108	317	892	238	69	1447	101	568	317	71	986	328	5094	5422
Grand Total	1113	1912	111	35	3136	314	1085	855	378	2254	586	1765	421	112	2772	193	1167	640	171	2000	696	10162	10858
Apprch %	35.5	61	3.5			13.9	48.1	37.9			21.1	63.7	15.2			9.6	58.3	32					
Total %	11	18.8	1.1		30.9	3.1	10.7	8.4		22.2	5.8	17.4	4.1		27.3	1.9	11.5	6.3		19.7	6.4	93.6	
Passenger Vehicles	1107	1884	107		3132	310	1079	843		2607	585	1744	415		2854	192	1158	636		2155	0	0	10748
% Passenger Vehicles	99.5	98.5	96.4	97.1	98.8	98.7	99.4	98.6	99.2	99.1	99.8	98.8	98.6	98.2	99	99.5	99.2	99.4	98.8	99.3	0	0	99
Large 2 Axle Vehicles	4	16	3		23	1	6	9		19	1	15	4		22	0	8	4		14	0	0	78
% Large 2 Axle Vehicles	0.4	0.8	2.7	0	0.7	0.3	0.6	1.1	0.8	0.7	0.2	0.8	1	1.8	0.8	0	0.7	0.6	1.2	0.6	0	0	0.7
3 Axle Vehicles	2	6	1		10	1	0	1		2	0	2	1		3	1	1	0		2	0	0	17
% 3 Axle Vehicles	0.2	0.3	0.9	2.9	0.3	0.3	0	0.1	0	0.1	0	0.1	0.2	0	0.1	0.5	0.1	0	0	0.1	0	0	0.2
4+ Axle Trucks	0	6	0		6	2	0	2		4	0	4	1		5	0	0	0		0	0	0	15
% 4+ Axle Trucks	0	0.3	0	0	0.2	0.6	0	0.2	0	0.2	0	0.2	0.2	0	0.2	0	0	0	0	0	0	0	0.1

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	151	247	19	417	31	144	113	288	87	251	49	387	26	166	85	277	1369
04:45 PM	143	253	17	413	53	146	103	302	61	190	44	295	25	132	60	217	1227
05:00 PM	147	242	17	406	39	115	102	256	77	249	65	391	18	138	81	237	1290
05:15 PM	145	283	14	442	35	150	127	312	76	225	53	354	21	129	87	237	1345
Total Volume	586	1025	67	1678	158	555	445	1158	301	915	211	1427	90	565	313	968	5231
% App. Total	34.9	61.1	4		13.6	47.9	38.4		21.1	64.1	14.8		9.3	58.4	32.3		
PHF	.970	.905	.882	.949	.745	.925	.876	.928	.865	.911	.812	.912	.865	.851	.899	.874	.955

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				05:00 PM				04:00 PM				
+0 mins.	151	247	19	417	31	144	113	288	77	249	65	391	24	144	88	256	
+15 mins.	143	253	17	413	53	146	103	302	76	225	53	354	17	157	90	264	
+30 mins.	147	242	17	406	39	115	102	256	82	198	57	337	26	166	85	277	
+45 mins.	145	283	14	442	35	150	127	312	82	220	63	365	25	132	60	217	
Total Volume	586	1025	67	1678	158	555	445	1158	317	892	238	1447	92	599	323	1014	
% App. Total	34.9	61.1	4		13.6	47.9	38.4		21.9	61.6	16.4		9.1	59.1	31.9		
PHF	.970	.905	.882	.949	.745	.925	.876	.928	.966	.896	.915	.925	.885	.902	.897	.915	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

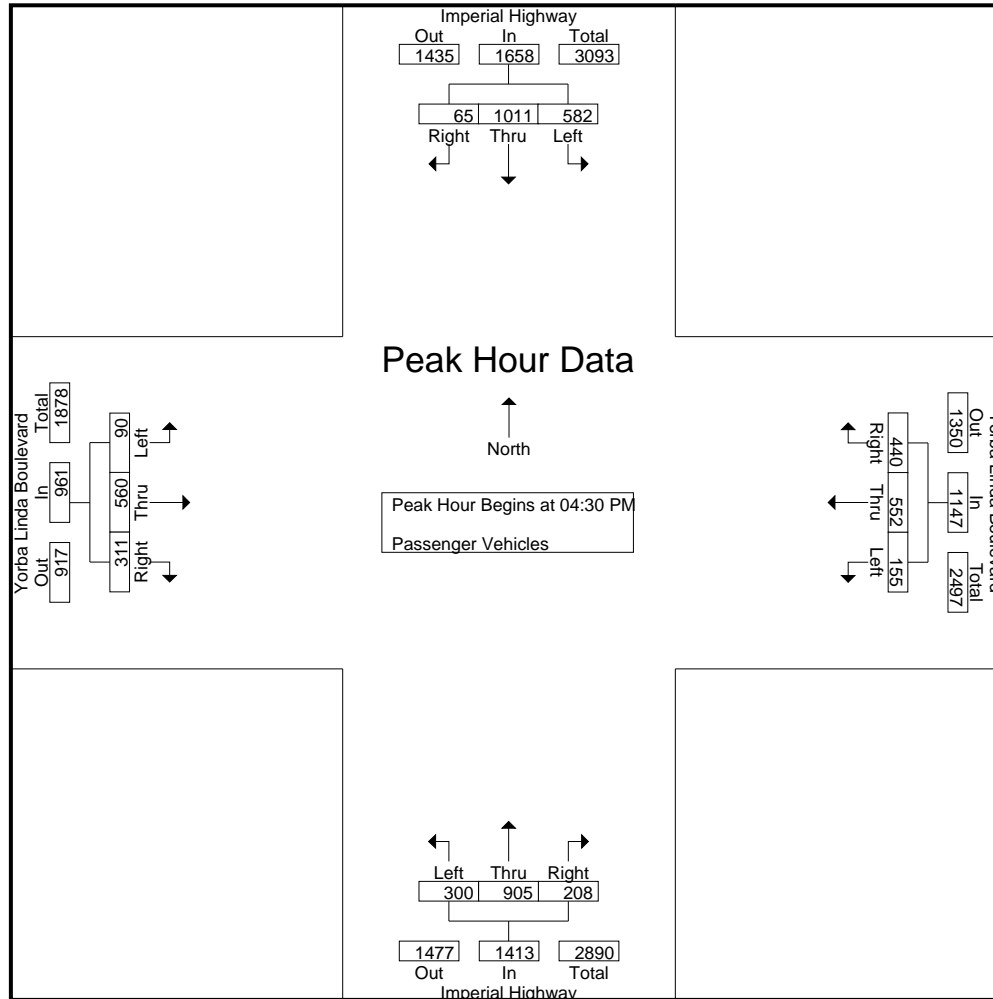
Groups Printed- Passenger Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	130	222	12	5	364	23	129	105	46	257	63	210	38	2	311	23	143	86	24	252	77	1184	1261
04:15 PM	138	231	10	1	379	42	135	116	59	293	58	213	51	14	322	17	157	90	32	264	106	1258	1364
04:30 PM	150	245	18	4	413	31	144	110	52	285	86	247	47	17	380	26	166	85	32	277	105	1355	1460
04:45 PM	143	247	17	6	407	51	146	103	50	300	61	190	43	10	294	25	132	59	11	216	77	1217	1294
Total	561	945	57	16	1563	147	554	434	207	1135	268	860	179	43	1307	91	598	320	99	1009	365	5014	5379
05:00 PM	144	238	16	1	398	39	112	100	45	251	77	248	65	3	390	18	138	81	15	237	64	1276	1340
05:15 PM	145	281	14	8	440	34	150	127	47	311	76	220	53	18	349	21	124	86	22	231	95	1331	1426
05:30 PM	116	234	7	3	357	51	137	93	36	281	82	196	56	26	334	32	159	80	18	271	83	1243	1326
05:45 PM	141	186	13	6	340	39	126	89	40	254	82	220	62	20	364	30	139	69	15	238	81	1196	1277
Total	546	939	50	18	1535	163	525	409	168	1097	317	884	236	67	1437	101	560	316	70	977	323	5046	5369
Grand Total	1107	1884	107	34	3098	310	1079	843	375	2232	585	1744	415	110	2744	192	1158	636	169	1986	688	10060	10748
Apprch %	35.7	60.8	3.5			13.9	48.3	37.8			21.3	63.6	15.1			9.7	58.3	32					
Total %	11	18.7	1.1		30.8	3.1	10.7	8.4		22.2	5.8	17.3	4.1		27.3	1.9	11.5	6.3		19.7	6.4	93.6	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	150	245	18	413	31	144	110	285	86	247	47	380	26	166	85	277	1355
04:45 PM	143	247	17	407	51	146	103	300	61	190	43	294	25	132	59	216	1217
05:00 PM	144	238	16	398	39	112	100	251	77	248	65	390	18	138	81	237	1276
05:15 PM	145	281	14	440	34	150	127	311	76	220	53	349	21	124	86	231	1331
Total Volume	582	1011	65	1658	155	552	440	1147	300	905	208	1413	90	560	311	961	5179
% App. Total	35.1	61	3.9		13.5	48.1	38.4		21.2	64	14.7		9.4	58.3	32.4		
PHF	.970	.899	.903	.942	.760	.920	.866	.922	.872	.912	.800	.906	.865	.843	.904	.867	.956

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	150	245	18	413	31	144	110	285	86	247	47	380	26	166	85	277	
+15 mins.	143	247	17	407	51	146	103	300	61	190	43	294	25	132	59	216	
+30 mins.	144	238	16	398	39	112	100	251	77	248	65	390	18	138	81	237	
+45 mins.	145	281	14	440	34	150	127	311	76	220	53	349	21	124	86	231	
Total Volume	582	1011	65	1658	155	552	440	1147	300	905	208	1413	90	560	311	961	
% App. Total	35.1	61	3.9		13.5	48.1	38.4		21.2	64	14.7		9.4	58.3	32.4		
PHF	.970	.899	.903	.942	.760	.920	.866	.922	.872	.912	.800	.906	.865	.843	.904	.867	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

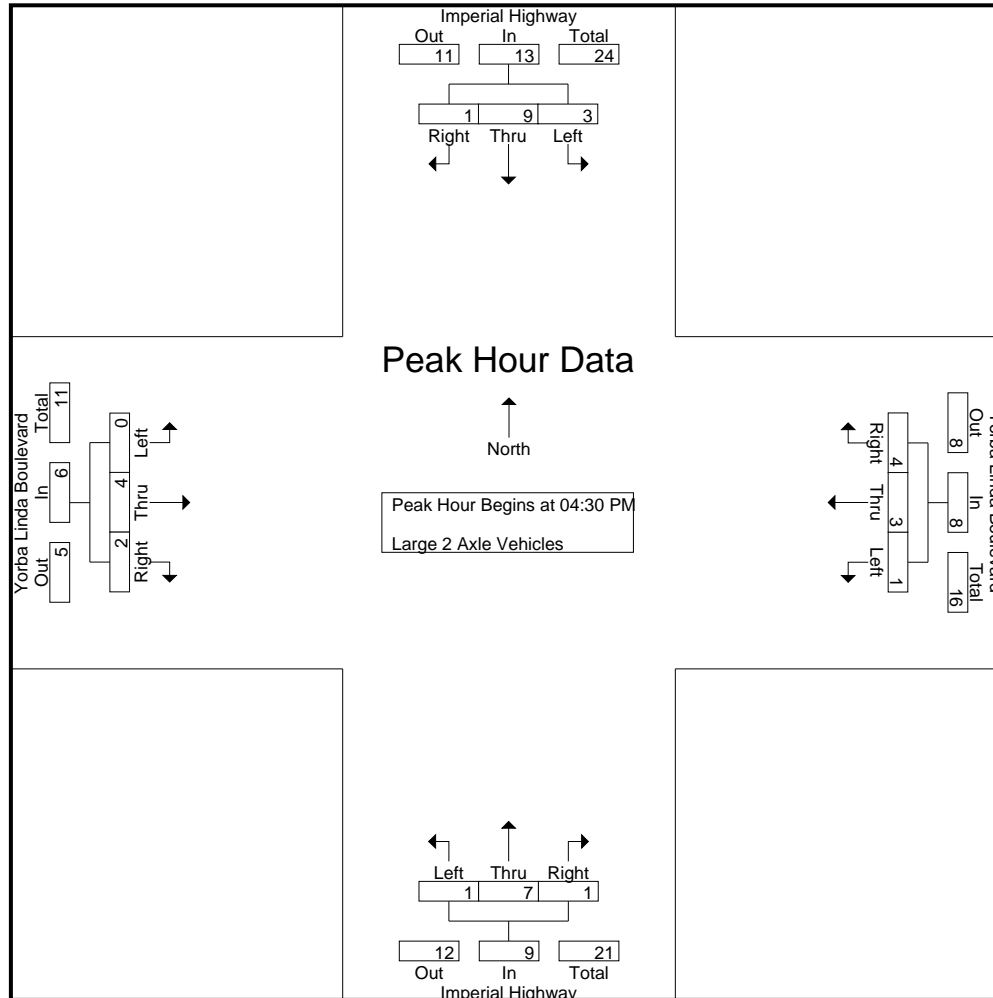
Groups Printed- Large 2 Axle Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	1	3	1	0	5	0	1	2	1	3	0	4	1	0	5	0	1	2	1	3	2	16	18
04:15 PM	0	1	0	0	1	0	1	1	1	2	0	2	0	0	2	0	0	0	0	0	1	5	6
04:30 PM	0	1	1	0	2	0	0	2	0	2	1	2	1	0	4	0	0	0	0	0	0	8	8
04:45 PM	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	6	6
Total	1	9	2	0	12	1	2	5	2	8	1	8	2	0	11	0	1	3	1	4	3	35	38
05:00 PM	3	3	0	0	6	0	3	2	1	5	0	1	0	0	1	0	0	0	0	0	1	12	13
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	4	1	1	5	1	10	11
05:30 PM	0	1	1	0	2	0	0	2	0	2	0	2	1	1	3	0	1	0	0	1	1	8	9
05:45 PM	0	2	0	0	2	0	1	0	0	1	0	0	1	1	1	0	2	0	0	2	1	6	7
Total	3	7	1	0	11	0	4	4	1	8	0	7	2	2	9	0	7	1	1	8	4	36	40
Grand Total	4	16	3	0	23	1	6	9	3	16	1	15	4	2	20	0	8	4	2	12	7	71	78
Apprch %	17.4	69.6	13			6.2	37.5	56.2			5	75	20			0	66.7	33.3					
Total %	5.6	22.5	4.2		32.4	1.4	8.5	12.7		22.5	1.4	21.1	5.6		28.2	0	11.3	5.6		16.9	9	91	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	1	2	0	0	2	2	1	2	1	4	0	0	0	0	8
04:45 PM	0	4	0	4	1	0	0	1	0	0	0	0	0	0	1	1	6
05:00 PM	3	3	0	6	0	3	2	5	0	1	0	1	0	0	0	0	12
05:15 PM	0	1	0	1	0	0	0	0	0	4	0	4	0	4	1	5	10
Total Volume	3	9	1	13	1	3	4	8	1	7	1	9	0	4	2	6	36
% App. Total	23.1	69.2	7.7		12.5	37.5	50		11.1	77.8	11.1		0	66.7	33.3		
PHF	.250	.563	.250	.542	.250	.250	.500	.400	.250	.438	.250	.563	.000	.250	.500	.300	.750

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	1	2	0	0	2	2	1	2	1	4	0	0	0	0	
+15 mins.	0	4	0	4	1	0	0	1	0	0	0	0	0	0	1	1	
+30 mins.	3	3	0	6	0	3	2	5	0	1	0	1	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	4	0	4	0	4	1	5	
Total Volume	3	9	1	13	1	3	4	8	1	7	1	9	0	4	2	6	
% App. Total	23.1	69.2	7.7		12.5	37.5	50		11.1	77.8	11.1		0	66.7	33.3		
PHF	.250	.563	.250	.542	.250	.250	.500	.400	.250	.438	.250	.563	.000	.250	.500	.300	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

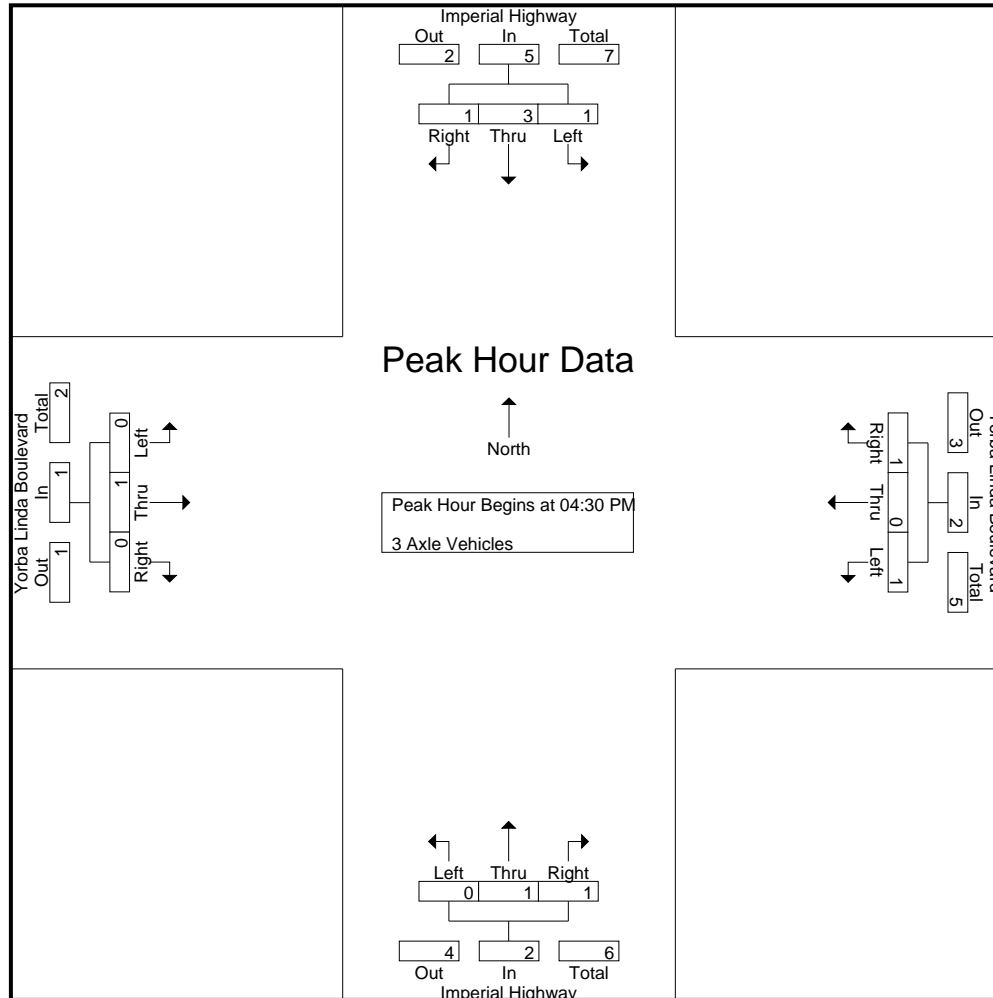
Groups Printed- 3 Axle Vehicles

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1
04:15 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	3
04:30 PM	1	1	0	0	2	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	0	0	5	5
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	2	3	0	0	5	0	0	1	0	1	0	2	1	0	3	1	0	0	0	1	0	0	10	10
05:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
05:15 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	3	3
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	1	1	4	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	6	7	7
Grand Total	2	6	1	1	9	1	0	1	0	2	0	2	1	0	3	1	1	0	0	2	1	16	17	17
Apprch %	22.2	66.7	11.1			50	0	50			0	66.7	33.3			50	50	0						
Total %	12.5	37.5	6.2		56.2	6.2	0	6.2		12.5	0	12.5	6.2		18.8	6.2	6.2	0		12.5	5.9	94.1		

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	1	0	2	0	0	1	1	0	1	1	2	0	0	0	0	5
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
Total Volume	1	3	1	5	1	0	1	2	0	1	1	2	0	1	0	1	10
% App. Total	20	60	20		50	0	50		0	50	50		0	100	0		
PHF	.250	.750	.250	.625	.250	.000	.250	.500	.000	.250	.250	.250	.000	.250	.000	.250	.500

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	1	0	2	0	0	1	1	0	1	1	2	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	
Total Volume	1	3	1	5	1	0	1	2	0	1	1	2	0	1	0	1	
% App. Total	20	60	20		50	0	50		0	50	50		0	100	0		
PHF	.250	.750	.250	.625	.250	.000	.250	.500	.000	.250	.250	.250	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

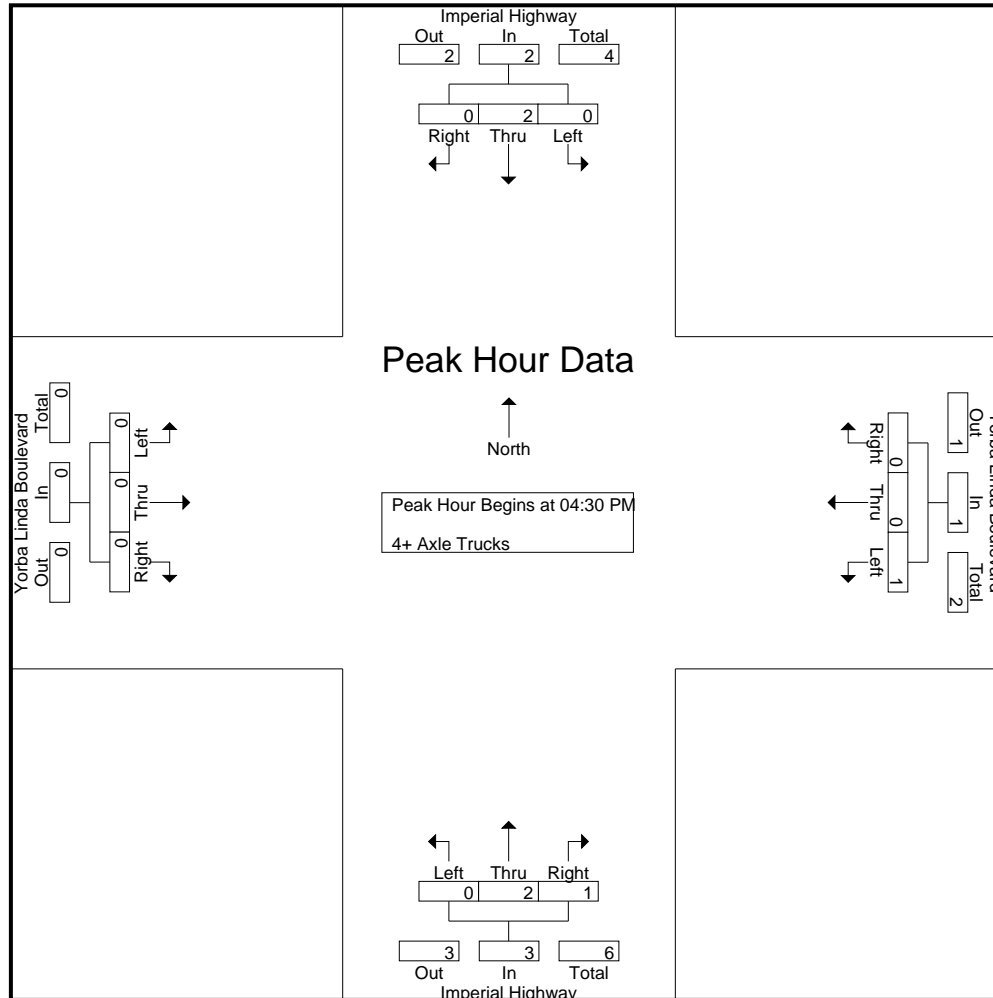
Groups Printed- 4+ Axle Trucks

Start Time	Imperial Highway Southbound					Yorba Linda Boulevard Westbound					Imperial Highway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	3	0	0	3	1	0	1	0	2	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	9	9
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	6
Grand Total	0	6	0	0	6	2	0	2	0	4	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0	15	15
Apprch %	0	100	0			50	0	50			0	80	20			0	0	0			0	0	0			0		
Total %	0	40	0		40	13.3	0	13.3		26.7	0	26.7	6.7		33.3	0	0	0		0	0	0	0		0	0	100	

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	2	0	2	1	0	0	1	0	2	1	3	0	0	0	0	6
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	0	0		
PHF	.000	.500	.000	.500	.250	.000	.000	.250	.000	.500	.250	.750	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 05_YLA_Imp_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Imperial Highway Southbound				Yorba Linda Boulevard Westbound				Imperial Highway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	0	2	0	2	1	0	0	1	0	2	1	3	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	0	0		
PHF	.000	.500	.000	.500	.250	.000	.000	.250	.000	.500	.250	.750	.000	.000	.000	.000	

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Imperial Highway Pedestrians	East Leg Yorba Linda Boulevard Pedestrians	South Leg Imperial Highway Pedestrians	West Leg Yorba Linda Boulevard Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	1	2

	North Leg Imperial Highway Pedestrians	East Leg Yorba Linda Boulevard Pedestrians	South Leg Imperial Highway Pedestrians	West Leg Yorba Linda Boulevard Pedestrians	
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	1	2
4:45 PM	7	0	0	0	7
5:00 PM	0	0	1	5	6
5:15 PM	0	1	0	0	1
5:30 PM	1	0	0	1	2
5:45 PM	0	0	1	0	1
TOTAL VOLUMES:	9	1	3	7	20

Location: Yorba Linda
 N/S: Imperial Highway
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Imperial Highway			Westbound Yorba Linda Boulevard			Northbound Imperial Highway			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Imperial Highway			Westbound Yorba Linda Boulevard			Northbound Imperial Highway			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	3	1	0	0	0	0	1	0	6

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

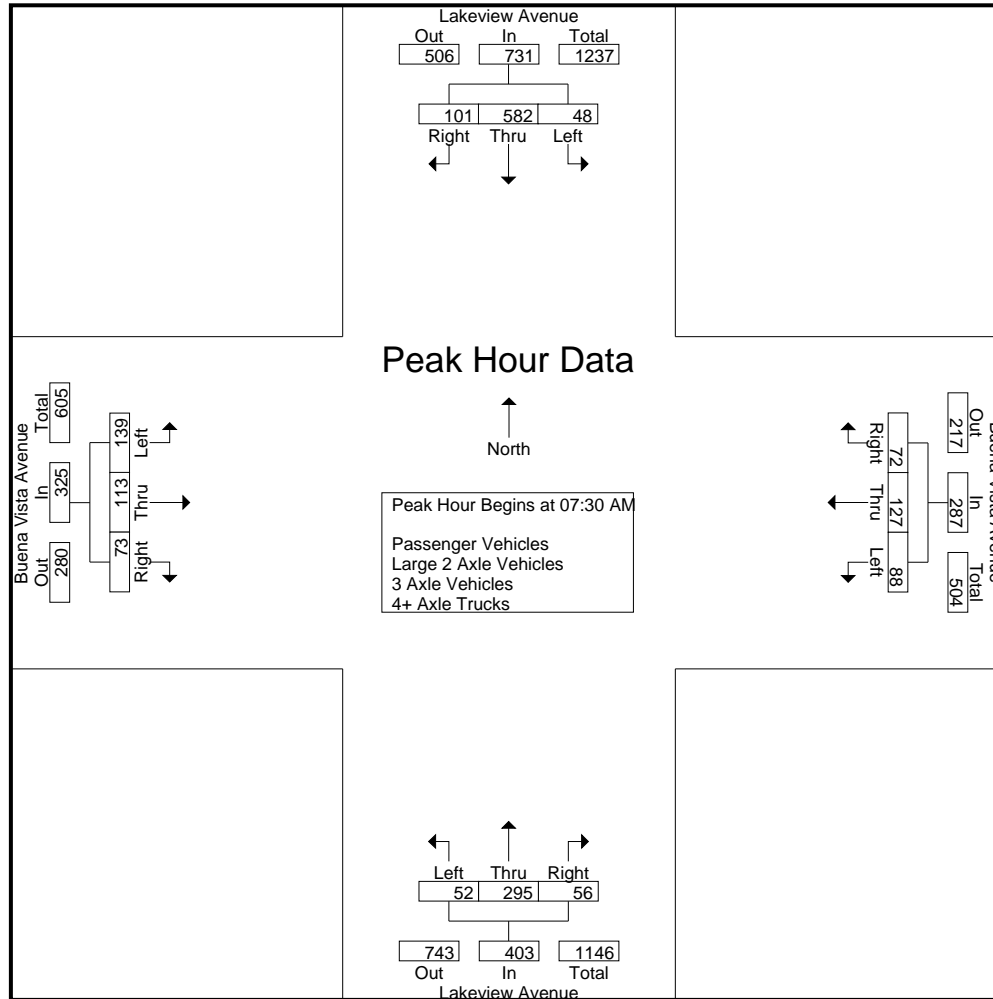
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	2	153	10	0	165	14	11	1	0	26	4	45	6	0	55	10	9	23	0	42	0	288	288
07:15 AM	4	124	15	0	143	11	16	5	0	32	6	37	0	0	43	22	19	20	0	61	0	279	279
07:30 AM	26	136	17	0	179	22	31	14	0	67	11	55	26	0	92	51	66	21	0	138	0	476	476
07:45 AM	9	163	27	0	199	38	62	38	0	138	15	87	12	0	114	33	32	17	0	82	0	533	533
Total	41	576	69	0	686	85	120	58	0	263	36	224	44	0	304	116	126	81	0	323	0	1576	1576
08:00 AM	4	142	19	0	165	17	16	10	0	43	14	79	10	0	103	33	9	8	0	50	0	361	361
08:15 AM	9	141	38	0	188	11	18	10	0	39	12	74	8	0	94	22	6	27	0	55	0	376	376
08:30 AM	8	136	37	0	181	7	17	12	0	36	9	84	6	0	99	36	17	28	0	81	0	397	397
08:45 AM	6	117	23	0	146	8	11	7	0	26	16	58	9	0	83	44	16	18	0	78	0	333	333
Total	27	536	117	0	680	43	62	39	0	144	51	295	33	0	379	135	48	81	0	264	0	1467	1467
Grand Total	68	1112	186	0	1366	128	182	97	0	407	87	519	77	0	683	251	174	162	0	587	0	3043	3043
Apprch %	5	81.4	13.6			31.4	44.7	23.8			12.7	76	11.3			42.8	29.6	27.6					
Total %	2.2	36.5	6.1		44.9	4.2	6	3.2		13.4	2.9	17.1	2.5		22.4	8.2	5.7	5.3		19.3	0	100	
Passenger Vehicles	67	1100	184		1351	123	176	96		395	86	497	74		657	243	165	160		568	0	0	2971
% Passenger Vehicles	98.5	98.9	98.9	0	98.9	96.1	96.7	99	0	97.1	98.9	95.8	96.1	0	96.2	96.8	94.8	98.8	0	96.8	0	0	97.6
Large 2 Axle Vehicles	1	12	2		15	5	6	1		12	0	21	3		24	7	9	1		17	0	0	68
% Large 2 Axle Vehicles	1.5	1.1	1.1	0	1.1	3.9	3.3	1	0	2.9	0	4	3.9	0	3.5	2.8	5.2	0.6	0	2.9	0	0	2.2
3 Axle Vehicles	0	0	0		0	0	0	0		0	0	1	0		1	1	0	0		1	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.1	0.4	0	0	0	0.2	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	0	0		0	1	0	0		1	0	0	1		1	0	0	2
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	1.1	0	0	0	0.1	0	0	0.6	0	0.2	0	0	0.1

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	26	136	17	179	22	31	14	67	11	55	26	92	51	66	21	138	476
07:45 AM	9	163	27	199	38	62	38	138	15	87	12	114	33	32	17	82	533
08:00 AM	4	142	19	165	17	16	10	43	14	79	10	103	33	9	8	50	361
08:15 AM	9	141	38	188	11	18	10	39	12	74	8	94	22	6	27	55	376
Total Volume	48	582	101	731	88	127	72	287	52	295	56	403	139	113	73	325	1746
% App. Total	6.6	79.6	13.8		30.7	44.3	25.1		12.9	73.2	13.9		42.8	34.8	22.5		
PHF	.462	.893	.664	.918	.579	.512	.474	.520	.867	.848	.538	.884	.681	.428	.676	.589	.819

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:30 AM				07:45 AM				07:15 AM				
+0 mins.	9	163	27	199	22	31	14	67	15	87	12	114	22	19	20	61	
+15 mins.	4	142	19	165	38	62	38	138	14	79	10	103	51	66	21	138	
+30 mins.	9	141	38	188	17	16	10	43	12	74	8	94	33	32	17	82	
+45 mins.	8	136	37	181	11	18	10	39	9	84	6	99	33	9	8	50	
Total Volume	30	582	121	733	88	127	72	287	50	324	36	410	139	126	66	331	
% App. Total	4.1	79.4	16.5		30.7	44.3	25.1		12.2	79	8.8		42	38.1	19.9		
PHF	.833	.893	.796	.921	.579	.512	.474	.520	.833	.931	.750	.899	.681	.477	.786	.600	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

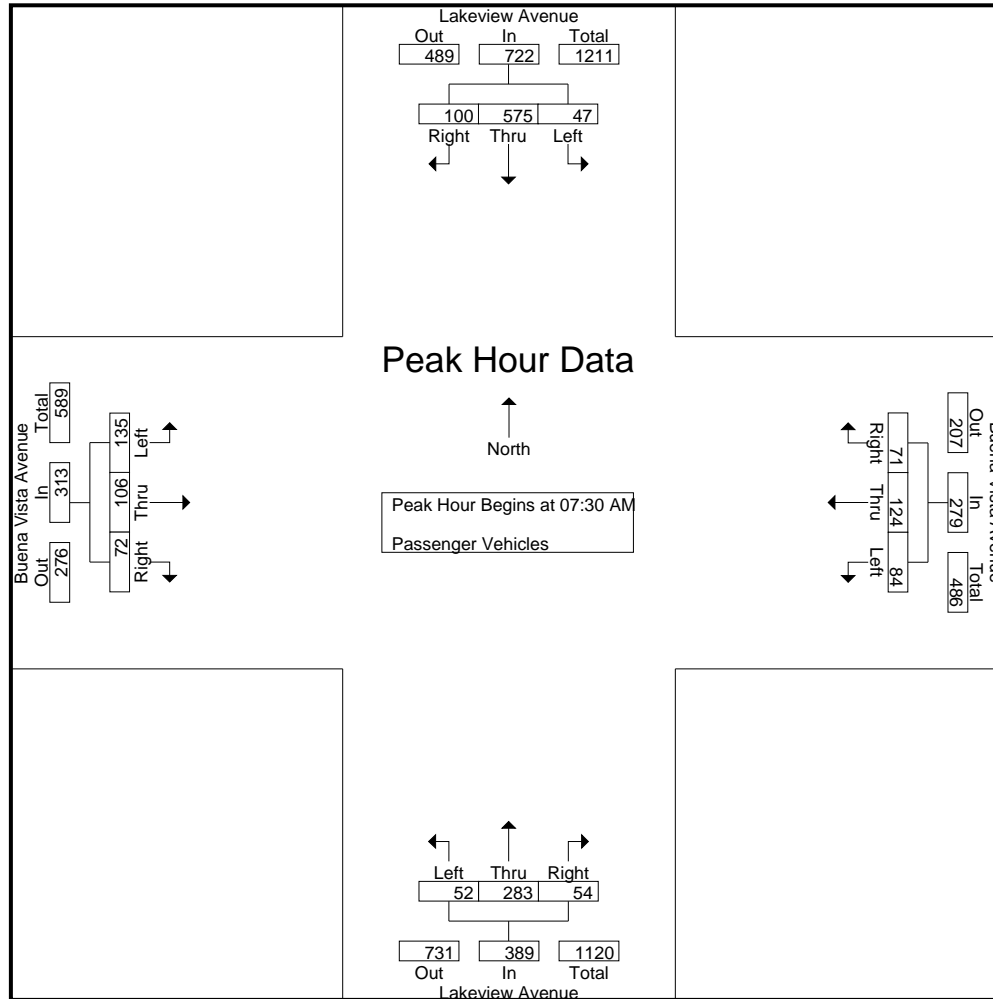
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	2	153	10	0	165	13	10	1	0	24	4	42	6	0	52	9	9	23	0	41	0	282	282
07:15 AM	4	123	15	0	142	11	16	5	0	32	6	35	0	0	41	22	19	19	0	60	0	275	275
07:30 AM	25	135	17	0	177	22	30	14	0	66	11	49	25	0	85	51	63	20	0	134	0	462	462
07:45 AM	9	162	26	0	197	35	62	37	0	134	15	85	12	0	112	32	31	17	0	80	0	523	523
Total	40	573	68	0	681	81	118	57	0	256	36	211	43	0	290	114	122	79	0	315	0	1542	1542
08:00 AM	4	138	19	0	161	16	16	10	0	42	14	76	9	0	99	30	7	8	0	45	0	347	347
08:15 AM	9	140	38	0	187	11	16	10	0	37	12	73	8	0	93	22	5	27	0	54	0	371	371
08:30 AM	8	134	37	0	179	7	16	12	0	35	9	79	6	0	94	34	16	28	0	78	0	386	386
08:45 AM	6	115	22	0	143	8	10	7	0	25	15	58	8	0	81	43	15	18	0	76	0	325	325
Total	27	527	116	0	670	42	58	39	0	139	50	286	31	0	367	129	43	81	0	253	0	1429	1429
Grand Total	67	1100	184	0	1351	123	176	96	0	395	86	497	74	0	657	243	165	160	0	568	0	2971	2971
Apprch %	5	81.4	13.6			31.1	44.6	24.3			13.1	75.6	11.3			42.8	29	28.2			0	2971	2971
Total %	2.3	37	6.2		45.5	4.1	5.9	3.2		13.3	2.9	16.7	2.5		22.1	8.2	5.6	5.4		19.1	0	100	100

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	25	135	17	177	22	30	14	66	11	49	25	85	51	63	20	134	462
07:45 AM	9	162	26	197	35	62	37	134	15	85	12	112	32	31	17	80	523
08:00 AM	4	138	19	161	16	16	10	42	14	76	9	99	30	7	8	45	347
08:15 AM	9	140	38	187	11	16	10	37	12	73	8	93	22	5	27	54	371
Total Volume	47	575	100	722	84	124	71	279	52	283	54	389	135	106	72	313	1703
% App. Total	6.5	79.6	13.9		30.1	44.4	25.4		13.4	72.8	13.9		43.1	33.9	23		
PHF	.470	.887	.658	.916	.600	.500	.480	.521	.867	.832	.540	.868	.662	.421	.667	.584	.814

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	25	135	17	177	22	30	14	66	11	49	25	85	51	63	20	134	
+15 mins.	9	162	26	197	35	62	37	134	15	85	12	112	32	31	17	80	
+30 mins.	4	138	19	161	16	16	10	42	14	76	9	99	30	7	8	45	
+45 mins.	9	140	38	187	11	16	10	37	12	73	8	93	22	5	27	54	
Total Volume	47	575	100	722	84	124	71	279	52	283	54	389	135	106	72	313	
% App. Total	6.5	79.6	13.9		30.1	44.4	25.4		13.4	72.8	13.9		43.1	33.9	23		
PHF	.470	.887	.658	.916	.600	.500	.480	.521	.867	.832	.540	.868	.662	.421	.667	.584	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

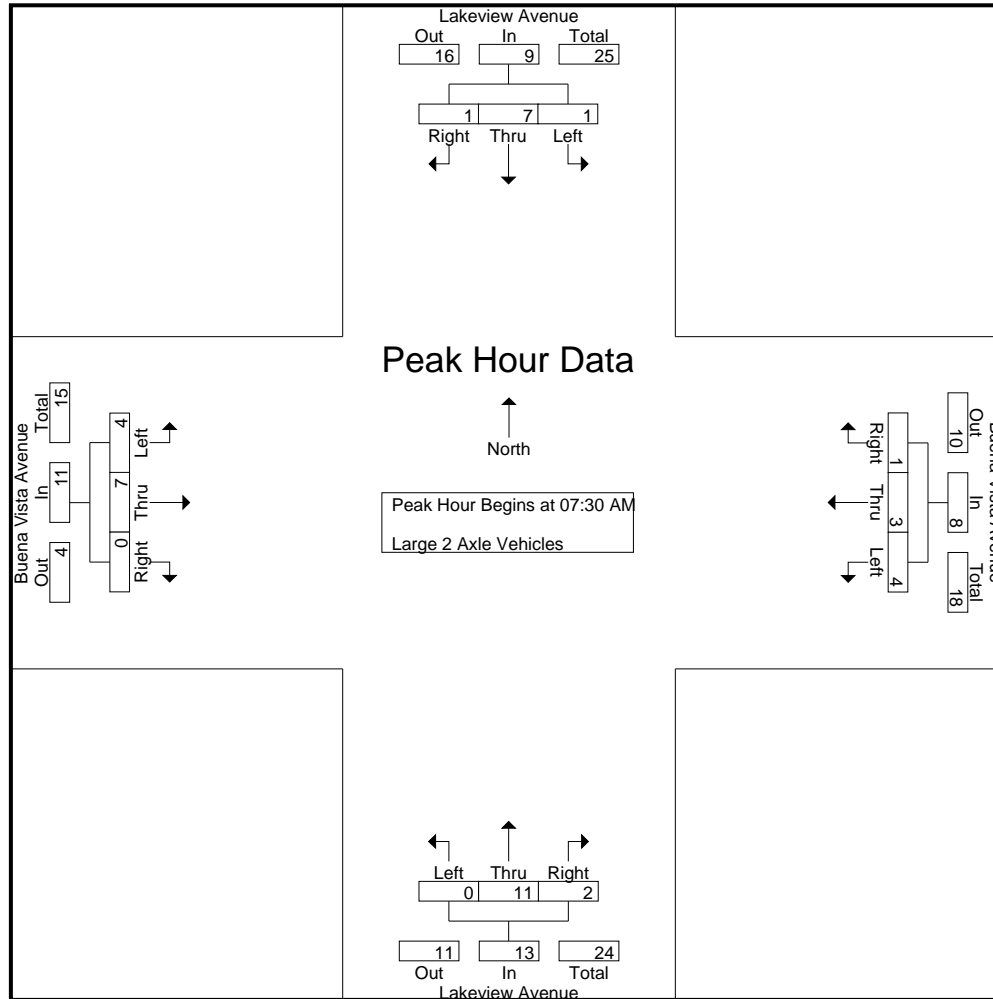
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	1	0	0	0	1	0	0	6	6
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	4	4	4
07:30 AM	1	1	0	0	2	0	1	0	0	1	0	5	1	0	6	0	3	0	0	3	0	12	12	12
07:45 AM	0	1	1	0	2	3	0	1	0	4	0	2	0	0	2	1	1	0	0	2	0	10	10	10
Total	1	3	1	0	5	4	2	1	0	7	0	12	1	0	13	2	4	1	0	7	0	32	32	32
08:00 AM	0	4	0	0	4	1	0	0	0	1	0	3	1	0	4	3	2	0	0	5	0	14	14	14
08:15 AM	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	5	5	5
08:30 AM	0	2	0	0	2	0	1	0	0	1	0	5	0	0	5	1	1	0	0	2	0	10	10	10
08:45 AM	0	2	1	0	3	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	0	7	7	7
Total	0	9	1	0	10	1	4	0	0	5	0	9	2	0	11	5	5	0	0	10	0	36	36	36
Grand Total	1	12	2	0	15	5	6	1	0	12	0	21	3	0	24	7	9	1	0	17	0	68	68	68
Apprch %	6.7	80	13.3			41.7	50	8.3			0	87.5	12.5			41.2	52.9	5.9			0	100	100	100
Total %	1.5	17.6	2.9		22.1	7.4	8.8	1.5		17.6	0	30.9	4.4		35.3	10.3	13.2	1.5		25	0	100	100	100

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	1	0	2	0	1	0	1	0	5	1	6	0	3	0	3	12
07:45 AM	0	1	1	2	3	0	1	4	0	2	0	2	1	1	0	2	10
08:00 AM	0	4	0	4	1	0	0	1	0	3	1	4	3	2	0	5	14
08:15 AM	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1	5
Total Volume	1	7	1	9	4	3	1	8	0	11	2	13	4	7	0	11	41
% App. Total	11.1	77.8	11.1		50	37.5	12.5		0	84.6	15.4		36.4	63.6	0		
PHF	.250	.438	.250	.563	.333	.375	.250	.500	.000	.550	.500	.542	.333	.583	.000	.550	.732

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	1	1	0	2	0	1	0	1	0	5	1	6	0	3	0	3	
+15 mins.	0	1	1	2	3	0	1	4	0	2	0	2	1	1	0	2	
+30 mins.	0	4	0	4	1	0	0	1	0	3	1	4	3	2	0	5	
+45 mins.	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1	
Total Volume	1	7	1	9	4	3	1	8	0	11	2	13	4	7	0	11	
% App. Total	11.1	77.8	11.1		50	37.5	12.5		0	84.6	15.4		36.4	63.6	0		
PHF	.250	.438	.250	.563	.333	.375	.250	.500	.000	.550	.500	.542	.333	.583	.000	.550	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

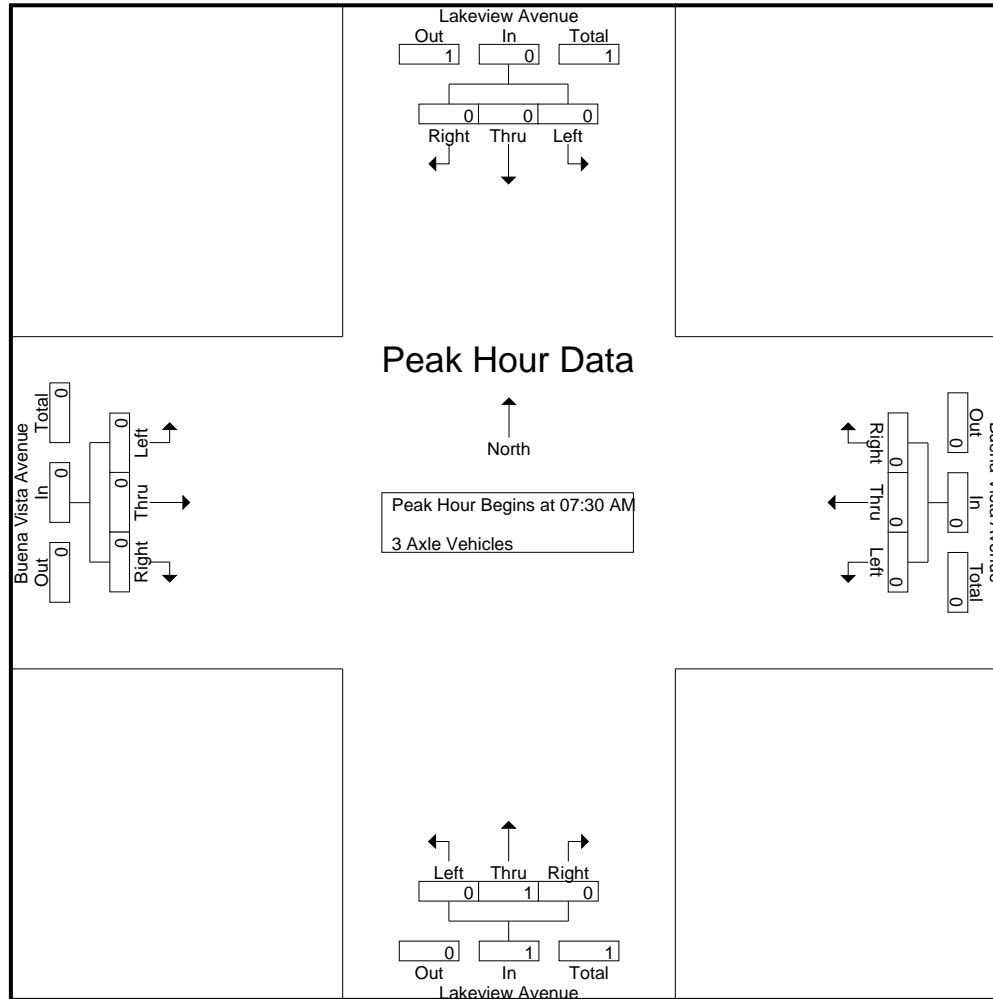
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	1	0	2	2
Apprch %	0	0	0			0	0	0			0	100	0			100	0	0										
Total %	0	0	0			0	0	0			0	50	0		50	50	0	0		50	0	0	0		50	0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

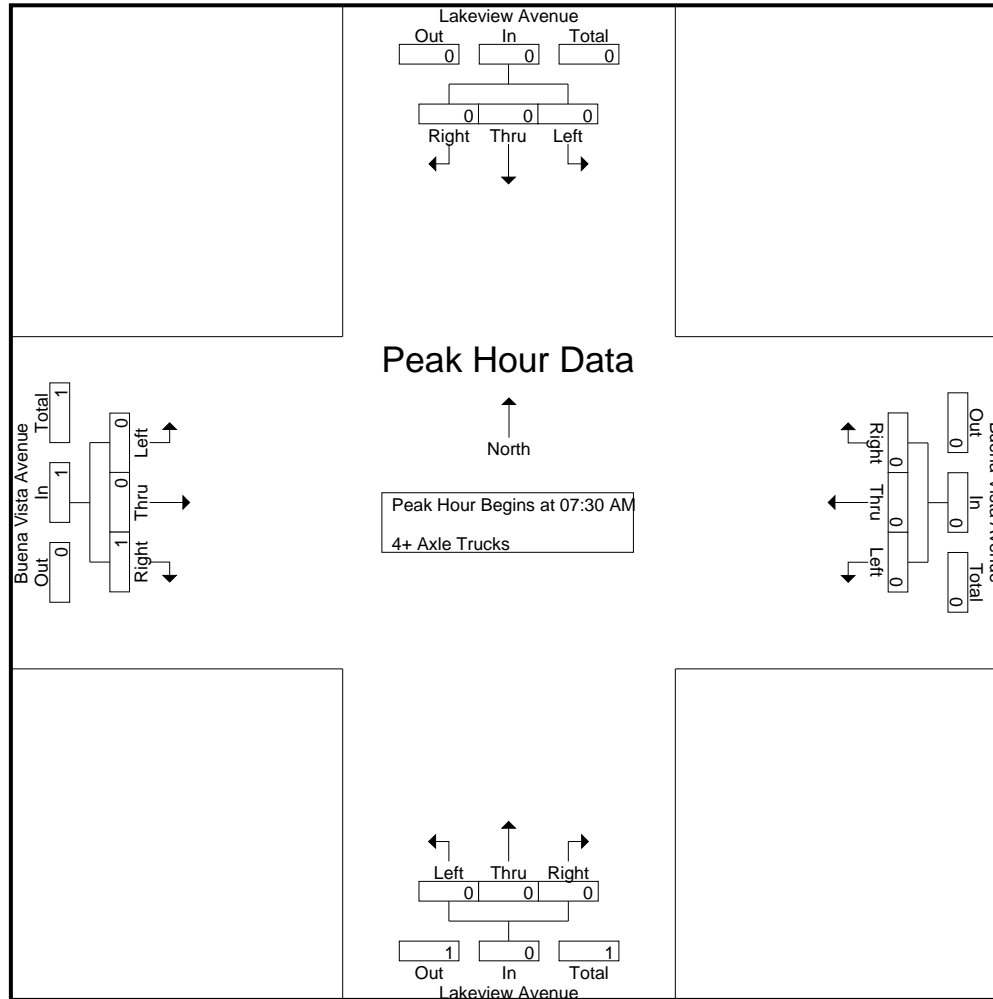
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	2	2
Apprch %	0	0	0			0	0	0			100	0	0			0	0	100										
Total %	0	0	0			0	0	0			50	0	0		50	0	0	50		50						0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

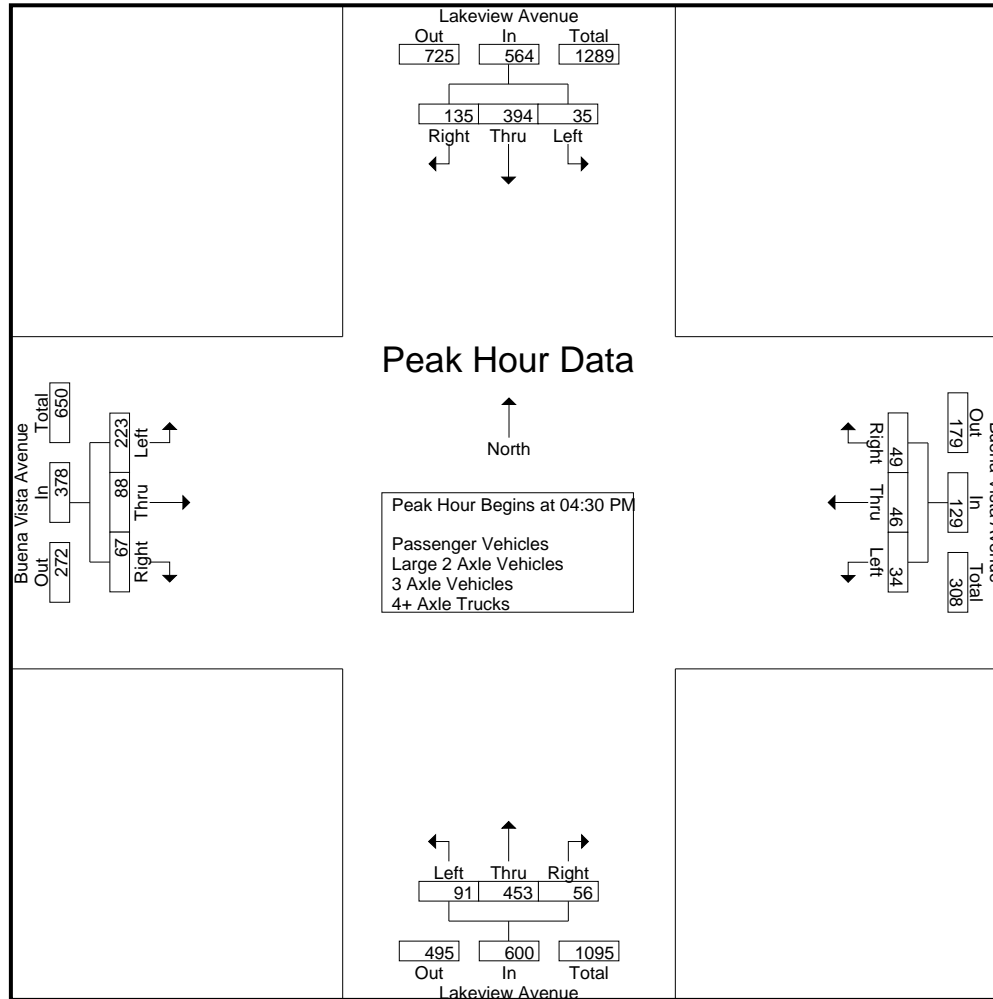
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	12	104	26	0	142	7	18	2	0	27	24	100	10	0	134	41	17	20	0	78	0	381	381
04:15 PM	10	98	27	0	135	10	12	13	0	35	18	113	11	0	142	40	15	24	0	79	0	391	391
04:30 PM	9	101	32	0	142	8	8	9	0	25	23	120	12	0	155	52	14	18	0	84	0	406	406
04:45 PM	12	93	31	0	136	5	13	13	0	31	29	112	10	0	151	59	21	19	0	99	0	417	417
Total	43	396	116	0	555	30	51	37	0	118	94	445	43	0	582	192	67	81	0	340	0	1595	1595
05:00 PM	9	106	40	0	155	9	17	9	1	35	20	116	15	0	151	55	21	13	0	89	1	430	431
05:15 PM	5	94	32	0	131	12	8	18	0	38	19	105	19	0	143	57	32	17	0	106	0	418	418
05:30 PM	4	89	31	0	124	11	16	6	0	33	27	114	13	0	154	50	17	27	0	94	0	405	405
05:45 PM	9	90	25	0	124	8	8	18	0	34	23	123	8	0	154	47	12	22	0	81	0	393	393
Total	27	379	128	0	534	40	49	51	1	140	89	458	55	0	602	209	82	79	0	370	1	1646	1647
Grand Total	70	775	244	0	1089	70	100	88	1	258	183	903	98	0	1184	401	149	160	0	710	1	3241	3242
Apprch %	6.4	71.2	22.4			27.1	38.8	34.1			15.5	76.3	8.3			56.5	21	22.5					
Total %	2.2	23.9	7.5		33.6	2.2	3.1	2.7		8	5.6	27.9	3		36.5	12.4	4.6	4.9		21.9	0	100	
Passenger Vehicles	67	761	243		1071	70	98	86		255	183	899	96		1178	399	148	159		706	0	0	3210
% Passenger Vehicles	95.7	98.2	99.6	0	98.3	100	98	97.7	100	98.5	100	99.6	98	0	99.5	99.5	99.3	99.4	0	99.4	0	0	99
Large 2 Axle Vehicles	3	9	1		13	0	2	2		4	0	4	2		6	2	1	1		4	0	0	27
% Large 2 Axle Vehicles	4.3	1.2	0.4	0	1.2	0	2	2.3	0	1.5	0	0.4	2	0	0.5	0.5	0.7	0.6	0	0.6	0	0	0.8
3 Axle Vehicles	0	4	0		4	0	0	0		0	0	0	0		0	0	0	0		0	0	0	4
% 3 Axle Vehicles	0	0.5	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	1	0		1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1
% 4+ Axle Trucks	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	9	101	32	142	8	8	9	25	23	120	12	155	52	14	18	84	406
04:45 PM	12	93	31	136	5	13	13	31	29	112	10	151	59	21	19	99	417
05:00 PM	9	106	40	155	9	17	9	35	20	116	15	151	55	21	13	89	430
05:15 PM	5	94	32	131	12	8	18	38	19	105	19	143	57	32	17	106	418
Total Volume	35	394	135	564	34	46	49	129	91	453	56	600	223	88	67	378	1671
% App. Total	6.2	69.9	23.9		26.4	35.7	38		15.2	75.5	9.3		59	23.3	17.7		
PHF	.729	.929	.844	.910	.708	.676	.681	.849	.784	.944	.737	.968	.945	.688	.882	.892	.972

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				04:45 PM				
+0 mins.	10	98	27	135	9	17	9	35	20	116	15	151	59	21	19	99	
+15 mins.	9	101	32	142	12	8	18	38	19	105	19	143	55	21	13	89	
+30 mins.	12	93	31	136	11	16	6	33	27	114	13	154	57	32	17	106	
+45 mins.	9	106	40	155	8	8	18	34	23	123	8	154	50	17	27	94	
Total Volume	40	398	130	568	40	49	51	140	89	458	55	602	221	91	76	388	
% App. Total	7	70.1	22.9		28.6	35	36.4		14.8	76.1	9.1		57	23.5	19.6		
PHF	.833	.939	.813	.916	.833	.721	.708	.921	.824	.931	.724	.977	.936	.711	.704	.915	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

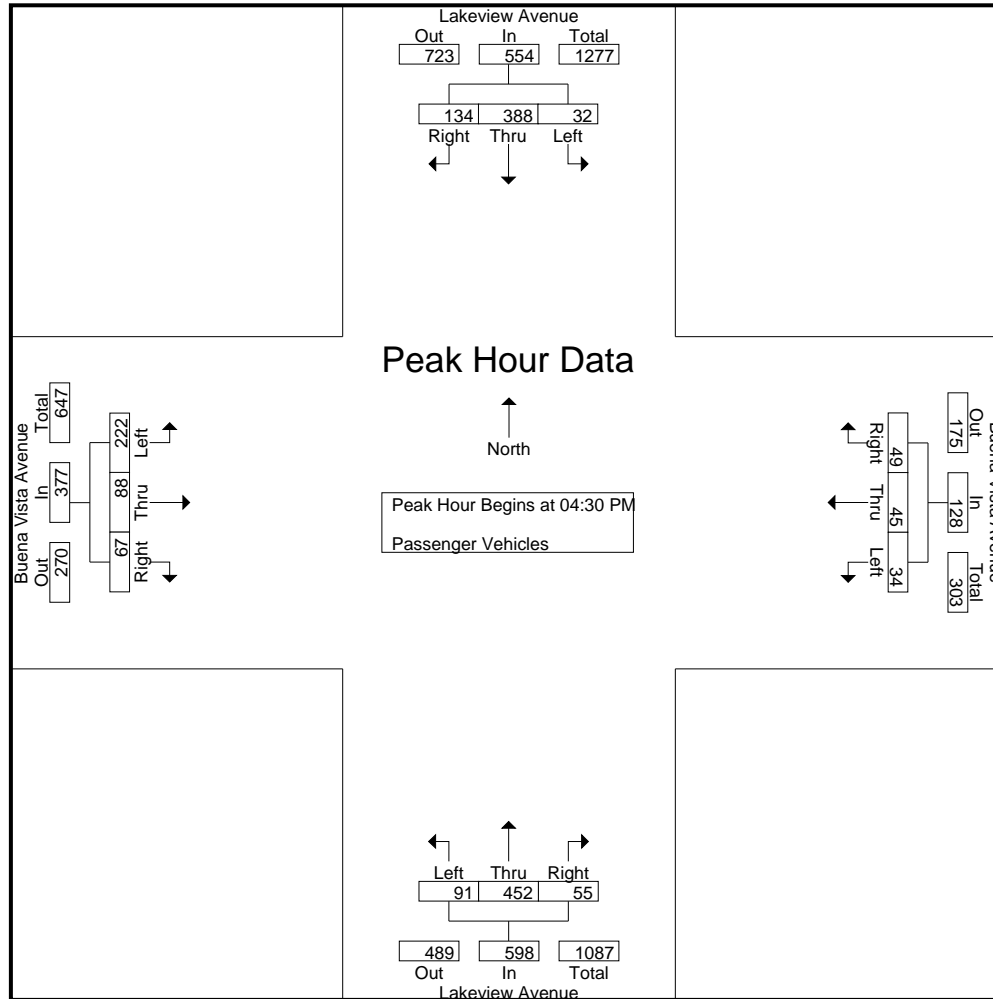
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	12	101	26	0	139	7	17	2	0	26	24	100	10	0	134	40	17	19	0	76	0	375	375
04:15 PM	10	95	27	0	132	10	12	13	0	35	18	111	11	0	140	40	14	24	0	78	0	385	385
04:30 PM	8	99	32	0	139	8	7	9	0	24	23	120	11	0	154	52	14	18	0	84	0	401	401
04:45 PM	11	91	31	0	133	5	13	13	0	31	29	112	10	0	151	59	21	19	0	99	0	414	414
Total	41	386	116	0	543	30	49	37	0	116	94	443	42	0	579	191	66	80	0	337	0	1575	1575
05:00 PM	8	105	40	0	153	9	17	9	1	35	20	116	15	0	151	54	21	13	0	88	1	427	428
05:15 PM	5	93	31	0	129	12	8	18	0	38	19	104	19	0	142	57	32	17	0	106	0	415	415
05:30 PM	4	87	31	0	122	11	16	6	0	33	27	113	13	0	153	50	17	27	0	94	0	402	402
05:45 PM	9	90	25	0	124	8	8	16	0	32	23	123	7	0	153	47	12	22	0	81	0	390	390
Total	26	375	127	0	528	40	49	49	1	138	89	456	54	0	599	208	82	79	0	369	1	1634	1635
Grand Total	67	761	243	0	1071	70	98	86	1	254	183	899	96	0	1178	399	148	159	0	706	1	3209	3210
Apprch %	6.3	71.1	22.7			27.6	38.6	33.9			15.5	76.3	8.1			56.5	21	22.5			0	3209	3210
Total %	2.1	23.7	7.6		33.4	2.2	3.1	2.7		7.9	5.7	28	3		36.7	12.4	4.6	5		22	0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	99	32	139	8	7	9	24	23	120	11	154	52	14	18	84	401
04:45 PM	11	91	31	133	5	13	13	31	29	112	10	151	59	21	19	99	414
05:00 PM	8	105	40	153	9	17	9	35	20	116	15	151	54	21	13	88	427
05:15 PM	5	93	31	129	12	8	18	38	19	104	19	142	57	32	17	106	415
Total Volume	32	388	134	554	34	45	49	128	91	452	55	598	222	88	67	377	1657
% App. Total	5.8	70	24.2		26.6	35.2	38.3		15.2	75.6	9.2		58.9	23.3	17.8		
PHF	.727	.924	.838	.905	.708	.662	.681	.842	.784	.942	.724	.971	.941	.688	.882	.889	.970

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	8	99	32	139	8	7	9	24	23	120	11	154	52	14	18	84	
+15 mins.	11	91	31	133	5	13	13	31	29	112	10	151	59	21	19	99	
+30 mins.	8	105	40	153	9	17	9	35	20	116	15	151	54	21	13	88	
+45 mins.	5	93	31	129	12	8	18	38	19	104	19	142	57	32	17	106	
Total Volume	32	388	134	554	34	45	49	128	91	452	55	598	222	88	67	377	
% App. Total	5.8	70	24.2		26.6	35.2	38.3		15.2	75.6	9.2		58.9	23.3	17.8		
PHF	.727	.924	.838	.905	.708	.662	.681	.842	.784	.942	.724	.971	.941	.688	.882	.889	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

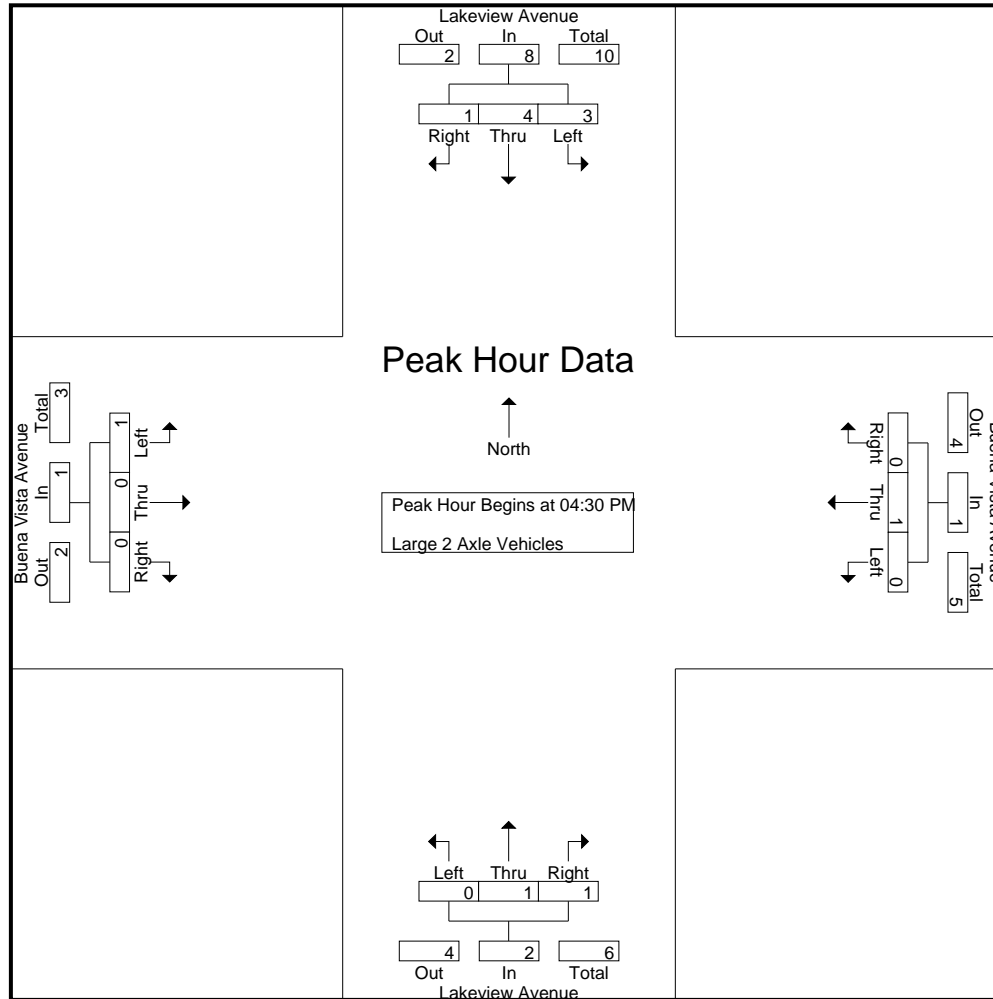
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	0	5	5
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	5	5
04:30 PM	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	3	3
04:45 PM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	2	6	0	0	8	0	2	0	0	2	0	2	1	0	3	1	1	1	0	3	0	0	16	16
05:00 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	3
05:15 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	3
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0	0	3	3
Total	1	3	1	0	5	0	0	2	0	2	0	2	1	0	3	1	0	0	0	1	0	0	11	11
Grand Total	3	9	1	0	13	0	2	2	0	4	0	4	2	0	6	2	1	1	0	4	0	0	27	27
Apprch %	23.1	69.2	7.7			0	50	50			0	66.7	33.3			50	25	25			0	0		
Total %	11.1	33.3	3.7		48.1	0	7.4	7.4		14.8	0	14.8	7.4		22.2	7.4	3.7	3.7		14.8	0	0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	3
04:45 PM	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
05:15 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total Volume	3	4	1	8	0	1	0	1	0	1	1	2	1	0	0	1	12
% App. Total	37.5	50	12.5		0	100	0		0	50	50		100	0	0		
PHF	.750	.500	.250	.667	.000	.250	.000	.250	.000	.250	.250	.500	.250	.000	.000	.250	1.00

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	
+15 mins.	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	
+45 mins.	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	3	4	1	8	0	1	0	1	0	1	1	2	1	0	0	1	
% App. Total	37.5	50	12.5		0	100	0		0	50	50		100	0	0		
PHF	.750	.500	.250	.667	.000	.250	.000	.250	.000	.250	.250	.500	.250	.000	.000	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

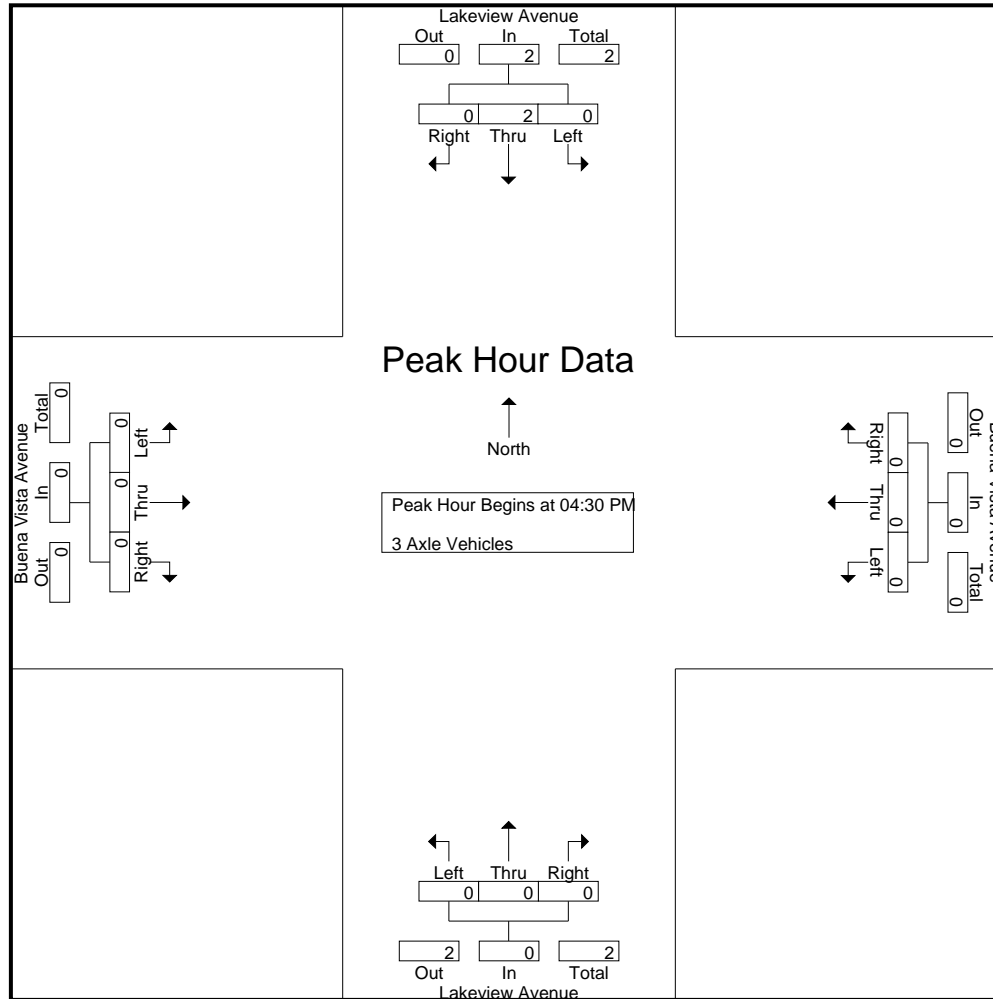
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Apprch %	0	100	0			0	0	0			0	0	0			0	0	0			0	0	0			0		
Total %	0	100	0		100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

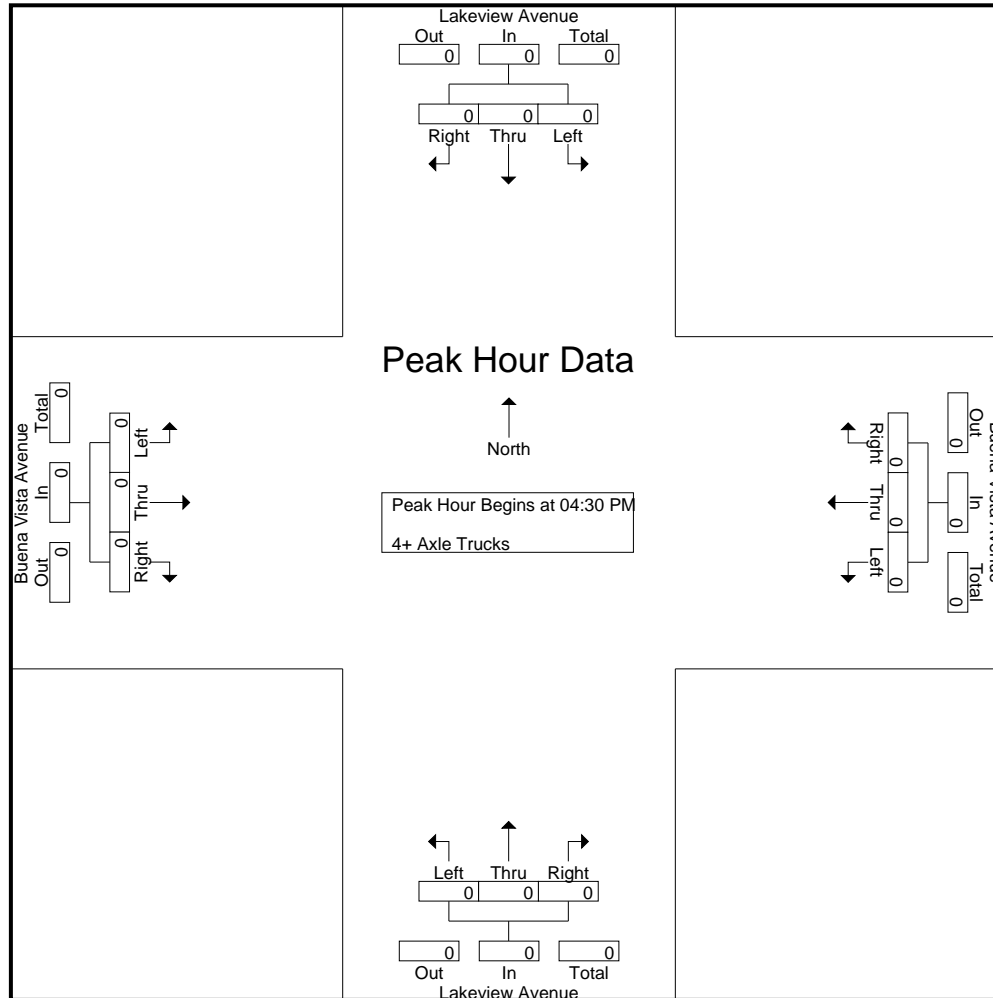
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Buena Vista Avenue Westbound					Lakeview Avenue Northbound					Buena Vista Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	100	0			0	0	0			0	0	0			0	0	0			0	0	0			0		
Total %	0	100	0		100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	100	

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue
 Weather: Clear

File Name : 06_YLA_Lake_Buena PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Buena Vista Avenue Westbound				Lakeview Avenue Northbound				Buena Vista Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Lakeview Avenue	East Leg Buena Vista Avenue	South Leg Lakeview Avenue	West Leg Buena Vista Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	1	1	0	2
8:00 AM	0	0	2	0	2
8:15 AM	0	2	3	1	6
8:30 AM	0	0	1	0	1
8:45 AM	2	1	1	0	4
TOTAL VOLUMES:	2	4	9	1	16

	North Leg Lakeview Avenue	East Leg Buena Vista Avenue	South Leg Lakeview Avenue	West Leg Buena Vista Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	1	1	4	0	6
4:30 PM	0	0	1	1	2
4:45 PM	0	1	0	2	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	1	2
5:30 PM	0	3	2	0	5
5:45 PM	0	0	1	0	1
TOTAL VOLUMES:	1	6	9	4	20

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Buena Vista Avenue



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Lakeview Avenue			Westbound Buena Vista Avenue			Northbound Lakeview Avenue			Eastbound Buena Vista Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES:	0	0	0	1	0	0	0	0	0	0	2	0	3

	Southbound Lakeview Avenue			Westbound Buena Vista Avenue			Northbound Lakeview Avenue			Eastbound Buena Vista Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	1	0	0	0	3
5:30 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	5	0	0	2	1	0	1	2	0	0	0	11

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

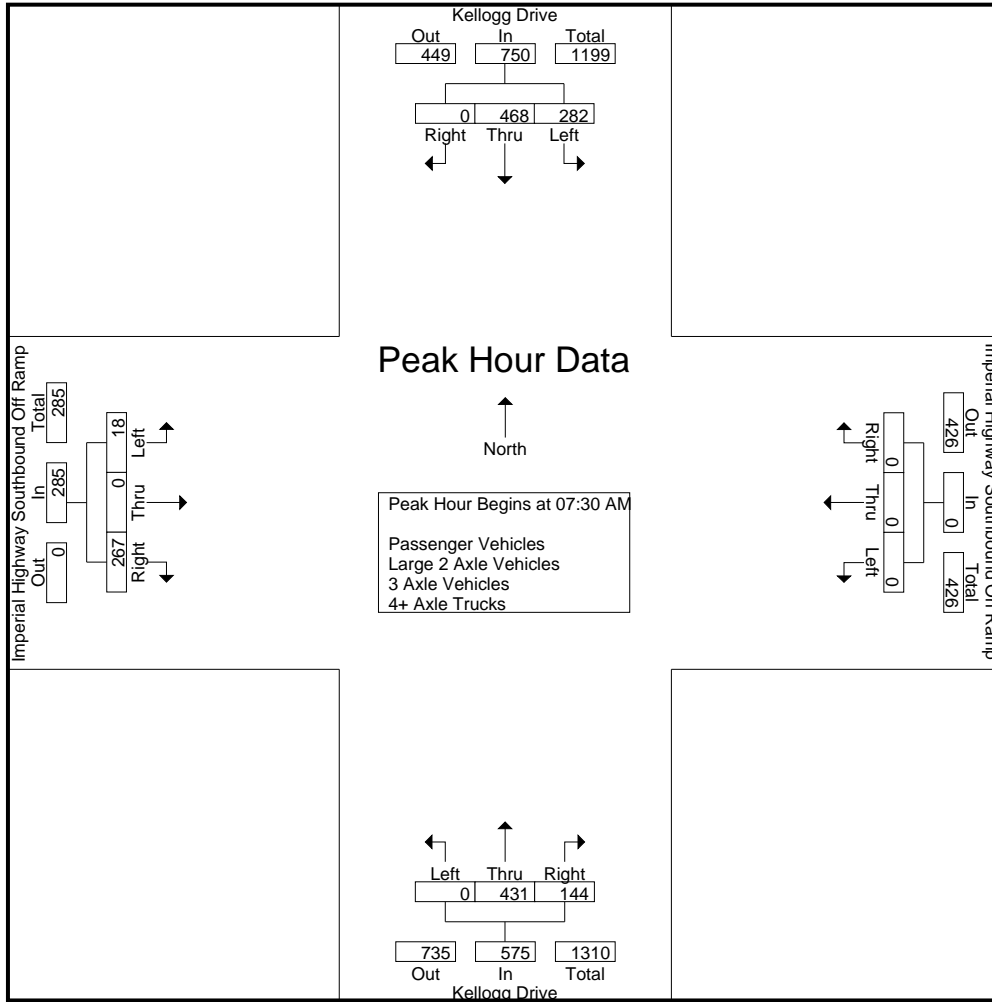
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	56	38	0	94	0	0	0	0	0	31	16	47	2	0	29	31	172
07:15 AM	71	61	0	132	0	0	0	0	0	44	27	71	4	0	37	41	244
07:30 AM	60	156	0	216	0	0	0	0	0	112	46	158	0	0	94	94	468
07:45 AM	87	182	0	269	0	0	0	0	0	184	67	251	1	0	97	98	618
Total	274	437	0	711	0	0	0	0	0	371	156	527	7	0	257	264	1502
08:00 AM	68	63	0	131	0	0	0	0	0	64	17	81	7	0	41	48	260
08:15 AM	67	67	0	134	0	0	0	0	0	71	14	85	10	0	35	45	264
08:30 AM	63	70	0	133	0	0	0	0	0	57	15	72	5	0	33	38	243
08:45 AM	49	37	0	86	0	0	0	0	0	43	12	55	3	0	25	28	169
Total	247	237	0	484	0	0	0	0	0	235	58	293	25	0	134	159	936
Grand Total	521	674	0	1195	0	0	0	0	0	606	214	820	32	0	391	423	2438
Apprch %	43.6	56.4	0		0	0	0		0	73.9	26.1		7.6	0	92.4		
Total %	21.4	27.6	0	49	0	0	0	0	0	24.9	8.8	33.6	1.3	0	16	17.4	
Passenger Vehicles	517	659	0	1176	0	0	0	0	0	590	210	800	30	0	384	414	2390
% Passenger Vehicles	99.2	97.8	0	98.4	0	0	0	0	0	97.4	98.1	97.6	93.8	0	98.2	97.9	98
Large 2 Axle Vehicles	2	13	0	15	0	0	0	0	0	14	3	17	2	0	7	9	41
% Large 2 Axle Vehicles	0.4	1.9	0	1.3	0	0	0	0	0	2.3	1.4	2.1	6.2	0	1.8	2.1	1.7
3 Axle Vehicles	1	2	0	3	0	0	0	0	0	2	1	3	0	0	0	0	6
% 3 Axle Vehicles	0.2	0.3	0	0.3	0	0	0	0	0	0.3	0.5	0.4	0	0	0	0	0.2
4+ Axle Trucks	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 4+ Axle Trucks	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	60	156	0	216	0	0	0	0	0	112	46	158	0	0	94	94	468
07:45 AM	87	182	0	269	0	0	0	0	0	184	67	251	1	0	97	98	618
08:00 AM	68	63	0	131	0	0	0	0	0	64	17	81	7	0	41	48	260
08:15 AM	67	67	0	134	0	0	0	0	0	71	14	85	10	0	35	45	264
Total Volume	282	468	0	750	0	0	0	0	0	431	144	575	18	0	267	285	1610
% App. Total	37.6	62.4	0		0	0	0		0	75	25		6.3	0	93.7		
PHF	.810	.643	.000	.697	.000	.000	.000	.000	.000	.586	.537	.573	.450	.000	.688	.727	.651

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:30 AM				07:30 AM			
+0 mins.	60	156	0	216	0	0	0	0	0	112	46	158	0	0	94	94
+15 mins.	87	182	0	269	0	0	0	0	0	184	67	251	1	0	97	98
+30 mins.	68	63	0	131	0	0	0	0	0	64	17	81	7	0	41	48
+45 mins.	67	67	0	134	0	0	0	0	0	71	14	85	10	0	35	45
Total Volume	282	468	0	750	0	0	0	0	0	431	144	575	18	0	267	285
% App. Total	37.6	62.4	0		0	0	0		0	75	25		6.3	0	93.7	
PHF	.810	.643	.000	.697	.000	.000	.000	.000	.000	.586	.537	.573	.450	.000	.688	.727

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

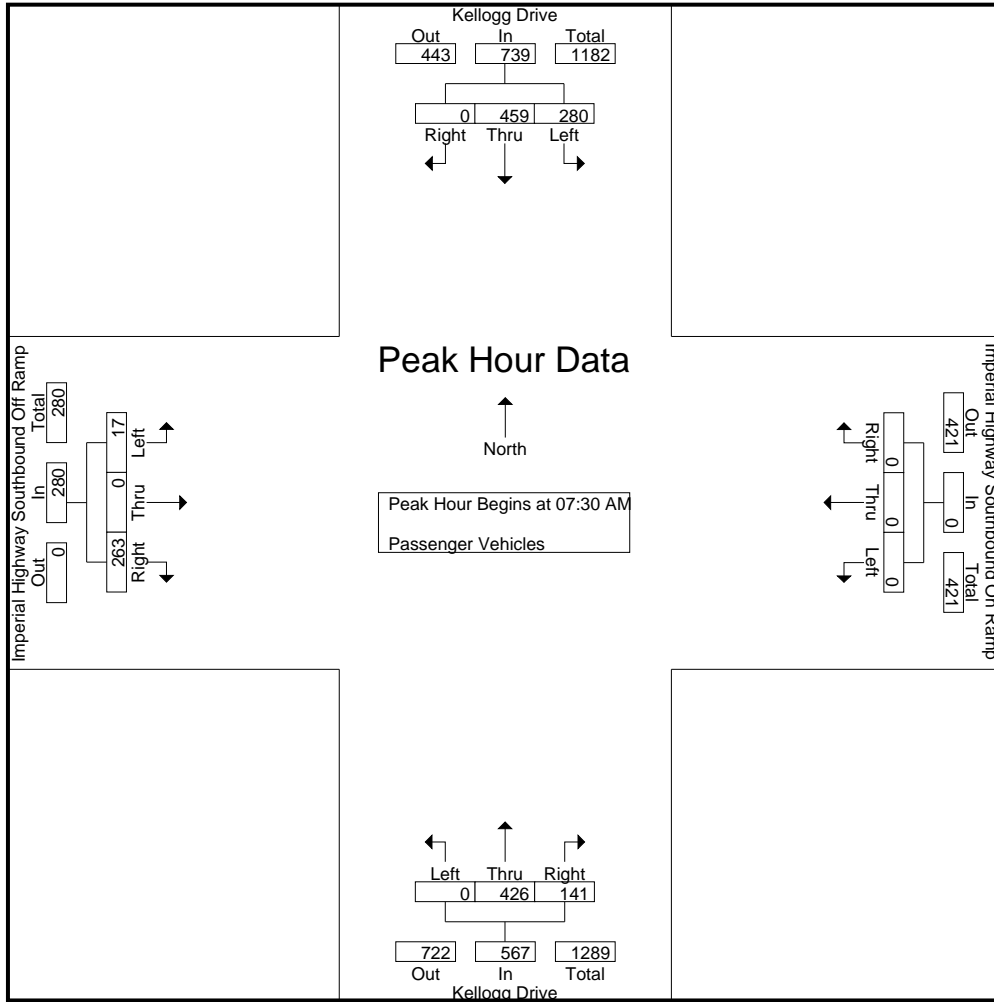
Groups Printed- Passenger Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	56	36	0	92	0	0	0	0	0	28	16	44	2	0	28	30	166
07:15 AM	70	59	0	129	0	0	0	0	0	39	27	66	4	0	36	40	235
07:30 AM	60	153	0	213	0	0	0	0	0	111	46	157	0	0	92	92	462
07:45 AM	87	180	0	267	0	0	0	0	0	184	66	250	1	0	96	97	614
Total	273	428	0	701	0	0	0	0	0	362	155	517	7	0	252	259	1477
08:00 AM	67	61	0	128	0	0	0	0	0	62	16	78	6	0	40	46	252
08:15 AM	66	65	0	131	0	0	0	0	0	69	13	82	10	0	35	45	258
08:30 AM	63	69	0	132	0	0	0	0	0	55	14	69	4	0	32	36	237
08:45 AM	48	36	0	84	0	0	0	0	0	42	12	54	3	0	25	28	166
Total	244	231	0	475	0	0	0	0	0	228	55	283	23	0	132	155	913
Grand Total	517	659	0	1176	0	0	0	0	0	590	210	800	30	0	384	414	2390
Apprch %	44	56	0		0	0	0		0	73.8	26.2		7.2	0	92.8		
Total %	21.6	27.6	0	49.2	0	0	0	0	0	24.7	8.8	33.5	1.3	0	16.1	17.3	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	60	153	0	213	0	0	0	0	0	111	46	157	0	0	92	92	462
07:45 AM	87	180	0	267	0	0	0	0	0	184	66	250	1	0	96	97	614
08:00 AM	67	61	0	128	0	0	0	0	0	62	16	78	6	0	40	46	252
08:15 AM	66	65	0	131	0	0	0	0	0	69	13	82	10	0	35	45	258
Total Volume	280	459	0	739	0	0	0	0	0	426	141	567	17	0	263	280	1586
% App. Total	37.9	62.1	0		0	0	0		0	75.1	24.9		6.1	0	93.9		
PHF	.805	.638	.000	.692	.000	.000	.000	.000	.000	.579	.534	.567	.425	.000	.685	.722	.646

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	60	153	0	213	0	0	0	0	0	111	46	157	0	0	92	92
+15 mins.	87	180	0	267	0	0	0	0	0	184	66	250	1	0	96	97
+30 mins.	67	61	0	128	0	0	0	0	0	62	16	78	6	0	40	46
+45 mins.	66	65	0	131	0	0	0	0	0	69	13	82	10	0	35	45
Total Volume	280	459	0	739	0	0	0	0	0	426	141	567	17	0	263	280
% App. Total	37.9	62.1	0		0	0	0		0	75.1	24.9		6.1	0	93.9	
PHF	.805	.638	.000	.692	.000	.000	.000	.000	.000	.579	.534	.567	.425	.000	.685	.722

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

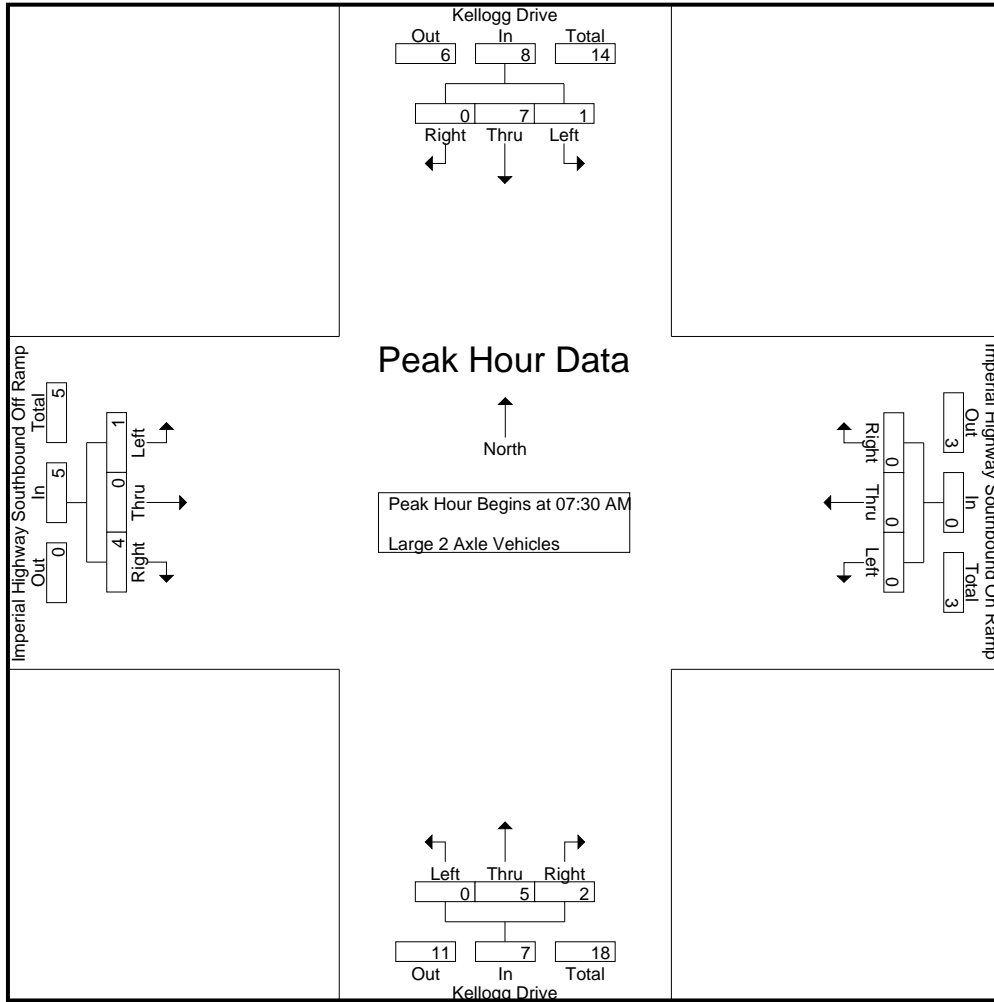
Groups Printed- Large 2 Axle Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	1	1	5
07:15 AM	1	2	0	3	0	0	0	0	0	4	0	4	0	0	1	1	1	8
07:30 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	2	2	2	6
07:45 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	3
Total	1	8	0	9	0	0	0	0	0	7	1	8	0	0	5	5	5	22
08:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	1	2	2	6
08:15 AM	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0	0	5
08:30 AM	0	1	0	1	0	0	0	0	0	2	1	3	1	0	1	2	2	6
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total	1	5	0	6	0	0	0	0	0	7	2	9	2	0	2	4	4	19
Grand Total	2	13	0	15	0	0	0	0	0	14	3	17	2	0	7	9	9	41
Apprch %	13.3	86.7	0		0	0	0		0	82.4	17.6		22.2	0	77.8			
Total %	4.9	31.7	0	36.6	0	0	0	0	0	34.1	7.3	41.5	4.9	0	17.1	22		

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	2	2	6
07:45 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	3
08:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	1	2	6
08:15 AM	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
Total Volume	1	7	0	8	0	0	0	0	0	5	2	7	1	0	4	5	20
% App. Total	12.5	87.5	0		0	0	0		0	71.4	28.6		20	0	80		
PHF	.250	.583	.000	.667	.000	.000	.000	.000	.000	.625	.500	.583	.250	.000	.500	.625	.833

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	2	2
+15 mins.	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	1	0	1	2
+45 mins.	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0
Total Volume	1	7	0	8	0	0	0	0	0	5	2	7	1	0	4	5
% App. Total	12.5	87.5	0		0	0	0		0	71.4	28.6		20	0	80	
PHF	.250	.583	.000	.667	.000	.000	.000	.000	.000	.625	.500	.583	.250	.000	.500	.625

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

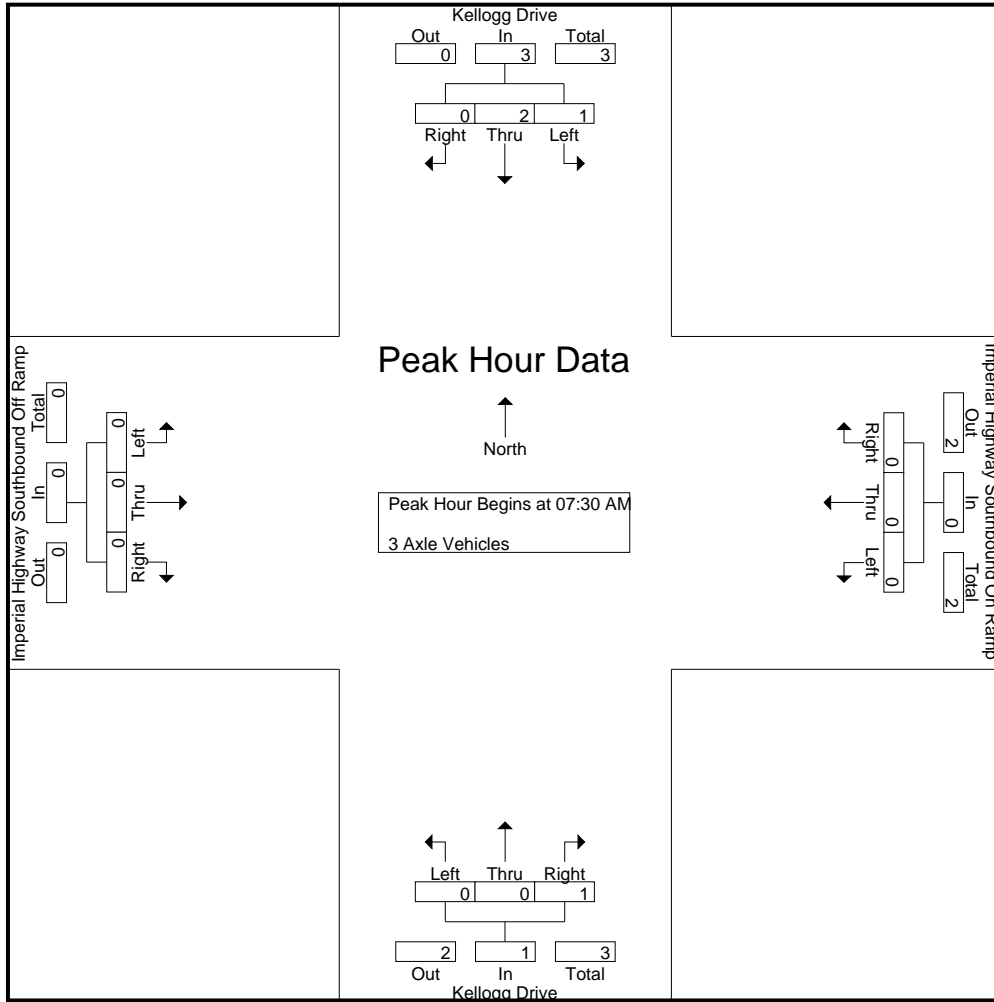
Groups Printed- 3 Axle Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	3
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	2
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	3
Grand Total	1	2	0	3	0	0	0	0	0	2	1	3	3	0	0	0	0	6
Apprch %	33.3	66.7	0		0	0	0		0	66.7	33.3			0	0	0		
Total %	16.7	33.3	0	50	0	0	0	0	0	33.3	16.7	50	50	0	0	0	0	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	1	0	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	2
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	2	0	3	0	0	0	0	0	0	1	1	1	0	0	0	0	4
% App. Total	33.3	66.7	0		0	0	0		0	0	100			0	0	0		
PHF	.250	.500	.000	.750	.000	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	0	3	0	0	0	0	0	0	1	1	0	0	0	0
% App. Total	33.3	66.7	0		0	0	0		0	0	100		0	0	0	
PHF	.250	.500	.000	.750	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

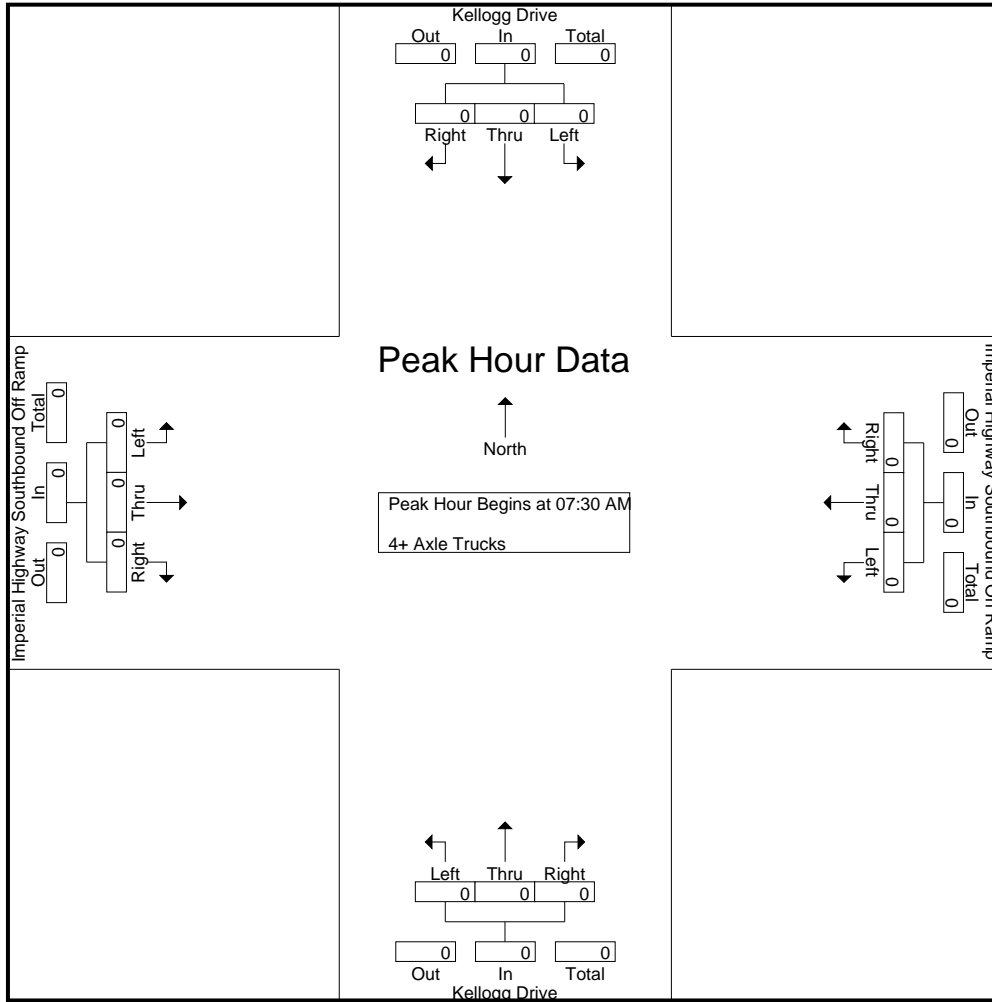
Groups Printed- 4+ Axle Trucks

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	100	0	0		0	0	0		0	0	0		0	0	0		
Total %	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

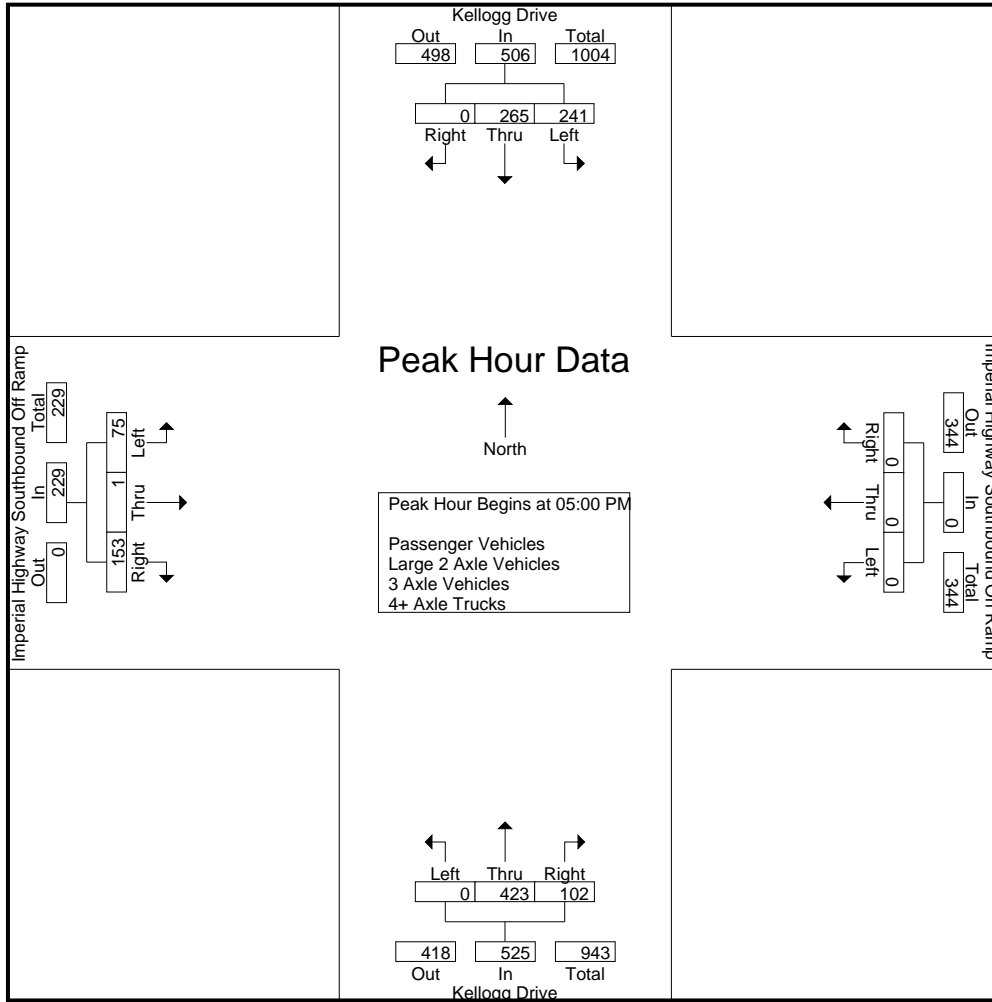
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	58	55	0	113	0	0	0	0	0	104	37	141	12	1	36	49	303
04:15 PM	58	56	0	114	0	0	0	0	0	97	13	110	18	0	39	57	281
04:30 PM	43	72	0	115	0	0	0	0	0	94	22	116	18	0	36	54	285
04:45 PM	58	82	0	140	0	0	0	0	0	79	11	90	20	0	50	70	300
Total	217	265	0	482	0	0	0	0	0	374	83	457	68	1	161	230	1169
05:00 PM	56	60	0	116	0	0	0	0	0	105	29	134	20	0	38	58	308
05:15 PM	51	65	0	116	0	0	0	0	0	93	23	116	18	1	38	57	289
05:30 PM	76	63	0	139	0	0	0	0	0	128	32	160	18	0	39	57	356
05:45 PM	58	77	0	135	0	0	0	0	0	97	18	115	19	0	38	57	307
Total	241	265	0	506	0	0	0	0	0	423	102	525	75	1	153	229	1260
Grand Total	458	530	0	988	0	0	0	0	0	797	185	982	143	2	314	459	2429
Apprch %	46.4	53.6	0		0	0	0		0	81.2	18.8		31.2	0.4	68.4		
Total %	18.9	21.8	0	40.7	0	0	0	0	0	32.8	7.6	40.4	5.9	0.1	12.9	18.9	
Passenger Vehicles	450	528	0	978	0	0	0	0	0	794	184	978	142	2	312	456	2412
% Passenger Vehicles	98.3	99.6	0	99	0	0	0	0	0	99.6	99.5	99.6	99.3	100	99.4	99.3	99.3
Large 2 Axle Vehicles	7	2	0	9	0	0	0	0	0	3	1	4	1	0	2	3	16
% Large 2 Axle Vehicles	1.5	0.4	0	0.9	0	0	0	0	0	0.4	0.5	0.4	0.7	0	0.6	0.7	0.7
3 Axle Vehicles	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	56	60	0	116	0	0	0	0	0	105	29	134	20	0	38	58	308
05:15 PM	51	65	0	116	0	0	0	0	0	93	23	116	18	1	38	57	289
05:30 PM	76	63	0	139	0	0	0	0	0	128	32	160	18	0	39	57	356
05:45 PM	58	77	0	135	0	0	0	0	0	97	18	115	19	0	38	57	307
Total Volume	241	265	0	506	0	0	0	0	0	423	102	525	75	1	153	229	1260
% App. Total	47.6	52.4	0		0	0	0		0	80.6	19.4		32.8	0.4	66.8		
PHF	.793	.860	.000	.910	.000	.000	.000	.000	.000	.826	.797	.820	.938	.250	.981	.987	.885

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				05:00 PM				04:45 PM			
+0 mins.	58	82	0	140	0	0	0	0	0	105	29	134	20	0	50	70
+15 mins.	56	60	0	116	0	0	0	0	0	93	23	116	20	0	38	58
+30 mins.	51	65	0	116	0	0	0	0	0	128	32	160	18	1	38	57
+45 mins.	76	63	0	139	0	0	0	0	0	97	18	115	18	0	39	57
Total Volume	241	270	0	511	0	0	0	0	0	423	102	525	76	1	165	242
% App. Total	47.2	52.8	0		0	0	0		0	80.6	19.4		31.4	0.4	68.2	
PHF	.793	.823	.000	.913	.000	.000	.000	.000	.000	.826	.797	.820	.950	.250	.825	.864

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

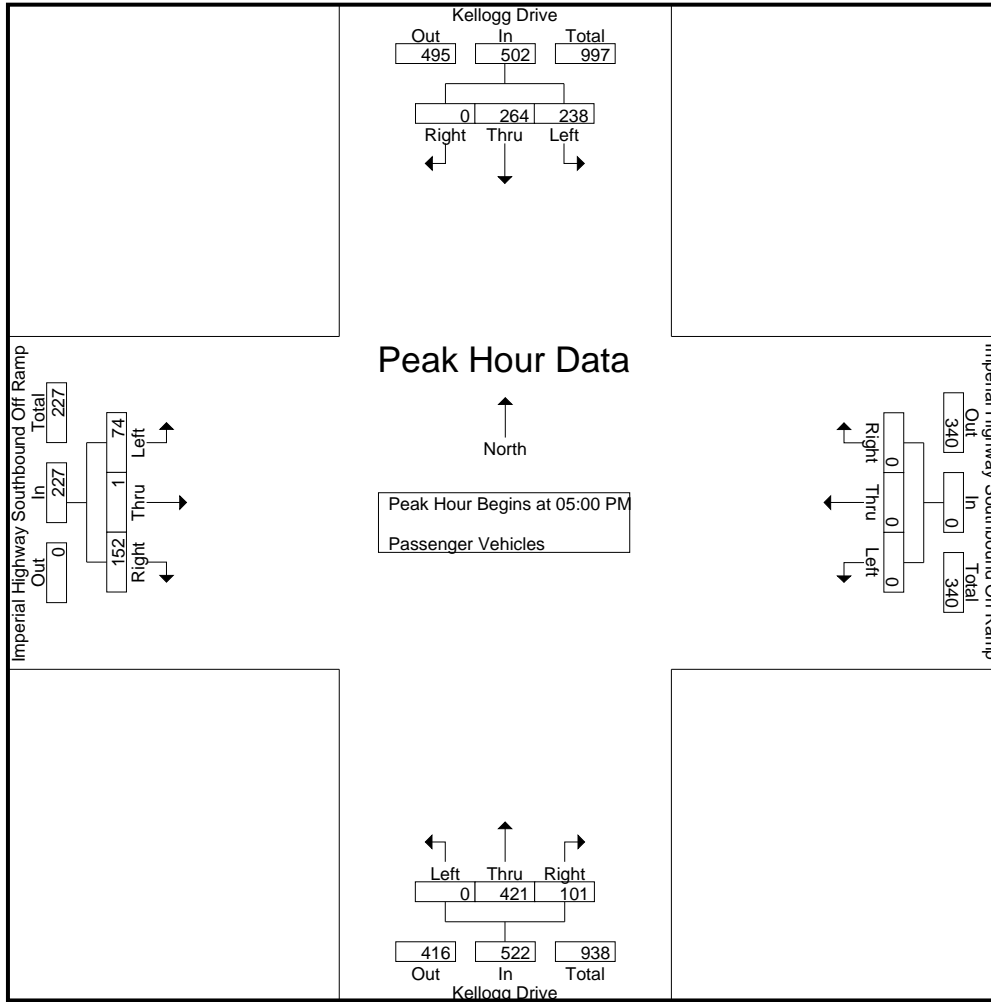
Groups Printed- Passenger Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	57	55	0	112	0	0	0	0	0	103	37	140	12	1	35	48	300
04:15 PM	56	55	0	111	0	0	0	0	0	97	13	110	18	0	39	57	278
04:30 PM	43	72	0	115	0	0	0	0	0	94	22	116	18	0	36	54	285
04:45 PM	56	82	0	138	0	0	0	0	0	79	11	90	20	0	50	70	298
Total	212	264	0	476	0	0	0	0	0	373	83	456	68	1	160	229	1161
05:00 PM	55	60	0	115	0	0	0	0	0	105	29	134	20	0	37	57	306
05:15 PM	51	65	0	116	0	0	0	0	0	91	23	114	18	1	38	57	287
05:30 PM	75	62	0	137	0	0	0	0	0	128	31	159	17	0	39	56	352
05:45 PM	57	77	0	134	0	0	0	0	0	97	18	115	19	0	38	57	306
Total	238	264	0	502	0	0	0	0	0	421	101	522	74	1	152	227	1251
Grand Total	450	528	0	978	0	0	0	0	0	794	184	978	142	2	312	456	2412
Apprch %	46	54	0		0	0	0		0	81.2	18.8		31.1	0.4	68.4		
Total %	18.7	21.9	0	40.5	0	0	0	0	0	32.9	7.6	40.5	5.9	0.1	12.9	18.9	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	55	60	0	115	0	0	0	0	0	105	29	134	20	0	37	57	306
05:15 PM	51	65	0	116	0	0	0	0	0	91	23	114	18	1	38	57	287
05:30 PM	75	62	0	137	0	0	0	0	0	128	31	159	17	0	39	56	352
05:45 PM	57	77	0	134	0	0	0	0	0	97	18	115	19	0	38	57	306
Total Volume	238	264	0	502	0	0	0	0	0	421	101	522	74	1	152	227	1251
% App. Total	47.4	52.6	0		0	0	0		0	80.7	19.3		32.6	0.4	67		
PHF	.793	.857	.000	.916	.000	.000	.000	.000	.000	.822	.815	.821	.925	.250	.974	.996	.888

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	55	60	0	115	0	0	0	0	0	105	29	134	20	0	37	57
+15 mins.	51	65	0	116	0	0	0	0	0	91	23	114	18	1	38	57
+30 mins.	75	62	0	137	0	0	0	0	0	128	31	159	17	0	39	56
+45 mins.	57	77	0	134	0	0	0	0	0	97	18	115	19	0	38	57
Total Volume	238	264	0	502	0	0	0	0	0	421	101	522	74	1	152	227
% App. Total	47.4	52.6	0		0	0	0		0	80.7	19.3		32.6	0.4	67	
PHF	.793	.857	.000	.916	.000	.000	.000	.000	.000	.822	.815	.821	.925	.250	.974	.996

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

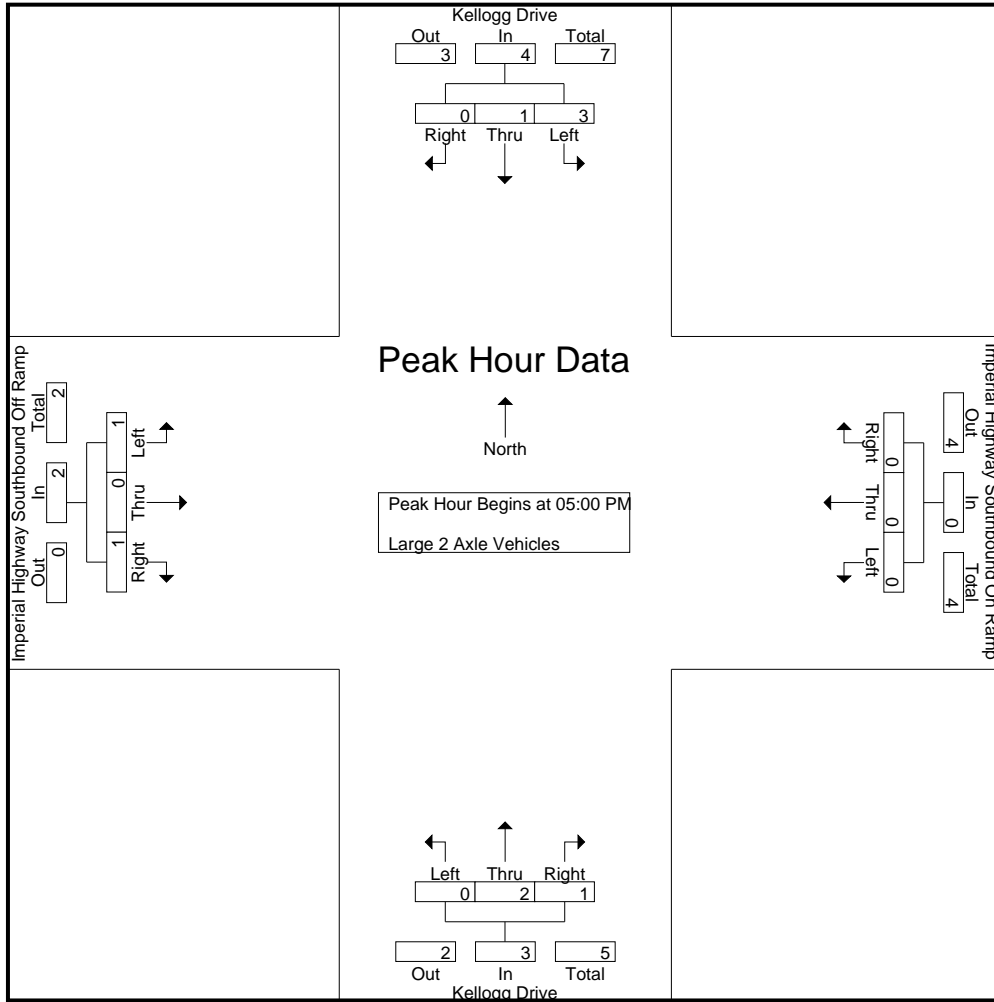
Groups Printed- Large 2 Axle Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
04:15 PM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	4	1	0	5	0	0	0	0	0	0	1	0	1	0	0	1	1	7
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:30 PM	1	1	0	2	0	0	0	0	0	0	0	1	1	1	0	0	1	4
05:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	1	0	4	0	0	0	0	0	0	2	1	3	1	0	1	2	9
Grand Total	7	2	0	9	0	0	0	0	0	3	1	4	4	1	0	2	3	16
Apprch %	77.8	22.2	0		0	0	0		0	75	25			33.3	0	66.7		
Total %	43.8	12.5	0	56.2	0	0	0	0	0	18.8	6.2	25		6.2	0	12.5	18.8	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 05:00 PM																		
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:30 PM	1	1	0	2	0	0	0	0	0	0	0	1	1	1	0	0	1	4
05:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	3	1	0	4	0	0	0	0	0	2	1	3	3	1	0	1	2	9
% App. Total	75	25	0		0	0	0		0	66.7	33.3			50	0	50		
PHF	.750	.250	.000	.500	.000	.000	.000	.000	.000	.250	.250	.375		.250	.000	.250	.500	.563

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
+30 mins.	1	1	0	2	0	0	0	0	0	0	1	1	1	0	0	0	1
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	3	1	0	4	0	0	0	0	0	2	1	3	1	0	1	2	2
% App. Total	75	25	0		0	0	0		0	66.7	33.3		50	0	50		
PHF	.750	.250	.000	.500	.000	.000	.000	.000	.000	.250	.250	.375	.250	.000	.250	.500	

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

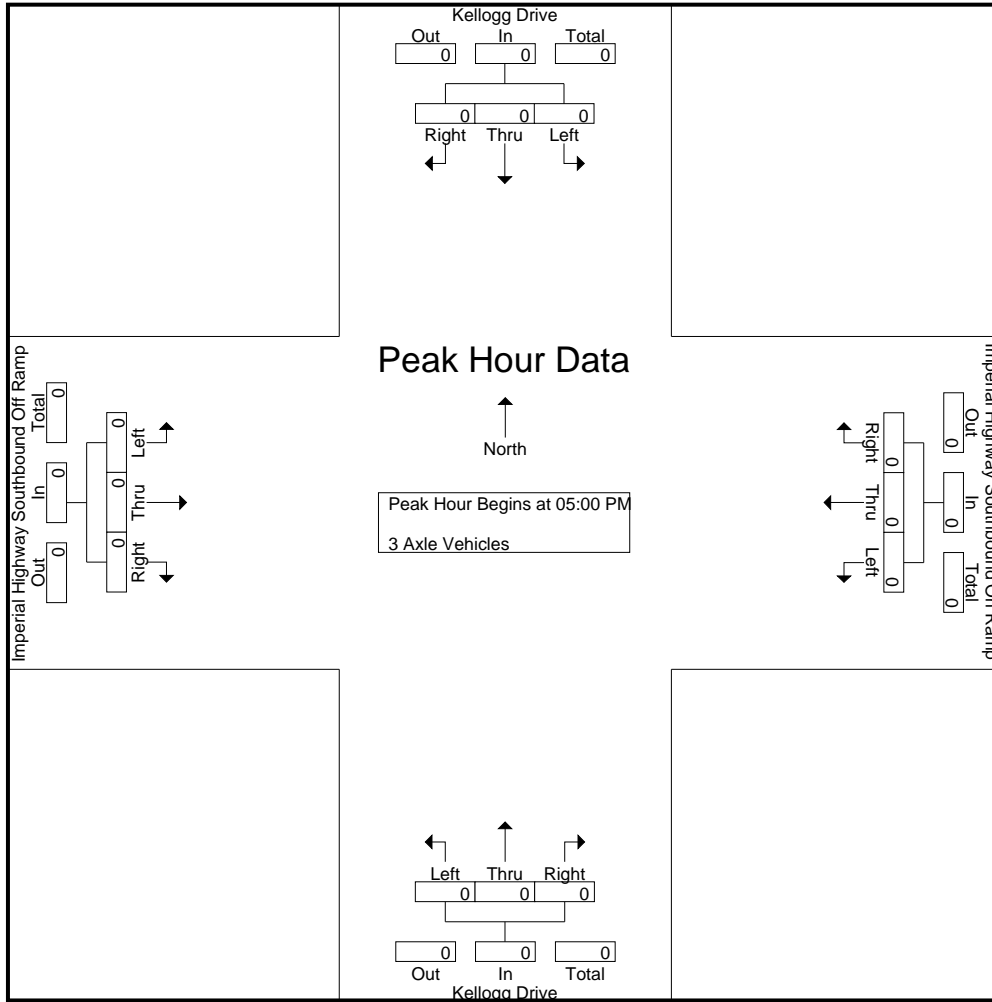
Groups Printed- 3 Axle Vehicles

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	100	0	0		0	0	0		0	0	0		0	0	0			
Total %	100	0	0	100	0	0	0		0	0	0		0	0	0			

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 05:00 PM																		
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellogg_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

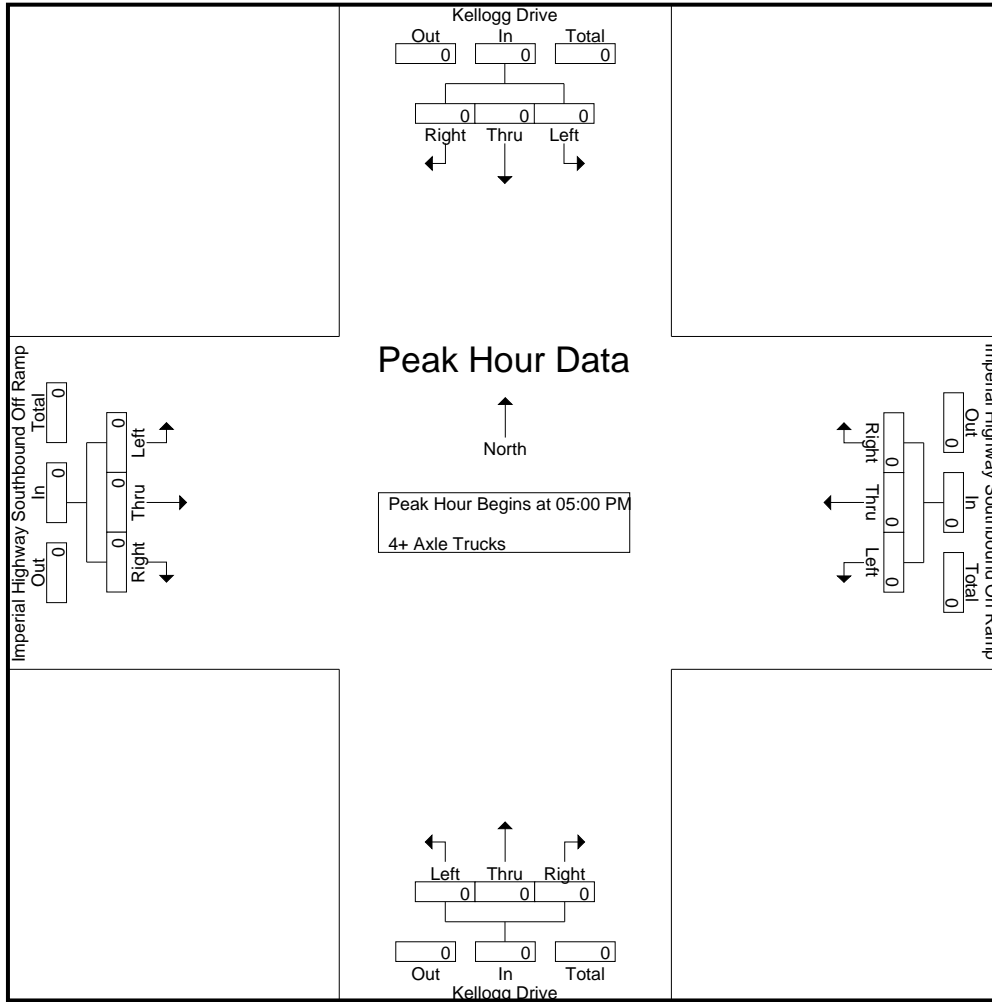
Groups Printed- 4+ Axle Trucks

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Kellogg Drive Southbound				Imperial Highway Southbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Southbound Ramps
 Weather: Clear

File Name : 07_YLA_Kellog_Imp SB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Hwy SB Ramps



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Kellogg Drive	East Leg Imperial Hwy SB Ramps	South Leg Kellogg Drive	West Leg Imperial Hwy SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	2	0	1	3
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	1	4

	North Leg Kellogg Drive	East Leg Imperial Hwy SB Ramps	South Leg Kellogg Drive	West Leg Imperial Hwy SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	5	0	0	5
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	5	0	0	5
5:15 PM	0	2	0	0	2
5:30 PM	0	1	1	5	7
5:45 PM	0	3	0	1	4
TOTAL VOLUMES:	0	17	1	6	24

Location: Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Hwy SB Ramps



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Kellogg Drive			Westbound Imperial Hwy SB Ramps			Northbound Kellogg Drive			Eastbound Imperial Hwy SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
7:45 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	4	0	0	0	0	0	3	0	0	0	0	7

	Southbound Kellogg Drive			Westbound Imperial Hwy SB Ramps			Northbound Kellogg Drive			Eastbound Imperial Hwy SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:45 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
TOTAL VOLUMES:	0	5	0	0	0	0	0	5	0	0	0	0	10

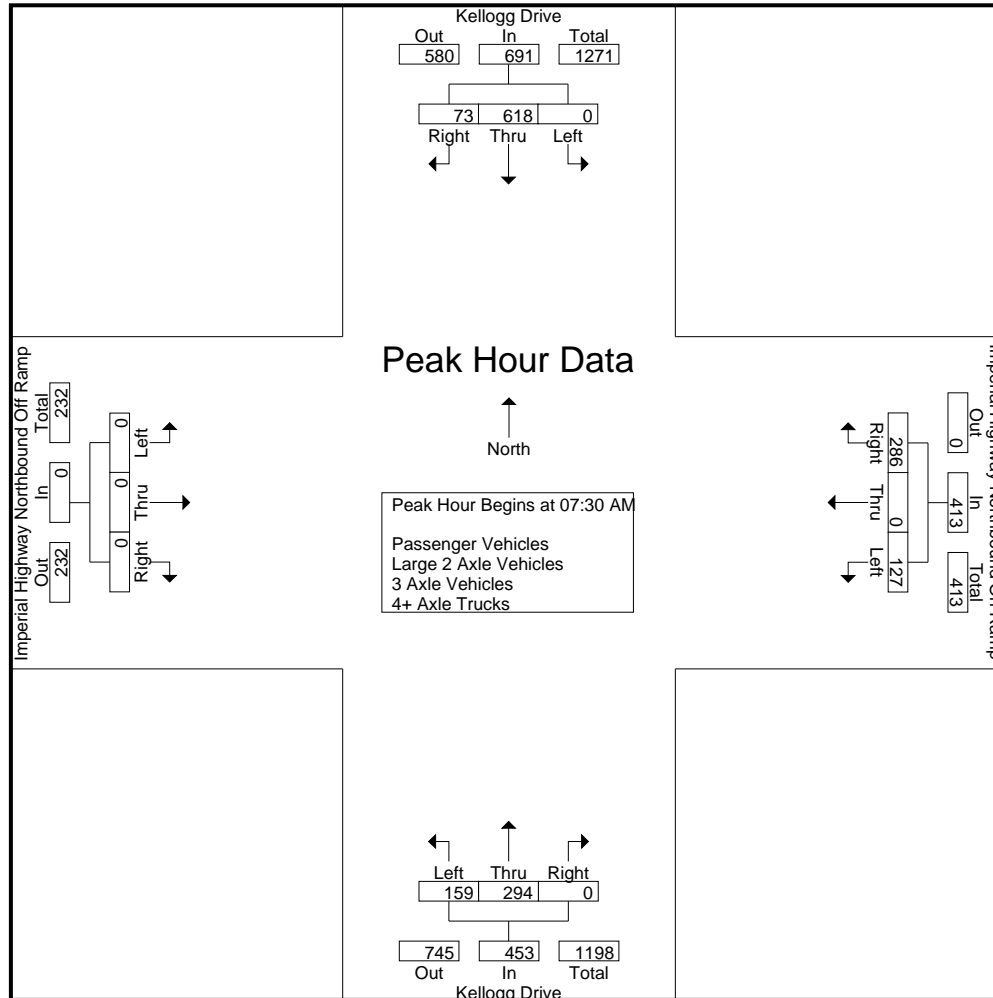
City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	83	14	2	97	15	1	33	27	49	22	11	0	0	33	0	0	0	0	0	29	179	208
07:15 AM	0	116	14	0	130	11	0	69	60	80	24	25	0	0	49	0	0	0	0	0	60	259	319
07:30 AM	0	181	26	1	207	37	0	81	56	118	49	68	0	0	117	0	0	0	0	0	57	442	499
07:45 AM	0	191	10	3	201	73	0	68	34	141	66	113	0	0	179	0	0	0	0	0	37	521	558
Total	0	571	64	6	635	136	1	251	177	388	161	217	0	0	378	0	0	0	0	0	183	1401	1584
08:00 AM	0	118	16	0	134	11	0	60	38	71	24	53	0	0	77	0	0	0	0	0	38	282	320
08:15 AM	0	128	21	2	149	6	0	77	76	83	20	60	0	0	80	0	0	0	0	0	78	312	390
08:30 AM	0	123	14	0	137	9	0	67	61	76	27	33	0	0	60	0	0	0	0	0	61	273	334
08:45 AM	0	76	11	0	87	10	0	62	58	72	21	26	0	0	47	0	0	0	0	0	58	206	264
Total	0	445	62	2	507	36	0	266	233	302	92	172	0	0	264	0	0	0	0	0	235	1073	1308
Grand Total	0	1016	126	8	1142	172	1	517	410	690	253	389	0	0	642	0	0	0	0	0	418	2474	2892
Apprch %	0	89	11			24.9	0.1	74.9			39.4	60.6	0			0	0	0					
Total %	0	41.1	5.1		46.2	7	0	20.9		27.9	10.2	15.7	0		25.9	0	0	0		0	14.5	85.5	
Passenger Vehicles	0	1002	126		1136	167	1	488		1046	245	379	0		624	0	0	0		0	0	0	2806
% Passenger Vehicles	0	98.6	100	100	98.8	97.1	100	94.4	95.1	95.1	96.8	97.4	0	0	97.2	0	0	0	0	0	0	0	97
Large 2 Axle Vehicles	0	11	0		11	4	0	23		42	7	8	0		15	0	0	0		0	0	0	68
% Large 2 Axle Vehicles	0	1.1	0	0	1	2.3	0	4.4	3.7	3.8	2.8	2.1	0	0	2.3	0	0	0	0	0	0	0	2.4
3 Axle Vehicles	0	2	0		2	1	0	5		10	1	2	0		3	0	0	0		0	0	0	15
% 3 Axle Vehicles	0	0.2	0	0	0.2	0.6	0	1	1	0.9	0.4	0.5	0	0	0.5	0	0	0	0	0	0	0	0.5
4+ Axle Trucks	0	1	0		1	0	0	1		2	0	0	0		0	0	0	0		0	0	0	3
% 4+ Axle Trucks	0	0.1	0	0	0.1	0	0	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	181	26	207	37	0	81	118	49	68	0	117	0	0	0	0	442
07:45 AM	0	191	10	201	73	0	68	141	66	113	0	179	0	0	0	0	521
08:00 AM	0	118	16	134	11	0	60	71	24	53	0	77	0	0	0	0	282
08:15 AM	0	128	21	149	6	0	77	83	20	60	0	80	0	0	0	0	312
Total Volume	0	618	73	691	127	0	286	413	159	294	0	453	0	0	0	0	1557
% App. Total	0	89.4	10.6		30.8	0	69.2		35.1	64.9	0		0	0	0		
PHF	.000	.809	.702	.835	.435	.000	.883	.732	.602	.650	.000	.633	.000	.000	.000	.000	.747



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:00 AM				
+0 mins.	0	181	26	207	37	0	81	118	49	68	0	117	0	0	0	0	
+15 mins.	0	191	10	201	73	0	68	141	66	113	0	179	0	0	0	0	
+30 mins.	0	118	16	134	11	0	60	71	24	53	0	77	0	0	0	0	
+45 mins.	0	128	21	149	6	0	77	83	20	60	0	80	0	0	0	0	
Total Volume	0	618	73	691	127	0	286	413	159	294	0	453	0	0	0	0	
% App. Total	0	89.4	10.6		30.8	0	69.2		35.1	64.9	0		0	0	0		
PHF	.000	.809	.702	.835	.435	.000	.883	.732	.602	.650	.000	.633	.000	.000	.000	.000	

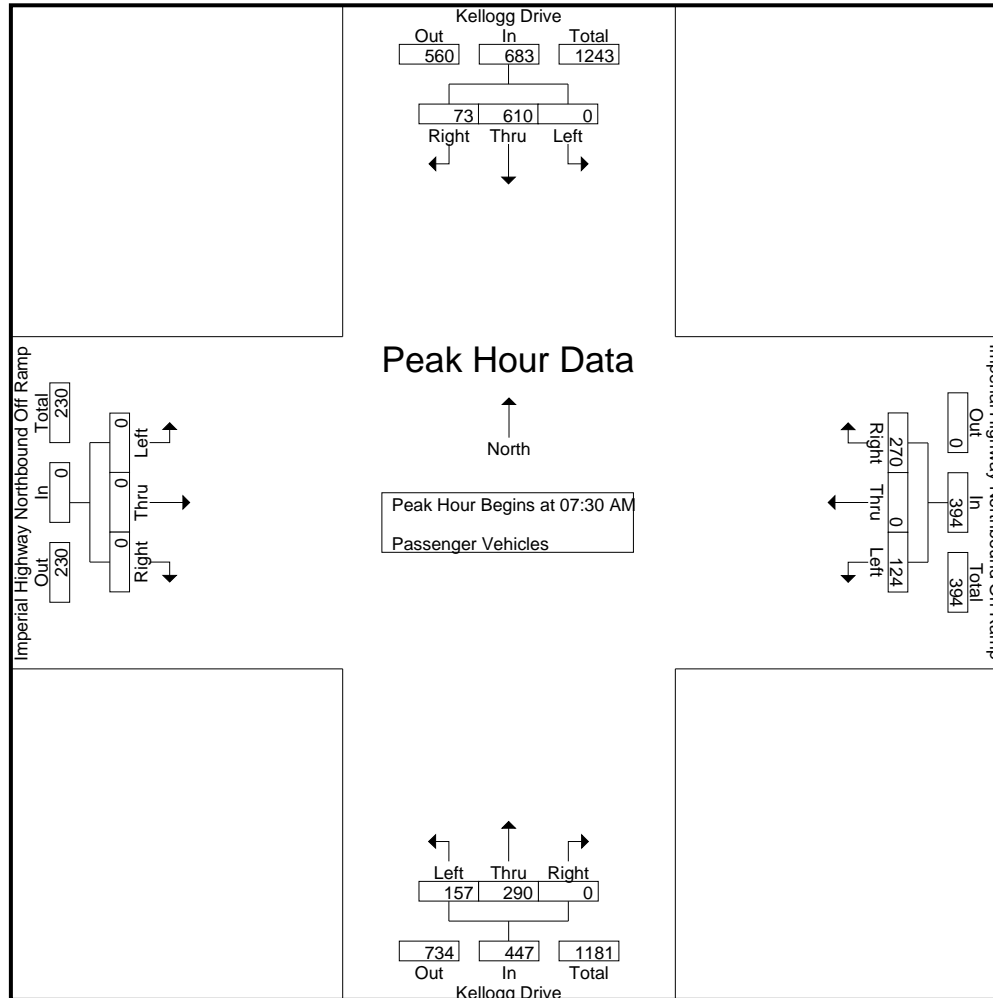
City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	81	14	2	95	15	1	29	24	45	21	9	0	0	30	0	0	0	0	0	26	170	196
07:15 AM	0	114	14	0	128	10	0	67	58	77	21	23	0	0	44	0	0	0	0	0	58	249	307
07:30 AM	0	178	26	1	204	37	0	75	53	112	49	67	0	0	116	0	0	0	0	0	54	432	486
07:45 AM	0	191	10	3	201	71	0	66	33	137	66	113	0	0	179	0	0	0	0	0	36	517	553
Total	0	564	64	6	628	133	1	237	168	371	157	212	0	0	369	0	0	0	0	0	174	1368	1542
08:00 AM	0	116	16	0	132	10	0	55	36	65	24	51	0	0	75	0	0	0	0	0	36	272	308
08:15 AM	0	125	21	2	146	6	0	74	73	80	18	59	0	0	77	0	0	0	0	0	75	303	378
08:30 AM	0	123	14	0	137	8	0	63	58	71	27	32	0	0	59	0	0	0	0	0	58	267	325
08:45 AM	0	74	11	0	85	10	0	59	55	69	19	25	0	0	44	0	0	0	0	0	55	198	253
Total	0	438	62	2	500	34	0	251	222	285	88	167	0	0	255	0	0	0	0	0	224	1040	1264
Grand Total	0	1002	126	8	1128	167	1	488	390	656	245	379	0	0	624	0	0	0	0	0	398	2408	2806
Apprch %	0	88.8	11.2			25.5	0.2	74.4			39.3	60.7	0			0	0	0					
Total %	0	41.6	5.2		46.8	6.9	0	20.3		27.2	10.2	15.7	0		25.9	0	0	0			14.2	85.8	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	178	26	204	37	0	75	112	49	67	0	116	0	0	0	0	432
07:45 AM	0	191	10	201	71	0	66	137	66	113	0	179	0	0	0	0	517
08:00 AM	0	116	16	132	10	0	55	65	24	51	0	75	0	0	0	0	272
08:15 AM	0	125	21	146	6	0	74	80	18	59	0	77	0	0	0	0	303
Total Volume	0	610	73	683	124	0	270	394	157	290	0	447	0	0	0	0	1524
% App. Total	0	89.3	10.7		31.5	0	68.5		35.1	64.9	0		0	0	0		
PHF	.000	.798	.702	.837	.437	.000	.900	.719	.595	.642	.000	.624	.000	.000	.000	.000	.737



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	178	26	204	37	0	75	112	49	67	0	116	0	0	0	0	
+15 mins.	0	191	10	201	71	0	66	137	66	113	0	179	0	0	0	0	
+30 mins.	0	116	16	132	10	0	55	65	24	51	0	75	0	0	0	0	
+45 mins.	0	125	21	146	6	0	74	80	18	59	0	77	0	0	0	0	
Total Volume	0	610	73	683	124	0	270	394	157	290	0	447	0	0	0	0	
% App. Total	0	89.3	10.7		31.5	0	68.5		35.1	64.9	0		0	0	0		
PHF	.000	.798	.702	.837	.437	.000	.900	.719	.595	.642	.000	.624	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

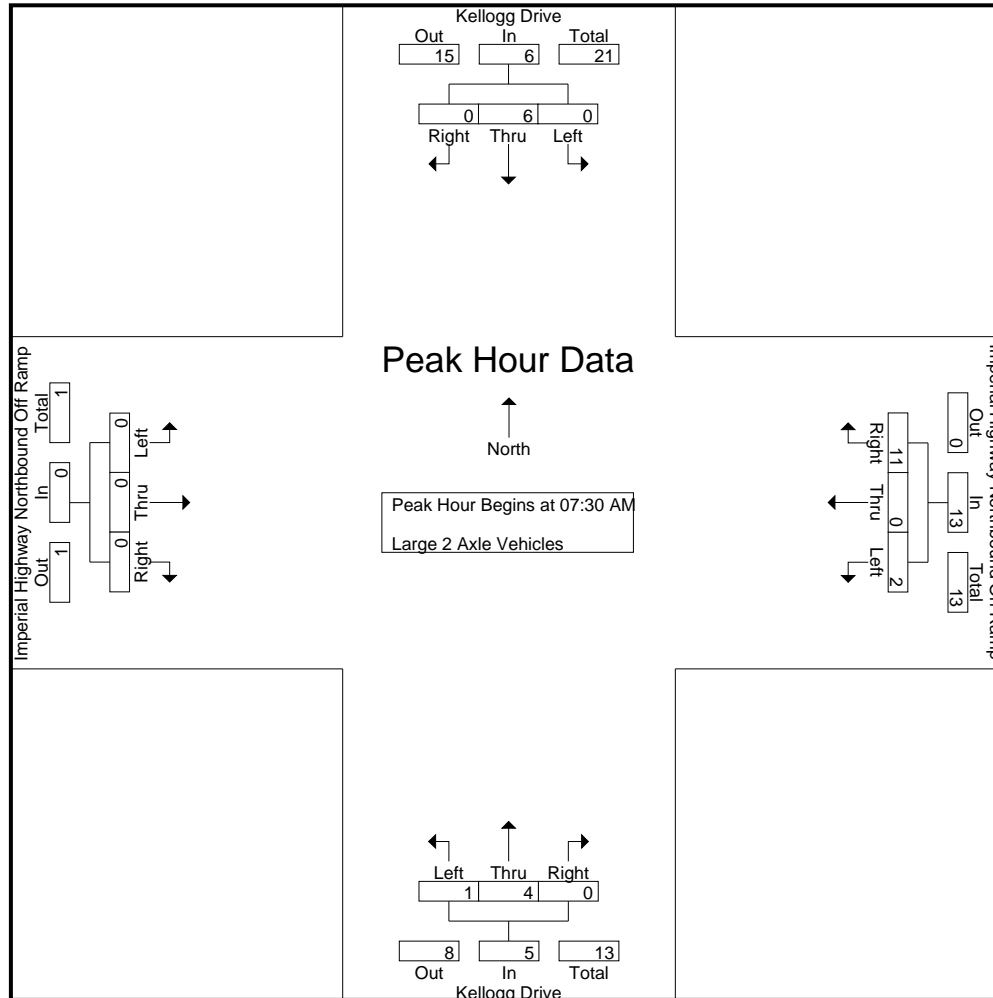
Groups Printed- Large 2 Axle Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	2	0	0	2	0	0	3	2	3	1	1	0	0	2	0	0	0	0	0	2	7	9
07:15 AM	0	2	0	0	2	1	0	2	2	3	3	1	0	0	4	0	0	0	0	0	2	9	11
07:30 AM	0	3	0	0	3	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	0	7	7
07:45 AM	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	2	3
Total	0	7	0	0	7	2	0	9	5	11	4	3	0	0	7	0	0	0	0	0	5	25	30
08:00 AM	0	1	0	0	1	1	0	4	1	5	0	2	0	0	2	0	0	0	0	0	1	8	9
08:15 AM	0	2	0	0	2	0	0	3	3	3	1	1	0	0	2	0	0	0	0	0	3	7	10
08:30 AM	0	0	0	0	0	1	0	4	3	5	0	1	0	0	1	0	0	0	0	0	3	6	9
08:45 AM	0	1	0	0	1	0	0	3	3	3	2	1	0	0	3	0	0	0	0	0	3	7	10
Total	0	4	0	0	4	2	0	14	10	16	3	5	0	0	8	0	0	0	0	0	10	28	38
Grand Total	0	11	0	0	11	4	0	23	15	27	7	8	0	0	15	0	0	0	0	0	15	53	68
Apprch %	0	100	0			14.8	0	85.2			46.7	53.3	0			0	0	0					
Total %	0	20.8	0		20.8	7.5	0	43.4		50.9	13.2	15.1	0		28.3	0	0	0		0	22.1	77.9	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	0	3	0	0	3	3	0	1	0	1	0	0	0	0	7
07:45 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	1	0	1	1	0	4	5	0	2	0	2	0	0	0	0	8
08:15 AM	0	2	0	2	0	0	3	3	1	1	0	2	0	0	0	0	7
Total Volume	0	6	0	6	2	0	11	13	1	4	0	5	0	0	0	0	24
% App. Total	0	100	0		15.4	0	84.6		20	80	0		0	0	0		
PHF	.000	.500	.000	.500	.500	.000	.688	.650	.250	.500	.000	.625	.000	.000	.000	.000	.750

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	3	0	3	0	0	3	3	0	1	0	1	0	0	0	0	
+15 mins.	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	1	0	4	5	0	2	0	2	0	0	0	0	
+45 mins.	0	2	0	2	0	0	3	3	1	1	0	2	0	0	0	0	
Total Volume	0	6	0	6	2	0	11	13	1	4	0	5	0	0	0	0	
% App. Total	0	100	0		15.4	0	84.6		20	80	0		0	0	0		
PHF	.000	.500	.000	.500	.500	.000	.688	.650	.250	.500	.000	.625	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

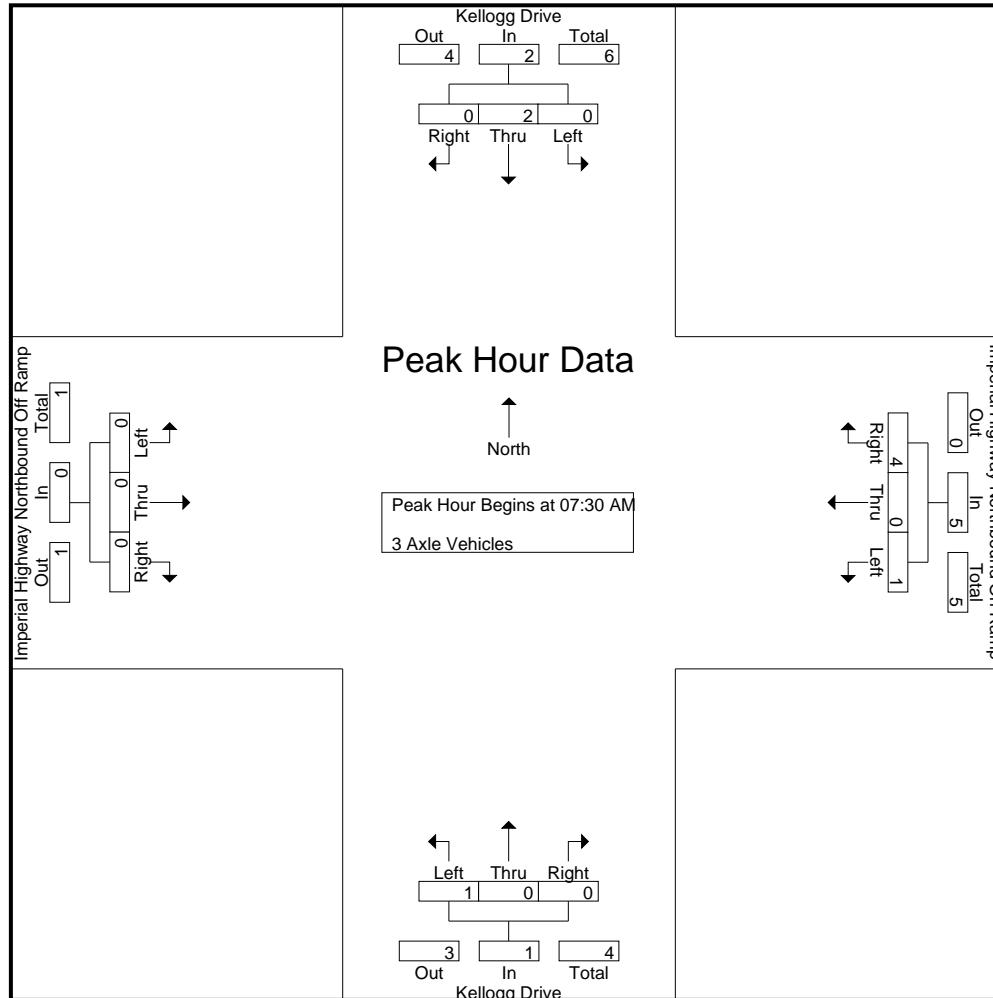
Groups Printed- 3 Axle Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	1	2	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	3	3	6
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	1	0	5	4	6	0	2	0	0	2	0	0	0	0	0	4	8	12
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:15 AM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	3
Grand Total	0	2	0	0	2	1	0	5	4	6	1	2	0	0	3	0	0	0	0	0	4	11	15
Apprch %	0	100	0			16.7	0	83.3			33.3	66.7	0			0	0	0					
Total %	0	18.2	0		18.2	9.1	0	45.5		54.5	9.1	18.2	0		27.3	0	0	0		0	26.7	73.3	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total Volume	0	2	0	2	1	0	4	5	1	0	0	1	0	0	0	0	8
% App. Total	0	100	0		20	0	80		100	0	0		0	0	0		
PHF	.000	.500	.000	.500	.250	.000	.333	.417	.250	.000	.000	.250	.000	.000	.000	.000	.667

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	
Total Volume	0	2	0	2	1	0	4	5	1	0	0	1	0	0	0	0	
% App. Total	0	100	0		20	0	80		100	0	0		0	0	0		
PHF	.000	.500	.000	.500	.250	.000	.333	.417	.250	.000	.000	.250	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

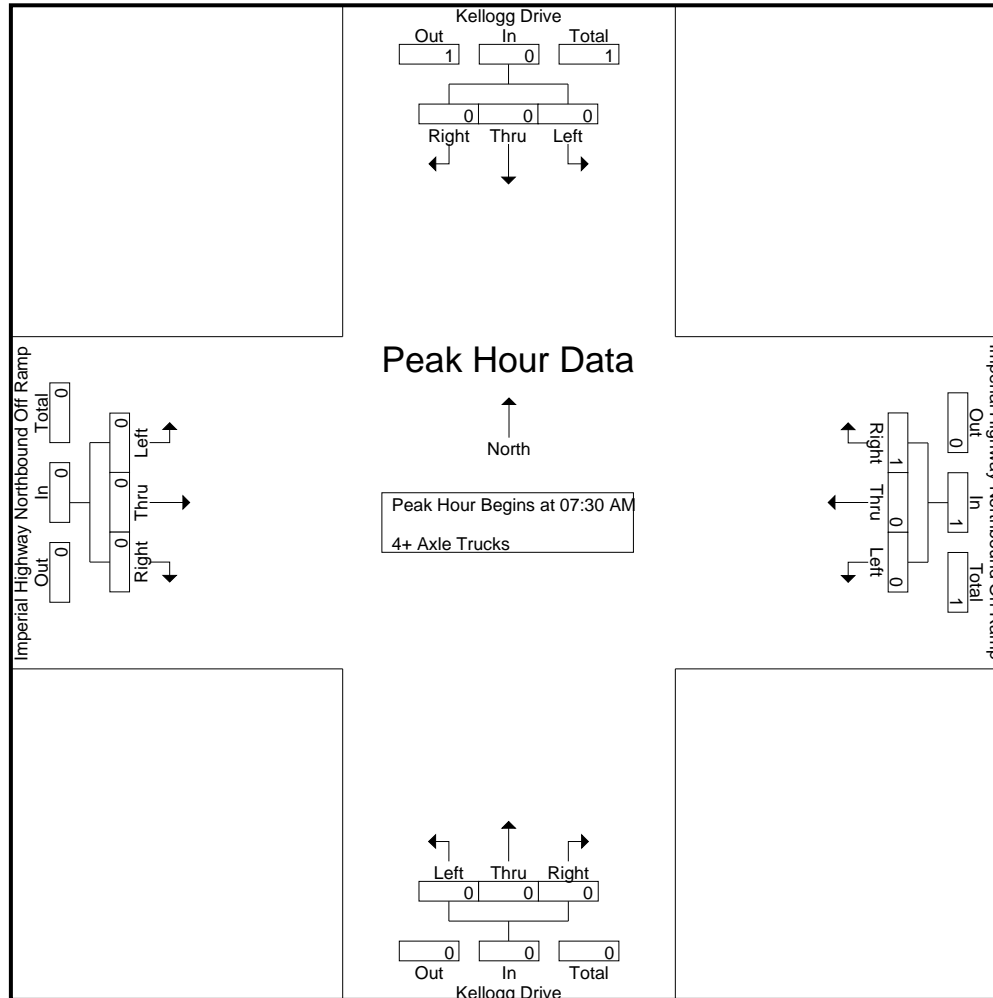
Groups Printed- 4+ Axle Trucks

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Total	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	3	1	2	3
Grand Total	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	3	1	2	3
Apprch %	0	100	0			0	0	100			0	0	0			0	0	0								
Total %	0	50	0		50	0	0	50		50	0	0	0		0	0	0	0		0	33.3	66.7				

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total				
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 07:30 AM																				
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000

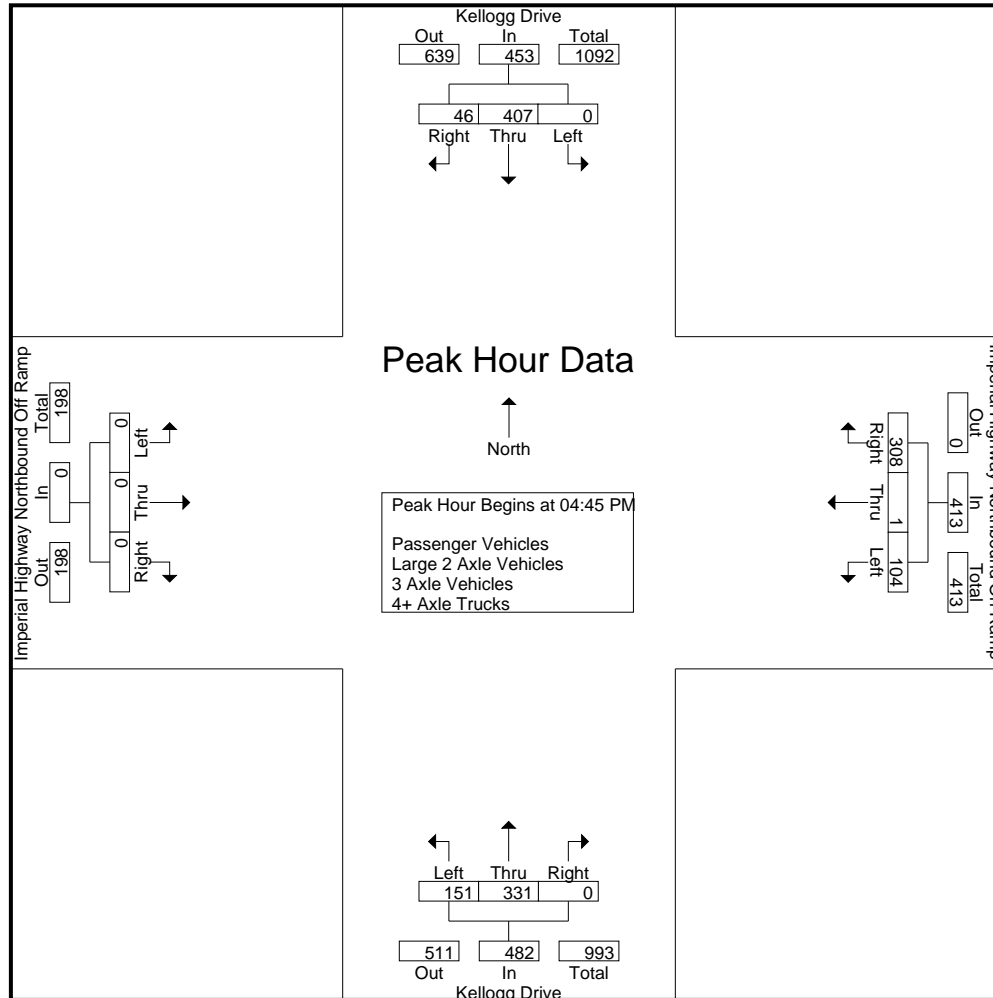
City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	87	13	0	100	20	0	71	54	91	44	72	0	0	116	0	0	0	0	0	54	307	361
04:15 PM	0	92	16	1	108	21	0	77	52	98	31	86	0	0	117	0	0	0	0	0	53	323	376
04:30 PM	0	83	6	0	89	26	0	75	47	101	38	74	0	0	112	0	0	0	0	0	47	302	349
04:45 PM	0	107	10	1	117	35	0	83	44	118	27	71	0	0	98	0	0	0	0	0	45	333	378
Total	0	369	45	2	414	102	0	306	197	408	140	303	0	0	443	0	0	0	0	0	199	1265	1464
05:00 PM	0	102	18	1	120	18	0	83	50	101	51	77	0	0	128	0	0	0	0	0	51	349	400
05:15 PM	0	83	7	1	90	27	1	79	49	107	29	74	0	0	103	0	0	0	0	0	50	300	350
05:30 PM	0	115	11	3	126	24	0	63	41	87	44	109	0	0	153	0	0	0	0	0	44	366	410
05:45 PM	0	98	6	1	104	35	0	77	47	112	34	81	0	0	115	0	0	0	0	0	48	331	379
Total	0	398	42	6	440	104	1	302	187	407	158	341	0	0	499	0	0	0	0	0	193	1346	1539
Grand Total	0	767	87	8	854	206	1	608	384	815	298	644	0	0	942	0	0	0	0	0	392	2611	3003
Apprch %	0	89.8	10.2			25.3	0.1	74.6			31.6	68.4	0			0	0	0					
Total %	0	29.4	3.3		32.7	7.9	0	23.3		31.2	11.4	24.7	0		36.1	0	0	0		0	13.1	86.9	
Passenger Vehicles	0	757	86		851	205	1	600		1184	296	640	0		936	0	0	0		0	0	0	2971
% Passenger Vehicles	0	98.7	98.9	100	98.7	99.5	100	98.7	98.4	98.7	99.3	99.4	0	0	99.4	0	0	0	0	0	0	0	98.9
Large 2 Axle Vehicles	0	9	1		10	1	0	8		15	2	4	0		6	0	0	0		0	0	0	31
% Large 2 Axle Vehicles	0	1.2	1.1	0	1.2	0.5	0	1.3	1.6	1.3	0.7	0.6	0	0	0.6	0	0	0	0	0	0	0	1
3 Axle Vehicles	0	1	0		1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1
% 3 Axle Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	107	10	117	35	0	83	118	27	71	0	98	0	0	0	0	333
05:00 PM	0	102	18	120	18	0	83	101	51	77	0	128	0	0	0	0	349
05:15 PM	0	83	7	90	27	1	79	107	29	74	0	103	0	0	0	0	300
05:30 PM	0	115	11	126	24	0	63	87	44	109	0	153	0	0	0	0	366
Total Volume	0	407	46	453	104	1	308	413	151	331	0	482	0	0	0	0	1348
% App. Total	0	89.8	10.2		25.2	0.2	74.6		31.3	68.7	0		0	0	0		
PHF	.000	.885	.639	.899	.743	.250	.928	.875	.740	.759	.000	.788	.000	.000	.000	.000	.921



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:30 PM				05:00 PM				04:00 PM				
+0 mins.	0	107	10	117	26	0	75	101	51	77	0	128	0	0	0	0	
+15 mins.	0	102	18	120	35	0	83	118	29	74	0	103	0	0	0	0	
+30 mins.	0	83	7	90	18	0	83	101	44	109	0	153	0	0	0	0	
+45 mins.	0	115	11	126	27	1	79	107	34	81	0	115	0	0	0	0	
Total Volume	0	407	46	453	106	1	320	427	158	341	0	499	0	0	0	0	
% App. Total	0	89.8	10.2		24.8	0.2	74.9		31.7	68.3	0		0	0	0		
PHF	.000	.885	.639	.899	.757	.250	.964	.905	.775	.782	.000	.815	.000	.000	.000	.000	

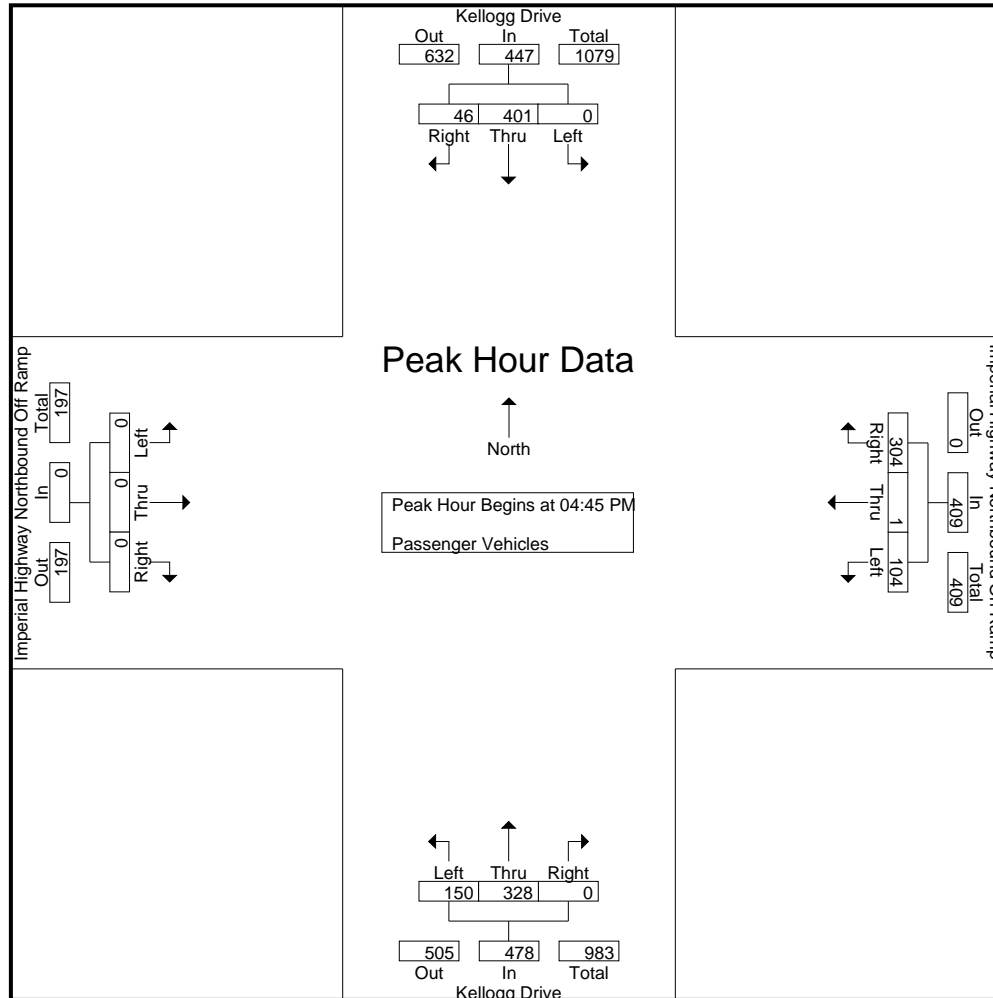
City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	86	12	0	98	20	0	71	54	91	43	72	0	0	115	0	0	0	0	0	54	304	358
04:15 PM	0	90	16	1	106	20	0	76	51	96	31	85	0	0	116	0	0	0	0	0	52	318	370
04:30 PM	0	83	6	0	89	26	0	74	47	100	38	74	0	0	112	0	0	0	0	0	47	301	348
04:45 PM	0	105	10	1	115	35	0	83	44	118	27	71	0	0	98	0	0	0	0	0	45	331	376
Total	0	364	44	2	408	101	0	304	196	405	139	302	0	0	441	0	0	0	0	0	198	1254	1452
05:00 PM	0	100	18	1	118	18	0	81	48	99	51	77	0	0	128	0	0	0	0	0	49	345	394
05:15 PM	0	83	7	1	90	27	1	78	48	106	28	73	0	0	101	0	0	0	0	0	49	297	346
05:30 PM	0	113	11	3	124	24	0	62	40	86	44	107	0	0	151	0	0	0	0	0	43	361	404
05:45 PM	0	97	6	1	103	35	0	75	46	110	34	81	0	0	115	0	0	0	0	0	47	328	375
Total	0	393	42	6	435	104	1	296	182	401	157	338	0	0	495	0	0	0	0	0	188	1331	1519
Grand Total	0	757	86	8	843	205	1	600	378	806	296	640	0	0	936	0	0	0	0	0	386	2585	2971
Apprch %	0	89.8	10.2			25.4	0.1	74.4			31.6	68.4	0			0	0	0					
Total %	0	29.3	3.3		32.6	7.9	0	23.2		31.2	11.5	24.8	0		36.2	0	0	0			13	87	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	105	10	115	35	0	83	118	27	71	0	98	0	0	0	0	331
05:00 PM	0	100	18	118	18	0	81	99	51	77	0	128	0	0	0	0	345
05:15 PM	0	83	7	90	27	1	78	106	28	73	0	101	0	0	0	0	297
05:30 PM	0	113	11	124	24	0	62	86	44	107	0	151	0	0	0	0	361
Total Volume	0	401	46	447	104	1	304	409	150	328	0	478	0	0	0	0	1334
% App. Total	0	89.7	10.3		25.4	0.2	74.3		31.4	68.6	0		0	0	0		
PHF	.000	.887	.639	.901	.743	.250	.916	.867	.735	.766	.000	.791	.000	.000	.000	.000	.924



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	105	10	115	35	0	83	118	27	71	0	98	0	0	0	0	
+15 mins.	0	100	18	118	18	0	81	99	51	77	0	128	0	0	0	0	
+30 mins.	0	83	7	90	27	1	78	106	28	73	0	101	0	0	0	0	
+45 mins.	0	113	11	124	24	0	62	86	44	107	0	151	0	0	0	0	
Total Volume	0	401	46	447	104	1	304	409	150	328	0	478	0	0	0	0	
% App. Total	0	89.7	10.3		25.4	0.2	74.3		31.4	68.6	0		0	0	0		
PHF	.000	.887	.639	.901	.743	.250	.916	.867	.735	.766	.000	.791	.000	.000	.000	.000	

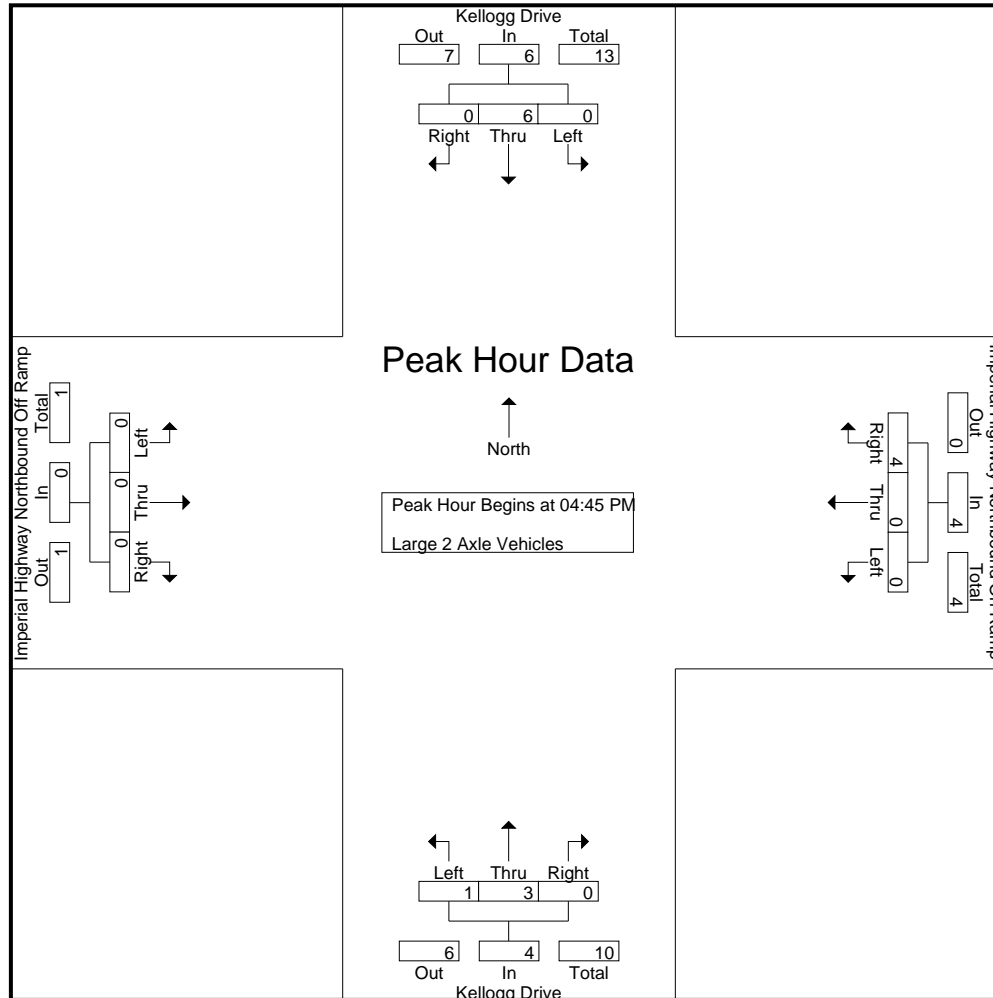
City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	2	0	0	2	1	0	1	1	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	5	6
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	4	1	0	5	1	0	2	1	3	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	10	11
05:00 PM	0	2	0	0	2	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6
05:15 PM	0	0	0	0	0	0	0	1	1	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	3	4
05:30 PM	0	2	0	0	2	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	5	6
05:45 PM	0	1	0	0	1	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4
Total	0	5	0	0	5	0	0	6	5	6	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	5	15	20
Grand Total	0	9	1	0	10	1	0	8	6	9	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	6	25	31
Apprch %	0	90	10			11.1	0	88.9			33.3	66.7	0			0	0	0										
Total %	0	36	4		40	4	0	32		36	8	16	0		24	0	0	0		0						19.4	80.6	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
05:30 PM	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0	5
Total Volume	0	6	0	6	0	0	4	4	1	3	0	4	0	0	0	0	14
% App. Total	0	100	0		0	0	100		25	75	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.500	.500	.250	.375	.000	.500	.000	.000	.000	.000	.700



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	
+45 mins.	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0	
Total Volume	0	6	0	6	0	0	4	4	1	3	0	4	0	0	0	0	
% App. Total	0	100	0		0	0	100		25	75	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.500	.500	.250	.375	.000	.500	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

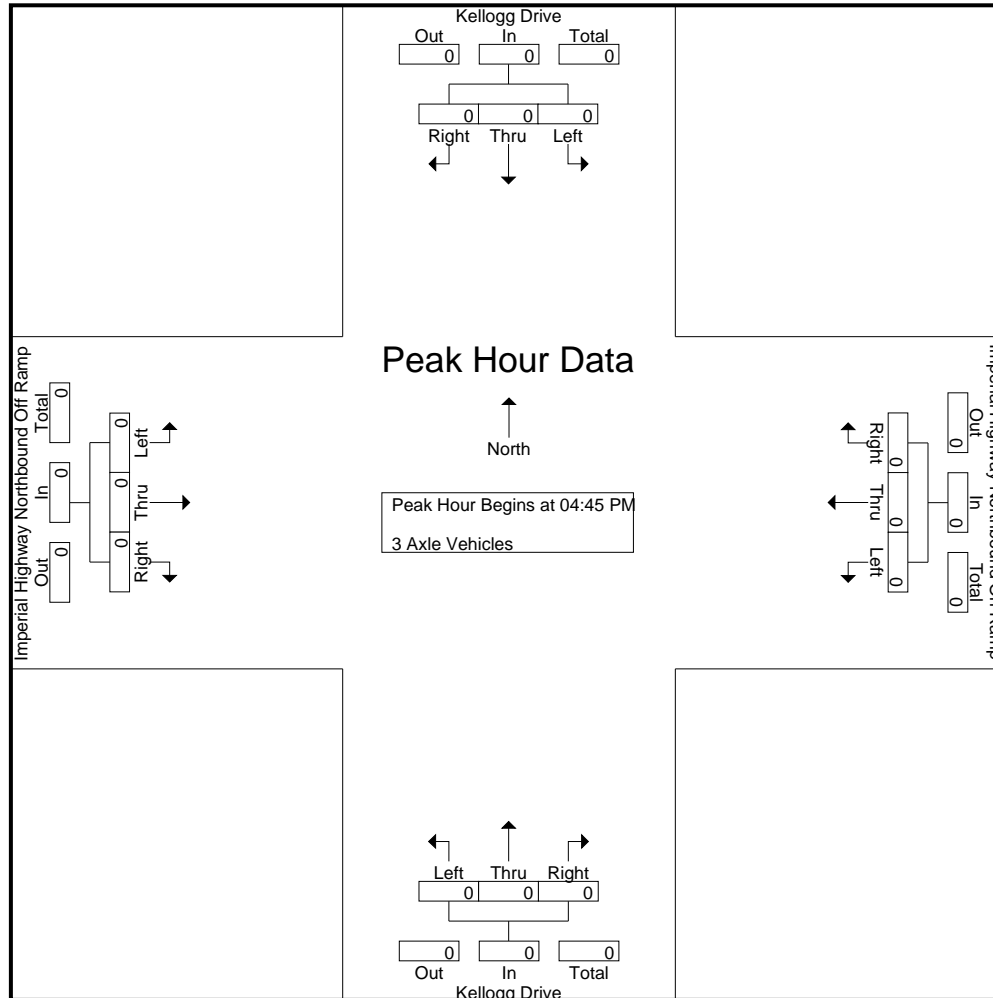
Groups Printed- 3 Axle Vehicles

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	100	0			0	0	0			0	0	0			0	0	0			0	0	0			0		
Total %	0	100	0		100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	100	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellogg_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

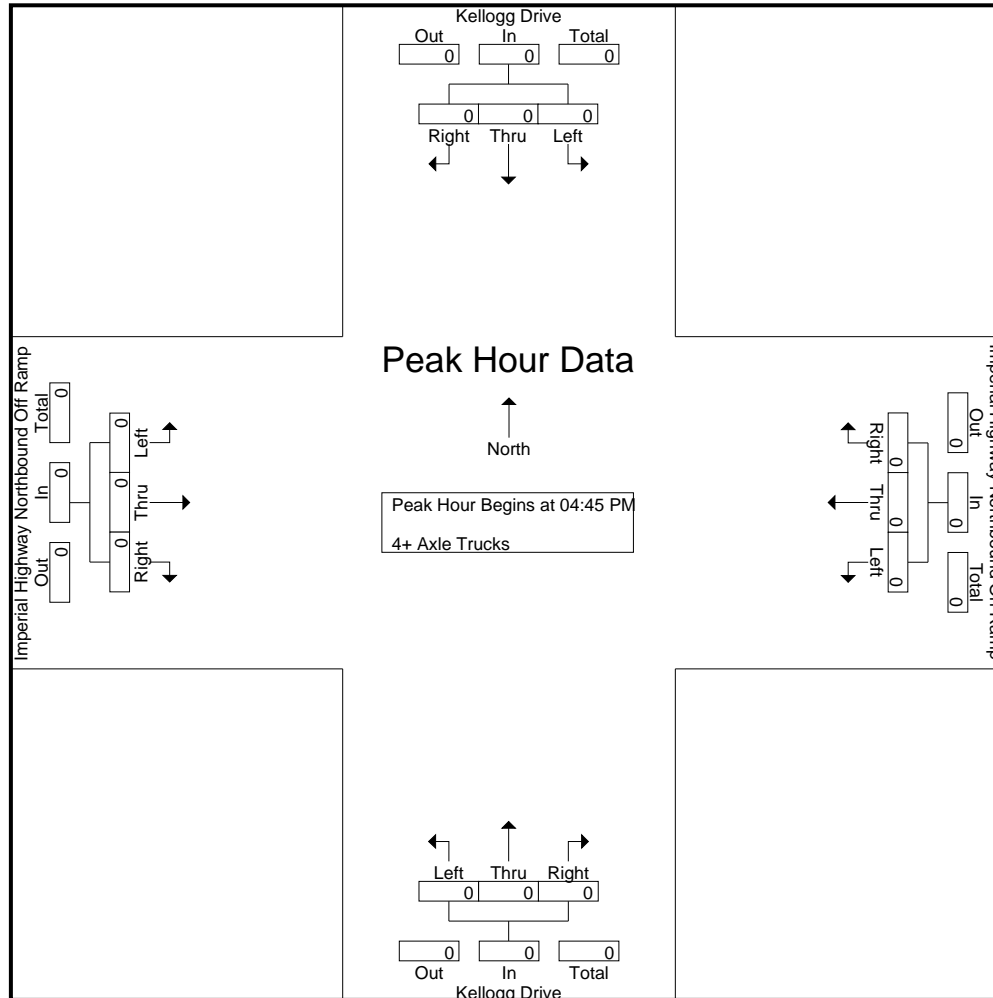
Groups Printed- 4+ Axle Trucks

Start Time	Kellogg Drive Southbound					Imperial Highway Northbound On Ramp Westbound					Kellogg Drive Northbound					Imperial Highway Northbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0			0	0	0			0	0	0			0	0	0								
Total %																								0	0	

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Highway Northbound Ramps
 Weather: Clear

File Name : 08_YLA_Kellog_Imp NB PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Kellogg Drive Southbound				Imperial Highway Northbound On Ramp Westbound				Kellogg Drive Northbound				Imperial Highway Northbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Hwy NB Ramps



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Kellogg Drive	East Leg Imperial Hwy NB Ramps	South Leg Kellogg Drive	West Leg Imperial Hwy NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	1	0	0	1
7:45 AM	0	2	0	1	3
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	2	5

	North Leg Kellogg Drive	East Leg Imperial Hwy NB Ramps	South Leg Kellogg Drive	West Leg Imperial Hwy NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	4	0	0	4
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	5	0	0	5
5:15 PM	0	2	0	0	2
5:30 PM	0	1	0	4	5
5:45 PM	0	3	0	1	4
TOTAL VOLUMES:	0	17	0	5	22

Location: Yorba Linda
 N/S: Kellogg Drive
 E/W: Imperial Hwy NB Ramps



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Kellogg Drive			Westbound Imperial Hwy NB Ramps			Northbound Kellogg Drive			Eastbound Imperial Hwy NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	3
7:45 AM	0	3	0	0	0	0	0	1	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	5	0	0	0	0	1	3	0	0	0	0	9

	Southbound Kellogg Drive			Westbound Imperial Hwy NB Ramps			Northbound Kellogg Drive			Eastbound Imperial Hwy NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:45 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
TOTAL VOLUMES:	0	5	0	0	0	0	0	5	0	0	0	0	10

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

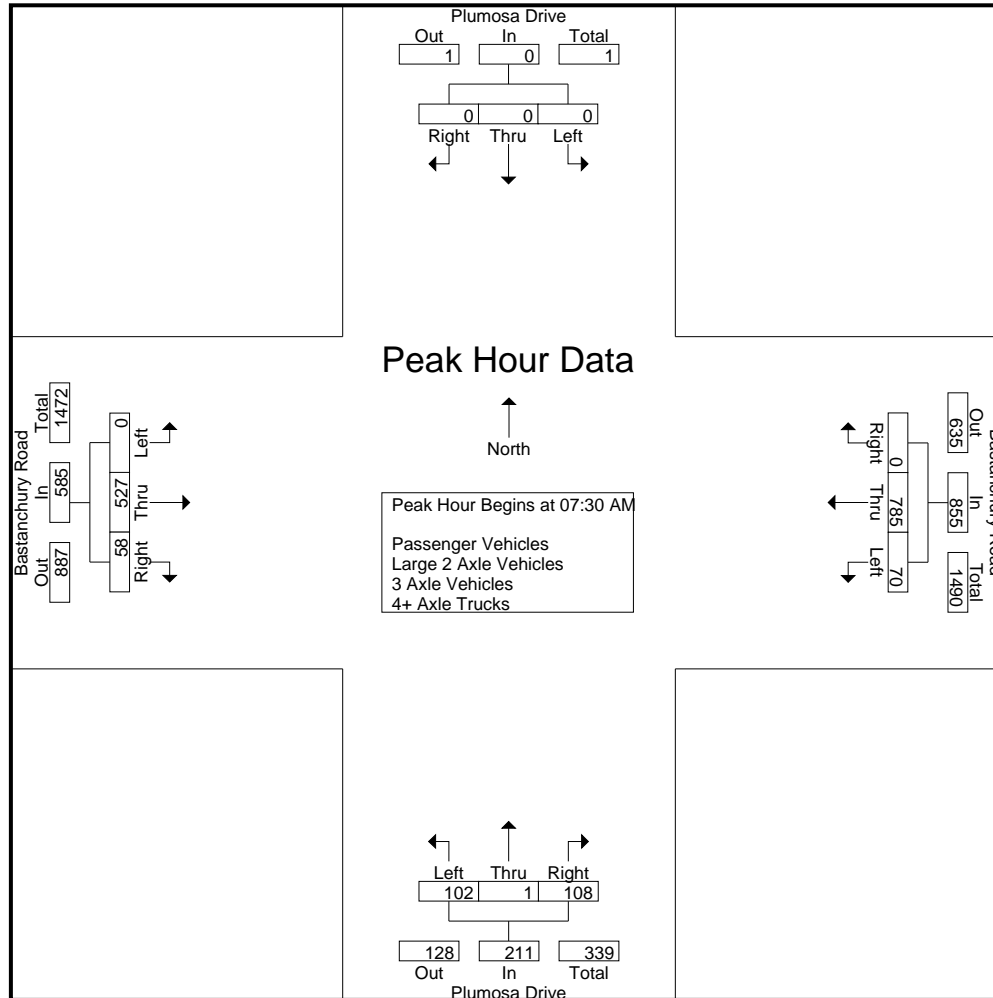
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	132	0	0	132	9	0	1	1	10	0	46	6	0	52	1	194	195
07:15 AM	0	0	0	0	0	8	175	0	0	183	8	0	6	4	14	0	69	10	1	79	5	276	281
07:30 AM	0	0	0	0	0	41	232	0	0	273	37	0	46	30	83	0	109	21	2	130	32	486	518
07:45 AM	0	0	0	0	0	23	164	0	0	187	40	0	48	21	88	0	169	24	2	193	23	468	491
Total	0	0	0	0	0	72	703	0	0	775	94	0	101	56	195	0	393	61	5	454	61	1424	1485
08:00 AM	0	0	0	0	0	6	188	0	0	194	15	0	9	8	24	0	121	10	3	131	11	349	360
08:15 AM	0	0	0	0	0	0	201	0	0	201	10	1	5	3	16	0	128	3	0	131	3	348	351
08:30 AM	0	0	0	0	0	0	228	0	0	228	13	0	4	3	17	0	123	8	0	131	3	376	379
08:45 AM	0	0	0	0	0	2	150	0	0	152	3	0	5	4	8	0	110	7	0	117	4	277	281
Total	0	0	0	0	0	8	767	0	0	775	41	1	23	18	65	0	482	28	3	510	21	1350	1371
Grand Total	0	0	0	0	0	80	1470	0	0	1550	135	1	124	74	260	0	875	89	8	964	82	2774	2856
Apprch %	0	0	0			5.2	94.8	0			51.9	0.4	47.7			0	90.8	9.2					
Total %	0	0	0			2.9	53	0		55.9	4.9	0	4.5		9.4	0	31.5	3.2		34.8	2.9	97.1	
Passenger Vehicles	0	0	0			79	1452	0		1531	134	0	120		324	0	849	86		942	0	0	2797
% Passenger Vehicles	0	0	0	0	0	98.8	98.8	0	0	98.8	99.3	0	96.8	94.6	97	0	97	96.6	87.5	96.9	0	0	97.9
Large 2 Axle Vehicles	0	0	0			1	16	0		17	1	1	3		8	0	25	2		27	0	0	52
% Large 2 Axle Vehicles	0	0	0	0	0	1.2	1.1	0	0	1.1	0.7	100	2.4	4.1	2.4	0	2.9	2.2	0	2.8	0	0	1.8
3 Axle Vehicles	0	0	0			0	2	0		2	0	0	1		2	0	0	1		2	0	0	6
% 3 Axle Vehicles	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.8	1.4	0.6	0	0	1.1	12.5	0.2	0	0	0.2
4+ Axle Trucks	0	0	0			0	0	0		0	0	0	0		0	0	1	0		1	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	41	232	0	273	37	0	46	83	0	109	21	130	486
07:45 AM	0	0	0	0	23	164	0	187	40	0	48	88	0	169	24	193	468
08:00 AM	0	0	0	0	6	188	0	194	15	0	9	24	0	121	10	131	349
08:15 AM	0	0	0	0	0	201	0	201	10	1	5	16	0	128	3	131	348
Total Volume	0	0	0	0	70	785	0	855	102	1	108	211	0	527	58	585	1651
% App. Total	0	0	0	0	8.2	91.8	0		48.3	0.5	51.2		0	90.1	9.9		
PHF	.000	.000	.000	.000	.427	.846	.000	.783	.638	.250	.563	.599	.000	.780	.604	.758	.849

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:30 AM				07:30 AM				07:45 AM				
+0 mins.	0	0	0	0	41	232	0	273	37	0	46	83	0	169	24	193	
+15 mins.	0	0	0	0	23	164	0	187	40	0	48	88	0	121	10	131	
+30 mins.	0	0	0	0	6	188	0	194	15	0	9	24	0	128	3	131	
+45 mins.	0	0	0	0	0	201	0	201	10	1	5	16	0	123	8	131	
Total Volume	0	0	0	0	70	785	0	855	102	1	108	211	0	541	45	586	
% App. Total	0	0	0	0	8.2	91.8	0		48.3	0.5	51.2		0	92.3	7.7		
PHF	.000	.000	.000	.000	.427	.846	.000	.783	.638	.250	.563	.599	.000	.800	.469	.759	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

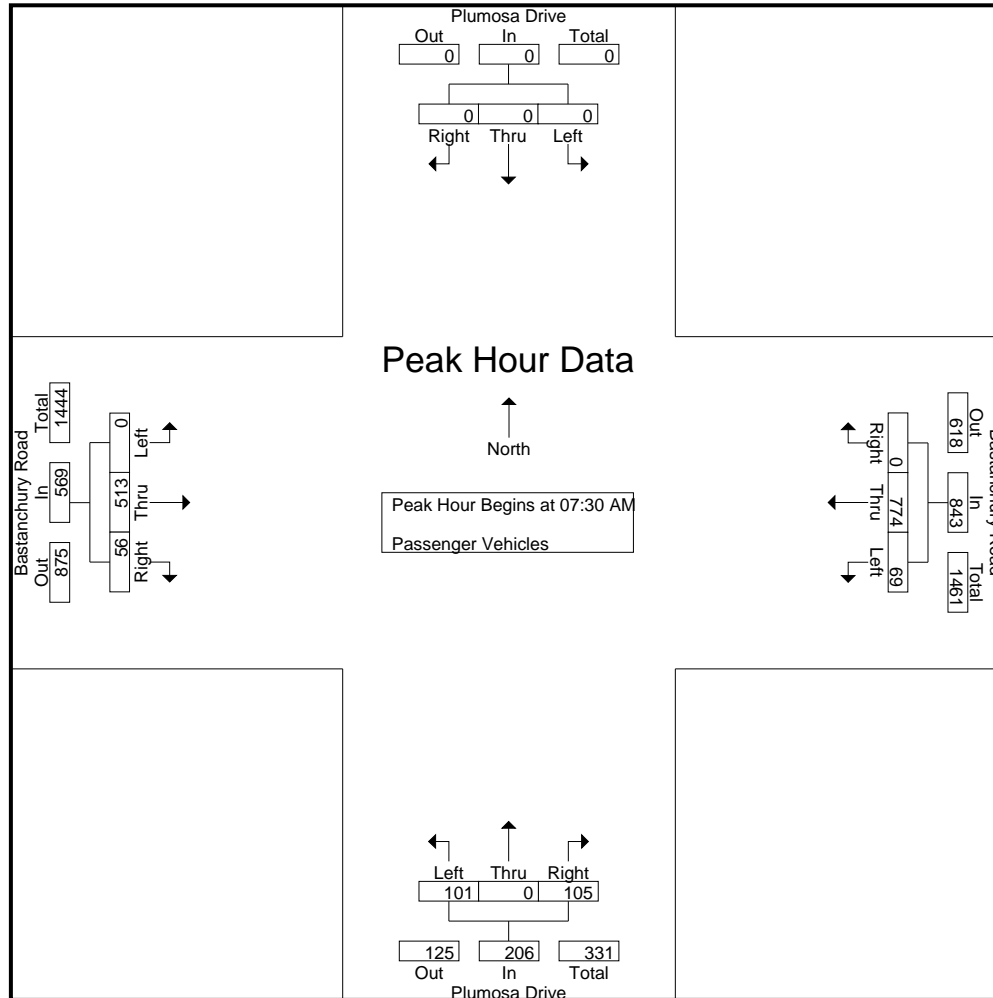
Groups Printed- Passenger Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	130	0	0	130	9	0	1	1	10	0	44	6	0	50	1	190	191
07:15 AM	0	0	0	0	0	8	175	0	0	183	8	0	6	4	14	0	66	10	1	76	5	273	278
07:30 AM	0	0	0	0	0	40	227	0	0	267	36	0	45	29	81	0	108	20	2	128	31	476	507
07:45 AM	0	0	0	0	0	23	163	0	0	186	40	0	48	21	88	0	166	23	1	189	22	463	485
Total	0	0	0	0	0	71	695	0	0	766	93	0	100	55	193	0	384	59	4	443	59	1402	1461
08:00 AM	0	0	0	0	0	6	186	0	0	192	15	0	8	7	23	0	119	10	3	129	10	344	354
08:15 AM	0	0	0	0	0	0	198	0	0	198	10	0	4	2	14	0	120	3	0	123	2	335	337
08:30 AM	0	0	0	0	0	0	226	0	0	226	13	0	4	3	17	0	119	7	0	126	3	369	372
08:45 AM	0	0	0	0	0	2	147	0	0	149	3	0	4	3	7	0	107	7	0	114	3	270	273
Total	0	0	0	0	0	8	757	0	0	765	41	0	20	15	61	0	465	27	3	492	18	1318	1336
Grand Total	0	0	0	0	0	79	1452	0	0	1531	134	0	120	70	254	0	849	86	7	935	77	2720	2797
Apprch %	0	0	0			5.2	94.8	0			52.8	0	47.2			0	90.8	9.2					
Total %	0	0	0			2.9	53.4	0		56.3	4.9	0	4.4		9.3	0	31.2	3.2		34.4	2.8	97.2	

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	40	227	0	267	36	0	45	81	0	108	20	128	476
07:45 AM	0	0	0	0	23	163	0	186	40	0	48	88	0	166	23	189	463
08:00 AM	0	0	0	0	6	186	0	192	15	0	8	23	0	119	10	129	344
08:15 AM	0	0	0	0	0	198	0	198	10	0	4	14	0	120	3	123	335
Total Volume	0	0	0	0	69	774	0	843	101	0	105	206	0	513	56	569	1618
% App. Total	0	0	0	0	8.2	91.8	0		49	0	51		0	90.2	9.8		
PHF	.000	.000	.000	.000	.431	.852	.000	.789	.631	.000	.547	.585	.000	.773	.609	.753	.850

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	40	227	0	267	36	0	45	81	0	108	20	128	
+15 mins.	0	0	0	0	23	163	0	186	40	0	48	88	0	166	23	189	
+30 mins.	0	0	0	0	6	186	0	192	15	0	8	23	0	119	10	129	
+45 mins.	0	0	0	0	0	198	0	198	10	0	4	14	0	120	3	123	
Total Volume	0	0	0	0	69	774	0	843	101	0	105	206	0	513	56	569	
% App. Total	0	0	0	0	8.2	91.8	0		49	0	51		0	90.2	9.8		
PHF	.000	.000	.000	.000	.431	.852	.000	.789	.631	.000	.547	.585	.000	.773	.609	.753	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

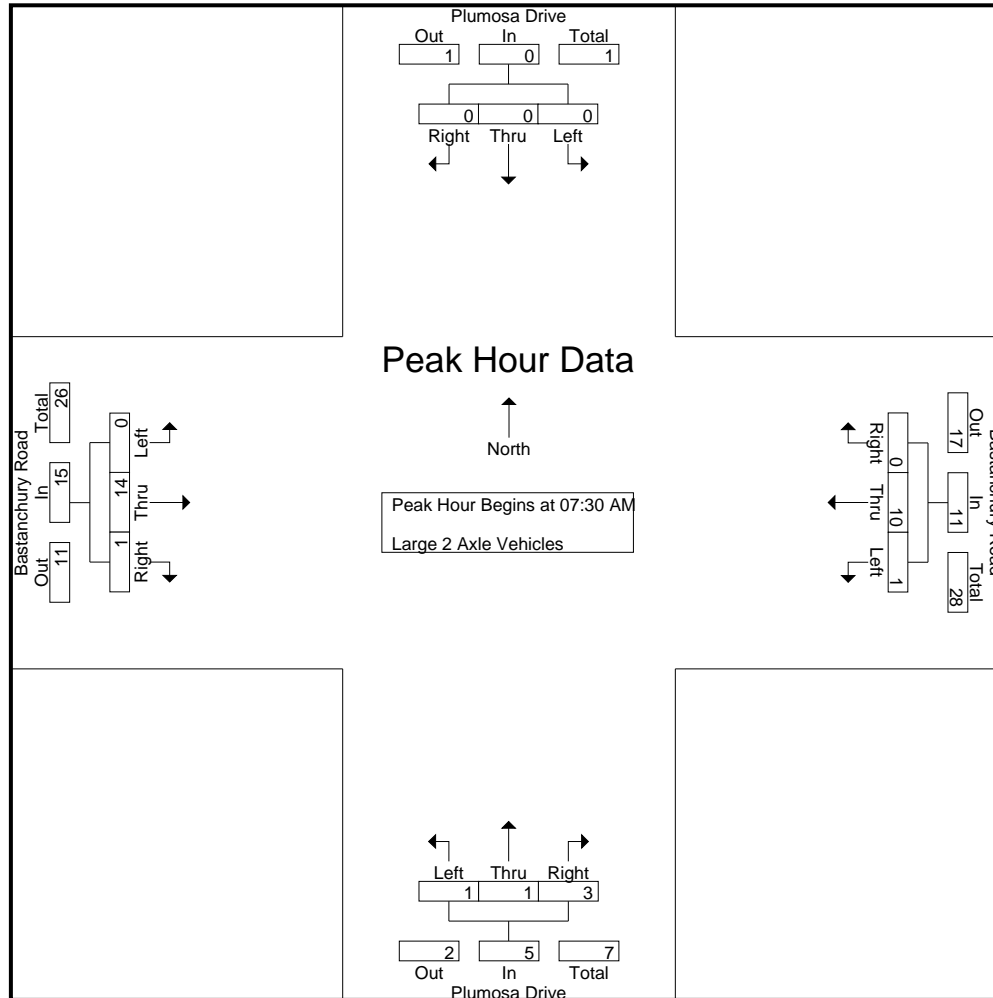
Groups Printed- Large 2 Axle Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	3	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3	3
07:30 AM	0	0	0	0	0	1	4	0	0	5	1	0	1	1	2	0	1	1	0	2	1	0	9	10
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	4	4
Total	0	0	0	0	0	1	7	0	0	8	1	0	1	1	2	0	8	1	0	9	1	0	19	20
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	1	1	0	2	0	0	2	1	0	5	6
08:15 AM	0	0	0	0	0	0	3	0	0	3	0	1	1	1	2	0	8	0	0	8	1	0	13	14
08:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	0	0	7	7
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	5	5
Total	0	0	0	0	0	0	9	0	0	9	0	1	2	2	3	0	17	1	0	18	2	0	30	32
Grand Total	0	0	0	0	0	1	16	0	0	17	1	1	3	3	5	0	25	2	0	27	3	0	49	52
Apprch %	0	0	0			5.9	94.1	0			20	20	60			0	92.6	7.4						
Total %	0	0	0			2	32.7	0		34.7	2	2	6.1		10.2	0	51	4.1		55.1	5.8		94.2	

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	1	4	0	5	1	0	1	2	0	1	1	2	9
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:00 AM	0	0	0	0	0	2	0	2	0	0	1	1	0	2	0	2	5
08:15 AM	0	0	0	0	0	3	0	3	0	1	1	2	0	8	0	8	13
Total Volume	0	0	0	0	1	10	0	11	1	1	3	5	0	14	1	15	31
% App. Total	0	0	0		9.1	90.9	0		20	20	60		0	93.3	6.7		
PHF	.000	.000	.000	.000	.250	.625	.000	.550	.250	.250	.750	.625	.000	.438	.250	.469	.596

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	1	4	0	5	1	0	1	2	0	1	1	2	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	
+30 mins.	0	0	0	0	0	2	0	2	0	0	1	1	0	2	0	2	
+45 mins.	0	0	0	0	0	3	0	3	0	1	1	2	0	8	0	8	
Total Volume	0	0	0	0	1	10	0	11	1	1	3	5	0	14	1	15	
% App. Total	0	0	0	0	9.1	90.9	0		20	20	60		0	93.3	6.7		
PHF	.000	.000	.000	.000	.250	.625	.000	.550	.250	.250	.750	.625	.000	.438	.250	.469	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

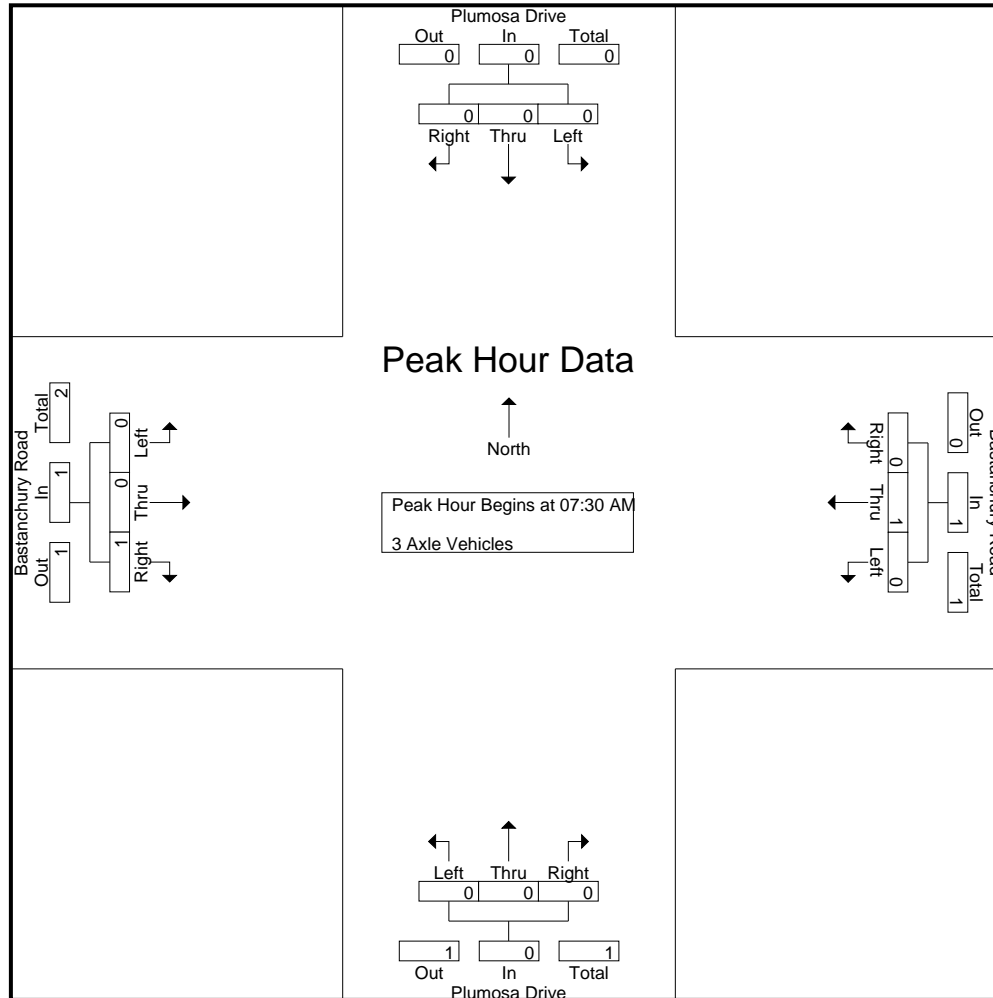
Groups Printed- 3 Axle Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	3
Total	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	3
Grand Total	0	0	0	0	0	0	2	0	0	2	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	2	4	6
Apprch %	0	0	0			0	100	0			0	0	100			0	0	100										
Total %	0	0	0			0	50	0		50	0	0	25		25	0	0	25		25						33.3	66.7	

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.500

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	0	100	100	100
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

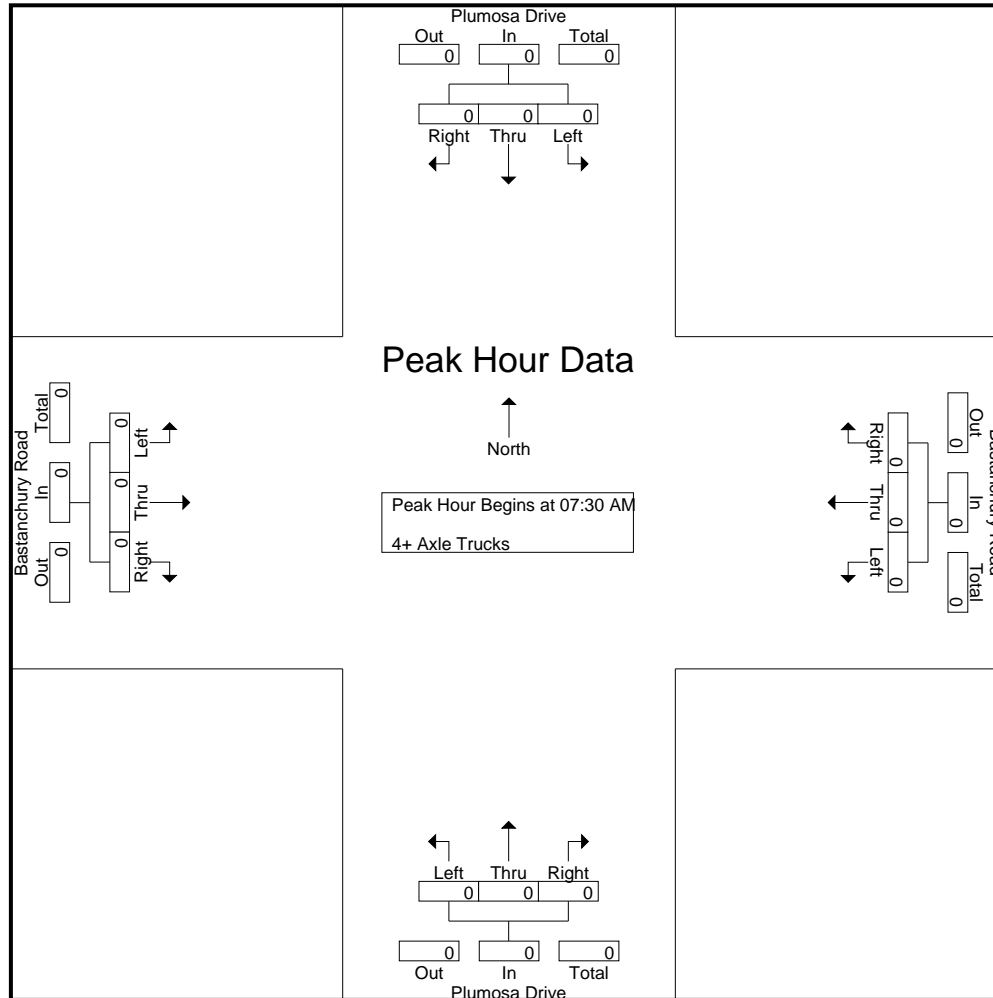
Groups Printed- 4+ Axle Trucks

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
Apprch %	0	0	0			0	0	0			0	0	0			0	100	0			0	0	100
Total %	0	0	0			0	0	0			0	0	0			0	100	0		100	0	0	100

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
N/S: Plumosa Drive
E/W: Bastanchury Road
Weather: Clear

File Name : 09_YLA_Plum_Bast AM
Site Code : 05122223
Start Date : 3/15/2022
Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

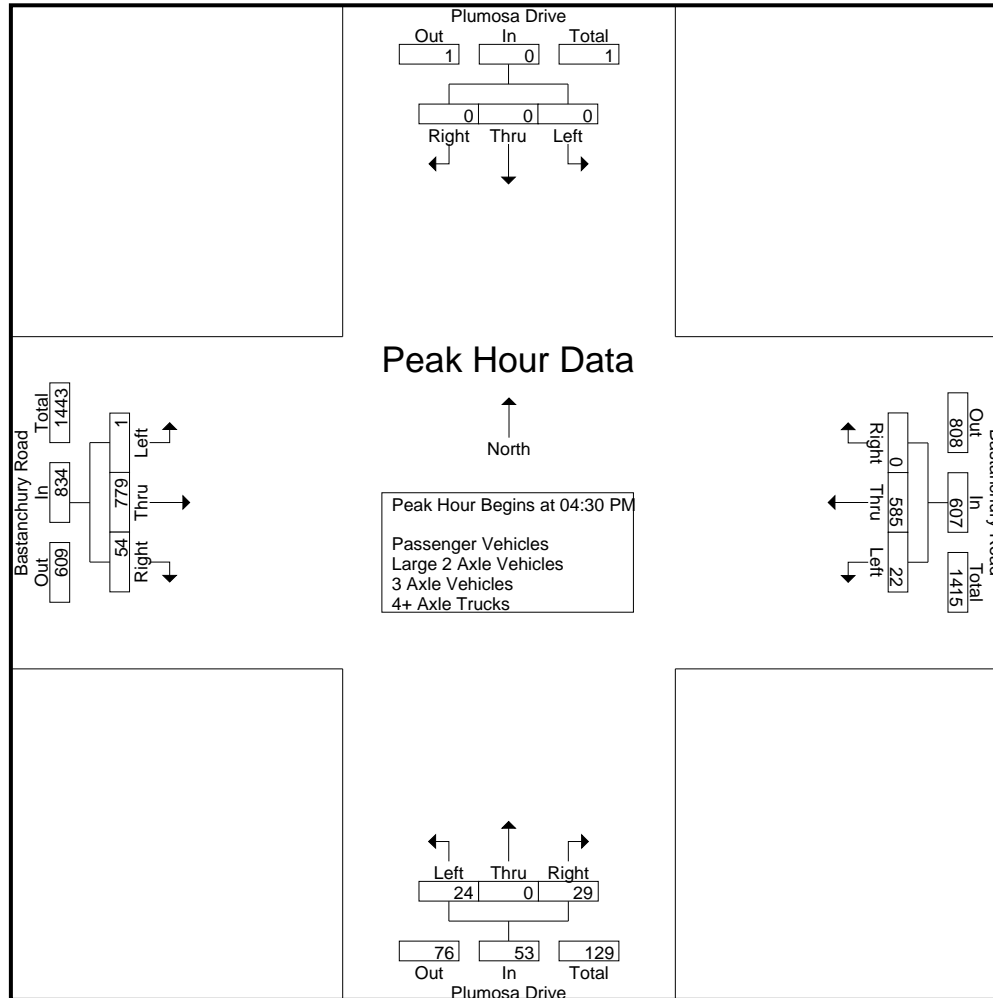
Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	6	159	0	0	165	8	0	3	3	11	0	168	13	2	181	5	357	362
04:15 PM	0	0	0	0	0	2	143	0	0	145	7	0	2	1	9	0	168	6	0	174	1	328	329
04:30 PM	0	0	0	0	0	7	150	0	0	157	8	0	5	3	13	0	185	13	3	198	6	368	374
04:45 PM	0	0	0	0	0	2	143	0	0	145	4	0	9	8	13	1	185	17	1	203	9	361	370
Total	0	0	0	0	0	17	595	0	0	612	27	0	19	15	46	1	706	49	6	756	21	1414	1435
05:00 PM	0	0	0	0	0	7	144	0	0	151	8	0	6	3	14	0	208	11	0	219	3	384	387
05:15 PM	0	0	0	0	0	6	148	0	0	154	4	0	9	9	13	0	201	13	0	214	9	381	390
05:30 PM	0	0	0	0	0	4	128	0	0	132	12	0	5	3	17	0	185	17	0	202	3	351	354
05:45 PM	0	0	0	0	0	1	134	0	0	135	10	0	6	5	16	0	173	13	0	186	5	337	342
Total	0	0	0	0	0	18	554	0	0	572	34	0	26	20	60	0	767	54	0	821	20	1453	1473
Grand Total	0	0	0	0	0	35	1149	0	0	1184	61	0	45	35	106	1	1473	103	6	1577	41	2867	2908
Apprch %	0	0	0			3	97	0			57.5	0	42.5			0.1	93.4	6.5					
Total %	0	0	0			1.2	40.1	0		41.3	2.1	0	1.6		3.7	0	51.4	3.6		55	1.4	98.6	
Passenger Vehicles	0	0	0			35	1136	0		1171	59	0	43		136	1	1466	102		1575	0	0	2882
% Passenger Vehicles	0	0	0			100	98.9	0		98.9	96.7	0	95.6	97.1	96.5	100	99.5	99	100	99.5	0	0	99.1
Large 2 Axle Vehicles	0	0	0			0	9	0		9	1	0	0		1	0	2	0		2	0	0	12
% Large 2 Axle Vehicles	0	0	0			0	0.8	0		0.8	1.6	0	0		0.7	0	0.1	0		0.1	0	0	0.4
3 Axle Vehicles	0	0	0			0	4	0		4	1	0	2		4	0	4	1		5	0	0	13
% 3 Axle Vehicles	0	0	0			0	0.3	0		0.3	1.6	0	4.4	2.9	2.8	0	0.3	1		0.3	0	0	0.4
4+ Axle Trucks	0	0	0			0	0	0		0	0	0	0		0	0	1	0		1	0	0	1
% 4+ Axle Trucks	0	0	0			0	0	0		0	0	0	0		0	0	0.1	0		0.1	0	0	0

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	7	150	0	157	8	0	5	13	0	185	13	198	368
04:45 PM	0	0	0	0	2	143	0	145	4	0	9	13	1	185	17	203	361
05:00 PM	0	0	0	0	7	144	0	151	8	0	6	14	0	208	11	219	384
05:15 PM	0	0	0	0	6	148	0	154	4	0	9	13	0	201	13	214	381
Total Volume	0	0	0	0	22	585	0	607	24	0	29	53	1	779	54	834	1494
% App. Total	0	0	0		3.6	96.4	0		45.3	0	54.7		0.1	93.4	6.5		
PHF	.000	.000	.000	.000	.786	.975	.000	.967	.750	.000	.806	.946	.250	.936	.794	.952	.973

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				04:45 PM				
+0 mins.	0	0	0	0	6	159	0	165	8	0	6	14	1	185	17	203	
+15 mins.	0	0	0	0	2	143	0	145	4	0	9	13	0	208	11	219	
+30 mins.	0	0	0	0	7	150	0	157	12	0	5	17	0	201	13	214	
+45 mins.	0	0	0	0	2	143	0	145	10	0	6	16	0	185	17	202	
Total Volume	0	0	0	0	17	595	0	612	34	0	26	60	1	779	58	838	
% App. Total	0	0	0	0	2.8	97.2	0		56.7	0	43.3		0.1	93	6.9		
PHF	.000	.000	.000	.000	.607	.936	.000	.927	.708	.000	.722	.882	.250	.936	.853	.957	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

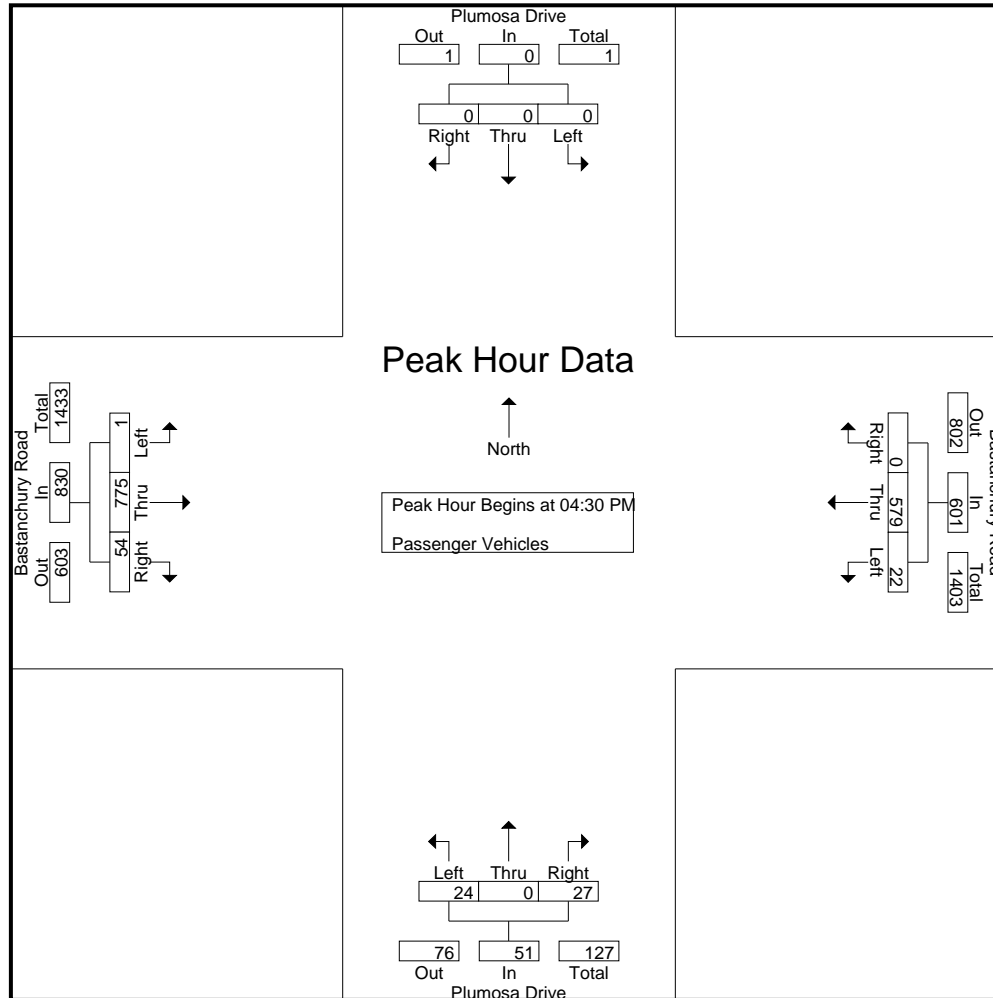
Groups Printed- Passenger Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	6	155	0	0	161	8	0	3	3	11	0	166	13	2	179	5	351	356
04:15 PM	0	0	0	0	0	2	142	0	0	144	6	0	2	1	8	0	168	6	0	174	1	326	327
04:30 PM	0	0	0	0	0	7	149	0	0	156	8	0	4	3	12	0	185	13	3	198	6	366	372
04:45 PM	0	0	0	0	0	2	143	0	0	145	4	0	9	8	13	1	185	17	1	203	9	361	370
Total	0	0	0	0	0	17	589	0	0	606	26	0	18	15	44	1	704	49	6	754	21	1404	1425
05:00 PM	0	0	0	0	0	7	142	0	0	149	8	0	5	2	13	0	204	11	0	215	2	377	379
05:15 PM	0	0	0	0	0	6	145	0	0	151	4	0	9	9	13	0	201	13	0	214	9	378	387
05:30 PM	0	0	0	0	0	4	128	0	0	132	11	0	5	3	16	0	185	16	0	201	3	349	352
05:45 PM	0	0	0	0	0	1	132	0	0	133	10	0	6	5	16	0	172	13	0	185	5	334	339
Total	0	0	0	0	0	18	547	0	0	565	33	0	25	19	58	0	762	53	0	815	19	1438	1457
Grand Total	0	0	0	0	0	35	1136	0	0	1171	59	0	43	34	102	1	1466	102	6	1569	40	2842	2882
Apprch %	0	0	0			3	97	0			57.8	0	42.2			0.1	93.4	6.5					
Total %	0	0	0			1.2	40	0		41.2	2.1	0	1.5		3.6	0	51.6	3.6		55.2	1.4	98.6	

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	7	149	0	156	8	0	4	12	0	185	13	198	366
04:45 PM	0	0	0	0	2	143	0	145	4	0	9	13	1	185	17	203	361
05:00 PM	0	0	0	0	7	142	0	149	8	0	5	13	0	204	11	215	377
05:15 PM	0	0	0	0	6	145	0	151	4	0	9	13	0	201	13	214	378
Total Volume	0	0	0	0	22	579	0	601	24	0	27	51	1	775	54	830	1482
% App. Total	0	0	0		3.7	96.3	0		47.1	0	52.9		0.1	93.4	6.5		
PHF	.000	.000	.000	.000	.786	.971	.000	.963	.750	.000	.750	.981	.250	.950	.794	.965	.980

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	7	149	0	156	8	0	4	12	0	185	13	198	
+15 mins.	0	0	0	0	2	143	0	145	4	0	9	13	1	185	17	203	
+30 mins.	0	0	0	0	7	142	0	149	8	0	5	13	0	204	11	215	
+45 mins.	0	0	0	0	6	145	0	151	4	0	9	13	0	201	13	214	
Total Volume	0	0	0	0	22	579	0	601	24	0	27	51	1	775	54	830	
% App. Total	0	0	0	0	3.7	96.3	0		47.1	0	52.9		0.1	93.4	6.5		
PHF	.000	.000	.000	.000	.786	.971	.000	.963	.750	.000	.750	.981	.250	.950	.794	.965	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

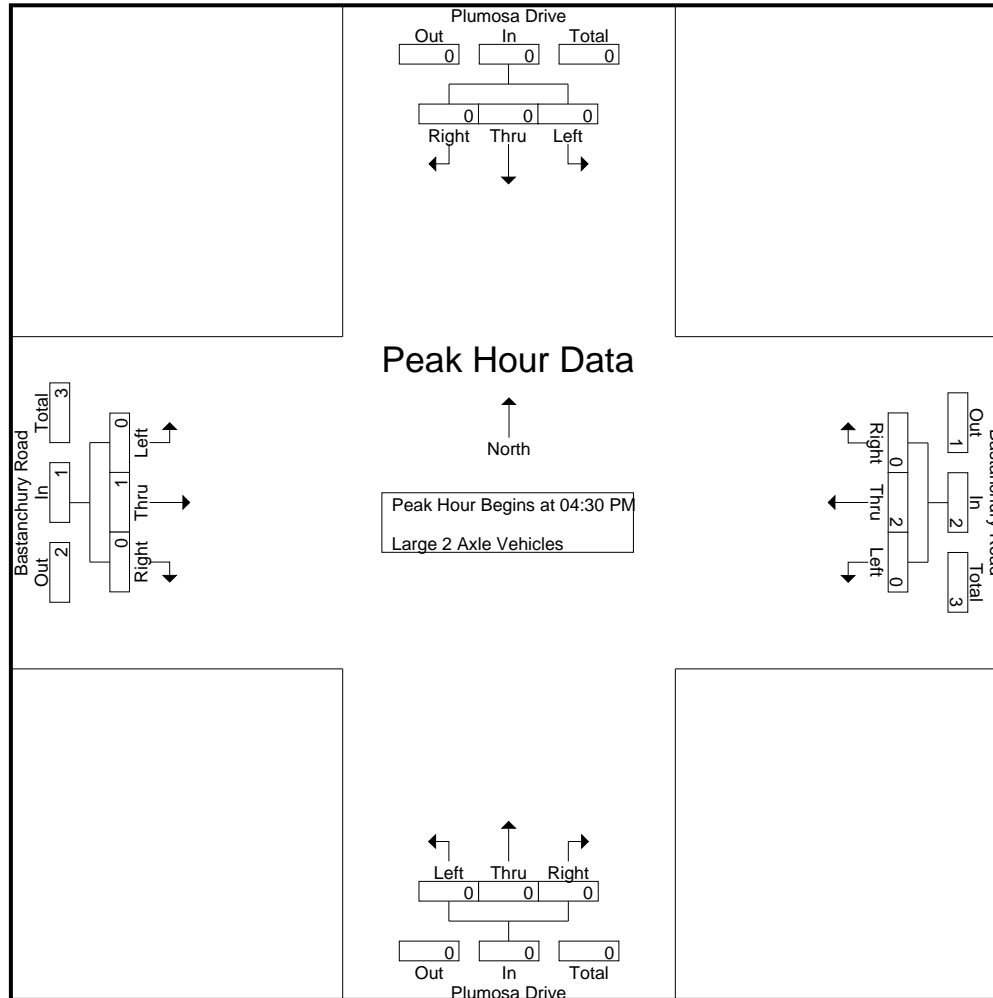
Groups Printed- Large 2 Axle Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
04:15 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	7
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	3	3
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	0	5	5
Grand Total	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	2	0	0	2	0	0	0	0	2	0	12	12
Apprch %	0	0	0			0	100	0			100	0	0			0	100	0								0	100	
Total %	0	0	0			0	75	0		75	8.3	0	0		8.3	0	16.7	0		16.7						0	100	

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.375

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	0	1
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

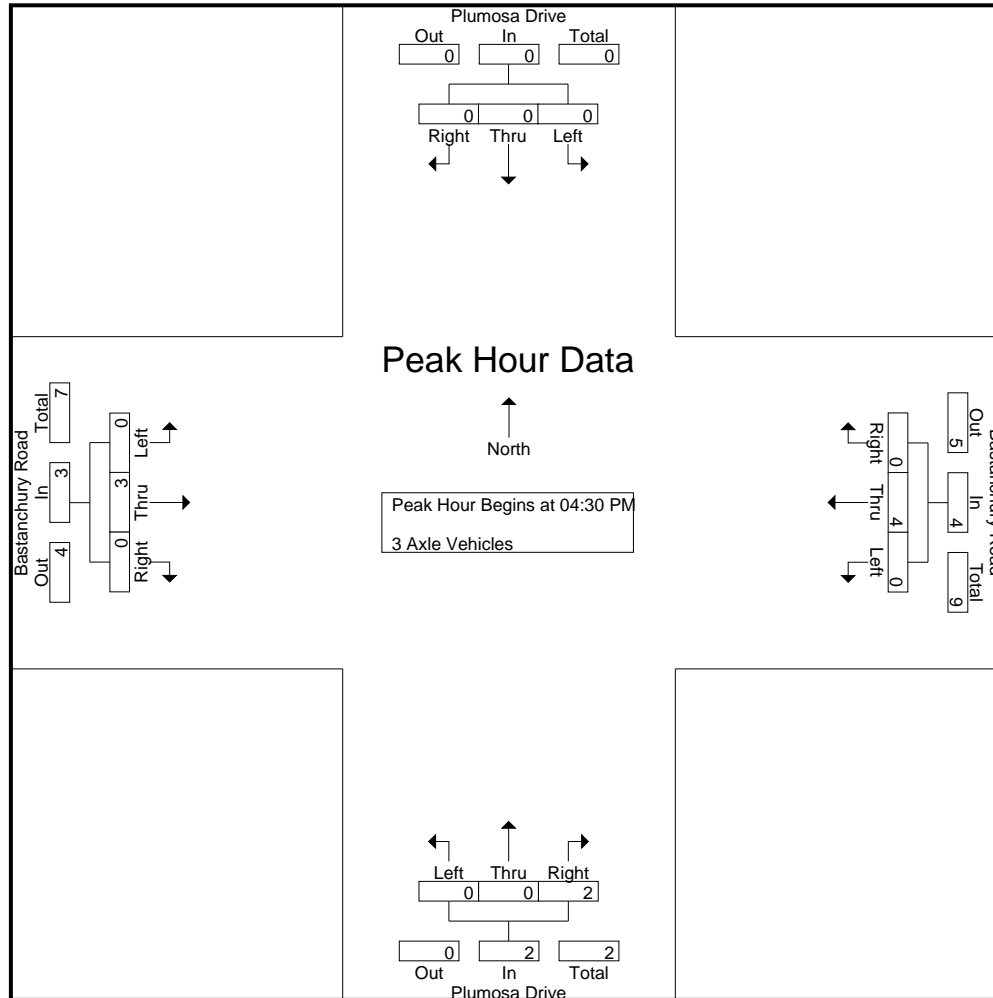
Groups Printed- 3 Axle Vehicles

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	3	0	0	3	1	5	6					
05:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3					
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	2	2					
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total	0	0	0	0	0	0	4	0	0	4	1	0	1	1	2	0	3	1	0	4	1	10	11					
Grand Total	0	0	0	0	0	0	4	0	0	4	1	0	2	1	3	0	4	1	0	5	1	12	13					
Apprch %	0	0	0			0	100	0			33.3	0	66.7			0	80	20			7.7	92.3						
Total %	0	0	0			0	33.3	0		33.3	8.3	0	16.7		25	0	33.3	8.3		41.7	7.7	92.3						

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	5
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	4	0	4	0	0	2	2	0	3	0	3	9
% App. Total	0	0	0		0	100	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.500	.500	.000	.250	.000	.250	.450

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	3	0	3	
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	4	0	4	0	0	2	2	0	3	0	3	
% App. Total	0	0	0	0	0	100	0	100	0	0	100	100	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.500	.500	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

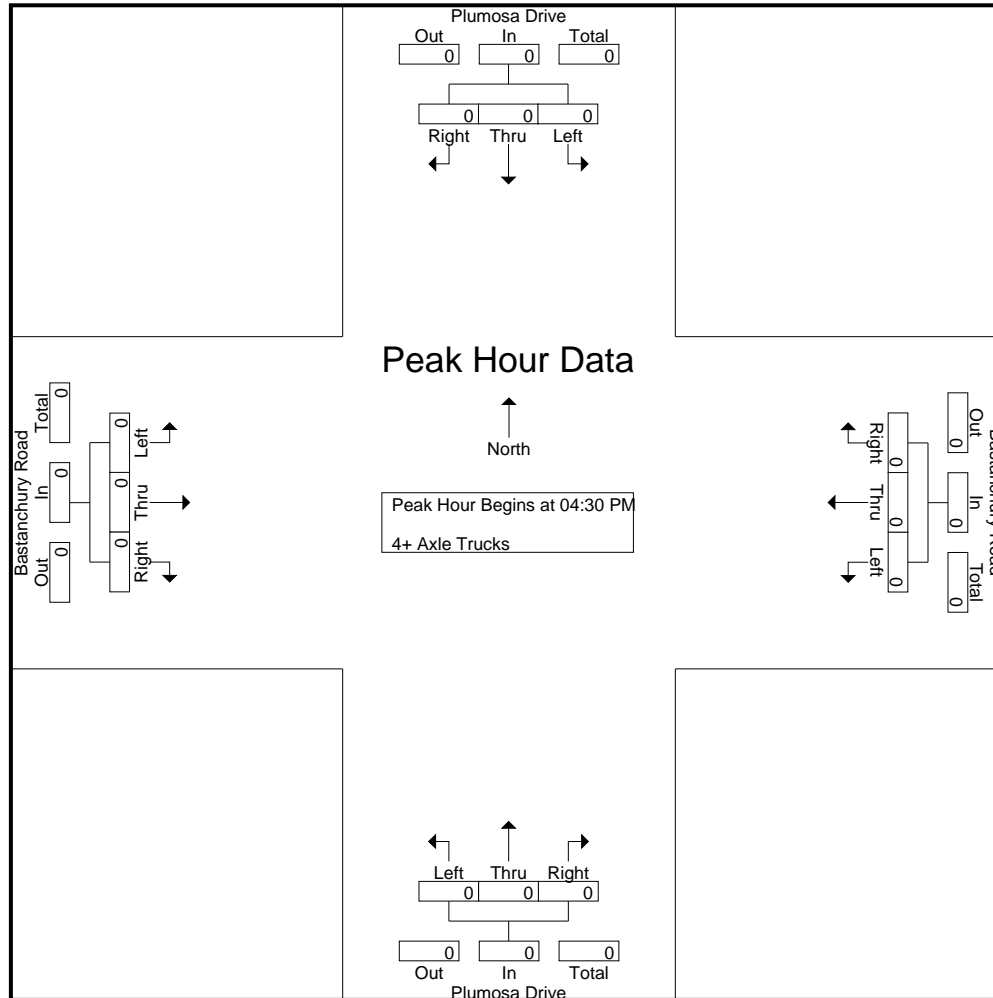
Groups Printed- 4+ Axle Trucks

Start Time	Plumosa Drive Southbound					Bastanchury Road Westbound					Plumosa Drive Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
Apprch %	0	0	0			0	0	0			0	0	0			0	100	0			0	0	100
Total %	0	0	0			0	0	0			0	0	0			0	100	0		100	0	0	100

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
N/S: Plumosa Drive
E/W: Bastanchury Road
Weather: Clear

File Name : 09_YLA_Plum_Bast PM
Site Code : 05122223
Start Date : 3/15/2022
Page No : 2



City of Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road
 Weather: Clear

File Name : 09_YLA_Plum_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Plumosa Drive Southbound				Bastanchury Road Westbound				Plumosa Drive Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Plumosa Drive	East Leg Bastanchury Road	South Leg Plumosa Drive	West Leg Bastanchury Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	0	1
8:30 AM	0	2	0	0	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	2	0	5

	North Leg Plumosa Drive	East Leg Bastanchury Road	South Leg Plumosa Drive	West Leg Bastanchury Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	3	3	0	6
4:45 PM	0	0	2	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	2	2	0	4
5:30 PM	0	1	2	0	3
5:45 PM	0	2	2	0	4
TOTAL VOLUMES:	0	8	12	0	20

Location: Yorba Linda
 N/S: Plumosa Drive
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Plumosa Drive			Westbound Bastanchury Road			Northbound Plumosa Drive			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	6	0	0	0	0	0	1	0	7

	Southbound Plumosa Drive			Westbound Bastanchury Road			Northbound Plumosa Drive			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

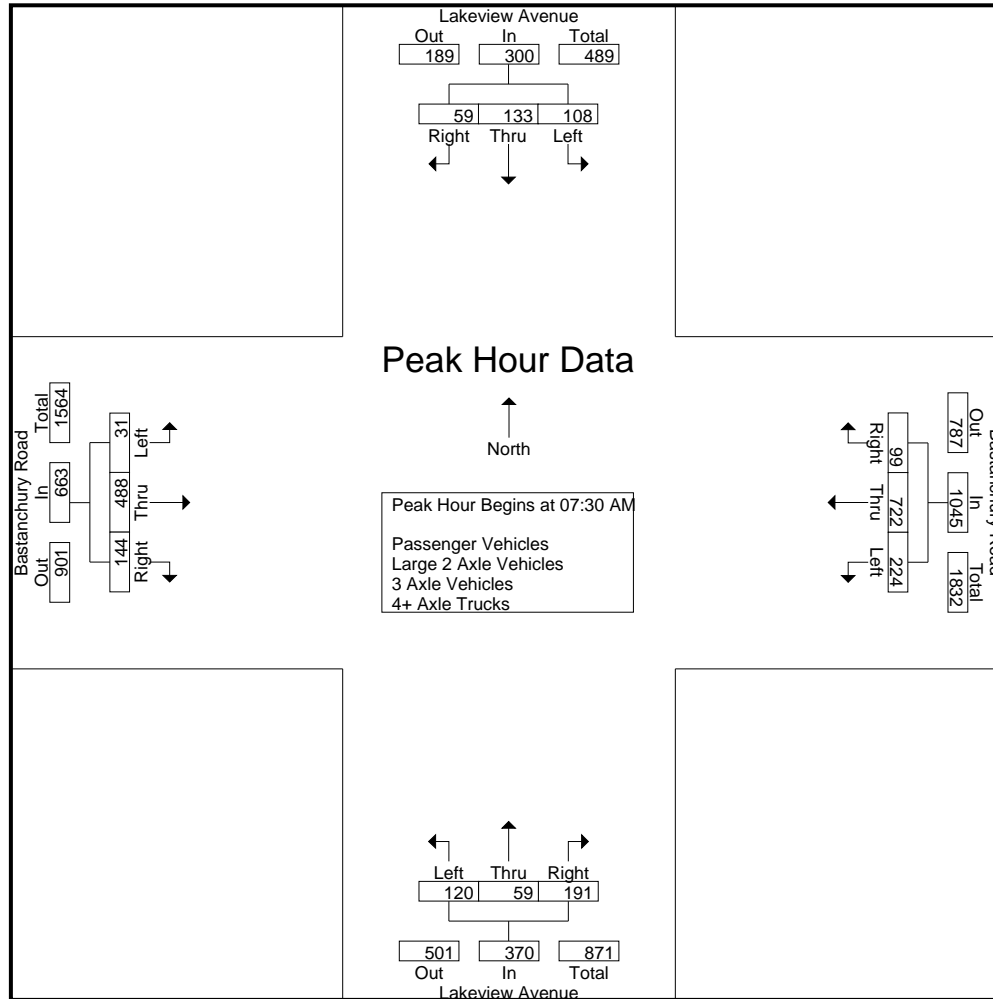
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	9	21	7	4	37	33	106	8	0	147	20	11	16	10	47	1	45	11	2	57	16	288	304
07:15 AM	7	16	12	7	35	39	164	16	3	219	24	8	27	15	59	6	52	17	6	75	31	388	419
07:30 AM	51	51	21	11	123	45	218	35	4	298	32	8	72	35	112	4	127	31	8	162	58	695	753
07:45 AM	33	42	13	10	88	84	159	38	2	281	30	19	54	29	103	13	170	50	4	233	45	705	750
Total	100	130	53	32	283	201	647	97	9	945	106	46	169	89	321	24	394	109	20	527	150	2076	2226
08:00 AM	17	18	8	7	43	52	160	13	0	225	26	19	30	23	75	7	96	32	1	135	31	478	509
08:15 AM	7	22	17	11	46	43	185	13	0	241	32	13	35	20	80	7	95	31	6	133	37	500	537
08:30 AM	9	15	14	6	38	35	147	4	0	186	34	10	22	10	66	11	89	17	3	117	19	407	426
08:45 AM	13	14	5	4	32	34	118	8	1	160	26	17	40	24	83	9	85	19	4	113	33	388	421
Total	46	69	44	28	159	164	610	38	1	812	118	59	127	77	304	34	365	99	14	498	120	1773	1893
Grand Total	146	199	97	60	442	365	1257	135	10	1757	224	105	296	166	625	58	759	208	34	1025	270	3849	4119
Apprch %	33	45	21.9			20.8	71.5	7.7			35.8	16.8	47.4			5.7	74	20.3					
Total %	3.8	5.2	2.5		11.5	9.5	32.7	3.5		45.6	5.8	2.7	7.7		16.2	1.5	19.7	5.4		26.6	6.6	93.4	
Passenger Vehicles	145	194	95		494	360	1243	133		1746	221	104	289		774	56	741	203		1033	0	0	4047
% Passenger Vehicles	99.3	97.5	97.9	100	98.4	98.6	98.9	98.5	100	98.8	98.7	99	97.6	96.4	97.9	96.6	97.6	97.6	97.1	97.5	0	0	98.3
Large 2 Axle Vehicles	1	5	1		7	4	13	1		18	3	1	6		15	2	17	5		25	0	0	65
% Large 2 Axle Vehicles	0.7	2.5	1	0	1.4	1.1	1	0.7	0	1	1.3	1	2	3	1.9	3.4	2.2	2.4	2.9	2.4	0	0	1.6
3 Axle Vehicles	0	0	1		1	1	1	1		3	0	0	0		0	0	1	0		1	0	0	5
% 3 Axle Vehicles	0	0	1	0	0.2	0.3	0.1	0.7	0	0.2	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	0	0		0	0	0	1		2	0	0	0		0	0	0	2
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	0.3	0	0	0	0	0	0	0	0

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	51	51	21	123	45	218	35	298	32	8	72	112	4	127	31	162	695
07:45 AM	33	42	13	88	84	159	38	281	30	19	54	103	13	170	50	233	705
08:00 AM	17	18	8	43	52	160	13	225	26	19	30	75	7	96	32	135	478
08:15 AM	7	22	17	46	43	185	13	241	32	13	35	80	7	95	31	133	500
Total Volume	108	133	59	300	224	722	99	1045	120	59	191	370	31	488	144	663	2378
% App. Total	36	44.3	19.7		21.4	69.1	9.5		32.4	15.9	51.6		4.7	73.6	21.7		
PHF	.529	.652	.702	.610	.667	.828	.651	.877	.938	.776	.663	.826	.596	.718	.720	.711	.843

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	51	51	21	123	45	218	35	298	32	8	72	112	4	127	31	162	
+15 mins.	33	42	13	88	84	159	38	281	30	19	54	103	13	170	50	233	
+30 mins.	17	18	8	43	52	160	13	225	26	19	30	75	7	96	32	135	
+45 mins.	7	22	17	46	43	185	13	241	32	13	35	80	7	95	31	133	
Total Volume	108	133	59	300	224	722	99	1045	120	59	191	370	31	488	144	663	
% App. Total	36	44.3	19.7		21.4	69.1	9.5		32.4	15.9	51.6		4.7	73.6	21.7		
PHF	.529	.652	.702	.610	.667	.828	.651	.877	.938	.776	.663	.826	.596	.718	.720	.711	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

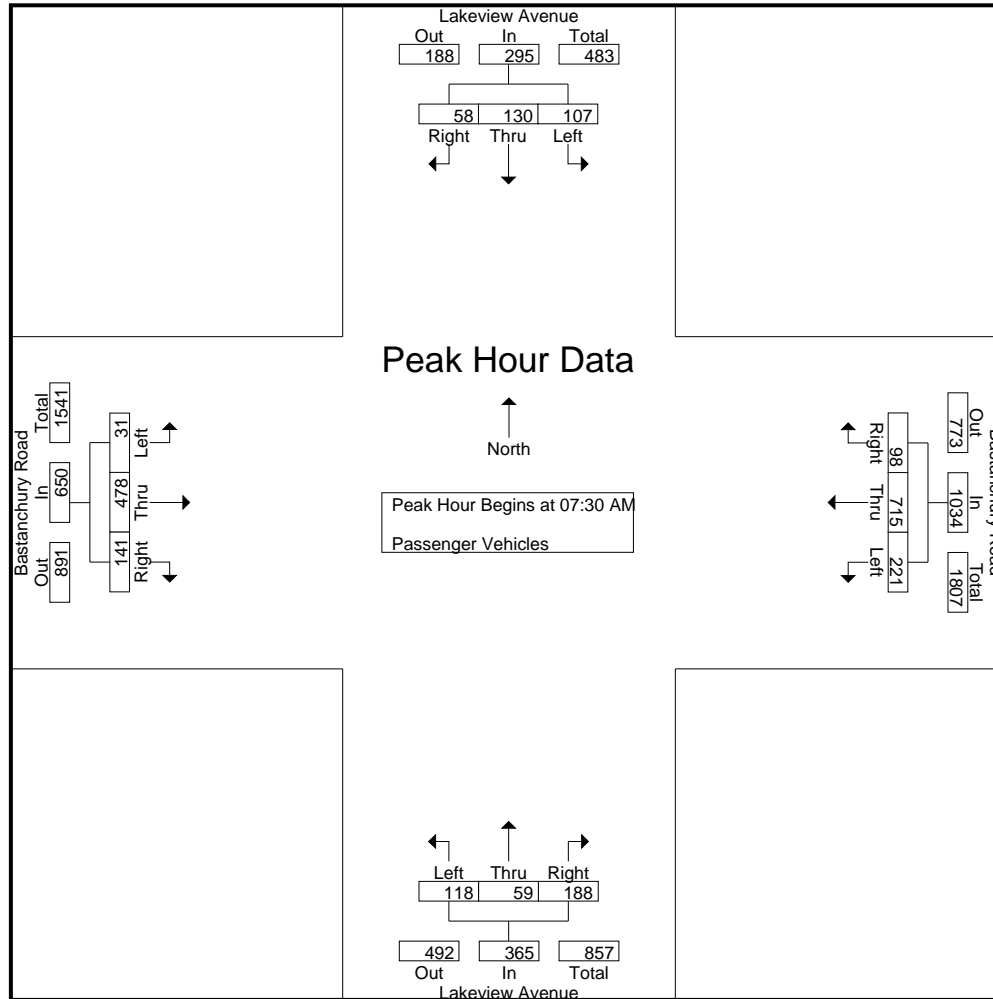
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	9	21	6	4	36	33	105	7	0	145	20	11	14	9	45	0	44	10	1	54	14	280	294
07:15 AM	7	14	12	7	33	39	163	16	3	218	24	7	27	15	58	6	50	17	6	73	31	382	413
07:30 AM	50	49	20	11	119	45	215	35	4	295	32	8	70	33	110	4	126	31	8	161	56	685	741
07:45 AM	33	42	13	10	88	82	158	38	2	278	30	19	54	29	103	13	168	49	4	230	45	699	744
Total	99	126	51	32	276	199	641	96	9	936	106	45	165	86	316	23	388	107	19	518	146	2046	2192
08:00 AM	17	17	8	7	42	52	158	13	0	223	26	19	29	22	74	7	95	31	1	133	30	472	502
08:15 AM	7	22	17	11	46	42	184	12	0	238	30	13	35	20	78	7	89	30	6	126	37	488	525
08:30 AM	9	15	14	6	38	35	145	4	0	184	33	10	21	9	64	10	86	16	3	112	18	398	416
08:45 AM	13	14	5	4	32	32	115	8	1	155	26	17	39	23	82	9	83	19	4	111	32	380	412
Total	46	68	44	28	158	161	602	37	1	800	115	59	124	74	298	33	353	96	14	482	117	1738	1855
Grand Total	145	194	95	60	434	360	1243	133	10	1736	221	104	289	160	614	56	741	203	33	1000	263	3784	4047
Apprch %	33.4	44.7	21.9			20.7	71.6	7.7			36	16.9	47.1			5.6	74.1	20.3					
Total %	3.8	5.1	2.5		11.5	9.5	32.8	3.5		45.9	5.8	2.7	7.6		16.2	1.5	19.6	5.4		26.4	6.5	93.5	

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	50	49	20	119	45	215	35	295	32	8	70	110	4	126	31	161	685
07:45 AM	33	42	13	88	82	158	38	278	30	19	54	103	13	168	49	230	699
08:00 AM	17	17	8	42	52	158	13	223	26	19	29	74	7	95	31	133	472
08:15 AM	7	22	17	46	42	184	12	238	30	13	35	78	7	89	30	126	488
Total Volume	107	130	58	295	221	715	98	1034	118	59	188	365	31	478	141	650	2344
% App. Total	36.3	44.1	19.7		21.4	69.1	9.5		32.3	16.2	51.5		4.8	73.5	21.7		
PHF	.535	.663	.725	.620	.674	.831	.645	.876	.922	.776	.671	.830	.596	.711	.719	.707	.838

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	50	49	20	119	45	215	35	295	32	8	70	110	4	126	31	161	
+15 mins.	33	42	13	88	82	158	38	278	30	19	54	103	13	168	49	230	
+30 mins.	17	17	8	42	52	158	13	223	26	19	29	74	7	95	31	133	
+45 mins.	7	22	17	46	42	184	12	238	30	13	35	78	7	89	30	126	
Total Volume	107	130	58	295	221	715	98	1034	118	59	188	365	31	478	141	650	
% App. Total	36.3	44.1	19.7		21.4	69.1	9.5		32.3	16.2	51.5		4.8	73.5	21.7		
PHF	.535	.663	.725	.620	.674	.831	.645	.876	.922	.776	.671	.830	.596	.711	.719	.707	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

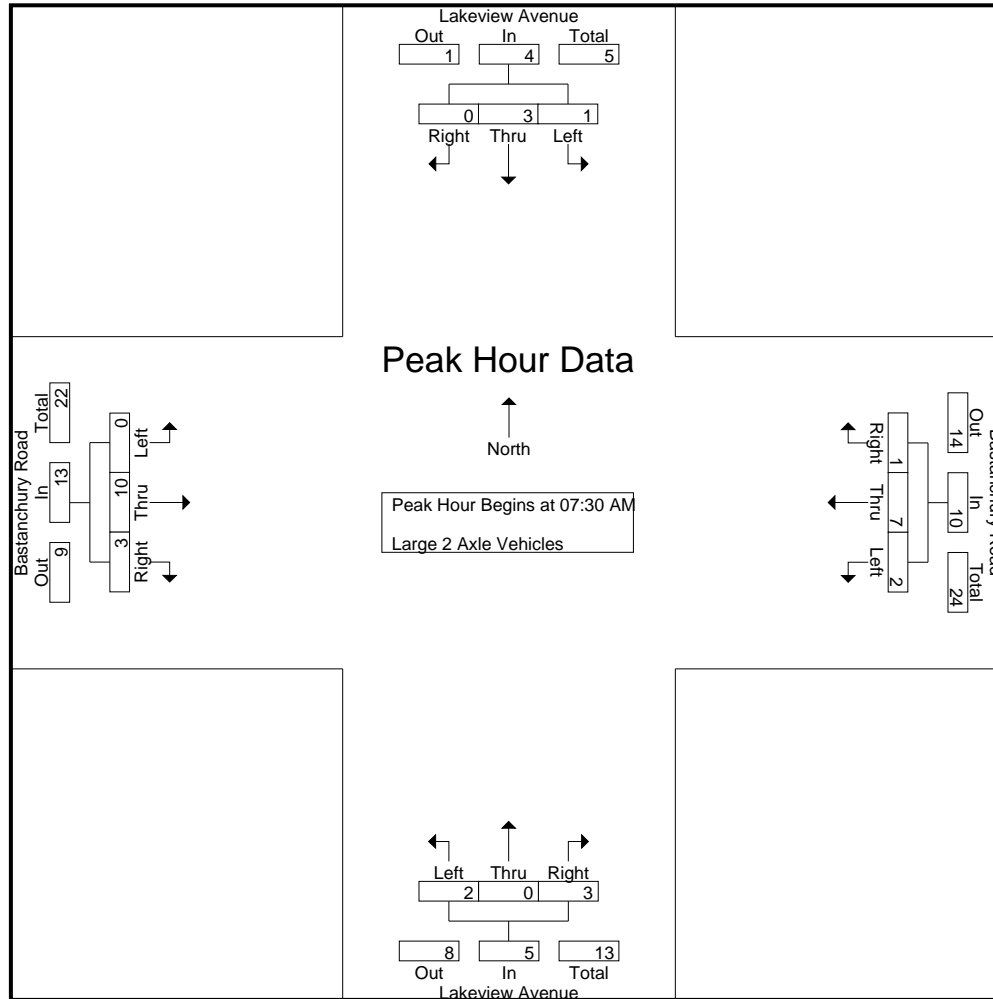
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	2	1	2	1	0	1	1	2	2	2	6	8
07:15 AM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	6	6	6
07:30 AM	1	2	0	0	3	0	3	0	0	3	0	0	2	2	2	0	1	0	0	1	2	9	11	11
07:45 AM	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	2	1	0	3	0	6	6	6
Total	1	4	1	0	6	2	6	0	0	8	0	1	4	3	5	1	5	2	1	8	4	27	31	31
08:00 AM	0	1	0	0	1	0	2	0	0	2	0	0	1	1	1	0	1	1	0	2	1	6	7	7
08:15 AM	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	0	6	1	0	7	0	11	11	11
08:30 AM	0	0	0	0	0	0	2	0	0	2	1	0	1	1	2	1	3	1	0	5	1	9	10	10
08:45 AM	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	0	6	6	6
Total	0	1	0	0	1	2	7	1	0	10	3	0	2	2	5	1	12	3	0	16	2	32	34	34
Grand Total	1	5	1	0	7	4	13	1	0	18	3	1	6	5	10	2	17	5	1	24	6	59	65	65
Apprch %	14.3	71.4	14.3			22.2	72.2	5.6			30	10	60			8.3	70.8	20.8			9.2	90.8		
Total %	1.7	8.5	1.7		11.9	6.8	22	1.7		30.5	5.1	1.7	10.2		16.9	3.4	28.8	8.5		40.7	9.2	90.8		

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	2	0	3	0	3	0	3	0	0	2	2	0	1	0	1	9
07:45 AM	0	0	0	0	2	1	0	3	0	0	0	0	0	2	1	3	6
08:00 AM	0	1	0	1	0	2	0	2	0	0	1	1	0	1	1	2	6
08:15 AM	0	0	0	0	0	1	1	2	2	0	0	2	0	6	1	7	11
Total Volume	1	3	0	4	2	7	1	10	2	0	3	5	0	10	3	13	32
% App. Total	25	75	0		20	70	10		40	0	60		0	76.9	23.1		
PHF	.250	.375	.000	.333	.250	.583	.250	.833	.250	.000	.375	.625	.000	.417	.750	.464	.727

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	0	2	0	3	0	3	0	0	2	2	0	1	0	1	
+15 mins.	1	2	0	3	2	1	0	3	0	0	0	0	0	2	1	3	
+30 mins.	0	0	0	0	0	2	0	2	0	0	1	1	0	1	1	2	
+45 mins.	0	1	0	1	0	1	1	2	2	0	0	2	0	6	1	7	
Total Volume	1	5	0	6	2	7	1	10	2	0	3	5	0	10	3	13	
% App. Total	16.7	83.3	0		20	70	10		40	0	60		0	76.9	23.1		
PHF	.250	.625	.000	.500	.250	.583	.250	.833	.250	.000	.375	.625	.000	.417	.750	.464	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

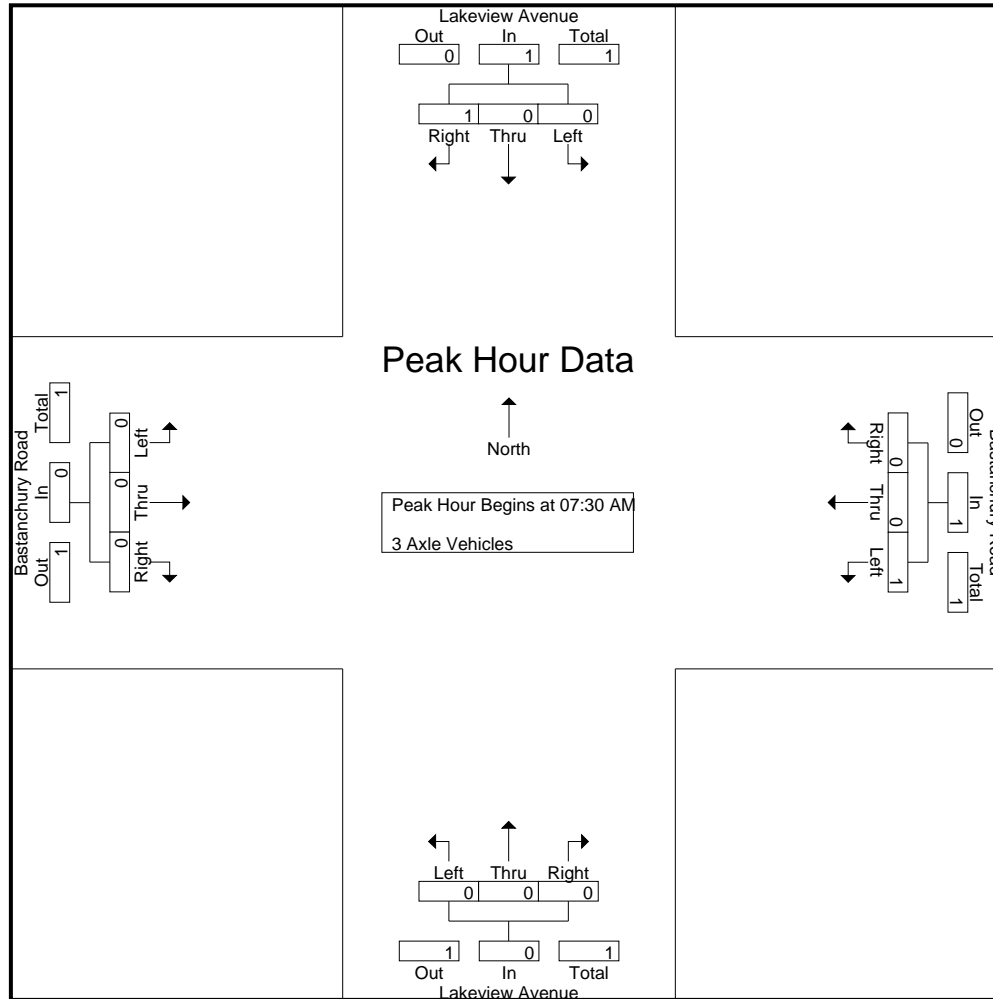
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	3	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Grand Total	0	0	1	0	1	1	1	1	0	3	0	0	0	0	0	0	1	0	0	1	0	5	5	5
Apprch %	0	0	100			33.3	33.3	33.3			0	0	0			0	100	0			0			
Total %	0	0	20		20	20	20	20		60	0	0	0		0	0	20	0		20	0	100		

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
% App. Total	0	0	100		100	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	
% App. Total	0	0	100		100	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

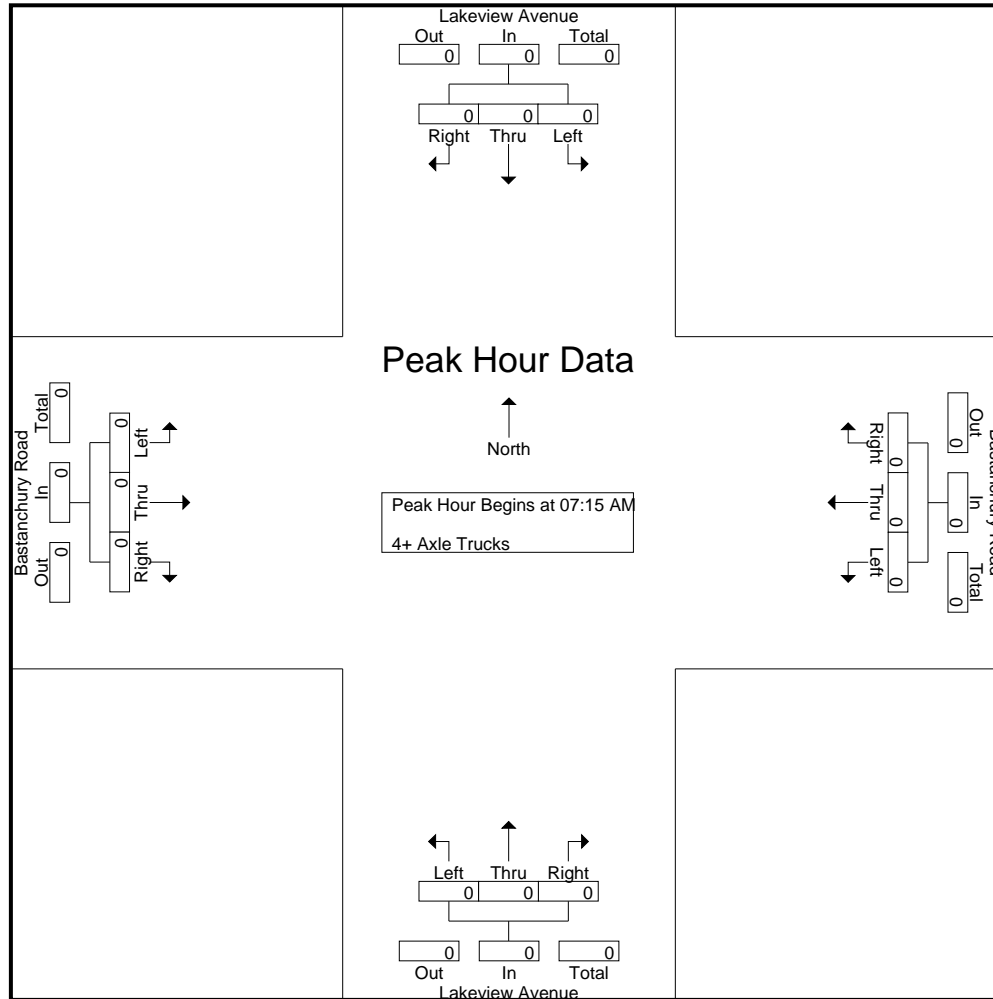
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	2	1	1	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	2	1	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	2	1	1	2
Apprch %	0	0	0			0	0	0			0	0	100			0	0	0			0	50	50		50	50	
Total %	0	0	0			0	0	0			0	0	100		100	0	0	0			0	50	50		50	50	

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

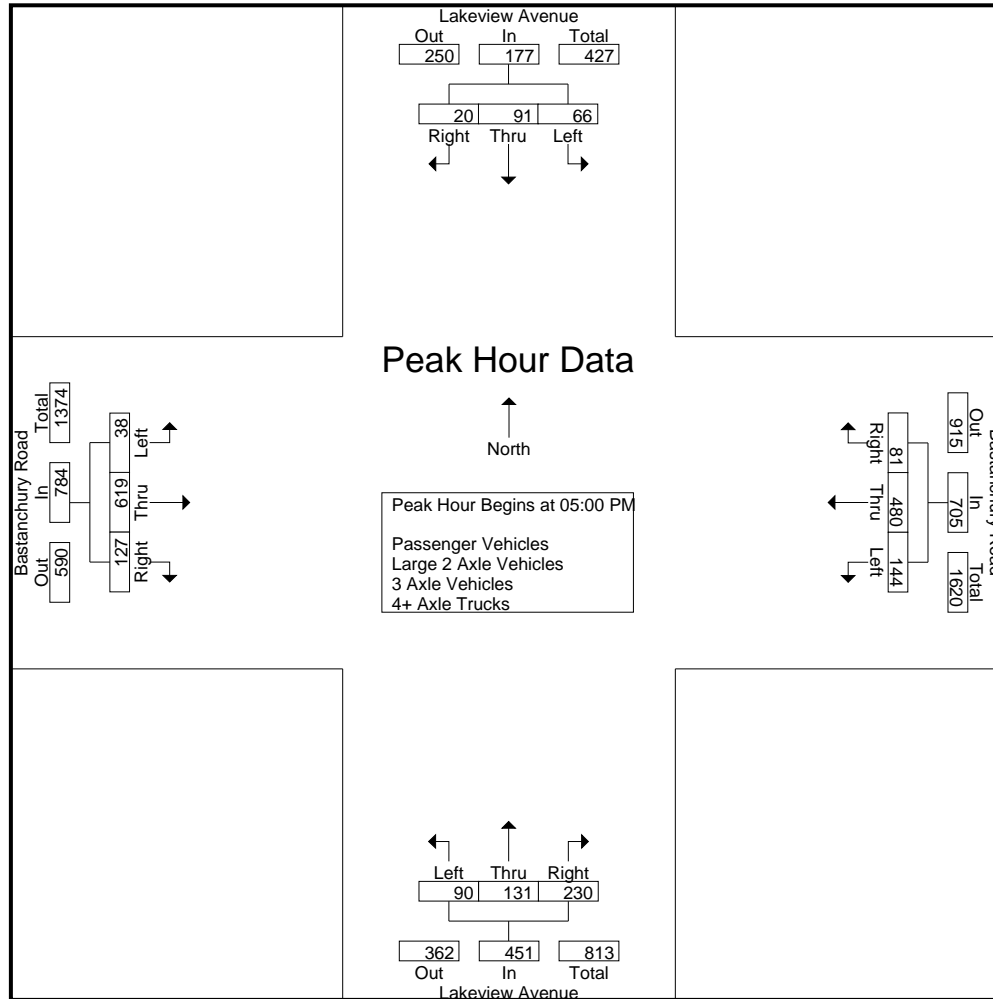
File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	19	27	9	5	55	49	119	18	2	186	30	14	51	26	95	8	142	35	9	185	42	521	563
04:15 PM	20	24	7	6	51	40	110	28	6	178	31	27	56	22	114	13	128	27	5	168	39	511	550
04:30 PM	18	21	10	3	49	47	125	11	3	183	25	20	50	19	95	5	161	31	4	197	29	524	553
04:45 PM	11	24	10	6	45	37	116	18	2	171	21	29	50	16	100	12	153	36	4	201	28	517	545
Total	68	96	36	20	200	173	470	75	13	718	107	90	207	83	404	38	584	129	22	751	138	2073	2211
05:00 PM	19	17	5	5	41	43	121	15	2	179	23	23	63	34	109	9	166	37	3	212	44	541	585
05:15 PM	16	14	5	5	35	25	132	23	3	180	18	33	51	14	102	10	163	35	4	208	26	525	551
05:30 PM	16	28	2	1	46	41	107	21	3	169	31	23	54	18	108	8	137	28	4	173	26	496	522
05:45 PM	15	32	8	3	55	35	120	22	3	177	18	52	62	25	132	11	153	27	5	191	36	555	591
Total	66	91	20	14	177	144	480	81	11	705	90	131	230	91	451	38	619	127	16	784	132	2117	2249
Grand Total	134	187	56	34	377	317	950	156	24	1423	197	221	437	174	855	76	1203	256	38	1535	270	4190	4460
Apprch %	35.5	49.6	14.9			22.3	66.8	11			23	25.8	51.1			5	78.4	16.7					
Total %	3.2	4.5	1.3		9	7.6	22.7	3.7		34	4.7	5.3	10.4		20.4	1.8	28.7	6.1		36.6	6.1	93.9	
Passenger Vehicles	133	186	56		409	313	943	154		1434	194	221	435		1023	76	1198	255		1567	0	0	4433
% Passenger Vehicles	99.3	99.5	100	100	99.5	98.7	99.3	98.7	100	99.1	98.5	100	99.5	99.4	99.4	100	99.6	99.6	100	99.6	0	0	99.4
Large 2 Axle Vehicles	0	0	0		0	1	4	0		5	1	0	1		3	0	1	0		1	0	0	9
% Large 2 Axle Vehicles	0	0	0	0	0	0.3	0.4	0	0	0.3	0.5	0	0.2	0.6	0.3	0	0.1	0	0	0.1	0	0	0.2
3 Axle Vehicles	1	1	0		2	2	2	2		6	2	0	0		2	0	3	1		4	0	0	14
% 3 Axle Vehicles	0.7	0.5	0	0	0.5	0.6	0.2	1.3	0	0.4	1	0	0	0	0.2	0	0.2	0.4	0	0.3	0	0	0.3
4+ Axle Trucks	0	0	0		0	1	1	0		2	0	0	1		1	0	1	0		1	0	0	4
% 4+ Axle Trucks	0	0	0	0	0	0.3	0.1	0	0	0.1	0	0	0.2	0	0.1	0	0.1	0	0	0.1	0	0	0.1

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	19	17	5	41	43	121	15	179	23	23	63	109	9	166	37	212	541
05:15 PM	16	14	5	35	25	132	23	180	18	33	51	102	10	163	35	208	525
05:30 PM	16	28	2	46	41	107	21	169	31	23	54	108	8	137	28	173	496
05:45 PM	15	32	8	55	35	120	22	177	18	52	62	132	11	153	27	191	555
Total Volume	66	91	20	177	144	480	81	705	90	131	230	451	38	619	127	784	2117
% App. Total	37.3	51.4	11.3		20.4	68.1	11.5		20	29	51		4.8	79	16.2		
PHF	.868	.711	.625	.805	.837	.909	.880	.979	.726	.630	.913	.854	.864	.932	.858	.925	.954

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 05:00 PM



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				04:30 PM				
+0 mins.	19	27	9	55	49	119	18	186	23	23	63	109	5	161	31	197	
+15 mins.	20	24	7	51	40	110	28	178	18	33	51	102	12	153	36	201	
+30 mins.	18	21	10	49	47	125	11	183	31	23	54	108	9	166	37	212	
+45 mins.	11	24	10	45	37	116	18	171	18	52	62	132	10	163	35	208	
Total Volume	68	96	36	200	173	470	75	718	90	131	230	451	36	643	139	818	
% App. Total	34	48	18		24.1	65.5	10.4		20	29	51		4.4	78.6	17		
PHF	.850	.889	.900	.909	.883	.940	.670	.965	.726	.630	.913	.854	.750	.968	.939	.965	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

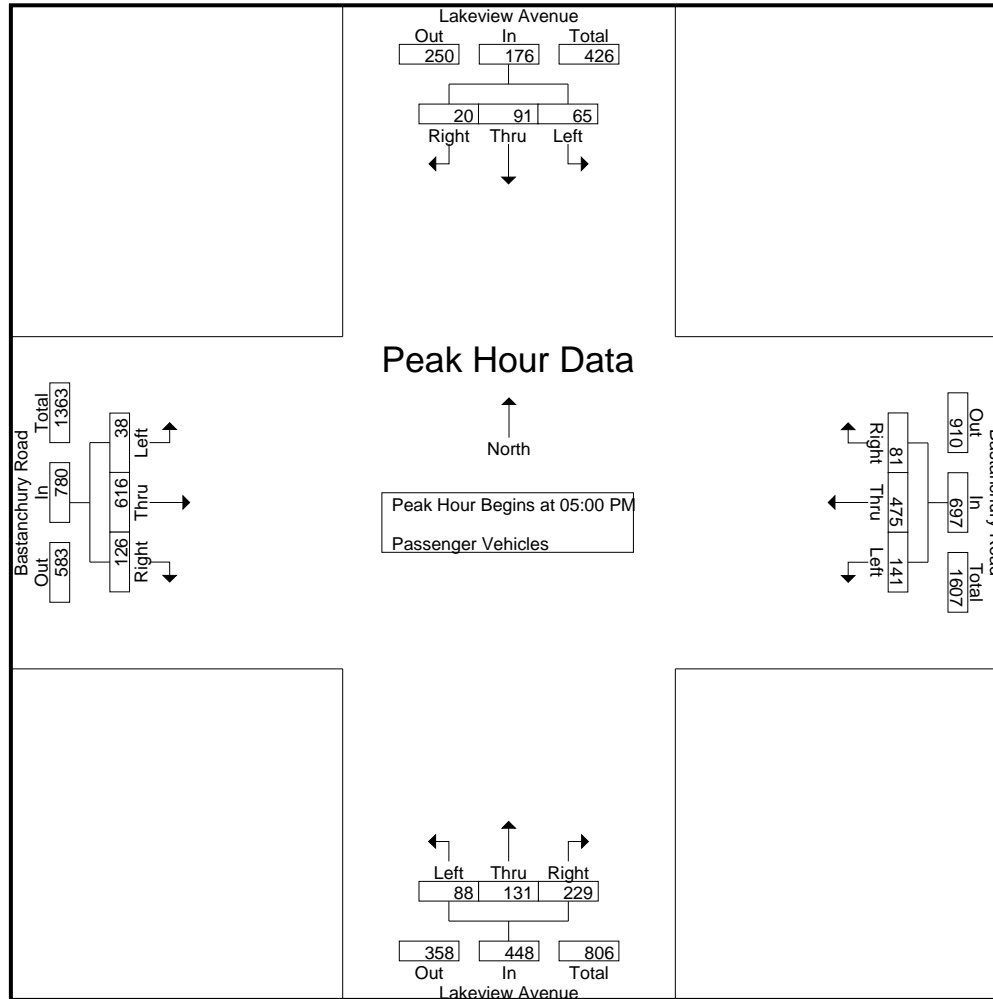
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	19	27	9	5	55	49	119	18	2	186	30	14	51	26	95	8	141	35	9	184	42	520	562
04:15 PM	20	24	7	6	51	40	109	26	6	175	31	27	56	22	114	13	128	27	5	168	39	508	547
04:30 PM	18	20	10	3	48	47	124	11	3	182	25	20	50	19	95	5	160	31	4	196	29	521	550
04:45 PM	11	24	10	6	45	36	116	18	2	170	20	29	49	16	98	12	153	36	4	201	28	514	542
Total	68	95	36	20	199	172	468	73	13	713	106	90	206	83	402	38	582	129	22	749	138	2063	2201
05:00 PM	19	17	5	5	41	43	121	15	2	179	22	23	63	34	108	9	163	36	3	208	44	536	580
05:15 PM	15	14	5	5	34	25	128	23	3	176	18	33	51	14	102	10	163	35	4	208	26	520	546
05:30 PM	16	28	2	1	46	39	107	21	3	167	31	23	54	18	108	8	137	28	4	173	26	494	520
05:45 PM	15	32	8	3	55	34	119	22	3	175	17	52	61	24	130	11	153	27	5	191	35	551	586
Total	65	91	20	14	176	141	475	81	11	697	88	131	229	90	448	38	616	126	16	780	131	2101	2232
Grand Total	133	186	56	34	375	313	943	154	24	1410	194	221	435	173	850	76	1198	255	38	1529	269	4164	4433
Apprch %	35.5	49.6	14.9			22.2	66.9	10.9			22.8	26	51.2			5	78.4	16.7					
Total %	3.2	4.5	1.3		9	7.5	22.6	3.7		33.9	4.7	5.3	10.4		20.4	1.8	28.8	6.1		36.7	6.1	93.9	

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	17	5	41	43	121	15	179	22	23	63	108	9	163	36	208	536
05:15 PM	15	14	5	34	25	128	23	176	18	33	51	102	10	163	35	208	520
05:30 PM	16	28	2	46	39	107	21	167	31	23	54	108	8	137	28	173	494
05:45 PM	15	32	8	55	34	119	22	175	17	52	61	130	11	153	27	191	551
Total Volume	65	91	20	176	141	475	81	697	88	131	229	448	38	616	126	780	2101
% App. Total	36.9	51.7	11.4		20.2	68.1	11.6		19.6	29.2	51.1		4.9	79	16.2		
PHF	.855	.711	.625	.800	.820	.928	.880	.973	.710	.630	.909	.862	.864	.945	.875	.938	.953

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	19	17	5	41	43	121	15	179	22	23	63	108	9	163	36	208	
+15 mins.	15	14	5	34	25	128	23	176	18	33	51	102	10	163	35	208	
+30 mins.	16	28	2	46	39	107	21	167	31	23	54	108	8	137	28	173	
+45 mins.	15	32	8	55	34	119	22	175	17	52	61	130	11	153	27	191	
Total Volume	65	91	20	176	141	475	81	697	88	131	229	448	38	616	126	780	
% App. Total	36.9	51.7	11.4		20.2	68.1	11.6		19.6	29.2	51.1		4.9	79	16.2		
PHF	.855	.711	.625	.800	.820	.928	.880	.973	.710	.630	.909	.862	.864	.945	.875	.938	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

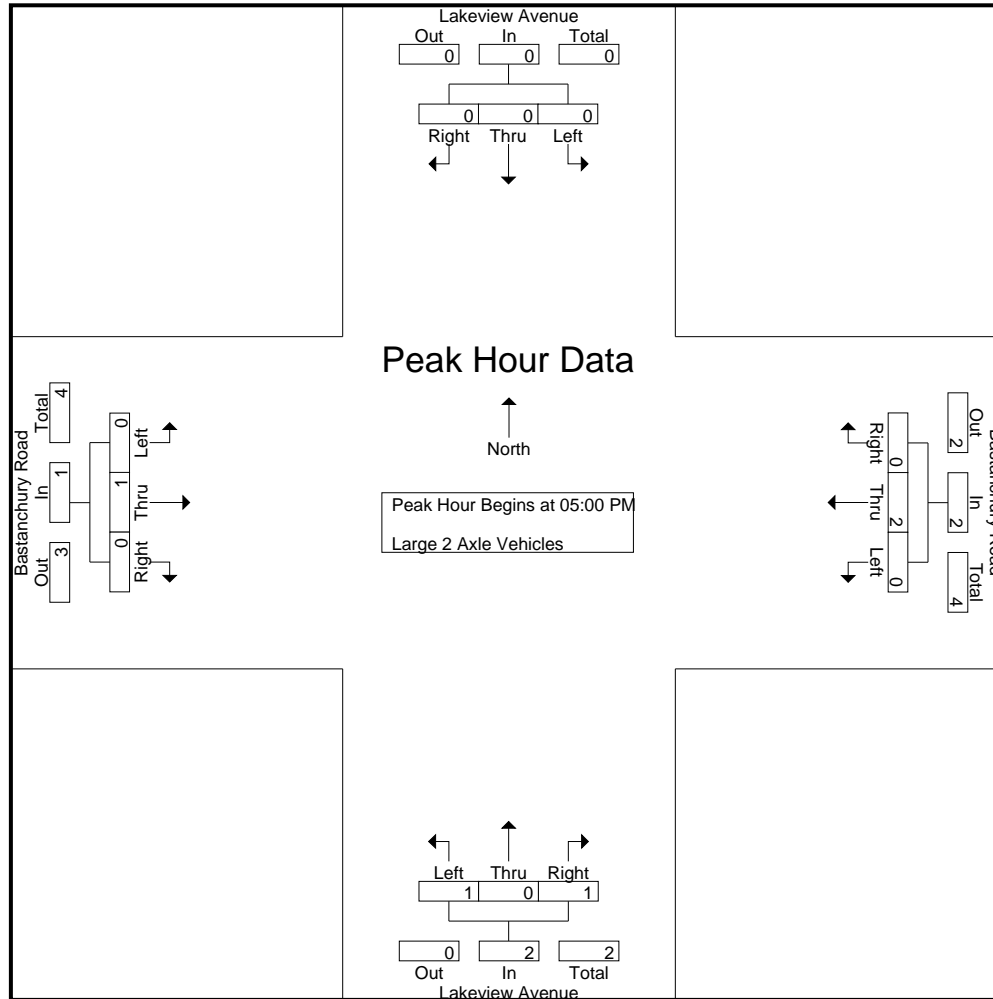
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	2	3
Total	0	0	0	0	0	0	2	0	0	2	1	0	1	1	2	0	1	0	0	1	0	1	0	0	1	1	5	6
Grand Total	0	0	0	0	0	1	4	0	0	5	1	0	1	1	2	0	1	0	0	1	0	1	0	0	1	1	8	9
Apprch %	0	0	0			20	80	0			50	0	50			0	100	0			0	100	0					
Total %	0	0	0			12.5	50	0		62.5	12.5	0	12.5		25	0	12.5	0		12.5						11.1	88.9	

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
Total Volume	0	0	0	0	0	2	0	2	1	0	1	2	0	1	0	1	5
% App. Total	0	0	0		0	100	0		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.250	.250	.000	.250	.000	.250	.625

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	
Total Volume	0	0	0	0	0	2	0	2	1	0	1	2	0	1	0	1	
% App. Total	0	0	0	0	0	100	0	100	50	0	50	100	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.250	.250	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

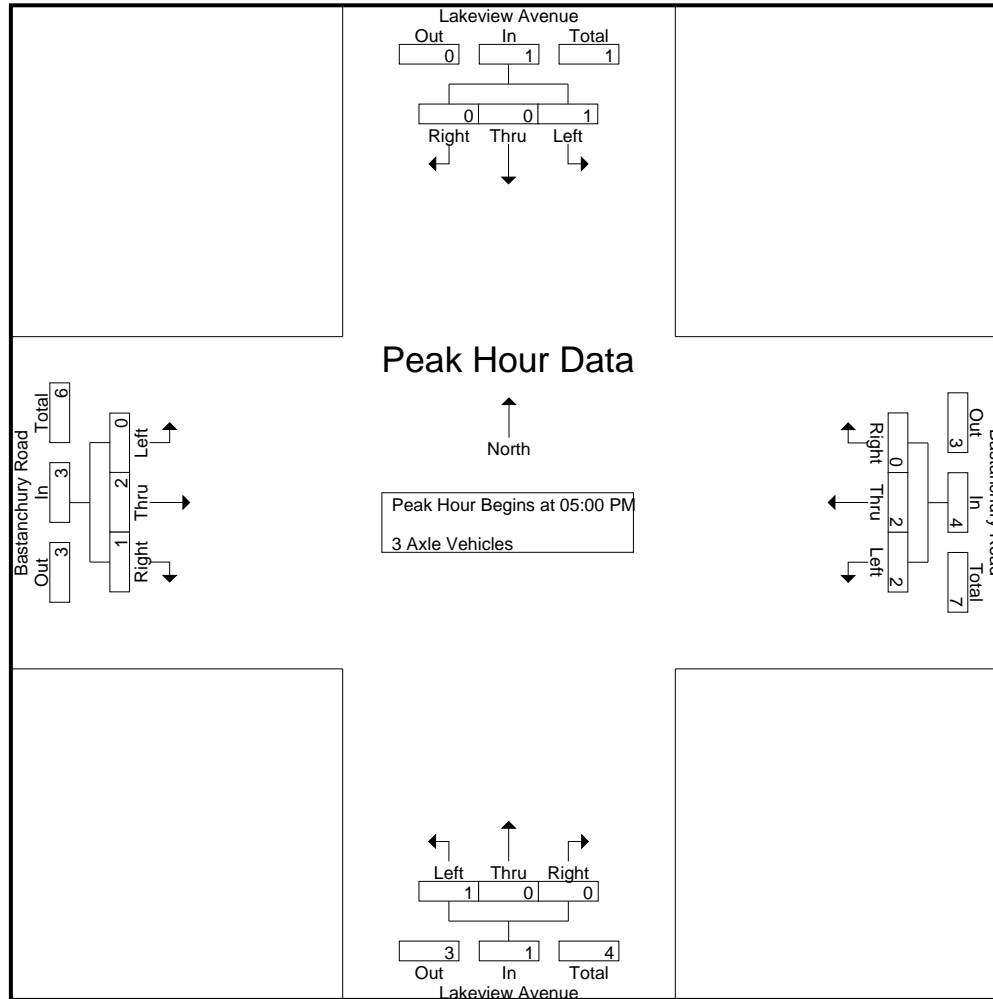
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	2	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	4	4
05:15 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:30 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	2	2	0	0	4	1	0	0	0	1	0	2	1	0	3	0	0	0	0	3	0	9	9
Grand Total	1	1	0	0	2	2	2	2	0	6	2	0	0	0	2	0	3	1	0	4	0	0	0	0	4	0	14	14
Apprch %	50	50	0			33.3	33.3	33.3			100	0	0			0	75	25										
Total %	7.1	7.1	0		14.3	14.3	14.3	14.3		42.9	14.3	0	0		14.3	0	21.4	7.1		28.6	0	0	0		100			

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	2	1	3	4
05:15 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	2	2	0	4	1	0	0	1	0	2	1	3	9
% App. Total	100	0	0		50	50	0		100	0	0		0	66.7	33.3		
PHF	.250	.000	.000	.250	.250	.250	.000	.500	.250	.000	.000	.250	.000	.250	.250	.250	.563

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	2	1	3	
+15 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	1	0	0	1	2	2	0	4	1	0	0	1	0	2	1	3	
% App. Total	100	0	0		50	50	0		100	0	0		0	66.7	33.3		
PHF	.250	.000	.000	.250	.250	.250	.000	.500	.250	.000	.000	.250	.000	.250	.250	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

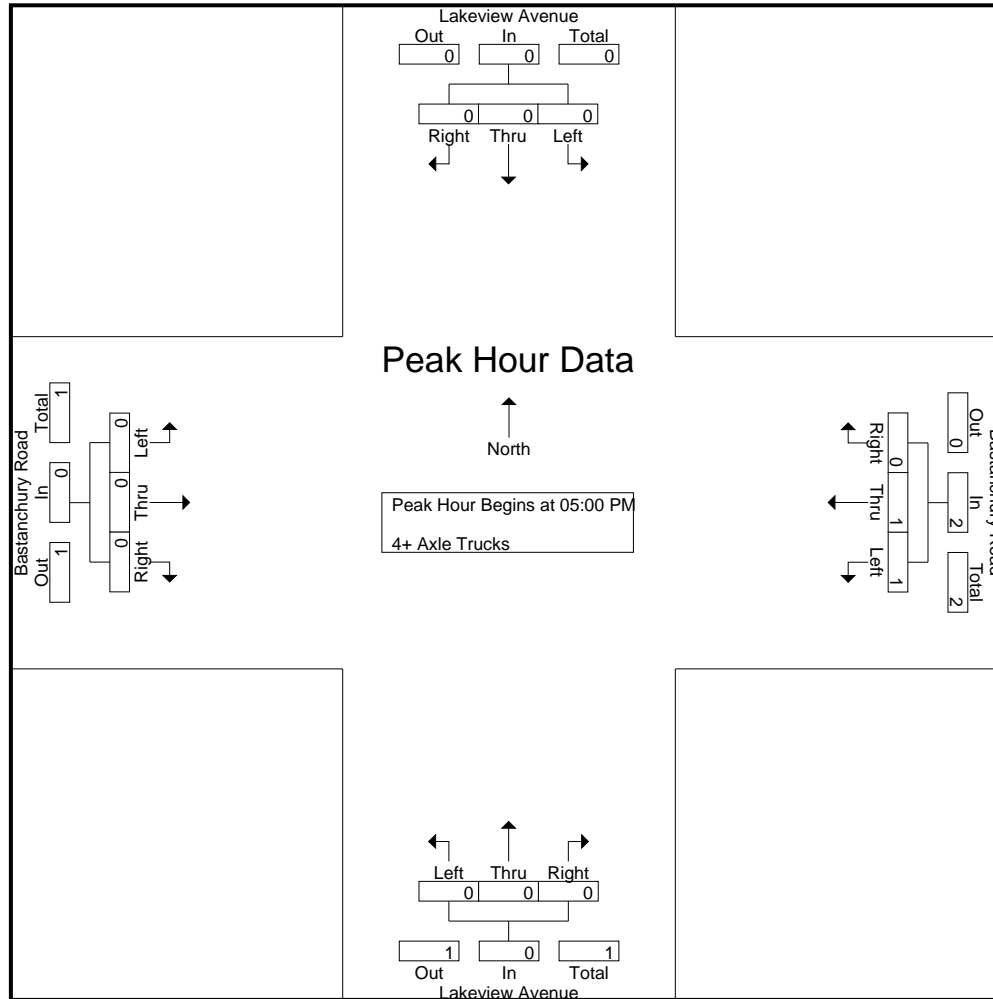
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Bastanchury Road Westbound					Lakeview Avenue Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	2	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Total	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Grand Total	0	0	0	0	0	1	1	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	4	0
Apprch %	0	0	0			50	50	0			0	0	100			0	100	0			0	0	100	
Total %	0	0	0			25	25	0		50	0	0	25		25	0	25	0		25	0	0	100	

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:45 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	
% App. Total	0	0	0		50	50	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road
 Weather: Clear

File Name : 10_YLA_Lake_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Bastanchury Road Westbound				Lakeview Avenue Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	50	50	0	100	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Lakeview Avenue	East Leg Bastanchury Road	South Leg Lakeview Avenue	West Leg Bastanchury Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	1	0	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	0	1	1	3
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	1	2	0	3
8:45 AM	0	1	3	0	4
TOTAL VOLUMES:	1	5	7	1	14

	North Leg Lakeview Avenue	East Leg Bastanchury Road	South Leg Lakeview Avenue	West Leg Bastanchury Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	2	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	1	1	1	3
5:30 PM	1	6	3	0	10
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	7	6	1	15

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Lakeview Avenue			Westbound Bastanchury Road			Northbound Lakeview Avenue			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	2	0	0	0	1	1	0	0	0	0	1	0	5

	Southbound Lakeview Avenue			Westbound Bastanchury Road			Northbound Lakeview Avenue			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1	0	0	2	0	0	0	1	5

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

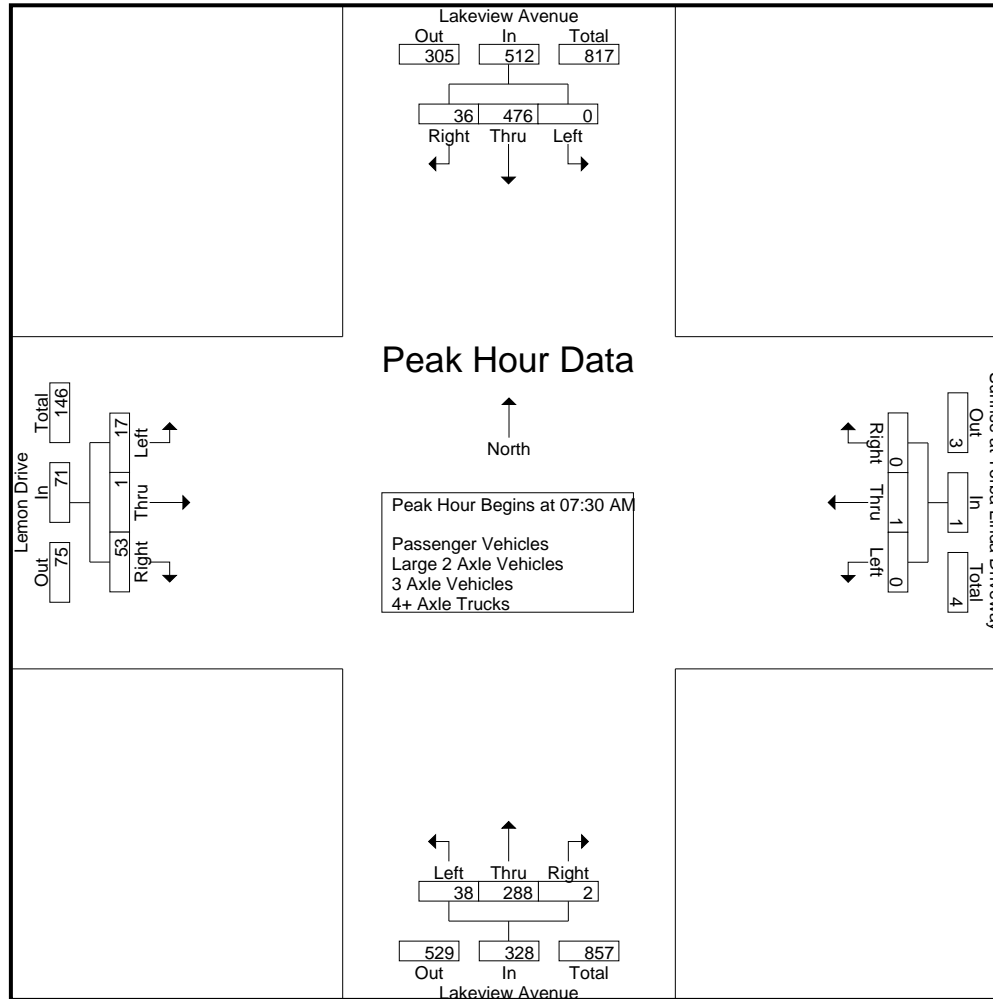
Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	80	4	0	84	0	0	0	0	0	3	44	0	0	47	1	0	9	9	10	9	141	150
07:15 AM	0	85	8	0	93	1	0	0	0	1	5	42	0	0	47	5	0	10	10	15	10	156	166
07:30 AM	0	129	8	1	137	0	0	0	0	0	9	83	0	0	92	2	0	18	16	20	17	249	266
07:45 AM	0	143	9	0	152	0	0	0	0	0	10	86	0	0	96	7	1	16	12	24	12	272	284
Total	0	437	29	1	466	1	0	0	0	1	27	255	0	0	282	15	1	53	47	69	48	818	866
08:00 AM	0	106	11	2	117	0	1	0	0	1	13	68	1	0	82	5	0	8	8	13	10	213	223
08:15 AM	0	98	8	1	106	0	0	0	0	0	6	51	1	0	58	3	0	11	9	14	10	178	188
08:30 AM	1	90	8	0	99	1	0	0	0	1	20	75	1	0	96	3	0	13	13	16	13	212	225
08:45 AM	1	73	8	0	82	0	0	0	0	0	14	71	1	0	86	7	0	17	14	24	14	192	206
Total	2	367	35	3	404	1	1	0	0	2	53	265	4	0	322	18	0	49	44	67	47	795	842
Grand Total	2	804	64	4	870	2	1	0	0	3	80	520	4	0	604	33	1	102	91	136	95	1613	1708
Apprch %	0.2	92.4	7.4			66.7	33.3	0			13.2	86.1	0.7			24.3	0.7	75					
Total %	0.1	49.8	4		53.9	0.1	0.1	0		0.2	5	32.2	0.2		37.4	2	0.1	6.3		8.4	5.6	94.4	
Passenger Vehicles	2	793	60		859	2	1	0		3	71	497	4		572	31	1	100		222	0	0	1656
% Passenger Vehicles	100	98.6	93.8	100	98.3	100	100	0	0	100	88.8	95.6	100	0	94.7	93.9	100	98	98.9	97.8	0	0	97
Large 2 Axle Vehicles	0	10	3		13	0	0	0		0	7	23	0		30	2	0	1		3	0	0	46
% Large 2 Axle Vehicles	0	1.2	4.7	0	1.5	0	0	0	0	0	8.8	4.4	0	0	5	6.1	0	1	0	1.3	0	0	2.7
3 Axle Vehicles	0	1	1		2	0	0	0		0	1	0	0		1	0	0	0		0	0	0	3
% 3 Axle Vehicles	0	0.1	1.6	0	0.2	0	0	0	0	0	1.2	0	0	0	0.2	0	0	0	0	0	0	0	0.2
4+ Axle Trucks	0	0	0		0	0	0	0		0	1	0	0		1	0	0	1		2	0	0	3
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	1.2	0	0	0	0.2	0	0	1	1.1	0.9	0	0	0.2

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	129	8	137	0	0	0	0	9	83	0	92	2	0	18	20	249
07:45 AM	0	143	9	152	0	0	0	0	10	86	0	96	7	1	16	24	272
08:00 AM	0	106	11	117	0	1	0	1	13	68	1	82	5	0	8	13	213
08:15 AM	0	98	8	106	0	0	0	0	6	51	1	58	3	0	11	14	178
Total Volume	0	476	36	512	0	1	0	1	38	288	2	328	17	1	53	71	912
% App. Total	0	93	7		0	100	0		11.6	87.8	0.6		23.9	1.4	74.6		
PHF	.000	.832	.818	.842	.000	.250	.000	.250	.731	.837	.500	.854	.607	.250	.736	.740	.838

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:15 AM				07:45 AM				07:15 AM				
+0 mins.	0	129	8	137	1	0	0	1	10	86	0	96	5	0	10	15	
+15 mins.	0	143	9	152	0	0	0	0	13	68	1	82	2	0	18	20	
+30 mins.	0	106	11	117	0	0	0	0	6	51	1	58	7	1	16	24	
+45 mins.	0	98	8	106	0	1	0	1	20	75	1	96	5	0	8	13	
Total Volume	0	476	36	512	1	1	0	2	49	280	3	332	19	1	52	72	
% App. Total	0	93	7		50	50	0		14.8	84.3	0.9		26.4	1.4	72.2		
PHF	.000	.832	.818	.842	.250	.250	.000	.500	.613	.814	.750	.865	.679	.250	.722	.750	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

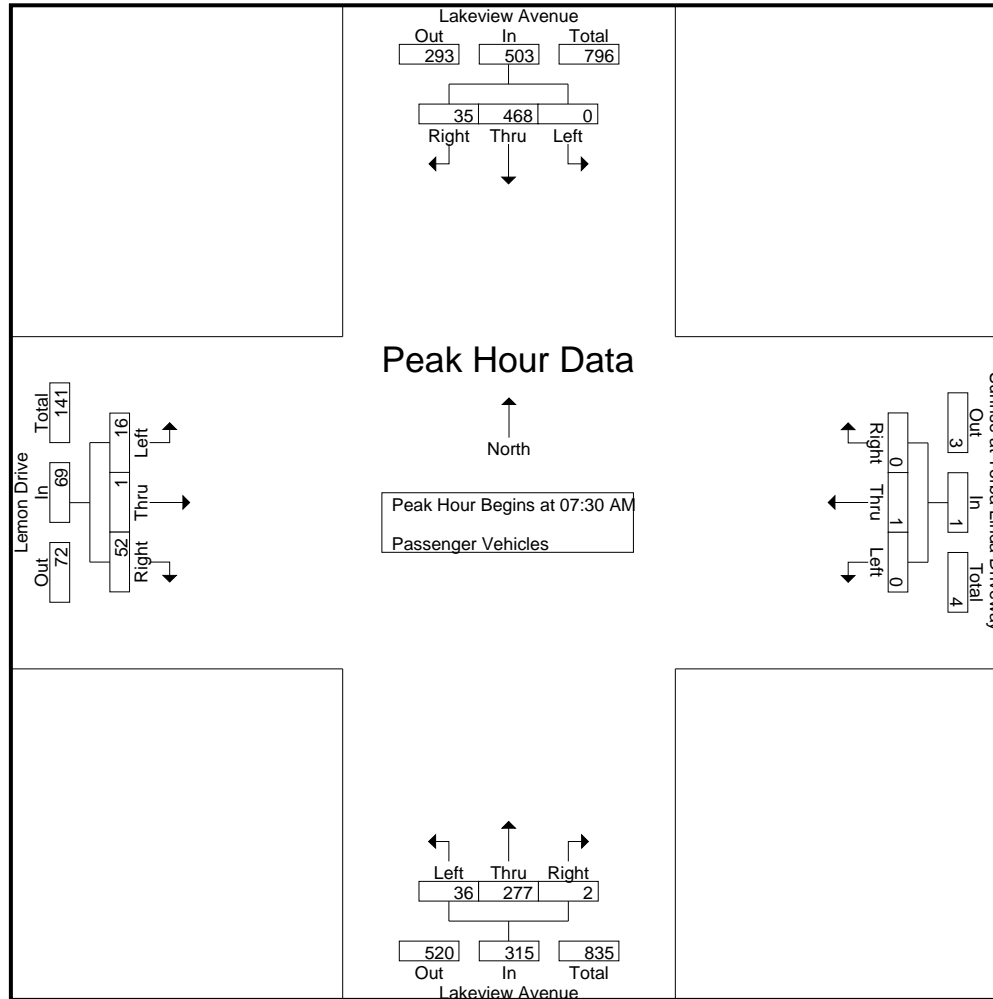
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	80	3	0	83	0	0	0	0	0	2	39	0	0	41	1	0	9	9	10	9	134	143
07:15 AM	0	84	7	0	91	1	0	0	0	1	4	42	0	0	46	5	0	10	10	15	10	153	163
07:30 AM	0	128	7	1	135	0	0	0	0	0	9	80	0	0	89	2	0	18	16	20	17	244	261
07:45 AM	0	142	9	0	151	0	0	0	0	0	9	84	0	0	93	7	1	16	12	24	12	268	280
Total	0	434	26	1	460	1	0	0	0	1	24	245	0	0	269	15	1	53	47	69	48	799	847
08:00 AM	0	102	11	2	113	0	1	0	0	1	12	64	1	0	77	5	0	8	8	13	10	204	214
08:15 AM	0	96	8	1	104	0	0	0	0	0	6	49	1	0	56	2	0	10	9	12	10	172	182
08:30 AM	1	90	8	0	99	1	0	0	0	1	16	72	1	0	89	2	0	13	13	15	13	204	217
08:45 AM	1	71	7	0	79	0	0	0	0	0	13	67	1	0	81	7	0	16	13	23	13	183	196
Total	2	359	34	3	395	1	1	0	0	2	47	252	4	0	303	16	0	47	43	63	46	763	809
Grand Total	2	793	60	4	855	2	1	0	0	3	71	497	4	0	572	31	1	100	90	132	94	1562	1656
Apprch %	0.2	92.7	7			66.7	33.3	0			12.4	86.9	0.7			23.5	0.8	75.8					
Total %	0.1	50.8	3.8		54.7	0.1	0.1	0		0.2	4.5	31.8	0.3		36.6	2	0.1	6.4		8.5	5.7	94.3	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	128	7	135	0	0	0	0	9	80	0	89	2	0	18	20	244
07:45 AM	0	142	9	151	0	0	0	0	9	84	0	93	7	1	16	24	268
08:00 AM	0	102	11	113	0	1	0	1	12	64	1	77	5	0	8	13	204
08:15 AM	0	96	8	104	0	0	0	0	6	49	1	56	2	0	10	12	172
Total Volume	0	468	35	503	0	1	0	1	36	277	2	315	16	1	52	69	888
% App. Total	0	93	7		0	100	0		11.4	87.9	0.6		23.2	1.4	75.4		
PHF	.000	.824	.795	.833	.000	.250	.000	.250	.750	.824	.500	.847	.571	.250	.722	.719	.828

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	128	7	135	0	0	0	0	9	80	0	89	2	0	18	20	
+15 mins.	0	142	9	151	0	0	0	0	9	84	0	93	7	1	16	24	
+30 mins.	0	102	11	113	0	1	0	1	12	64	1	77	5	0	8	13	
+45 mins.	0	96	8	104	0	0	0	0	6	49	1	56	2	0	10	12	
Total Volume	0	468	35	503	0	1	0	1	36	277	2	315	16	1	52	69	
% App. Total	0	93	7		0	100	0		11.4	87.9	0.6		23.2	1.4	75.4		
PHF	.000	.824	.795	.833	.000	.250	.000	.250	.750	.824	.500	.847	.571	.250	.722	.719	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

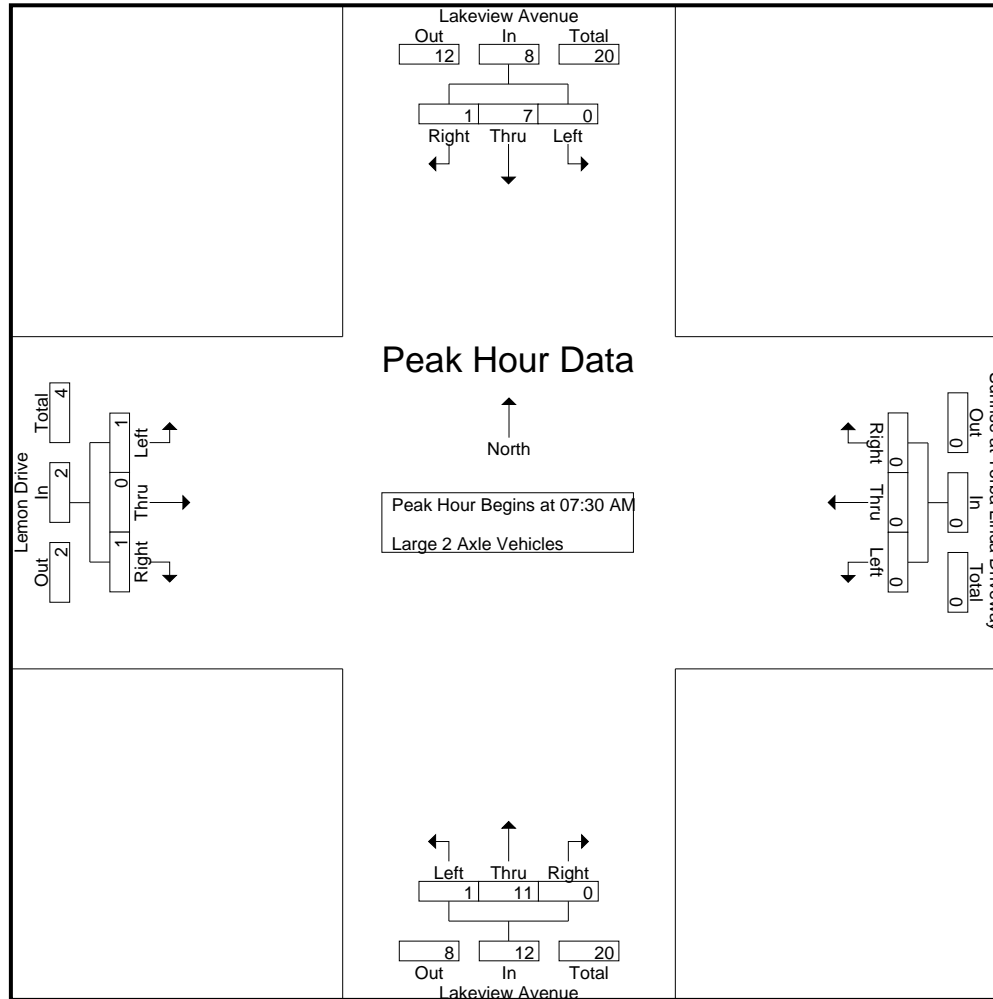
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	6
07:15 AM	0	1	1	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
07:30 AM	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5	5
07:45 AM	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	0	3	2	0	5	0	0	0	0	0	3	10	0	0	13	0	0	0	0	0	0	0	0	0	0	0	18	18
08:00 AM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	8	8
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	0	0	0	0	0	0	5	5
08:30 AM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	6	1	0	0	0	1	0	0	0	0	0	0	7	7
08:45 AM	0	2	1	0	3	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	8	8
Total	0	7	1	0	8	0	0	0	0	0	4	13	0	0	17	2	0	1	0	3	0	0	0	0	0	0	28	28
Grand Total	0	10	3	0	13	0	0	0	0	0	7	23	0	0	30	2	0	1	0	3	0	0	0	0	0	0	46	46
Apprch %	0	76.9	23.1			0	0	0			23.3	76.7	0			66.7	0	33.3										
Total %	0	21.7	6.5		28.3	0	0	0		0	15.2	50	0		65.2	4.3	0	2.2		6.5	0	0	0			0	100	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	1	2	0	0	0	0	0	3	0	3	0	0	0	0	5
07:45 AM	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	4
08:00 AM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
08:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	1	0	1	2	5
Total Volume	0	7	1	8	0	0	0	0	1	11	0	12	1	0	1	2	22
% App. Total	0	87.5	12.5		0	0	0		8.3	91.7	0		50	0	50		
PHF	.000	.438	.250	.500	.000	.000	.000	.000	.250	.688	.000	.750	.250	.000	.250	.250	.688

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	1	2	0	0	0	0	0	3	0	3	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	
+30 mins.	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	2	0	2	1	0	1	2	
Total Volume	0	7	1	8	0	0	0	0	1	11	0	12	1	0	1	2	
% App. Total	0	87.5	12.5		0	0	0		8.3	91.7	0		50	0	50		
PHF	.000	.438	.250	.500	.000	.000	.000	.000	.250	.688	.000	.750	.250	.000	.250	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

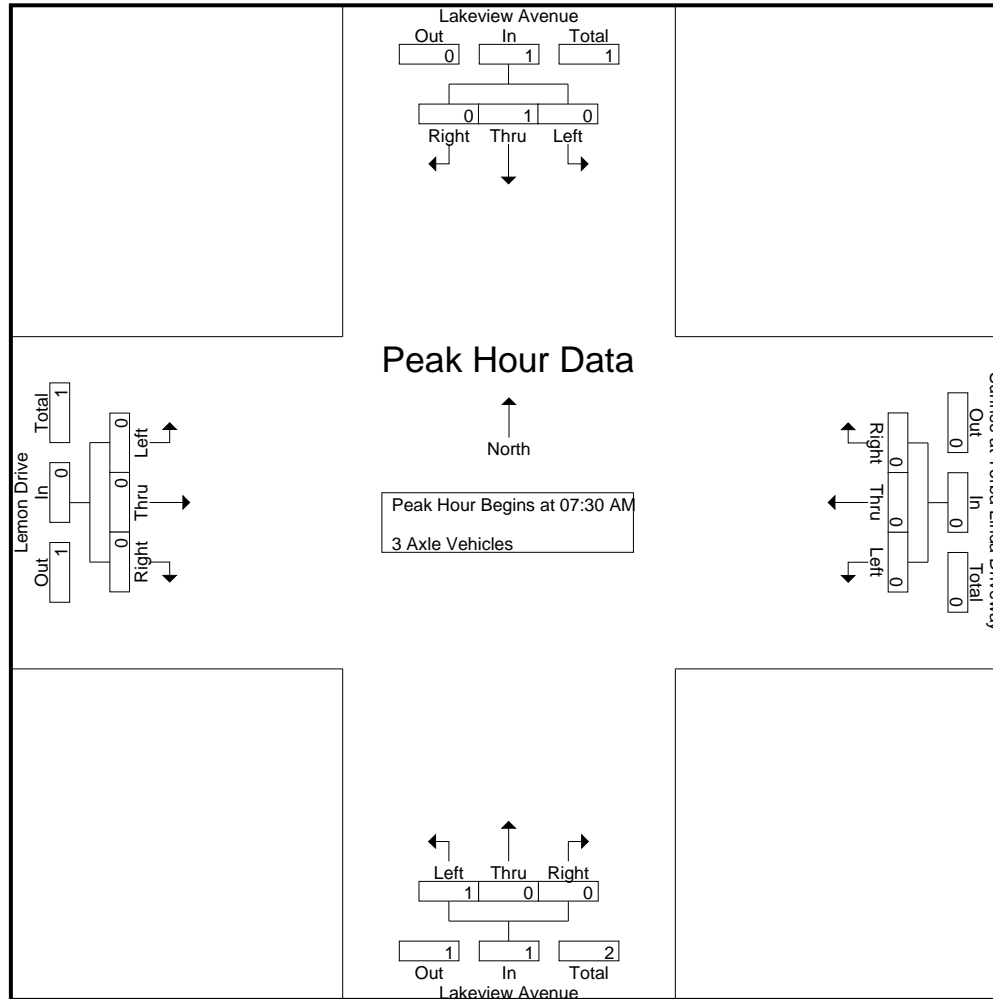
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
Grand Total	0	1	1	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
Apprch %	0	50	50			0	0	0			100	0	0			0	0	0			0	0	0			0		
Total %	0	33.3	33.3		66.7	0	0	0		0	33.3	0	0		33.3	0	0	0		0	0	0	0		0	0	100	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		100	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	
% App. Total	0	100	0		0	0	0		100	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

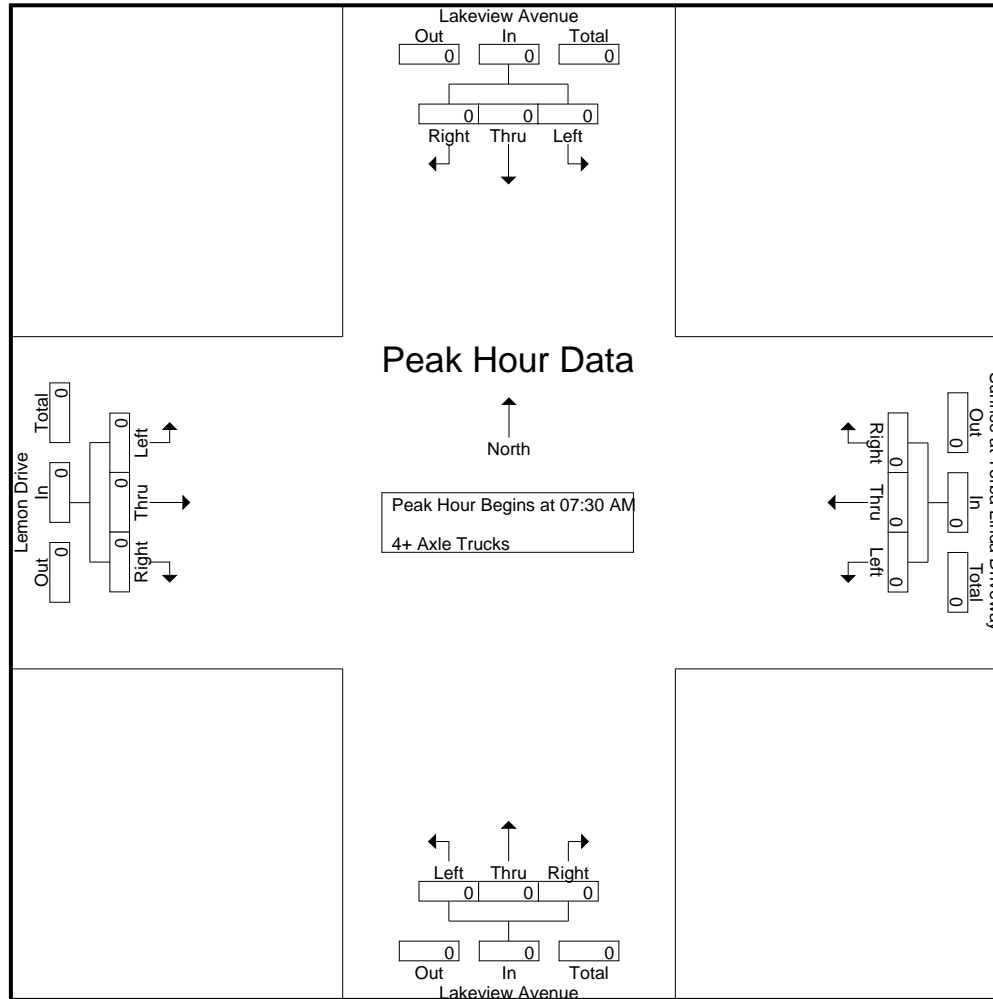
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	1	2	3	1	2	3
Grand Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	1	2	3	1	2	3
Apprch %	0	0	0			0	0	0			100	0	0			0	0	100									
Total %	0	0	0			0	0	0			50	0	0		50	0	0	50		50	33.3	66.7					

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

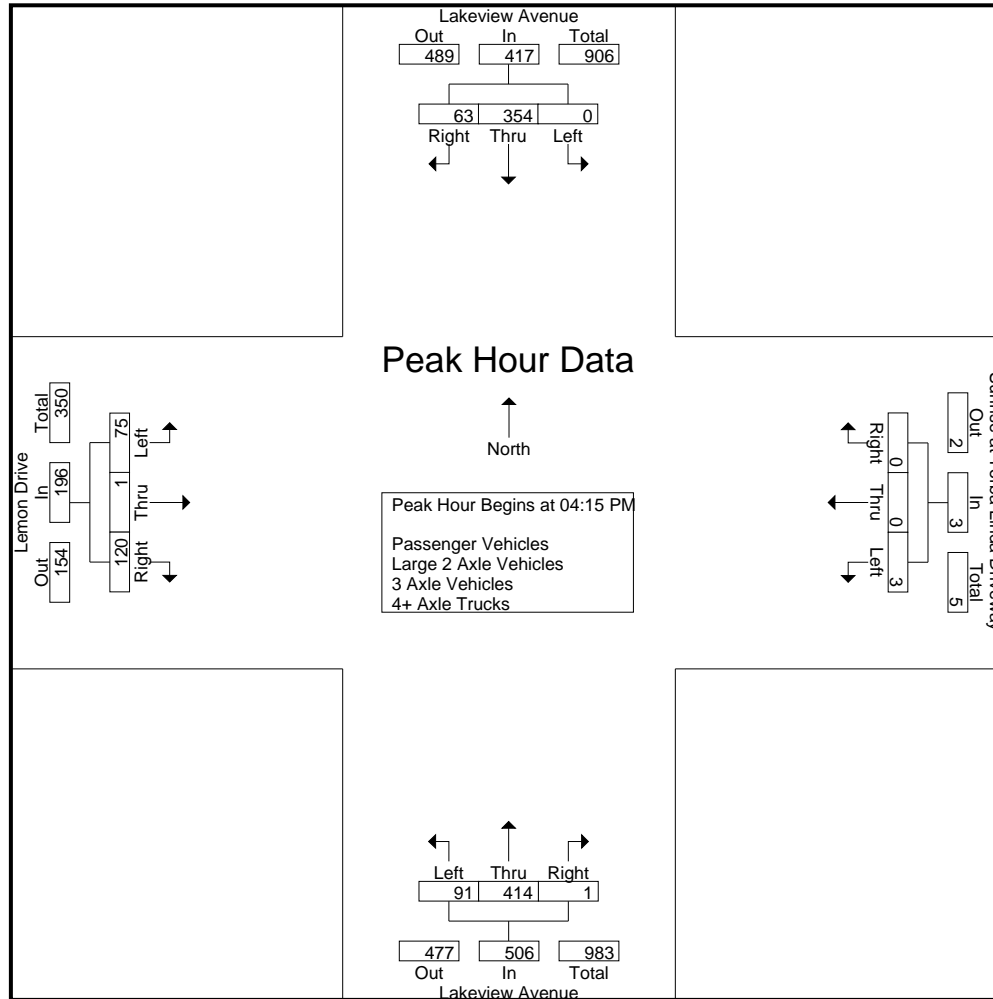
Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	90	8	1	98	1	0	0	0	1	27	100	0	0	127	18	0	11	7	29	8	255	263
04:15 PM	0	92	15	2	107	0	0	0	0	0	25	111	1	0	137	17	0	33	28	50	30	294	324
04:30 PM	0	95	14	5	109	3	0	0	0	3	18	100	0	0	118	15	0	31	20	46	25	276	301
04:45 PM	0	80	23	6	103	0	0	0	0	0	19	94	0	0	113	25	1	26	16	52	22	268	290
Total	0	357	60	14	417	4	0	0	0	4	89	405	1	0	495	75	1	101	71	177	85	1093	1178
05:00 PM	0	87	11	3	98	0	0	0	0	0	29	109	0	0	138	18	0	30	21	48	24	284	308
05:15 PM	0	67	11	4	78	1	0	0	0	1	26	112	0	0	138	15	0	24	23	39	27	256	283
05:30 PM	0	82	16	3	98	0	0	0	0	0	33	117	0	0	150	13	0	30	24	43	27	291	318
05:45 PM	0	84	11	0	95	0	0	0	0	0	21	131	0	0	152	23	0	14	8	37	8	284	292
Total	0	320	49	10	369	1	0	0	0	1	109	469	0	0	578	69	0	98	76	167	86	1115	1201
Grand Total	0	677	109	24	786	5	0	0	0	5	198	874	1	0	1073	144	1	199	147	344	171	2208	2379
Apprch %	0	86.1	13.9			100	0	0			18.5	81.5	0.1			41.9	0.3	57.8					
Total %	0	30.7	4.9		35.6	0.2	0	0		0.2	9	39.6	0		48.6	6.5	0	9		15.6	7.2	92.8	
Passenger Vehicles	0	670	109		803	5	0	0		5	196	870	1		1067	142	1	199		489	0	0	2364
% Passenger Vehicles	0	99	100	100	99.1	100	0	0	0	100	99	99.5	100	0	99.4	98.6	100	100	100	99.6	0	0	99.4
Large 2 Axle Vehicles	0	3	0		3	0	0	0		0	2	2	0		4	0	0	0		0	0	0	7
% Large 2 Axle Vehicles	0	0.4	0	0	0.4	0	0	0	0	0	1	0.2	0	0	0.4	0	0	0	0	0	0	0	0.3
3 Axle Vehicles	0	3	0		3	0	0	0		0	0	1	0		1	2	0	0		2	0	0	6
% 3 Axle Vehicles	0	0.4	0	0	0.4	0	0	0	0	0	0	0.1	0	0	0.1	1.4	0	0	0	0.4	0	0	0.3
4+ Axle Trucks	0	1	0		1	0	0	0		0	0	1	0		1	0	0	0		0	0	0	2
% 4+ Axle Trucks	0	0.1	0	0	0.1	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0.1

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	92	15	107	0	0	0	0	25	111	1	137	17	0	33	50	294
04:30 PM	0	95	14	109	3	0	0	3	18	100	0	118	15	0	31	46	276
04:45 PM	0	80	23	103	0	0	0	0	19	94	0	113	25	1	26	52	268
05:00 PM	0	87	11	98	0	0	0	0	29	109	0	138	18	0	30	48	284
Total Volume	0	354	63	417	3	0	0	3	91	414	1	506	75	1	120	196	1122
% App. Total	0	84.9	15.1		100	0	0		18	81.8	0.2		38.3	0.5	61.2		
PHF	.000	.932	.685	.956	.250	.000	.000	.250	.784	.932	.250	.917	.750	.250	.909	.942	.954

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:15 PM

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				04:15 PM				
+0 mins.	0	90	8	98	1	0	0	1	29	109	0	138	17	0	33	50	
+15 mins.	0	92	15	107	0	0	0	0	26	112	0	138	15	0	31	46	
+30 mins.	0	95	14	109	3	0	0	3	33	117	0	150	25	1	26	52	
+45 mins.	0	80	23	103	0	0	0	0	21	131	0	152	18	0	30	48	
Total Volume	0	357	60	417	4	0	0	4	109	469	0	578	75	1	120	196	
% App. Total	0	85.6	14.4		100	0	0		18.9	81.1	0		38.3	0.5	61.2		
PHF	.000	.939	.652	.956	.333	.000	.000	.333	.826	.895	.000	.951	.750	.250	.909	.942	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

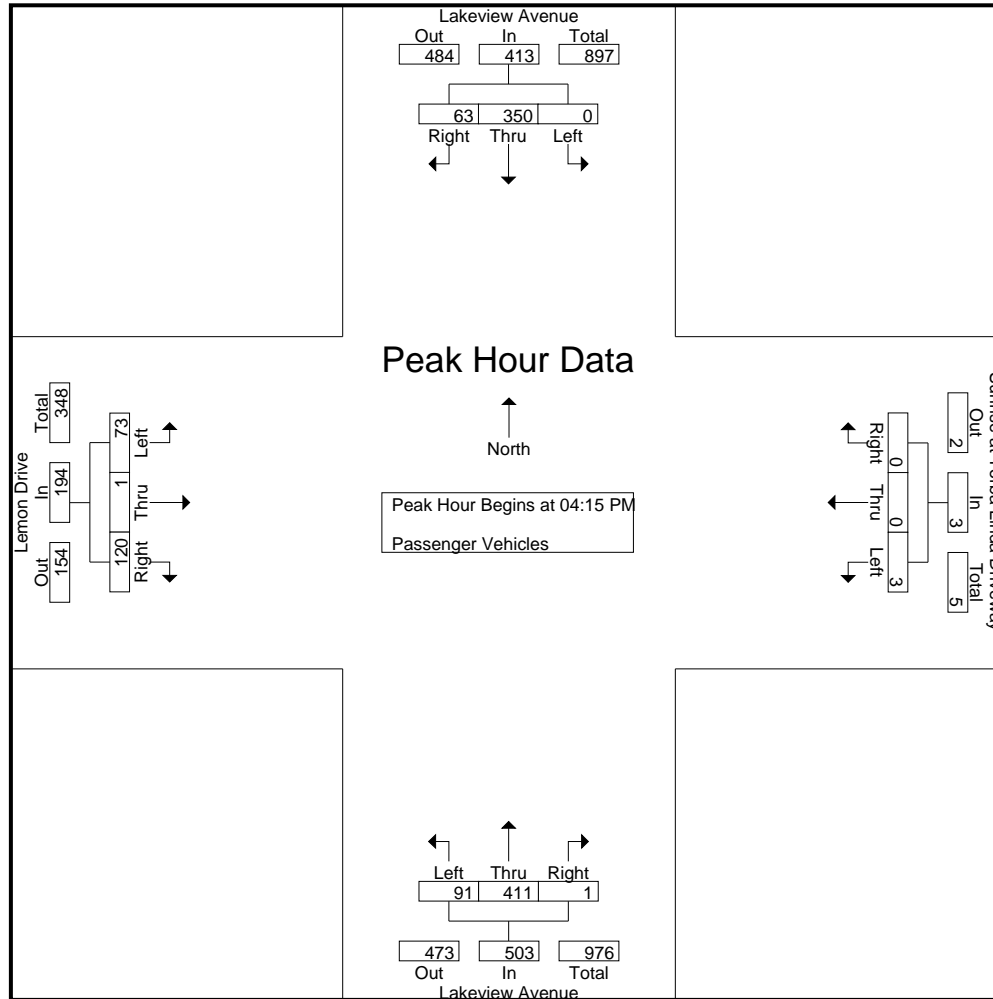
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	90	8	1	98	1	0	0	0	1	27	100	0	0	127	18	0	11	7	29	8	255	263
04:15 PM	0	91	15	2	106	0	0	0	0	0	25	110	1	0	136	16	0	33	28	49	30	291	321
04:30 PM	0	95	14	5	109	3	0	0	0	3	18	99	0	0	117	15	0	31	20	46	25	275	300
04:45 PM	0	79	23	6	102	0	0	0	0	0	19	93	0	0	112	24	1	26	16	51	22	265	287
Total	0	355	60	14	415	4	0	0	0	4	89	402	1	0	492	73	1	101	71	175	85	1086	1171
05:00 PM	0	85	11	3	96	0	0	0	0	0	29	109	0	0	138	18	0	30	21	48	24	282	306
05:15 PM	0	66	11	4	77	1	0	0	0	1	26	112	0	0	138	15	0	24	23	39	27	255	282
05:30 PM	0	81	16	3	97	0	0	0	0	0	32	117	0	0	149	13	0	30	24	43	27	289	316
05:45 PM	0	83	11	0	94	0	0	0	0	0	20	130	0	0	150	23	0	14	8	37	8	281	289
Total	0	315	49	10	364	1	0	0	0	1	107	468	0	0	575	69	0	98	76	167	86	1107	1193
Grand Total	0	670	109	24	779	5	0	0	0	5	196	870	1	0	1067	142	1	199	147	342	171	2193	2364
Apprch %	0	86	14			100	0	0			18.4	81.5	0.1			41.5	0.3	58.2					
Total %	0	30.6	5		35.5	0.2	0	0		0.2	8.9	39.7	0		48.7	6.5	0	9.1		15.6	7.2	92.8	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	91	15	106	0	0	0	0	25	110	1	136	16	0	33	49	291
04:30 PM	0	95	14	109	3	0	0	3	18	99	0	117	15	0	31	46	275
04:45 PM	0	79	23	102	0	0	0	0	19	93	0	112	24	1	26	51	265
05:00 PM	0	85	11	96	0	0	0	0	29	109	0	138	18	0	30	48	282
Total Volume	0	350	63	413	3	0	0	3	91	411	1	503	73	1	120	194	1113
% App. Total	0	84.7	15.3		100	0	0		18.1	81.7	0.2		37.6	0.5	61.9		
PHF	.000	.921	.685	.947	.250	.000	.000	.250	.784	.934	.250	.911	.760	.250	.909	.951	.956

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	91	15	106	0	0	0	0	25	110	1	136	16	0	33	49	
+15 mins.	0	95	14	109	3	0	0	3	18	99	0	117	15	0	31	46	
+30 mins.	0	79	23	102	0	0	0	0	19	93	0	112	24	1	26	51	
+45 mins.	0	85	11	96	0	0	0	0	29	109	0	138	18	0	30	48	
Total Volume	0	350	63	413	3	0	0	3	91	411	1	503	73	1	120	194	
% App. Total	0	84.7	15.3		100	0	0		18.1	81.7	0.2		37.6	0.5	61.9		
PHF	.000	.921	.685	.947	.250	.000	.000	.250	.784	.934	.250	.911	.760	.250	.909	.951	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

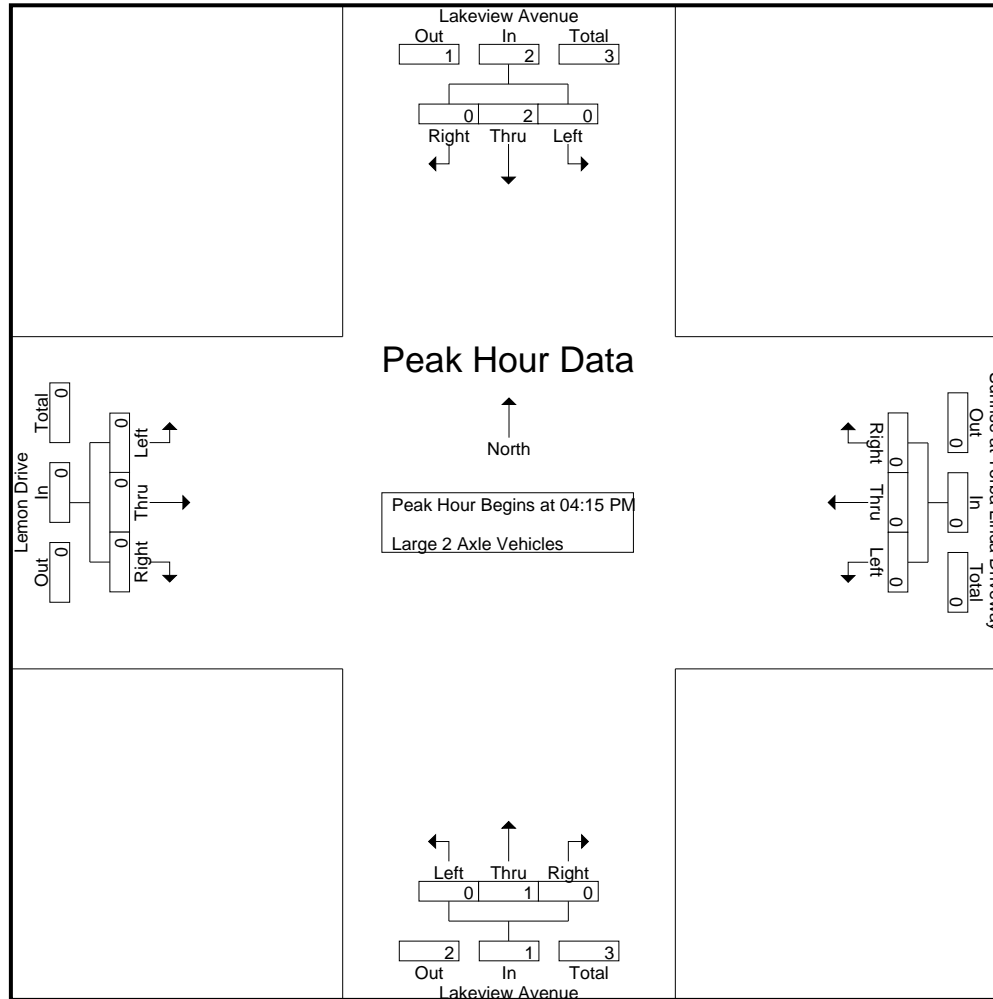
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	2	0	0	2	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5	5
Grand Total	0	3	0	0	3	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	7	7
Apprch %	0	100	0			0	0	0			50	50	0			0	0	0			0	0	0			0		
Total %	0	42.9	0		42.9	0	0	0		0	28.6	28.6	0		57.1	0	0	0		0	0	0	0		0	0	100	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.750

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

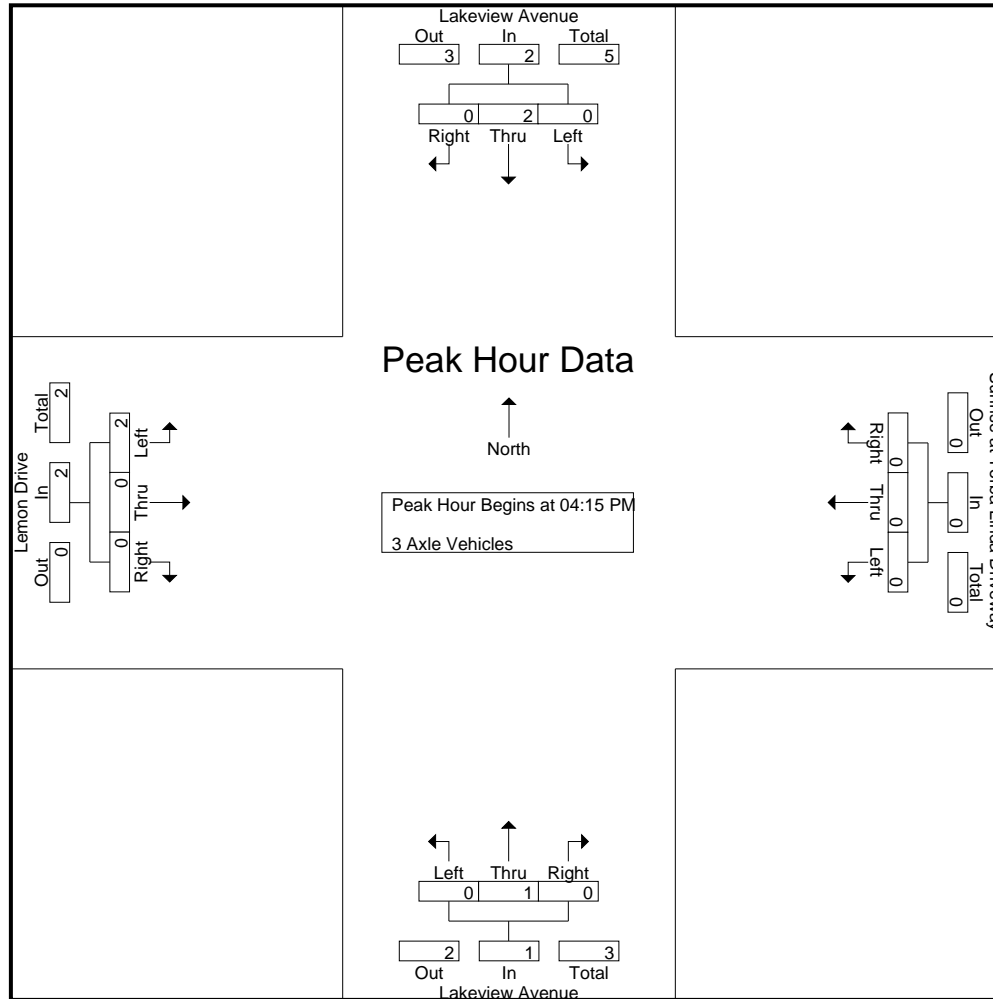
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	0	4	4
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Grand Total	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	0	6	6
Apprch %	0	100	0			0	0	0			0	100	0			100	0	0			0	0	0					
Total %	0	50	0		50	0	0	0		0	0	16.7	0		16.7	33.3	0	0		33.3	0	100						

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	2	0	0	2	5
% App. Total	0	100	0		0	0	0		0	100	0		100	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.500	.000	.000	.500	.625

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	2	0	0	2	
% App. Total	0	100	0		0	0	0		0	100	0		100	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.500	.000	.000	.500	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

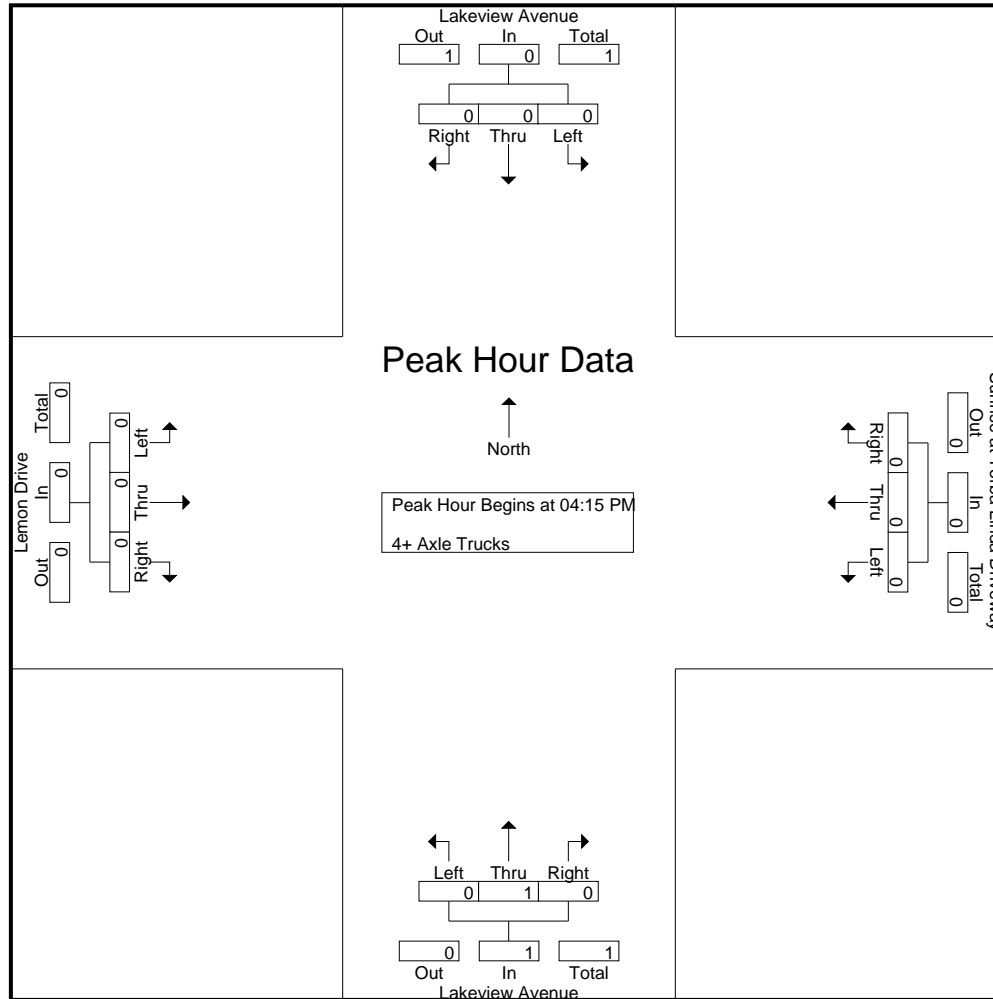
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Sunrise at Yorba Linda Driveway Westbound					Lakeview Avenue Northbound					Lemon Drive Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0			0	0	0		0		
Total %	0	50	0		50	0	0	0		0	0	50	0		50	0	0	0		0	0	0	0		0	100	

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive
 Weather: Clear

File Name : 11_YLA_Lake_Lemon PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Sunrise at Yorba Linda Driveway Westbound				Lakeview Avenue Northbound				Lemon Drive Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Lakeview Avenue	East Leg Sunrise Driveway	South Leg Lakeview Avenue	West Leg Lemon Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	0	0	2	0	2
8:30 AM	0	0	4	0	4
8:45 AM	0	0	4	1	5
TOTAL VOLUMES:	0	0	10	3	13

	North Leg Lakeview Avenue	East Leg Sunrise Driveway	South Leg Lakeview Avenue	West Leg Lemon Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	4	2	6
5:00 PM	0	0	3	0	3
5:15 PM	0	0	4	3	7
5:30 PM	0	0	5	3	8
5:45 PM	0	0	5	4	9
TOTAL VOLUMES:	0	0	23	12	35

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Lemon Drive



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Lakeview Avenue			Westbound Sunrise Driveway			Northbound Lakeview Avenue			Eastbound Lemon Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Lakeview Avenue			Westbound Sunrise Driveway			Northbound Lakeview Avenue			Eastbound Lemon Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	1	0	0	0	0	1	3

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

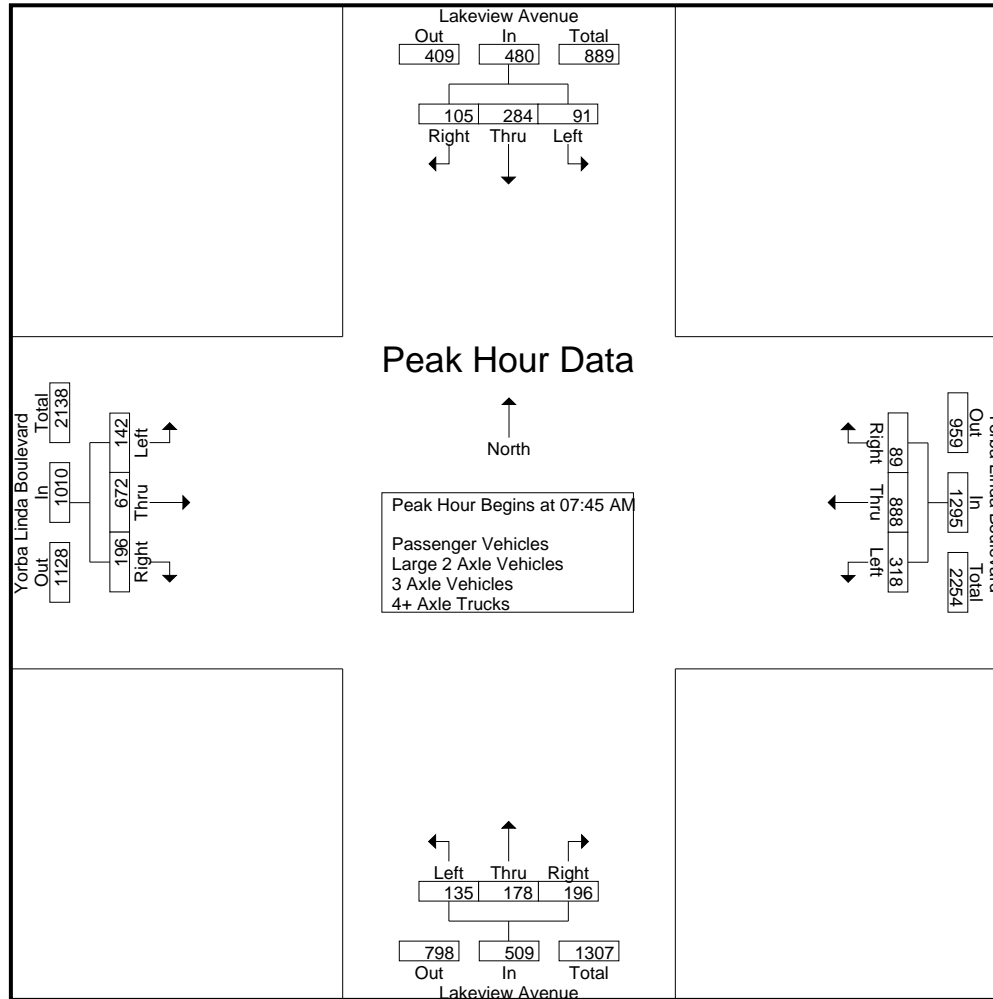
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	6	70	7	0	83	66	101	10	4	177	11	33	20	12	64	12	63	23	4	98	20	422	442
07:15 AM	14	67	19	0	100	64	152	6	0	222	17	24	25	15	66	16	85	14	3	115	18	503	521
07:30 AM	19	84	38	0	141	76	222	7	0	305	28	58	29	16	115	24	115	29	1	168	17	729	746
07:45 AM	25	84	38	0	147	91	218	21	2	330	28	54	55	35	137	30	166	30	5	226	42	840	882
Total	64	305	102	0	471	297	693	44	6	1034	84	169	129	78	382	82	429	96	13	607	97	2494	2591
08:00 AM	21	72	23	1	116	76	214	17	2	307	28	38	43	32	109	29	166	46	10	241	45	773	818
08:15 AM	22	64	25	0	111	72	229	26	1	327	36	36	39	25	111	40	169	53	10	262	36	811	847
08:30 AM	23	64	19	1	106	79	227	25	3	331	43	50	59	46	152	43	171	67	20	281	70	870	940
08:45 AM	21	64	35	3	120	52	208	16	1	276	44	43	58	35	145	45	170	19	3	234	42	775	817
Total	87	264	102	5	453	279	878	84	7	1241	151	167	199	138	517	157	676	185	43	1018	193	3229	3422
Grand Total	151	569	204	5	924	576	1571	128	13	2275	235	336	328	216	899	239	1105	281	56	1625	290	5723	6013
Apprch %	16.3	61.6	22.1			25.3	69.1	5.6			26.1	37.4	36.5			14.7	68	17.3					
Total %	2.6	9.9	3.6		16.1	10.1	27.5	2.2		39.8	4.1	5.9	5.7		15.7	4.2	19.3	4.9		28.4	4.8	95.2	
Passenger Vehicles	148	565	198		916	573	1547	122		2255	231	328	320		1090	230	1073	278		1637	0	0	5898
% Passenger Vehicles	98	99.3	97.1	100	98.6	99.5	98.5	95.3	100	98.6	98.3	97.6	97.6	97.7	97.8	96.2	97.1	98.9	100	97.4	0	0	98.1
Large 2 Axle Vehicles	2	4	4		10	3	19	4		26	3	8	8		24	9	23	3		35	0	0	95
% Large 2 Axle Vehicles	1.3	0.7	2	0	1.1	0.5	1.2	3.1	0	1.1	1.3	2.4	2.4	2.3	2.2	3.8	2.1	1.1	0	2.1	0	0	1.6
3 Axle Vehicles	1	0	1		2	0	3	0		3	1	0	0		1	0	5	0		5	0	0	11
% 3 Axle Vehicles	0.7	0	0.5	0	0.2	0	0.2	0	0	0.1	0.4	0	0	0	0.1	0	0.5	0	0	0.3	0	0	0.2
4+ Axle Trucks	0	0	1		1	0	2	2		4	0	0	0		0	0	4	0		4	0	0	9
% 4+ Axle Trucks	0	0	0.5	0	0.1	0	0.1	1.6	0	0.2	0	0	0	0	0	0	0.4	0	0	0.2	0	0	0.1

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	25	84	38	147	91	218	21	330	28	54	55	137	30	166	30	226	840
08:00 AM	21	72	23	116	76	214	17	307	28	38	43	109	29	166	46	241	773
08:15 AM	22	64	25	111	72	229	26	327	36	36	39	111	40	169	53	262	811
08:30 AM	23	64	19	106	79	227	25	331	43	50	59	152	43	171	67	281	870
Total Volume	91	284	105	480	318	888	89	1295	135	178	196	509	142	672	196	1010	3294
% App. Total	19	59.2	21.9		24.6	68.6	6.9		26.5	35	38.5		14.1	66.5	19.4		
PHF	.910	.845	.691	.816	.874	.969	.856	.978	.785	.824	.831	.837	.826	.982	.731	.899	.947

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:45 AM				08:00 AM				08:00 AM				
+0 mins.	19	84	38	141	91	218	21	330	28	38	43	109	29	166	46	241	
+15 mins.	25	84	38	147	76	214	17	307	36	36	39	111	40	169	53	262	
+30 mins.	21	72	23	116	72	229	26	327	43	50	59	152	43	171	67	281	
+45 mins.	22	64	25	111	79	227	25	331	44	43	58	145	45	170	19	234	
Total Volume	87	304	124	515	318	888	89	1295	151	167	199	517	157	676	185	1018	
% App. Total	16.9	59	24.1		24.6	68.6	6.9		29.2	32.3	38.5		15.4	66.4	18.2		
PHF	.870	.905	.816	.876	.874	.969	.856	.978	.858	.835	.843	.850	.872	.988	.690	.906	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

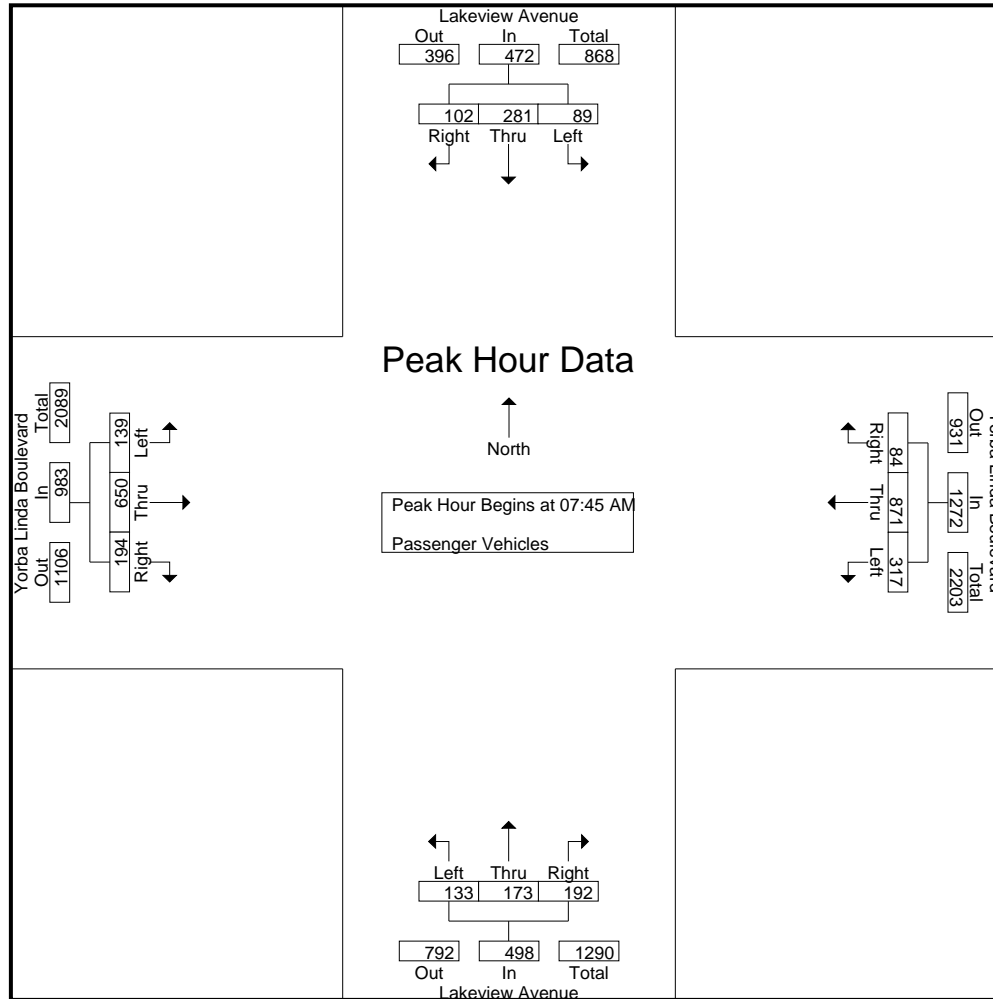
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	6	70	7	0	83	66	100	9	4	175	11	31	19	11	61	11	60	23	4	94	19	413	432
07:15 AM	14	67	17	0	98	64	151	6	0	221	17	24	24	15	65	15	83	14	3	112	18	496	514
07:30 AM	18	84	37	0	139	76	219	7	0	302	27	58	28	16	113	22	113	28	1	163	17	717	734
07:45 AM	25	83	37	0	145	91	214	20	2	325	28	54	55	35	137	29	159	30	5	218	42	825	867
Total	63	304	98	0	465	297	684	42	6	1023	83	167	126	77	376	77	415	95	13	587	96	2451	2547
08:00 AM	20	70	23	1	113	75	212	17	2	304	28	35	41	30	104	28	160	45	10	233	43	754	797
08:15 AM	22	64	23	0	109	72	223	26	1	321	36	35	38	25	109	40	164	53	10	257	36	796	832
08:30 AM	22	64	19	1	105	79	222	21	3	322	41	49	58	45	148	42	167	66	20	275	69	850	919
08:45 AM	21	63	35	3	119	50	206	16	1	272	43	42	57	34	142	43	167	19	3	229	41	762	803
Total	85	261	100	5	446	276	863	80	7	1219	148	161	194	134	503	153	658	183	43	994	189	3162	3351
Grand Total	148	565	198	5	911	573	1547	122	13	2242	231	328	320	211	879	230	1073	278	56	1581	285	5613	5898
Apprch %	16.2	62	21.7			25.6	69	5.4			26.3	37.3	36.4			14.5	67.9	17.6					
Total %	2.6	10.1	3.5		16.2	10.2	27.6	2.2		39.9	4.1	5.8	5.7		15.7	4.1	19.1	5		28.2	4.8	95.2	

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	25	83	37	145	91	214	20	325	28	54	55	137	29	159	30	218	825
08:00 AM	20	70	23	113	75	212	17	304	28	35	41	104	28	160	45	233	754
08:15 AM	22	64	23	109	72	223	26	321	36	35	38	109	40	164	53	257	796
08:30 AM	22	64	19	105	79	222	21	322	41	49	58	148	42	167	66	275	850
Total Volume	89	281	102	472	317	871	84	1272	133	173	192	498	139	650	194	983	3225
% App. Total	18.9	59.5	21.6		24.9	68.5	6.6		26.7	34.7	38.6		14.1	66.1	19.7		
PHF	.890	.846	.689	.814	.871	.976	.808	.978	.811	.801	.828	.841	.827	.973	.735	.894	.949

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	25	83	37	145	91	214	20	325	28	54	55	137	29	159	30	218	
+15 mins.	20	70	23	113	75	212	17	304	28	35	41	104	28	160	45	233	
+30 mins.	22	64	23	109	72	223	26	321	36	35	38	109	40	164	53	257	
+45 mins.	22	64	19	105	79	222	21	322	41	49	58	148	42	167	66	275	
Total Volume	89	281	102	472	317	871	84	1272	133	173	192	498	139	650	194	983	
% App. Total	18.9	59.5	21.6		24.9	68.5	6.6		26.7	34.7	38.6		14.1	66.1	19.7		
PHF	.890	.846	.689	.814	.871	.976	.808	.978	.811	.801	.828	.841	.827	.973	.735	.894	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

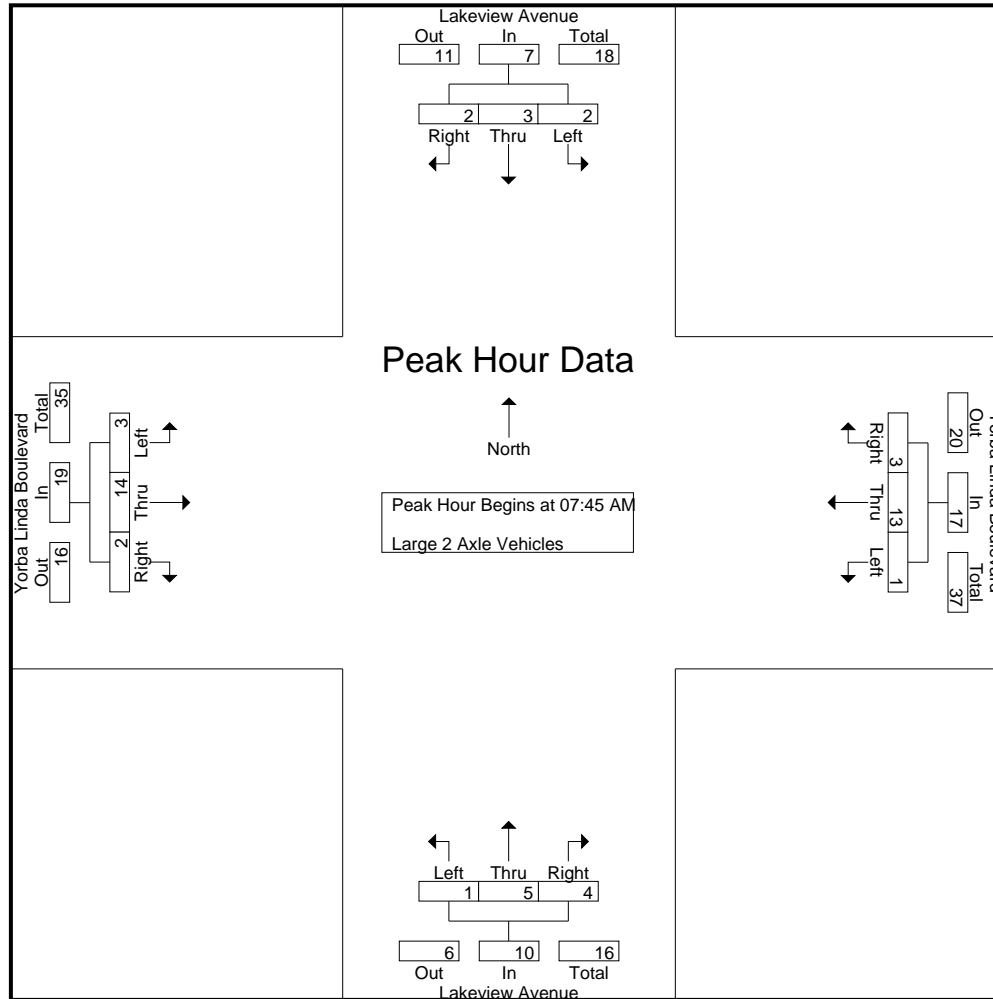
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	1	1	0	2	0	2	1	1	3	1	2	0	0	3	1	8	9
07:15 AM	0	0	1	0	1	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	0	6	6
07:30 AM	0	0	1	0	1	0	3	0	0	3	1	0	1	0	2	2	2	1	0	5	0	11	11
07:45 AM	0	1	1	0	2	0	2	1	0	3	0	0	0	0	0	1	3	0	0	4	0	9	9
Total	0	1	3	0	4	0	7	2	0	9	1	2	3	1	6	5	9	1	0	15	1	34	35
08:00 AM	1	2	0	0	3	1	2	0	0	3	0	3	2	2	5	1	5	1	0	7	2	18	20
08:15 AM	0	0	1	0	1	0	4	0	0	4	0	1	1	0	2	0	4	0	0	4	0	11	11
08:30 AM	1	0	0	0	1	0	5	2	0	7	1	1	1	1	3	1	2	1	0	4	1	15	16
08:45 AM	0	1	0	0	1	2	1	0	0	3	1	1	1	1	3	2	3	0	0	5	1	12	13
Total	2	3	1	0	6	3	12	2	0	17	2	6	5	4	13	4	14	2	0	20	4	56	60
Grand Total	2	4	4	0	10	3	19	4	0	26	3	8	8	5	19	9	23	3	0	35	5	90	95
Apprch %	20	40	40			11.5	73.1	15.4			15.8	42.1	42.1			25.7	65.7	8.6					
Total %	2.2	4.4	4.4		11.1	3.3	21.1	4.4		28.9	3.3	8.9	8.9		21.1	10	25.6	3.3		38.9	5.3	94.7	

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	1	2	0	2	1	3	0	0	0	0	1	3	0	4	9
08:00 AM	1	2	0	3	1	2	0	3	0	3	2	5	1	5	1	7	18
08:15 AM	0	0	1	1	0	4	0	4	0	1	1	2	0	4	0	4	11
08:30 AM	1	0	0	1	0	5	2	7	1	1	1	3	1	2	1	4	15
Total Volume	2	3	2	7	1	13	3	17	1	5	4	10	3	14	2	19	53
% App. Total	28.6	42.9	28.6		5.9	76.5	17.6		10	50	40		15.8	73.7	10.5		
PHF	.500	.375	.500	.583	.250	.650	.375	.607	.250	.417	.500	.500	.750	.700	.500	.679	.736

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	1	1	2	0	2	1	3	0	0	0	0	1	3	0	4	
+15 mins.	1	2	0	3	1	2	0	3	0	3	2	5	1	5	1	7	
+30 mins.	0	0	1	1	0	4	0	4	0	1	1	2	0	4	0	4	
+45 mins.	1	0	0	1	0	5	2	7	1	1	1	3	1	2	1	4	
Total Volume	2	3	2	7	1	13	3	17	1	5	4	10	3	14	2	19	
% App. Total	28.6	42.9	28.6		5.9	76.5	17.6		10	50	40		15.8	73.7	10.5		
PHF	.500	.375	.500	.583	.250	.650	.375	.607	.250	.417	.500	.500	.750	.700	.500	.679	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

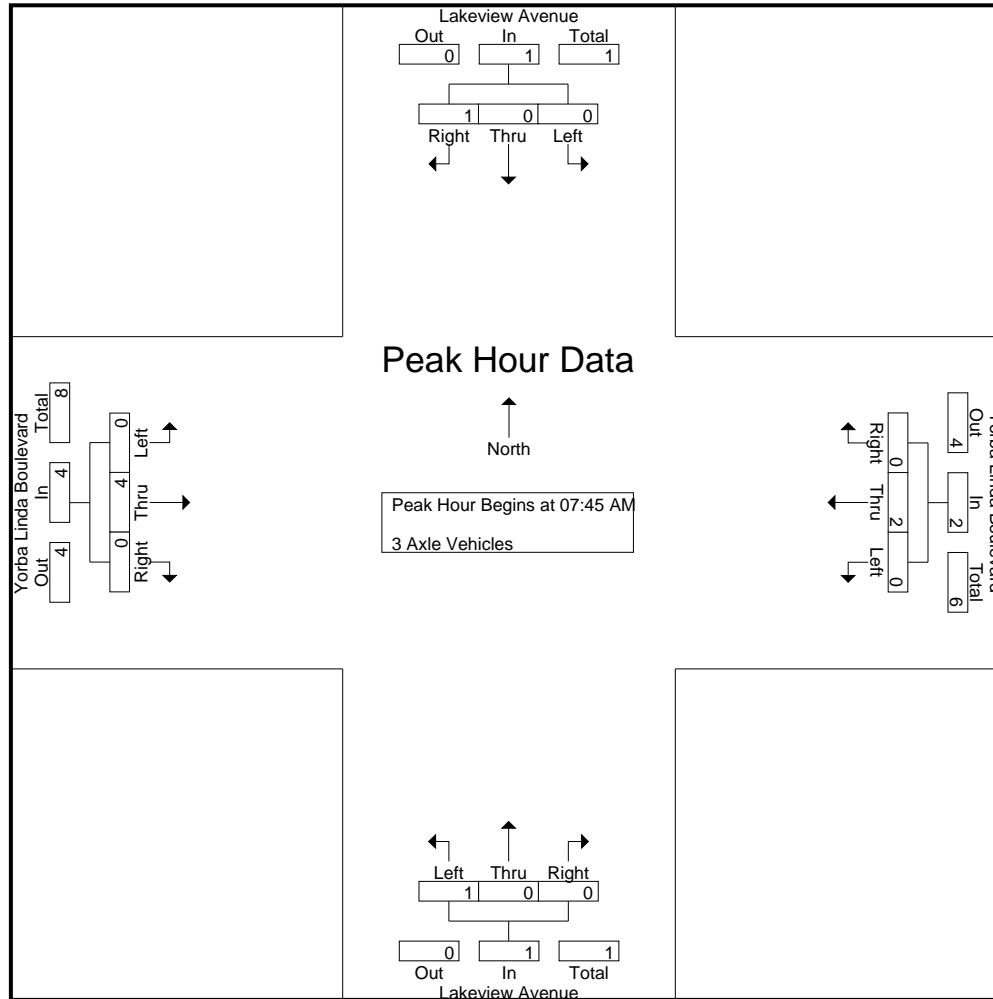
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3	3
Total	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	5	5	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	3	3	3
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	1	0	1	0	1	0	0	1	1	0	0	0	1	0	3	0	0	3	0	6	6	6
Grand Total	1	0	1	0	2	0	3	0	0	3	1	0	0	0	1	0	5	0	0	5	0	11	11	11
Apprch %	50	0	50			0	100	0			100	0	0			0	100	0			0	100	100	100
Total %	9.1	0	9.1		18.2	0	27.3	0		27.3	9.1	0	0		9.1	0	45.5	0		45.5	0	100	100	100

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	2	3
Total Volume	0	0	1	1	0	2	0	2	1	0	0	1	0	4	0	4	8
% App. Total	0	0	100		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.000	.500	.667

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	2	
Total Volume	0	0	1	1	0	2	0	2	1	0	0	1	0	4	0	4	
% App. Total	0	0	100		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.000	.500	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

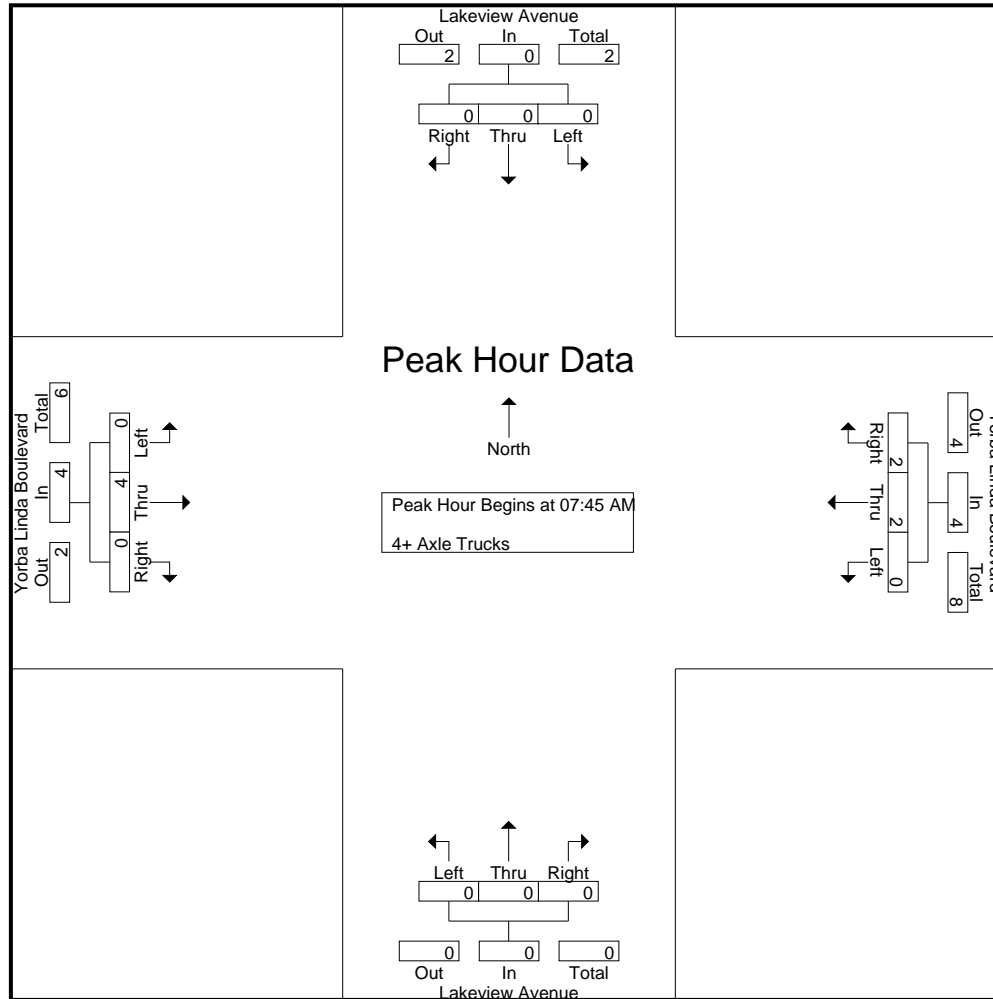
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	0	3	3
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	0	4	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	5	5
Grand Total	0	0	1	0	1	0	2	2	0	4	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	0	9	9
Apprch %	0	0	100			0	50	50			0	0	0			0	100	0			0	100	0			0	100	100
Total %	0	0	11.1		11.1	0	22.2	22.2		44.4	0	0	0		0	0	44.4	0		44.4	0	44.4	0		44.4	0	100	100

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	2	2	4	0	0	0	0	0	4	0	4	8
% App. Total	0	0	0	0	0	50	50		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.500	.000	.000	.000	.000	.000	.333	.000	.333	.667

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	2	2	4	0	0	0	0	0	4	0	4	
% App. Total	0	0	0	0	0	50	50		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.500	.000	.000	.000	.000	.000	.333	.000	.333	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

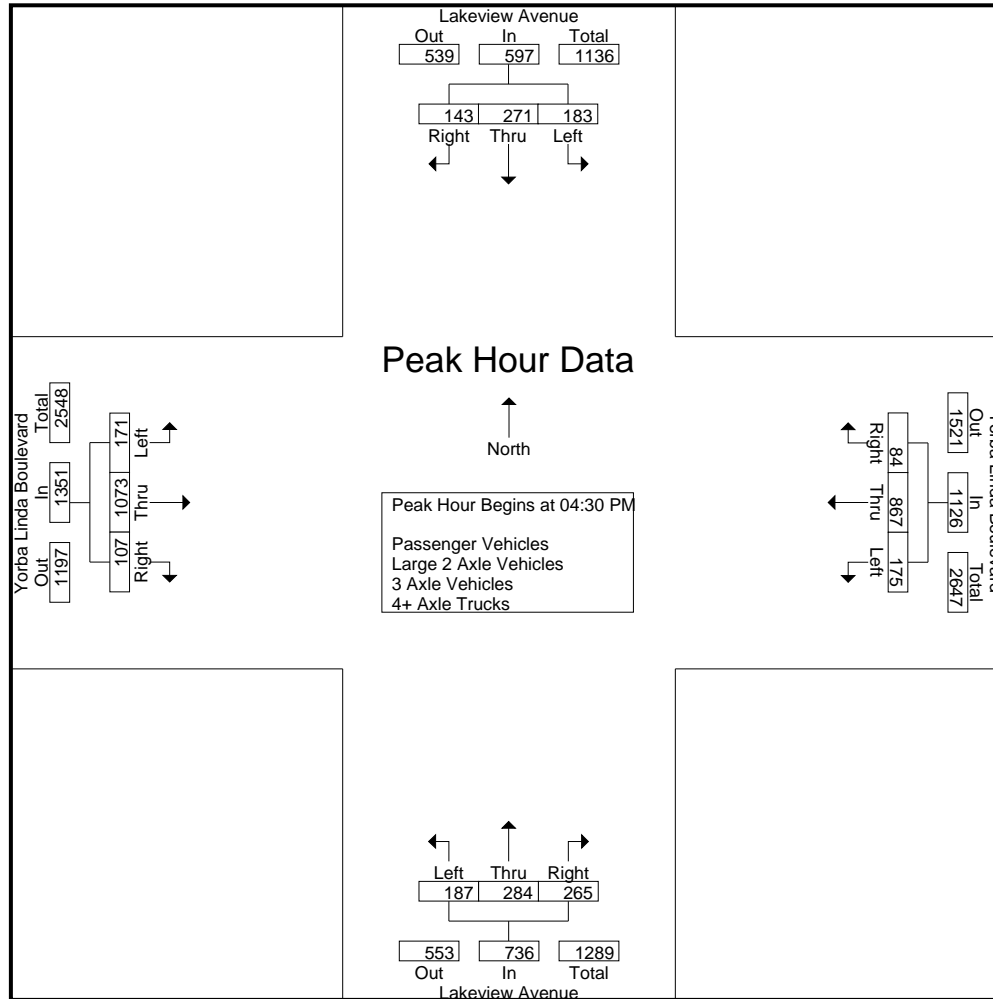
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	40	64	12	0	116	42	213	29	3	284	44	50	52	34	146	37	254	25	4	316	41	862	903
04:15 PM	41	58	34	5	133	43	209	18	1	270	56	72	55	34	183	47	273	28	4	348	44	934	978
04:30 PM	45	69	30	2	144	43	231	20	1	294	46	76	54	35	176	39	279	33	7	351	45	965	1010
04:45 PM	54	69	42	6	165	35	214	17	1	266	46	69	75	51	190	43	255	24	1	322	59	943	1002
Total	180	260	118	13	558	163	867	84	6	1114	192	267	236	154	695	166	1061	110	16	1337	189	3704	3893
05:00 PM	39	71	31	0	141	50	192	28	5	270	43	62	74	47	179	47	265	29	5	341	57	931	988
05:15 PM	45	62	40	2	147	47	230	19	4	296	52	77	62	42	191	42	274	21	5	337	53	971	1024
05:30 PM	55	62	32	1	149	54	209	35	1	298	32	82	62	47	176	42	258	25	4	325	53	948	1001
05:45 PM	40	48	30	2	118	45	199	21	1	265	37	90	48	31	175	61	271	27	6	359	40	917	957
Total	179	243	133	5	555	196	830	103	11	1129	164	311	246	167	721	192	1068	102	20	1362	203	3767	3970
Grand Total	359	503	251	18	1113	359	1697	187	17	2243	356	578	482	321	1416	358	2129	212	36	2699	392	7471	7863
Apprch %	32.3	45.2	22.6			16	75.7	8.3			25.1	40.8	34			13.3	78.9	7.9					
Total %	4.8	6.7	3.4		14.9	4.8	22.7	2.5		30	4.8	7.7	6.5		19	4.8	28.5	2.8		36.1	5	95	
Passenger Vehicles	358	499	247		1122	357	1686	186		2246	354	578	482		1735	352	2122	210		2720	0	0	7823
% Passenger Vehicles	99.7	99.2	98.4	100	99.2	99.4	99.4	99.5	100	99.4	99.4	100	100	100	99.9	98.3	99.7	99.1	100	99.5	0	0	99.5
Large 2 Axle Vehicles	1	2	1		4	1	8	1		10	2	0	0		2	4	5	0		9	0	0	25
% Large 2 Axle Vehicles	0.3	0.4	0.4	0	0.4	0.3	0.5	0.5	0	0.4	0.6	0	0	0	0.1	1.1	0.2	0	0	0.3	0	0	0.3
3 Axle Vehicles	0	2	1		3	0	1	0		1	0	0	0		0	1	1	2		4	0	0	8
% 3 Axle Vehicles	0	0.4	0.4	0	0.3	0	0.1	0	0	0	0	0	0	0	0	0.3	0	0.9	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	2		2	1	2	0		3	0	0	0		0	1	1	0		2	0	0	7
% 4+ Axle Trucks	0	0	0.8	0	0.2	0.3	0.1	0	0	0.1	0	0	0	0	0	0.3	0	0	0	0.1	0	0	0.1

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	45	69	30	144	43	231	20	294	46	76	54	176	39	279	33	351	965
04:45 PM	54	69	42	165	35	214	17	266	46	69	75	190	43	255	24	322	943
05:00 PM	39	71	31	141	50	192	28	270	43	62	74	179	47	265	29	341	931
05:15 PM	45	62	40	147	47	230	19	296	52	77	62	191	42	274	21	337	971
Total Volume	183	271	143	597	175	867	84	1126	187	284	265	736	171	1073	107	1351	3810
% App. Total	30.7	45.4	24		15.5	77	7.5		25.4	38.6	36		12.7	79.4	7.9		
PHF	.847	.954	.851	.905	.875	.938	.750	.951	.899	.922	.883	.963	.910	.961	.811	.962	.981

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:30 PM				04:15 PM				
+0 mins.	54	69	42	165	35	214	17	266	46	76	54	176	47	273	28	348	
+15 mins.	39	71	31	141	50	192	28	270	46	69	75	190	39	279	33	351	
+30 mins.	45	62	40	147	47	230	19	296	43	62	74	179	43	255	24	322	
+45 mins.	55	62	32	149	54	209	35	298	52	77	62	191	47	265	29	341	
Total Volume	193	264	145	602	186	845	99	1130	187	284	265	736	176	1072	114	1362	
% App. Total	32.1	43.9	24.1		16.5	74.8	8.8		25.4	38.6	36		12.9	78.7	8.4		
PHF	.877	.930	.863	.912	.861	.918	.707	.948	.899	.922	.883	.963	.936	.961	.864	.970	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

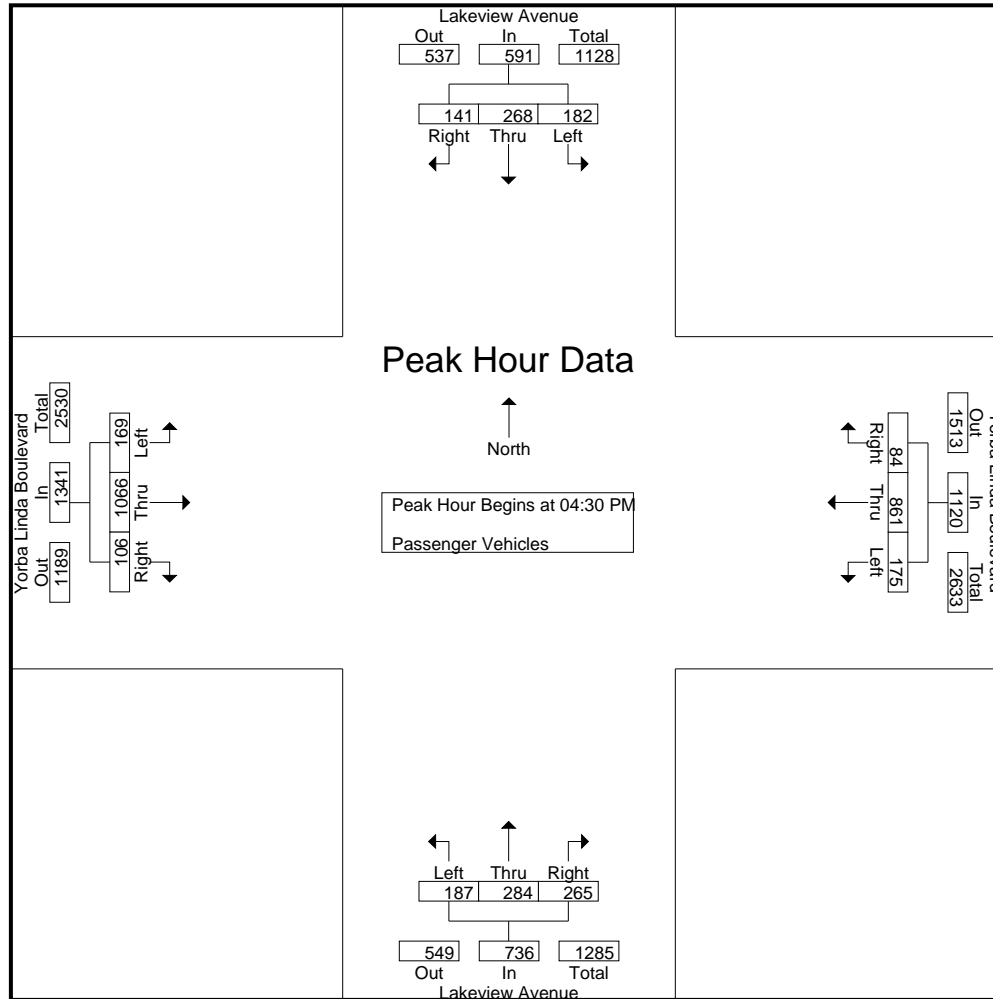
Groups Printed- Passenger Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	40	64	12	0	116	41	211	28	3	280	44	50	52	34	146	36	254	25	4	315	41	857	898
04:15 PM	41	58	33	5	132	43	208	18	1	269	55	72	55	34	182	47	273	27	4	347	44	930	974
04:30 PM	44	68	30	2	142	43	228	20	1	291	46	76	54	35	176	38	278	32	7	348	45	957	1002
04:45 PM	54	68	41	6	163	35	214	17	1	266	46	69	75	51	190	42	254	24	1	320	59	939	998
Total	179	258	116	13	553	162	861	83	6	1106	191	267	236	154	694	163	1059	108	16	1330	189	3683	3872
05:00 PM	39	71	31	0	141	50	189	28	5	267	43	62	74	47	179	47	263	29	5	339	57	926	983
05:15 PM	45	61	39	2	145	47	230	19	4	296	52	77	62	42	191	42	271	21	5	334	53	966	1019
05:30 PM	55	61	32	1	148	53	207	35	1	295	32	82	62	47	176	41	258	25	4	324	53	943	996
05:45 PM	40	48	29	2	117	45	199	21	1	265	36	90	48	31	174	59	271	27	6	357	40	913	953
Total	179	241	131	5	551	195	825	103	11	1123	163	311	246	167	720	189	1063	102	20	1354	203	3748	3951
Grand Total	358	499	247	18	1104	357	1686	186	17	2229	354	578	482	321	1414	352	2122	210	36	2684	392	7431	7823
Apprch %	32.4	45.2	22.4			16	75.6	8.3			25	40.9	34.1			13.1	79.1	7.8					
Total %	4.8	6.7	3.3		14.9	4.8	22.7	2.5		30	4.8	7.8	6.5		19	4.7	28.6	2.8		36.1	5	95	

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	44	68	30	142	43	228	20	291	46	76	54	176	38	278	32	348	957
04:45 PM	54	68	41	163	35	214	17	266	46	69	75	190	42	254	24	320	939
05:00 PM	39	71	31	141	50	189	28	267	43	62	74	179	47	263	29	339	926
05:15 PM	45	61	39	145	47	230	19	296	52	77	62	191	42	271	21	334	966
Total Volume	182	268	141	591	175	861	84	1120	187	284	265	736	169	1066	106	1341	3788
% App. Total	30.8	45.3	23.9		15.6	76.9	7.5		25.4	38.6	36		12.6	79.5	7.9		
PHF	.843	.944	.860	.906	.875	.936	.750	.946	.899	.922	.883	.963	.899	.959	.828	.963	.980

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	44	68	30	142	43	228	20	291	46	76	54	176	38	278	32	348	
+15 mins.	54	68	41	163	35	214	17	266	46	69	75	190	42	254	24	320	
+30 mins.	39	71	31	141	50	189	28	267	43	62	74	179	47	263	29	339	
+45 mins.	45	61	39	145	47	230	19	296	52	77	62	191	42	271	21	334	
Total Volume	182	268	141	591	175	861	84	1120	187	284	265	736	169	1066	106	1341	
% App. Total	30.8	45.3	23.9		15.6	76.9	7.5		25.4	38.6	36		12.6	79.5	7.9		
PHF	.843	.944	.860	.906	.875	.936	.750	.946	.899	.922	.883	.963	.899	.959	.828	.963	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

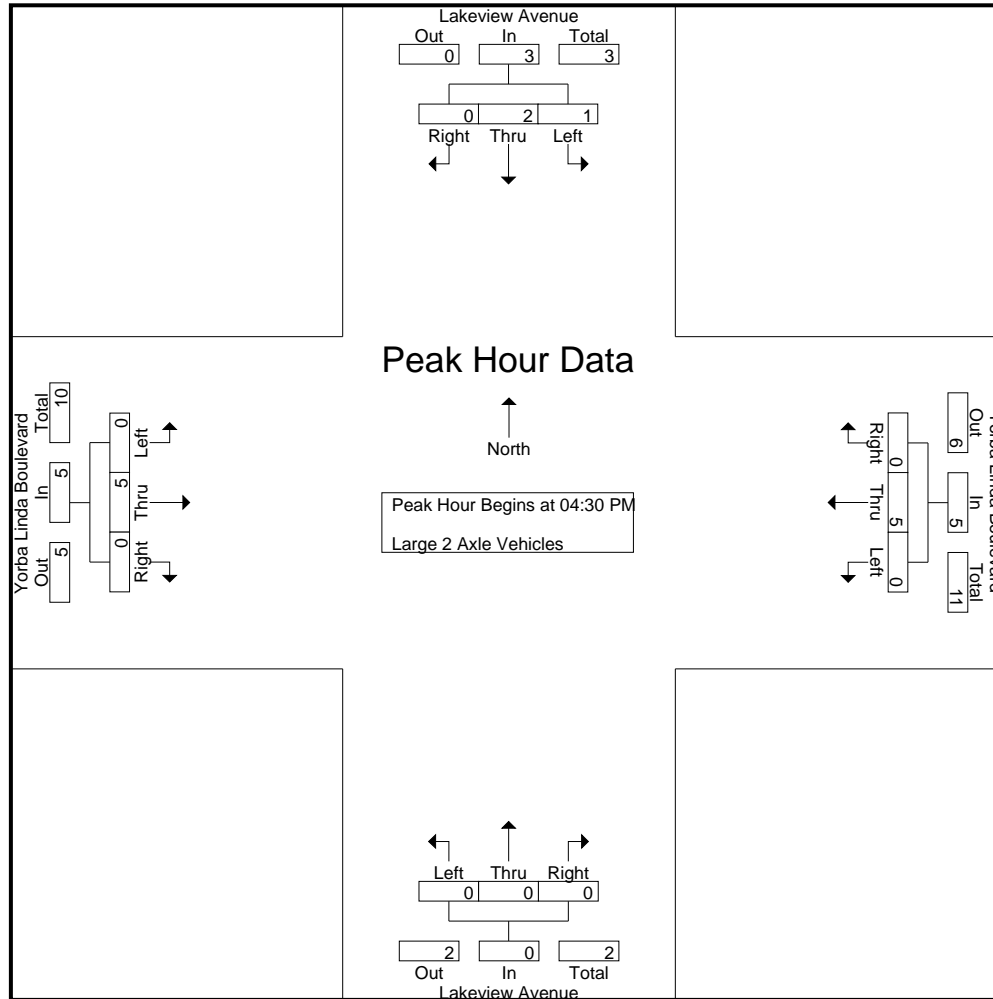
Groups Printed- Large 2 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	1	0	0	0	1	0	4	4
04:15 PM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
04:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	4	4
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	1	1	0	3	0	4	1	0	5	1	0	0	0	1	1	1	0	0	2	0	11	11
05:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	5	5
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	3
05:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	1	0	0	0	1	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	2	0	3	3
Total	0	1	0	0	1	1	4	0	0	5	1	0	0	0	1	3	4	0	0	7	0	14	14
Grand Total	1	2	1	0	4	1	8	1	0	10	2	0	0	0	2	4	5	0	0	9	0	25	25
Apprch %	25	50	25			10	80	10			100	0	0			44.4	55.6	0					
Total %	4	8	4		16	4	32	4		40	8	0	0		8	16	20	0		36	0	100	

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
Total Volume	1	2	0	3	0	5	0	5	0	0	0	0	0	5	0	5	13
% App. Total	33.3	66.7	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.500	.000	.750	.000	.417	.000	.417	.000	.000	.000	.000	.000	.625	.000	.625	.650

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	1	0	1	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	
Total Volume	1	2	0	3	0	5	0	5	0	0	0	0	0	5	0	5	
% App. Total	33.3	66.7	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.500	.000	.750	.000	.417	.000	.417	.000	.000	.000	.000	.000	.625	.000	.625	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

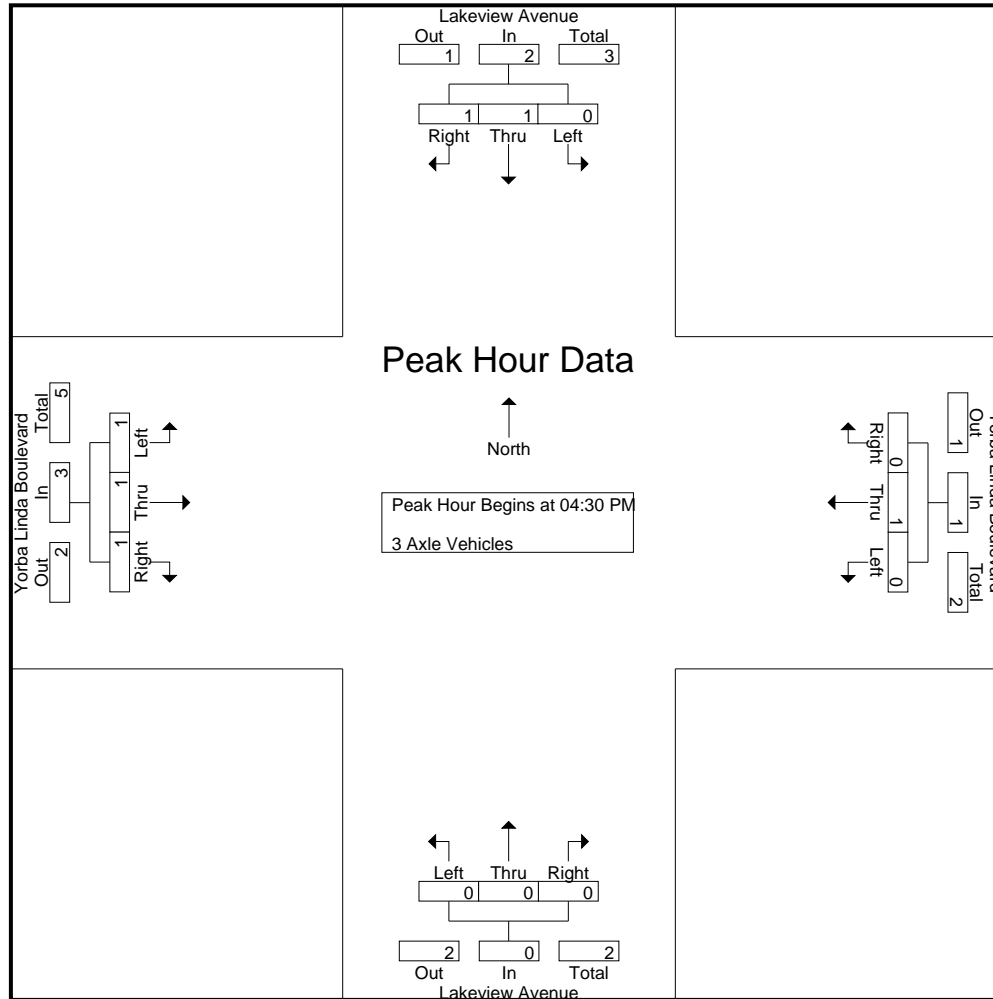
Groups Printed- 3 Axle Vehicles

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	1	1
04:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	4	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	0	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	2	2
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	3	3
Grand Total	0	2	1	0	3	0	1	0	0	1	0	0	0	0	0	1	1	2	0	4	0	0	0	0	4	0	8	8
Apprch %	0	66.7	33.3			0	100	0			0	0	0			25	25	50										
Total %	0	25	12.5		37.5	0	12.5	0		12.5	0	0	0		0	12.5	12.5	25		50	0	0	0		50	0	100	

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	0	1	2	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	1	1	2	0	1	0	1	0	0	0	0	1	1	1	3	6
% App. Total	0	50	50		0	100	0		0	0	0		33.3	33.3	33.3		
PHF	.000	.250	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.375	.375

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	0	1	0	1	0	1	0	0	0	0	1	0	1	2	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	0	1	1	2	0	1	0	1	0	0	0	0	1	1	1	3	
% App. Total	0	50	50		0	100	0		0	0	0		33.3	33.3	33.3		
PHF	.000	.250	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.375	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

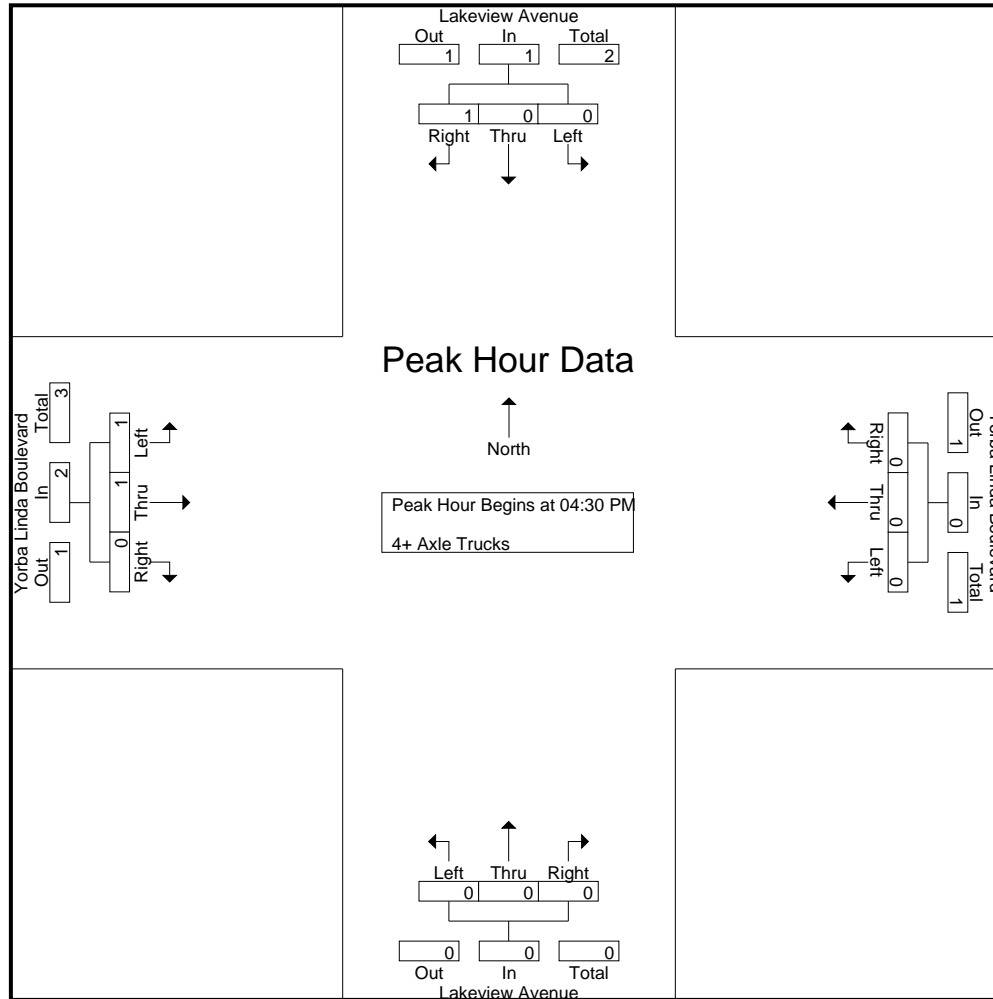
Groups Printed- 4+ Axle Trucks

Start Time	Lakeview Avenue Southbound					Yorba Linda Boulevard Westbound					Lakeview Avenue Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	3	3	3
Total	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	1	1	0	0	2	0	5	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Grand Total	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	1	1	0	0	2	0	7	7	7
Apprch %	0	0	100			33.3	66.7	0			0	0	0			50	50	0			0			
Total %	0	0	28.6		28.6	14.3	28.6	0		42.9	0	0	0		0	14.3	14.3	0		28.6	0	100		

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	
% App. Total	0	0	100		0	0	0		0	0	0		50	50	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.250	

City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 12_YLA_Lake_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Lakeview Avenue Southbound				Yorba Linda Boulevard Westbound				Lakeview Avenue Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	
% App. Total	0	0	100		0	0	0		0	0	0		50	50	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.250	

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Lakeview Avenue	East Leg Yorba Linda Boulevard	South Leg Methodist Church DW	West Leg Yorba Linda Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	1	1	0	3
7:15 AM	1	3	2	0	6
7:30 AM	0	0	1	0	1
7:45 AM	1	2	0	0	3
8:00 AM	1	0	1	0	2
8:15 AM	0	0	0	0	0
8:30 AM	0	4	1	0	5
8:45 AM	1	7	1	0	9
TOTAL VOLUMES:	5	17	7	0	29

	North Leg Lakeview Avenue	East Leg Yorba Linda Boulevard	South Leg Methodist Church DW	West Leg Yorba Linda Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	1	4	2	0	7
4:45 PM	2	1	0	0	3
5:00 PM	0	1	1	0	2
5:15 PM	0	2	0	0	2
5:30 PM	1	3	0	0	4
5:45 PM	0	1	2	0	3
TOTAL VOLUMES:	4	12	5	0	21

Location: Yorba Linda
 N/S: Lakeview Avenue
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Lakeview Avenue			Westbound Yorba Linda Boulevard			Northbound Methodist Church DW			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	1	1	4

	Southbound Lakeview Avenue			Westbound Yorba Linda Boulevard			Northbound Methodist Church DW			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

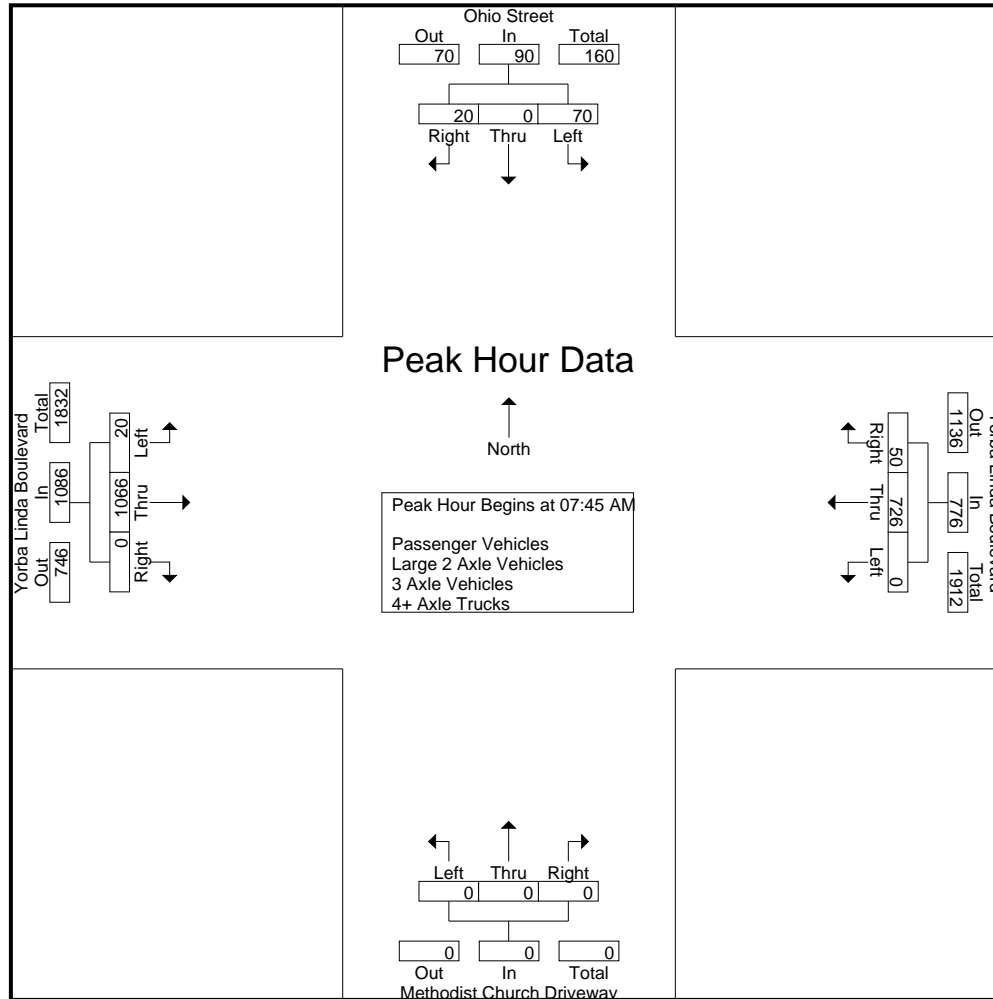
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	6	0	3	3	9	0	77	2	0	79	0	0	0	0	0	2	136	0	0	138	3	226	229
07:15 AM	13	0	2	2	15	0	92	4	1	96	0	0	0	0	0	0	192	0	0	192	3	303	306
07:30 AM	10	0	7	6	17	0	150	34	0	184	0	0	0	0	0	3	241	0	0	244	6	445	451
07:45 AM	22	0	4	3	26	0	179	17	1	196	0	0	0	0	0	2	266	0	0	268	4	490	494
Total	51	0	16	14	67	0	498	57	2	555	0	0	0	0	0	7	835	0	0	842	16	1464	1480
08:00 AM	16	0	1	1	17	0	179	10	0	189	0	0	0	0	0	2	275	0	0	277	1	483	484
08:15 AM	12	0	4	3	16	0	179	10	0	189	0	0	0	0	0	5	267	0	0	272	3	477	480
08:30 AM	20	0	11	9	31	0	189	13	1	202	0	0	0	0	0	11	258	0	0	269	10	502	512
08:45 AM	18	0	5	4	23	0	192	12	0	204	0	0	0	0	0	7	228	0	0	235	4	462	466
Total	66	0	21	17	87	0	739	45	1	784	0	0	0	0	0	25	1028	0	0	1053	18	1924	1942
Grand Total	117	0	37	31	154	0	1237	102	3	1339	0	0	0	0	0	32	1863	0	0	1895	34	3388	3422
Apprch %	76	0	24			0	92.4	7.6			0	0	0			1.7	98.3	0					
Total %	3.5	0	1.1		4.5	0	36.5	3		39.5	0	0	0		0	0.9	55	0		55.9	1	99	
Passenger Vehicles	117	0	37		185	0	1205	101		1309	0	0	0		0	31	1829	0		1860	0	0	3354
% Passenger Vehicles	100	0	100		100	0	97.4	99	100	97.5	0	0	0		0	96.9	98.2	0		98.2	0	0	98
Large 2 Axle Vehicles	0	0	0		0	0	24	1		25	0	0	0		0	1	26	0		27	0	0	52
% Large 2 Axle Vehicles	0	0	0		0	0	1.9	1	0	1.9	0	0	0		0	3.1	1.4	0		1.4	0	0	1.5
3 Axle Vehicles	0	0	0		0	0	4	0		4	0	0	0		0	4	0		4	0	0	0	8
% 3 Axle Vehicles	0	0	0		0	0	0.3	0	0	0.3	0	0	0		0	0.2	0		0.2	0	0	0	0.2
4+ Axle Trucks	0	0	0		0	0	4	0		4	0	0	0		0	4	0		4	0	0	0	8
% 4+ Axle Trucks	0	0	0		0	0	0.3	0	0	0.3	0	0	0		0	0.2	0		0.2	0	0	0	0.2

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	22	0	4	26	0	179	17	196	0	0	0	0	2	266	0	268	490
08:00 AM	16	0	1	17	0	179	10	189	0	0	0	0	2	275	0	277	483
08:15 AM	12	0	4	16	0	179	10	189	0	0	0	0	5	267	0	272	477
08:30 AM	20	0	11	31	0	189	13	202	0	0	0	0	11	258	0	269	502
Total Volume	70	0	20	90	0	726	50	776	0	0	0	0	20	1066	0	1086	1952
% App. Total	77.8	0	22.2		0	93.6	6.4		0	0	0		1.8	98.2	0		
PHF	.795	.000	.455	.726	.000	.960	.735	.960	.000	.000	.000	.000	.455	.969	.000	.980	.972

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				07:00 AM				07:45 AM				
+0 mins.	22	0	4	26	0	179	10	189	0	0	0	0	2	266	0	268	
+15 mins.	16	0	1	17	0	179	10	189	0	0	0	0	2	275	0	277	
+30 mins.	12	0	4	16	0	189	13	202	0	0	0	0	5	267	0	272	
+45 mins.	20	0	11	31	0	192	12	204	0	0	0	0	11	258	0	269	
Total Volume	70	0	20	90	0	739	45	784	0	0	0	0	20	1066	0	1086	
% App. Total	77.8	0	22.2		0	94.3	5.7		0	0	0		1.8	98.2	0		
PHF	.795	.000	.455	.726	.000	.962	.865	.961	.000	.000	.000	.000	.455	.969	.000	.980	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

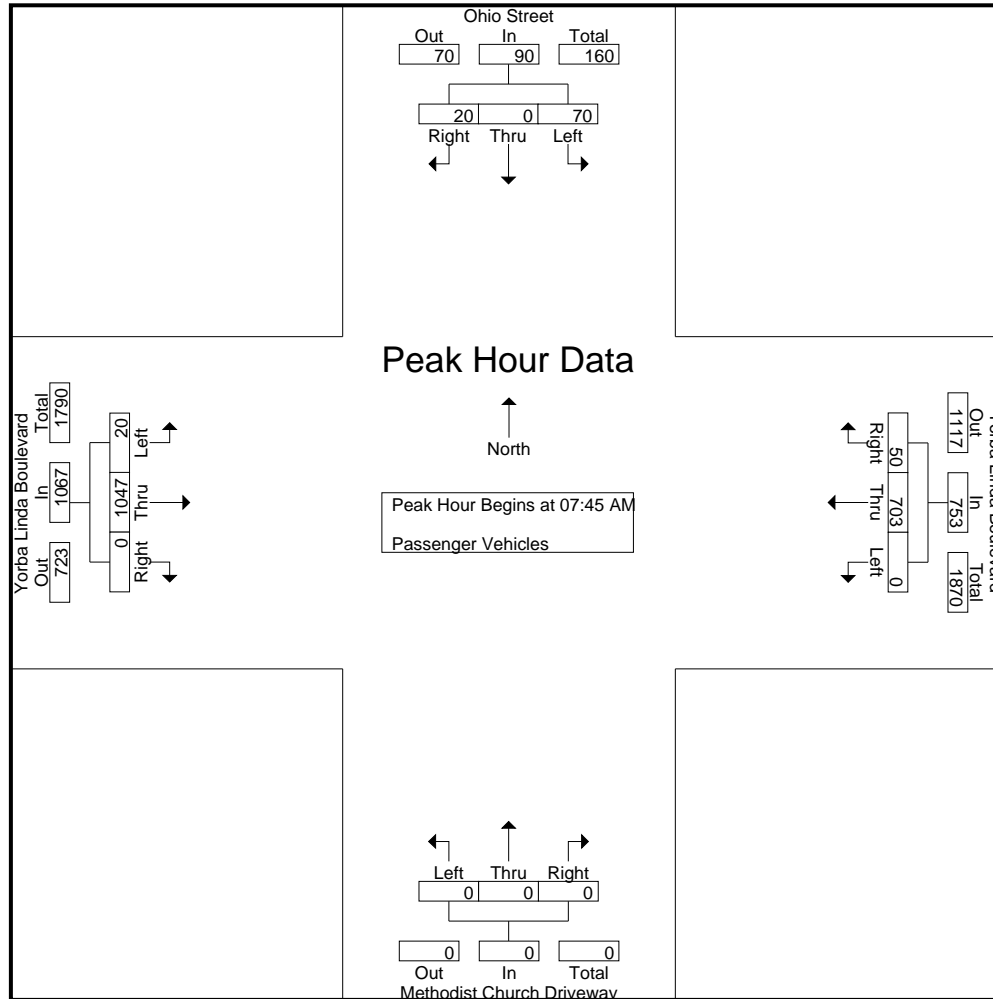
Groups Printed- Passenger Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	6	0	3	3	9	0	73	2	0	75	0	0	0	0	0	2	132	0	0	134	3	218	221
07:15 AM	13	0	2	2	15	0	91	4	1	95	0	0	0	0	0	0	191	0	0	191	3	301	304
07:30 AM	10	0	7	6	17	0	147	34	0	181	0	0	0	0	0	2	234	0	0	236	6	434	440
07:45 AM	22	0	4	3	26	0	172	17	1	189	0	0	0	0	0	2	263	0	0	265	4	480	484
Total	51	0	16	14	67	0	483	57	2	540	0	0	0	0	0	6	820	0	0	826	16	1433	1449
08:00 AM	16	0	1	1	17	0	173	10	0	183	0	0	0	0	0	2	272	0	0	274	1	474	475
08:15 AM	12	0	4	3	16	0	174	10	0	184	0	0	0	0	0	5	260	0	0	265	3	465	468
08:30 AM	20	0	11	9	31	0	184	13	1	197	0	0	0	0	0	11	252	0	0	263	10	491	501
08:45 AM	18	0	5	4	23	0	191	11	0	202	0	0	0	0	0	7	225	0	0	232	4	457	461
Total	66	0	21	17	87	0	722	44	1	766	0	0	0	0	0	25	1009	0	0	1034	18	1887	1905
Grand Total	117	0	37	31	154	0	1205	101	3	1306	0	0	0	0	0	31	1829	0	0	1860	34	3320	3354
Apprch %	76	0	24			0	92.3	7.7			0	0	0		1.7	98.3	0						
Total %	3.5	0	1.1		4.6	0	36.3	3		39.3	0	0	0		0.9	55.1	0		56		1	99	

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	22	0	4	26	0	172	17	189	0	0	0	0	2	263	0	265	480
08:00 AM	16	0	1	17	0	173	10	183	0	0	0	0	2	272	0	274	474
08:15 AM	12	0	4	16	0	174	10	184	0	0	0	0	5	260	0	265	465
08:30 AM	20	0	11	31	0	184	13	197	0	0	0	0	11	252	0	263	491
Total Volume	70	0	20	90	0	703	50	753	0	0	0	0	20	1047	0	1067	1910
% App. Total	77.8	0	22.2		0	93.4	6.6		0	0	0		1.9	98.1	0		
PHF	.795	.000	.455	.726	.000	.955	.735	.956	.000	.000	.000	.000	.455	.962	.000	.974	.973

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	22	0	4	26	0	172	17	189	0	0	0	0	2	263	0	265	
+15 mins.	16	0	1	17	0	173	10	183	0	0	0	0	2	272	0	274	
+30 mins.	12	0	4	16	0	174	10	184	0	0	0	0	5	260	0	265	
+45 mins.	20	0	11	31	0	184	13	197	0	0	0	0	11	252	0	263	
Total Volume	70	0	20	90	0	703	50	753	0	0	0	0	20	1047	0	1067	
% App. Total	77.8	0	22.2		0	93.4	6.6		0	0	0		1.9	98.1	0		
PHF	.795	.000	.455	.726	.000	.955	.735	.956	.000	.000	.000	.000	.455	.962	.000	.974	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

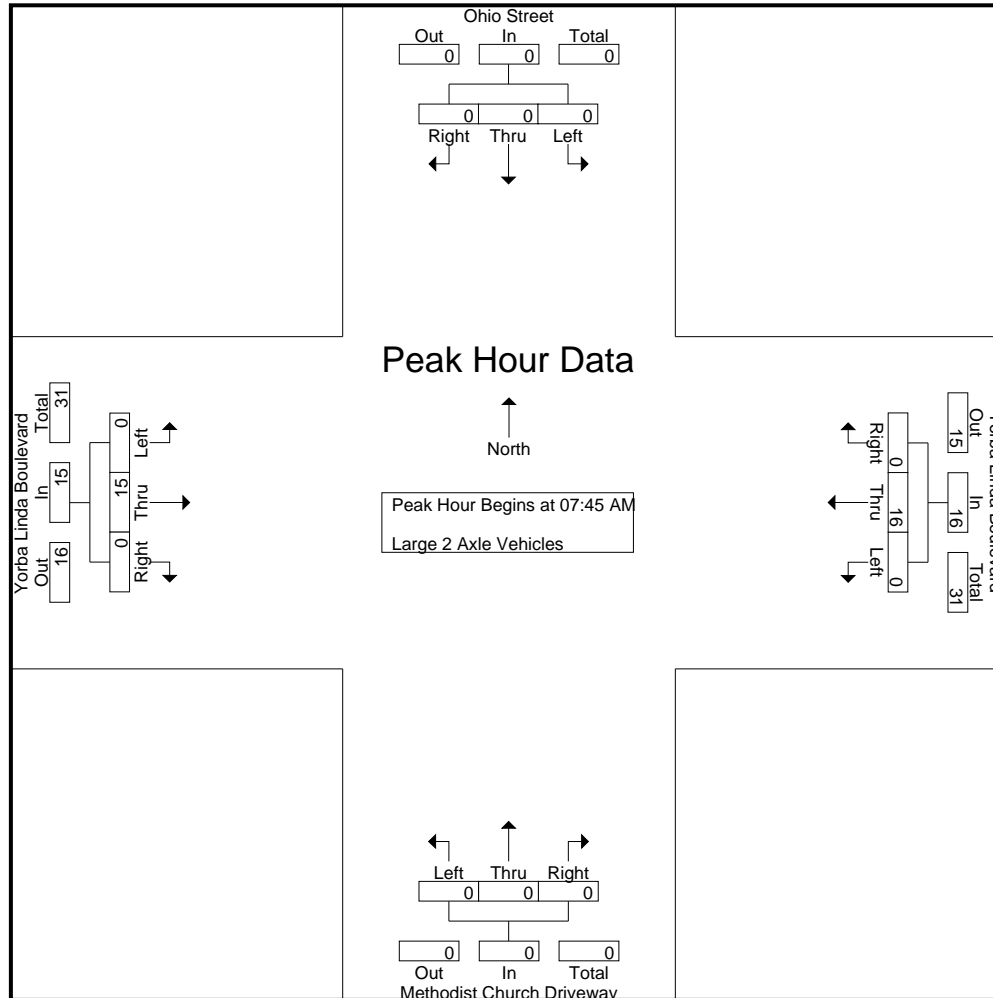
Groups Printed- Large 2 Axle Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	5	5
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	2
07:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	6	0	0	7	0	0	10	10
07:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	6	6
Total	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	1	11	0	0	12	0	0	23	23
08:00 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	8	8
08:15 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	9	9
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	8	8
08:45 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	0	0	4	4
Total	0	0	0	0	0	0	13	1	0	14	0	0	0	0	0	0	15	0	0	15	0	0	29	29
Grand Total	0	0	0	0	0	0	24	1	0	25	0	0	0	0	0	1	26	0	0	27	0	0	52	52
Apprch %	0	0	0			0	96	4			0	0	0			3.7	96.3	0						
Total %	0	0	0			0	46.2	1.9		48.1	0	0	0			1.9	50	0		51.9	0	0	100	

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
Total Volume	0	0	0	0	0	16	0	16	0	0	0	0	0	15	0	15	31
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.800	.000	.800	.000	.000	.000	.000	.000	.750	.000	.750	.861

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	
+30 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	
Total Volume	0	0	0	0	0	16	0	16	0	0	0	0	0	15	0	15	
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.800	.000	.800	.000	.000	.000	.000	.000	.750	.000	.750	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

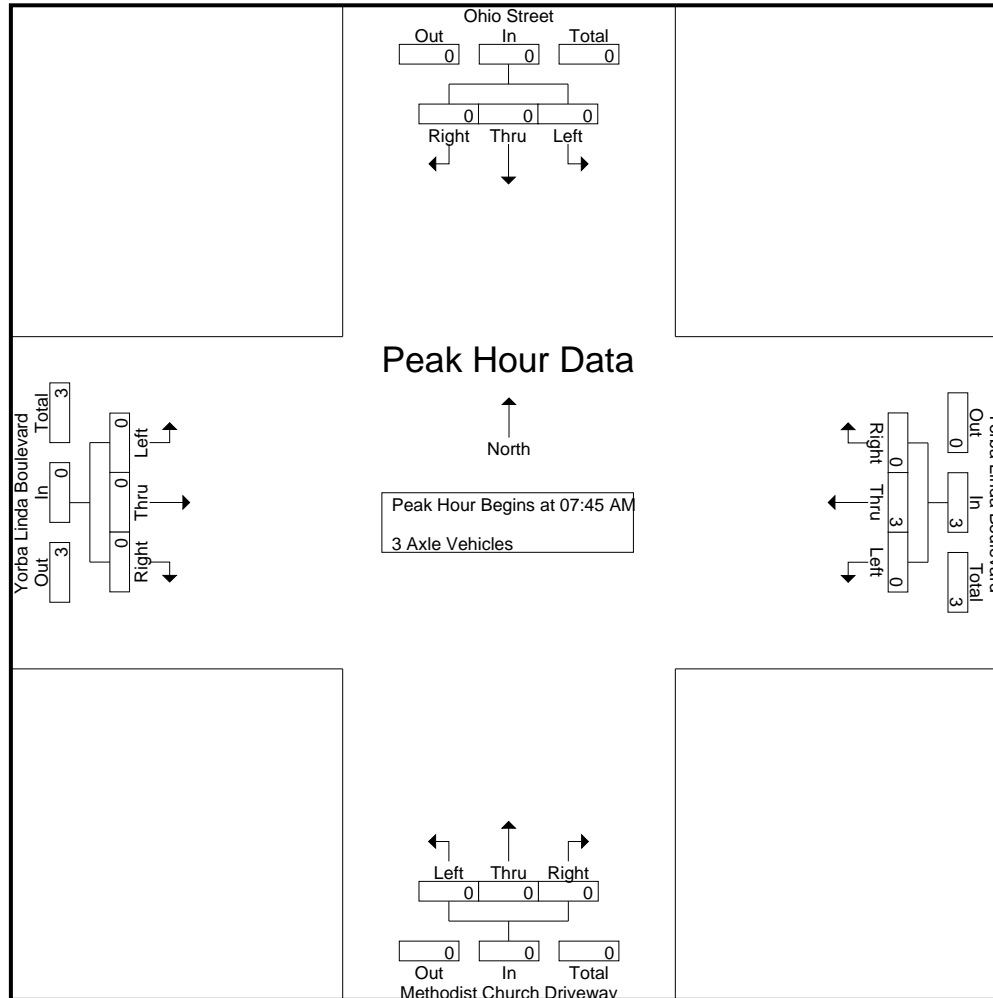
Groups Printed- 3 Axle Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	3	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	4	4	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4	4
Grand Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	8	8	8
Apprch %	0	0	0			0	100	0			0	0	0			0	100	0			0			
Total %	0	0	0			0	50	0		50	0	0	0		0	0	50	0		50	0	100		

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.000	.000	.000	.375

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

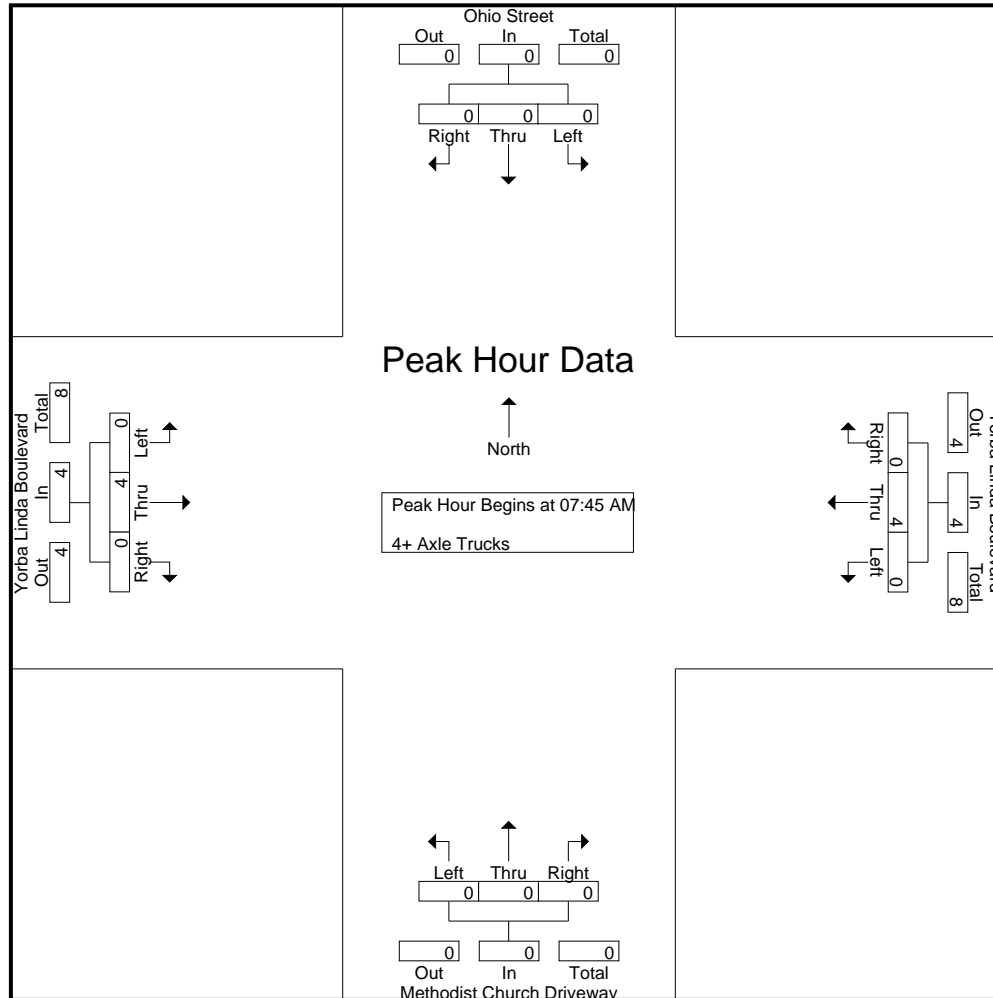
Groups Printed- 4+ Axle Trucks

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4	0	4	4
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4	0	4	4
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	4	4	0	4	4
Grand Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	8	8	0	8	8
Apprch %	0	0	0			0	100	0			0	0	0			0	100	0			0			0		
Total %	0	0	0			0	50	0		50	0	0	0		0	0	50	0		50	0	100		0	100	

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	.000	.500	.000	.500	.500

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	.000	.500	.000	.500	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

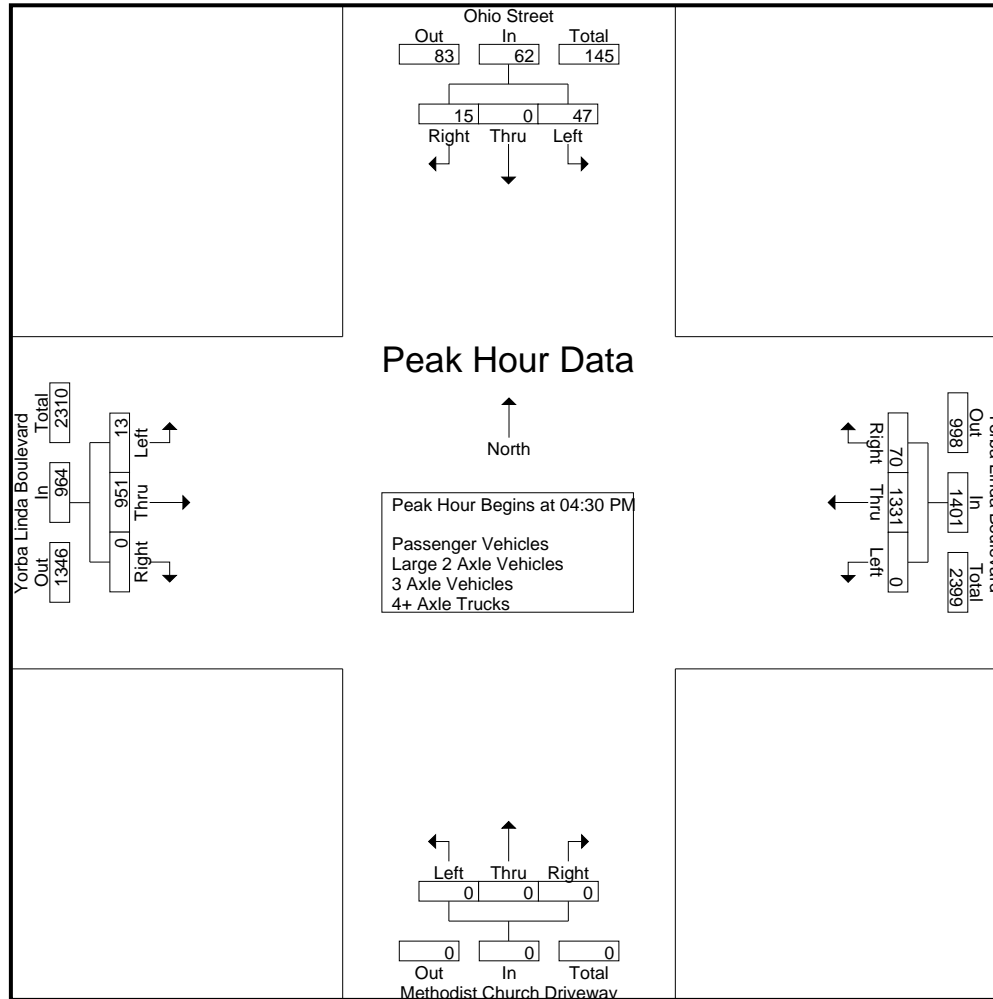
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	10	0	4	4	14	0	273	12	0	285	0	0	0	0	0	10	247	0	0	257	4	556	560
04:15 PM	11	0	4	4	15	0	327	11	0	338	0	0	0	0	0	3	234	0	0	237	4	590	594
04:30 PM	14	0	4	4	18	0	320	15	2	335	0	0	0	0	0	6	236	0	0	242	6	595	601
04:45 PM	11	0	2	1	13	0	355	15	0	370	0	0	0	0	0	1	235	0	0	236	1	619	620
Total	46	0	14	13	60	0	1275	53	2	1328	0	0	0	0	0	20	952	0	0	972	15	2360	2375
05:00 PM	10	0	6	6	16	0	328	18	0	346	0	0	0	0	0	4	235	0	0	239	6	601	607
05:15 PM	12	0	3	2	15	0	328	22	0	350	0	0	0	0	0	2	245	0	0	247	2	612	614
05:30 PM	14	0	1	0	15	0	295	17	0	312	0	0	0	0	0	2	230	0	0	232	0	559	559
05:45 PM	13	0	3	2	16	0	321	17	0	338	0	0	0	0	0	4	200	0	0	204	2	558	560
Total	49	0	13	10	62	0	1272	74	0	1346	0	0	0	0	0	12	910	0	0	922	10	2330	2340
Grand Total	95	0	27	23	122	0	2547	127	2	2674	0	0	0	0	0	32	1862	0	0	1894	25	4690	4715
Apprch %	77.9	0	22.1			0	95.3	4.7			0	0	0		1.7	98.3	0						
Total %	2	0	0.6		2.6	0	54.3	2.7		57	0	0	0		0.7	39.7	0		40.4		0.5	99.5	
Passenger Vehicles	94	0	26		142	0	2540	125		2667	0	0	0		0	1851	0		1883		0	0	4692
% Passenger Vehicles	98.9	0	96.3	95.7	97.9	0	99.7	98.4	100	99.7	0	0	0	0	0	100	99.4	0	0	99.4	0	0	99.5
Large 2 Axle Vehicles	1	0	1		3	0	6	2		8	0	0	0		0	7	0		7		0	0	18
% Large 2 Axle Vehicles	1.1	0	3.7	4.3	2.1	0	0.2	1.6	0	0.3	0	0	0	0	0	0.4	0	0	0.4		0	0	0.4
3 Axle Vehicles	0	0	0		0	0	1	0		1	0	0	0		0	1	0		1		0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1		0	0	0
4+ Axle Trucks	0	0	0		0	0	0	0		0	0	0	0		0	3	0		3		0	0	3
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.2		0	0	0.1

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	14	0	4	18	0	320	15	335	0	0	0	0	6	236	0	242	595
04:45 PM	11	0	2	13	0	355	15	370	0	0	0	0	1	235	0	236	619
05:00 PM	10	0	6	16	0	328	18	346	0	0	0	0	4	235	0	239	601
05:15 PM	12	0	3	15	0	328	22	350	0	0	0	0	2	245	0	247	612
Total Volume	47	0	15	62	0	1331	70	1401	0	0	0	0	13	951	0	964	2427
% App. Total	75.8	0	24.2		0	95	5		0	0	0		1.3	98.7	0		
PHF	.839	.000	.625	.861	.000	.937	.795	.947	.000	.000	.000	.000	.542	.970	.000	.976	.980

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:30 PM				04:00 PM				04:00 PM				
+0 mins.	11	0	4	15	0	320	15	335	0	0	0	0	10	247	0	257	
+15 mins.	14	0	4	18	0	355	15	370	0	0	0	0	3	234	0	237	
+30 mins.	11	0	2	13	0	328	18	346	0	0	0	0	6	236	0	242	
+45 mins.	10	0	6	16	0	328	22	350	0	0	0	0	1	235	0	236	
Total Volume	46	0	16	62	0	1331	70	1401	0	0	0	0	20	952	0	972	
% App. Total	74.2	0	25.8		0	95	5		0	0	0		2.1	97.9	0		
PHF	.821	.000	.667	.861	.000	.937	.795	.947	.000	.000	.000	.000	.500	.964	.000	.946	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

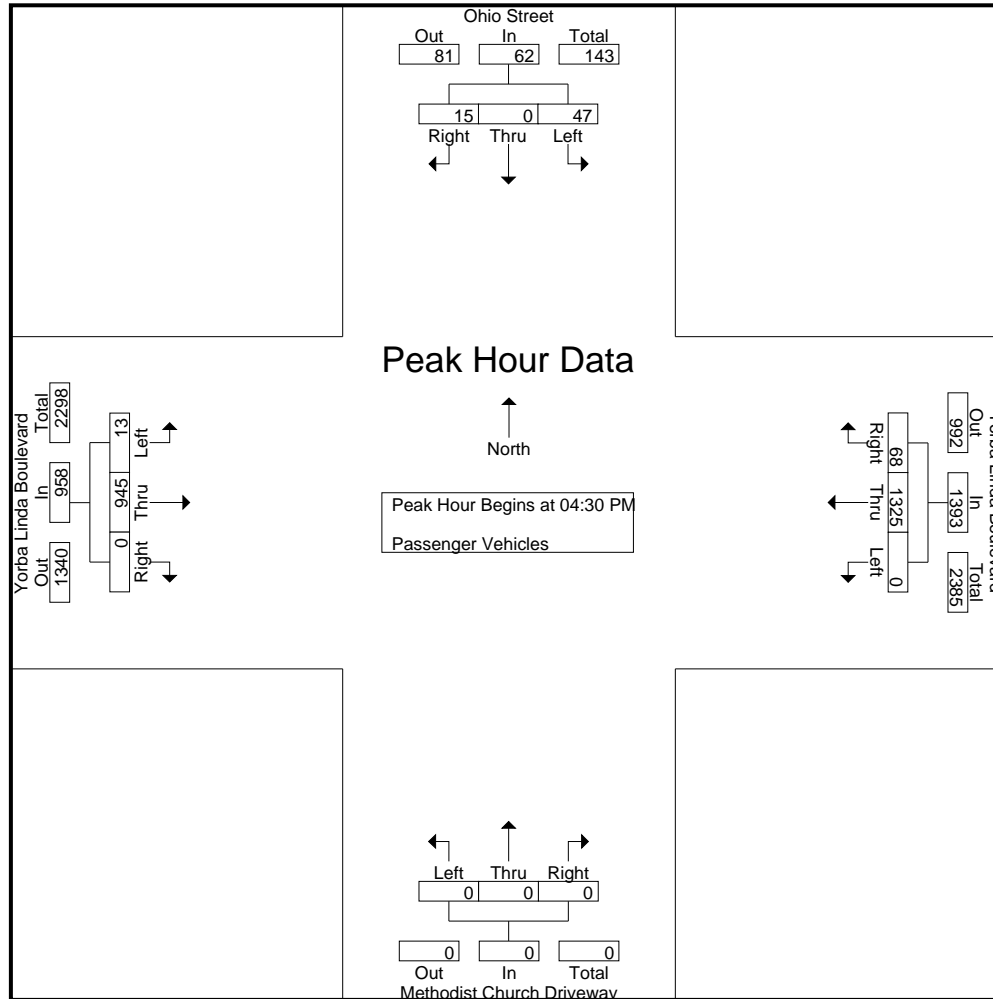
Groups Printed- Passenger Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	10	0	3	3	13	0	273	12	0	285	0	0	0	0	0	10	244	0	0	254	3	552	555
04:15 PM	11	0	4	4	15	0	326	11	0	337	0	0	0	0	0	3	232	0	0	235	4	587	591
04:30 PM	14	0	4	4	18	0	320	15	2	335	0	0	0	0	0	6	234	0	0	240	6	593	599
04:45 PM	11	0	2	1	13	0	355	15	0	370	0	0	0	0	0	1	235	0	0	236	1	619	620
Total	46	0	13	12	59	0	1274	53	2	1327	0	0	0	0	0	20	945	0	0	965	14	2351	2365
05:00 PM	10	0	6	6	16	0	326	16	0	342	0	0	0	0	0	4	232	0	0	236	6	594	600
05:15 PM	12	0	3	2	15	0	324	22	0	346	0	0	0	0	0	2	244	0	0	246	2	607	609
05:30 PM	13	0	1	0	14	0	295	17	0	312	0	0	0	0	0	2	230	0	0	232	0	558	558
05:45 PM	13	0	3	2	16	0	321	17	0	338	0	0	0	0	0	4	200	0	0	204	2	558	560
Total	48	0	13	10	61	0	1266	72	0	1338	0	0	0	0	0	12	906	0	0	918	10	2317	2327
Grand Total	94	0	26	22	120	0	2540	125	2	2665	0	0	0	0	0	32	1851	0	0	1883	24	4668	4692
Apprch %	78.3	0	21.7			0	95.3	4.7			0	0	0		1.7	98.3	0						
Total %	2	0	0.6		2.6	0	54.4	2.7		57.1	0	0	0		0.7	39.7	0		40.3	0.5	99.5		

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	14	0	4	18	0	320	15	335	0	0	0	0	6	234	0	240	593
04:45 PM	11	0	2	13	0	355	15	370	0	0	0	0	1	235	0	236	619
05:00 PM	10	0	6	16	0	326	16	342	0	0	0	0	4	232	0	236	594
05:15 PM	12	0	3	15	0	324	22	346	0	0	0	0	2	244	0	246	607
Total Volume	47	0	15	62	0	1325	68	1393	0	0	0	0	13	945	0	958	2413
% App. Total	75.8	0	24.2		0	95.1	4.9		0	0	0		1.4	98.6	0		
PHF	.839	.000	.625	.861	.000	.933	.773	.941	.000	.000	.000	.000	.542	.968	.000	.974	.975

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	14	0	4	18	0	320	15	335	0	0	0	0	6	234	0	240	
+15 mins.	11	0	2	13	0	355	15	370	0	0	0	0	1	235	0	236	
+30 mins.	10	0	6	16	0	326	16	342	0	0	0	0	4	232	0	236	
+45 mins.	12	0	3	15	0	324	22	346	0	0	0	0	2	244	0	246	
Total Volume	47	0	15	62	0	1325	68	1393	0	0	0	0	13	945	0	958	
% App. Total	75.8	0	24.2		0	95.1	4.9		0	0	0		1.4	98.6	0		
PHF	.839	.000	.625	.861	.000	.933	.773	.941	.000	.000	.000	.000	.542	.968	.000	.974	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

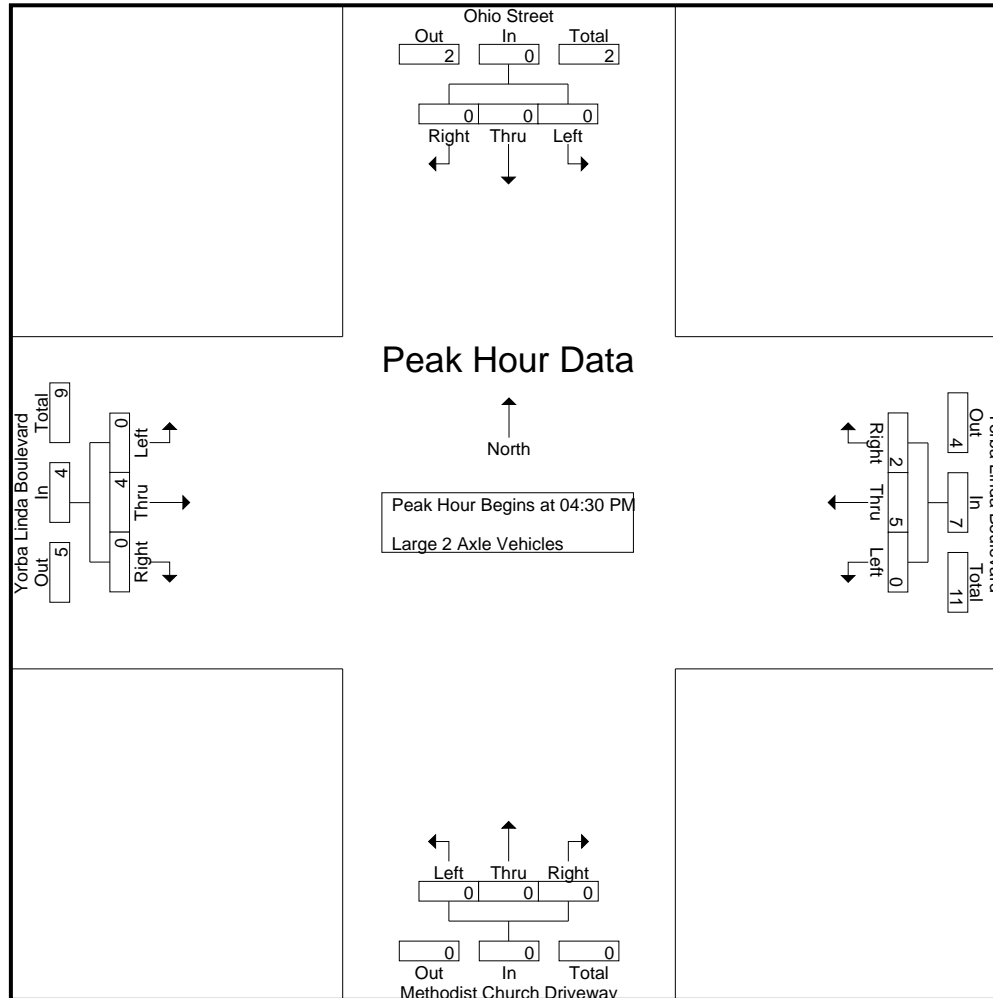
Groups Printed- Large 2 Axle Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	3	4
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	1	6	7
05:00 PM	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	3	0	0	3	0	7	7
05:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	5	2	0	7	0	0	0	0	0	0	3	0	0	3	0	11	11
Grand Total	1	0	1	1	2	0	6	2	0	8	0	0	0	0	0	0	7	0	0	7	1	17	18
Apprch %	50	0	50			0	75	25			0	0	0			0	100	0					
Total %	5.9	0	5.9		11.8	0	35.3	11.8		47.1	0	0	0		0	0	41.2	0		41.2	5.6	94.4	

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	2	2	4	0	0	0	0	0	3	0	3	7
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	5	2	7	0	0	0	0	0	4	0	4	11
% App. Total	0	0	0	0	0	71.4	28.6		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.417	.250	.438	.000	.000	.000	.000	.000	.333	.000	.333	.393

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	2	2	4	0	0	0	0	0	3	0	3	
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	5	2	7	0	0	0	0	0	4	0	4	
% App. Total	0	0	0	0	0	71.4	28.6		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.417	.250	.438	.000	.000	.000	.000	.000	.333	.000	.333	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

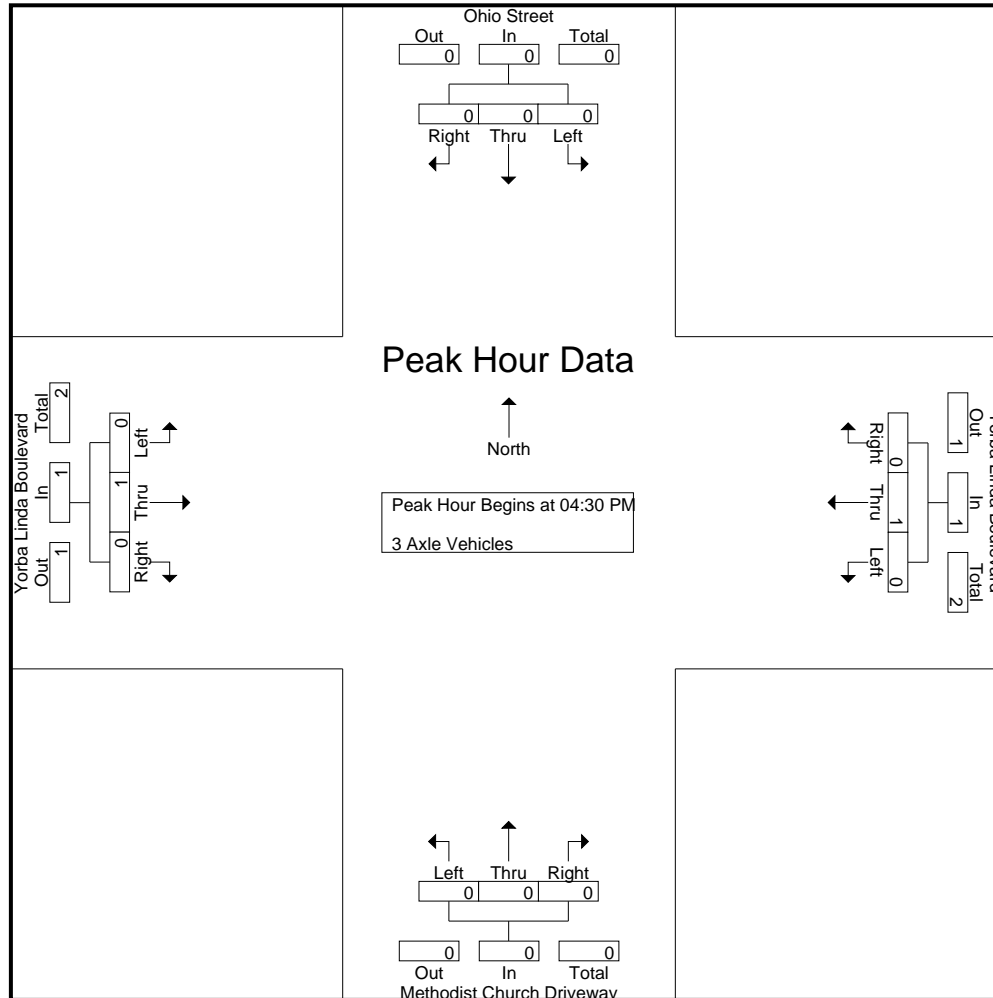
Groups Printed- 3 Axle Vehicles

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2	0	2	2
Apprch %	0	0	0			0	100	0			0	0	0			0	100	0			0			0		
Total %	0	0	0			0	50	0		50	0	0	0		0	0	50	0		50	0	100		0	100	

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

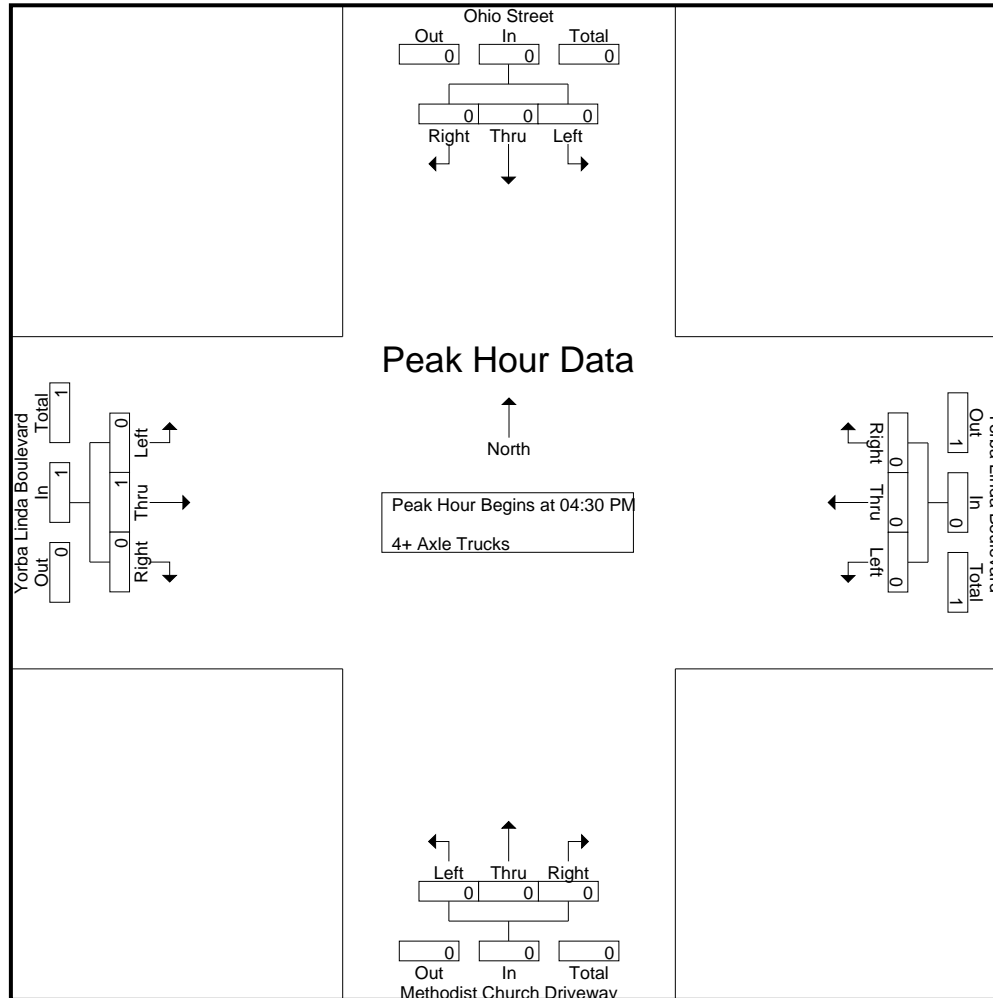
Groups Printed- 4+ Axle Trucks

Start Time	Ohio Street Southbound					Yorba Linda Boulevard Westbound					Methodist Church Driveway Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3
Apprch %	0	0	0			0	0	0			0	0	0			0	100	0			0		100
Total %	0	0	0			0	0	0			0	0	0			0	100	0		100	0	0	100

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 13_YLA_Ohio_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Ohio Street Southbound				Yorba Linda Boulevard Westbound				Methodist Church Driveway Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	

Location: Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Ohio Street	East Leg Yorba Linda Boulevard	South Leg Methodist Church DW	West Leg Yorba Linda Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	2	0	0	0	2
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	3	0	0	0	3

	North Leg Ohio Street	East Leg Yorba Linda Boulevard	South Leg Methodist Church DW	West Leg Yorba Linda Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

Location: Yorba Linda
 N/S: Ohio Street
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Ohio Street			Westbound Yorba Linda Boulevard			Northbound Methodist Church DW			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	1	0	0	0	0	2	0	4

	Southbound Ohio Street			Westbound Yorba Linda Boulevard			Northbound Methodist Church DW			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	3	0	4

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

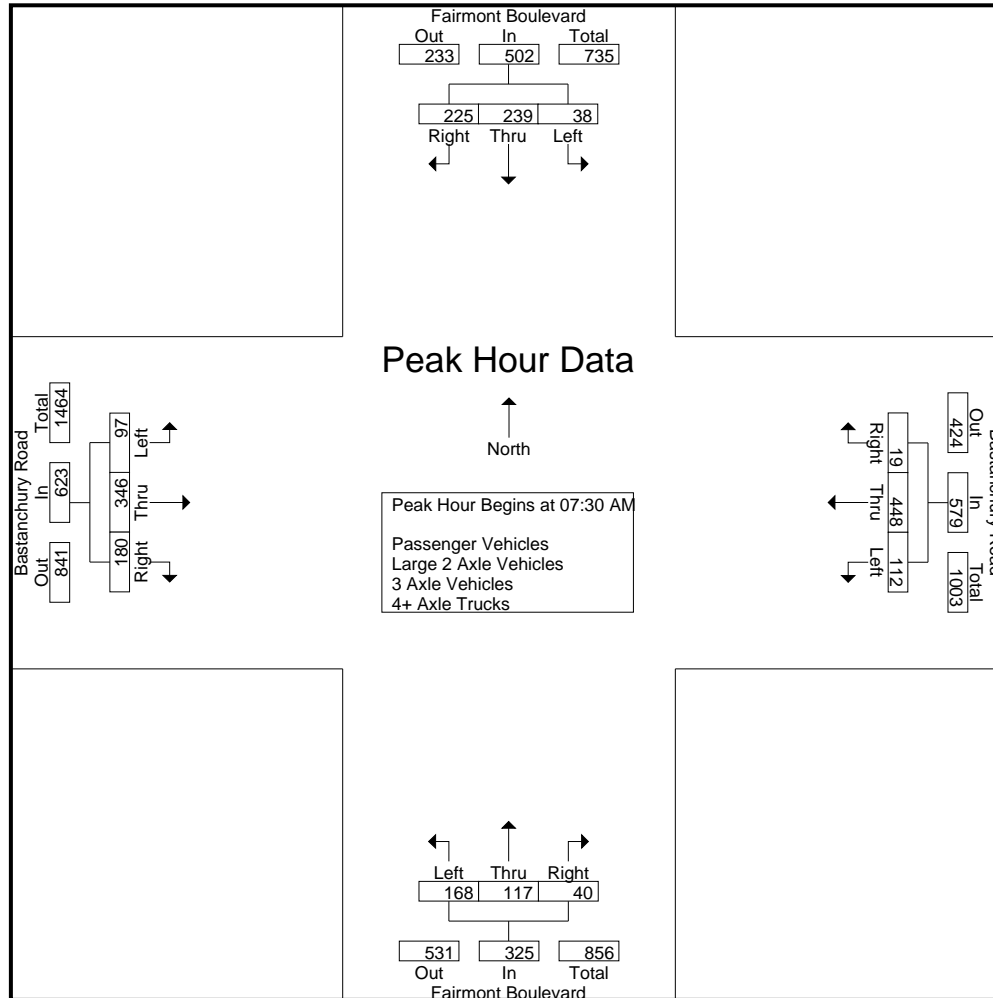
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	8	18	29	20	55	5	54	2	0	61	20	14	4	1	38	8	30	8	2	46	23	200	223
07:15 AM	10	28	50	26	88	17	97	1	0	115	40	13	6	0	59	10	44	14	4	68	30	330	360
07:30 AM	8	67	88	38	163	50	192	1	1	243	57	17	3	1	77	11	73	54	6	138	46	621	667
07:45 AM	13	64	52	21	129	38	110	5	0	153	52	32	15	1	99	45	151	71	11	267	33	648	681
Total	39	177	219	105	435	110	453	9	1	572	169	76	28	3	273	74	298	147	23	519	132	1799	1931
08:00 AM	12	61	43	25	116	17	83	9	4	109	25	26	6	2	57	25	59	36	13	120	44	402	446
08:15 AM	5	47	42	26	94	7	63	4	2	74	34	42	16	1	92	16	63	19	6	98	35	358	393
08:30 AM	7	16	52	38	75	7	78	4	2	89	27	25	9	0	61	23	52	20	8	95	48	320	368
08:45 AM	5	15	25	20	45	9	74	3	1	86	37	13	7	2	57	24	66	30	9	120	32	308	340
Total	29	139	162	109	330	40	298	20	9	358	123	106	38	5	267	88	240	105	36	433	159	1388	1547
Grand Total	68	316	381	214	765	150	751	29	10	930	292	182	66	8	540	162	538	252	59	952	291	3187	3478
Apprch %	8.9	41.3	49.8			16.1	80.8	3.1			54.1	33.7	12.2			17	56.5	26.5					
Total %	2.1	9.9	12		24	4.7	23.6	0.9		29.2	9.2	5.7	2.1		16.9	5.1	16.9	7.9		29.9	8.4	91.6	
Passenger Vehicles	68	313	378		971	150	741	28		929	289	173	66		536	160	527	251		997	0	0	3433
% Passenger Vehicles	100	99.1	99.2	99.1	99.2	100	98.7	96.6	100	98.8	99	95.1	100	100	97.8	98.8	98	99.6	100	98.6	0	0	98.7
Large 2 Axle Vehicles	0	3	3		8	0	9	1		10	3	5	0		8	2	11	1		14	0	0	40
% Large 2 Axle Vehicles	0	0.9	0.8	0.9	0.8	0	1.2	3.4	0	1.1	1	2.7	0	0	1.5	1.2	2	0.4	0	1.4	0	0	1.2
3 Axle Vehicles	0	0	0		0	0	1	0		1	0	3	0		3	0	0	0		0	0	0	4
% 3 Axle Vehicles	0	0	0	0	0	0	0.1	0	0	0.1	0	1.6	0	0	0.5	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	0	0		0	0	1	0		1	0	0	0		0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0.2	0	0	0	0	0	0	0	0

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	8	67	88	163	50	192	1	243	57	17	3	77	11	73	54	138	621
07:45 AM	13	64	52	129	38	110	5	153	52	32	15	99	45	151	71	267	648
08:00 AM	12	61	43	116	17	83	9	109	25	26	6	57	25	59	36	120	402
08:15 AM	5	47	42	94	7	63	4	74	34	42	16	92	16	63	19	98	358
Total Volume	38	239	225	502	112	448	19	579	168	117	40	325	97	346	180	623	2029
% App. Total	7.6	47.6	44.8		19.3	77.4	3.3		51.7	36	12.3		15.6	55.5	28.9		
PHF	.731	.892	.639	.770	.560	.583	.528	.596	.737	.696	.625	.821	.539	.573	.634	.583	.783

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:15 AM				07:30 AM				07:30 AM				
+0 mins.	8	67	88	163	17	97	1	115	57	17	3	77	11	73	54	138	
+15 mins.	13	64	52	129	50	192	1	243	52	32	15	99	45	151	71	267	
+30 mins.	12	61	43	116	38	110	5	153	25	26	6	57	25	59	36	120	
+45 mins.	5	47	42	94	17	83	9	109	34	42	16	92	16	63	19	98	
Total Volume	38	239	225	502	122	482	16	620	168	117	40	325	97	346	180	623	
% App. Total	7.6	47.6	44.8		19.7	77.7	2.6		51.7	36	12.3		15.6	55.5	28.9		
PHF	.731	.892	.639	.770	.610	.628	.444	.638	.737	.696	.625	.821	.539	.573	.634	.583	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

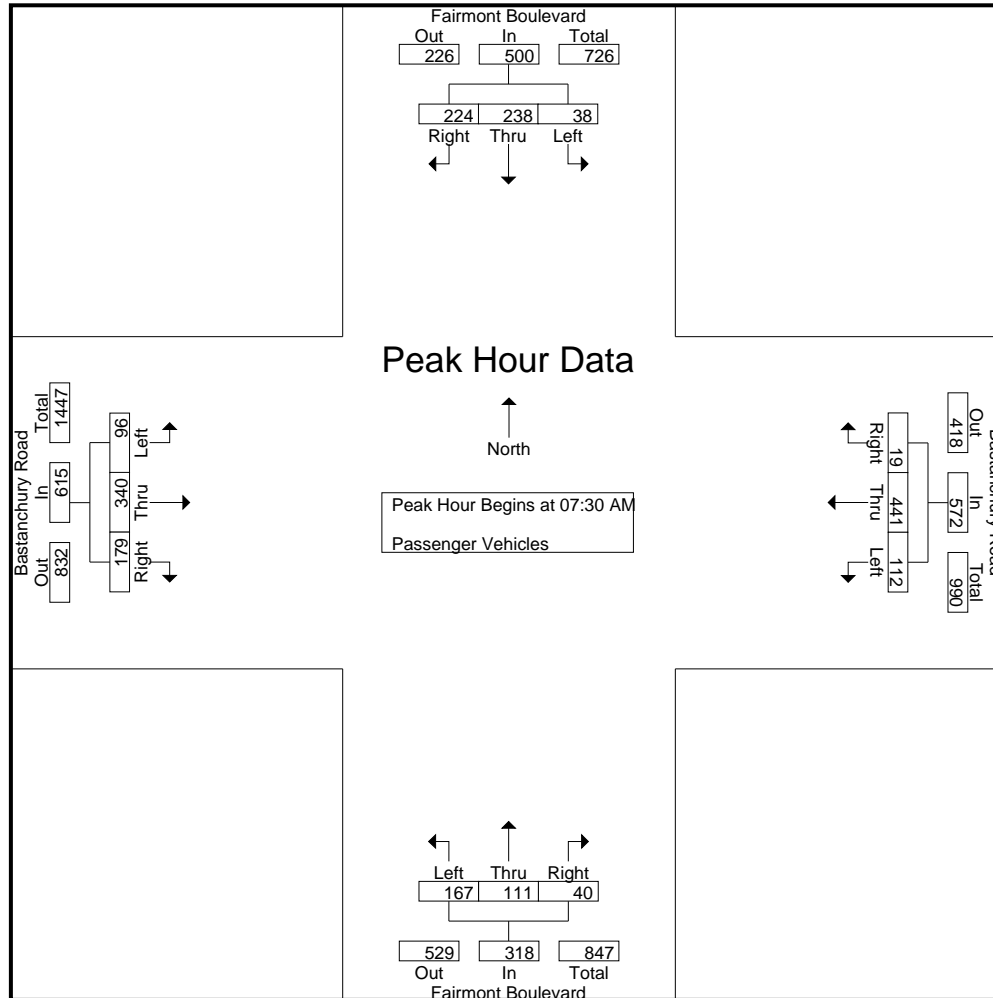
Groups Printed- Passenger Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	8	16	29	20	53	5	54	1	0	60	20	12	4	1	36	7	30	8	2	45	23	194	217
07:15 AM	10	28	48	25	86	17	96	1	0	114	38	12	6	0	56	10	42	14	4	66	29	322	351
07:30 AM	8	67	88	38	163	50	191	1	1	242	56	16	3	1	75	11	73	54	6	138	46	618	664
07:45 AM	13	63	52	21	128	38	108	5	0	151	52	29	15	1	96	45	149	71	11	265	33	640	673
Total	39	174	217	104	430	110	449	8	1	567	166	69	28	3	263	73	294	147	23	514	131	1774	1905
08:00 AM	12	61	43	25	116	17	82	9	4	108	25	24	6	2	55	24	57	35	13	116	44	395	439
08:15 AM	5	47	41	25	93	7	60	4	2	71	34	42	16	1	92	16	61	19	6	96	34	352	386
08:30 AM	7	16	52	38	75	7	76	4	2	87	27	25	9	0	61	23	51	20	8	94	48	317	365
08:45 AM	5	15	25	20	45	9	74	3	1	86	37	13	7	2	57	24	64	30	9	118	32	306	338
Total	29	139	161	108	329	40	292	20	9	352	123	104	38	5	265	87	233	104	36	424	158	1370	1528
Grand Total	68	313	378	212	759	150	741	28	10	919	289	173	66	8	528	160	527	251	59	938	289	3144	3433
Apprch %	9	41.2	49.8			16.3	80.6	3			54.7	32.8	12.5			17.1	56.2	26.8					
Total %	2.2	10	12		24.1	4.8	23.6	0.9		29.2	9.2	5.5	2.1		16.8	5.1	16.8	8		29.8	8.4	91.6	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	8	67	88	163	50	191	1	242	56	16	3	75	11	73	54	138	618
07:45 AM	13	63	52	128	38	108	5	151	52	29	15	96	45	149	71	265	640
08:00 AM	12	61	43	116	17	82	9	108	25	24	6	55	24	57	35	116	395
08:15 AM	5	47	41	93	7	60	4	71	34	42	16	92	16	61	19	96	352
Total Volume	38	238	224	500	112	441	19	572	167	111	40	318	96	340	179	615	2005
% App. Total	7.6	47.6	44.8		19.6	77.1	3.3		52.5	34.9	12.6		15.6	55.3	29.1		
PHF	.731	.888	.636	.767	.560	.577	.528	.591	.746	.661	.625	.828	.533	.570	.630	.580	.783

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	8	67	88	163	50	191	1	242	56	16	3	75	11	73	54	138	
+15 mins.	13	63	52	128	38	108	5	151	52	29	15	96	45	149	71	265	
+30 mins.	12	61	43	116	17	82	9	108	25	24	6	55	24	57	35	116	
+45 mins.	5	47	41	93	7	60	4	71	34	42	16	92	16	61	19	96	
Total Volume	38	238	224	500	112	441	19	572	167	111	40	318	96	340	179	615	
% App. Total	7.6	47.6	44.8		19.6	77.1	3.3		52.5	34.9	12.6		15.6	55.3	29.1		
PHF	.731	.888	.636	.767	.560	.577	.528	.591	.746	.661	.625	.828	.533	.570	.630	.580	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

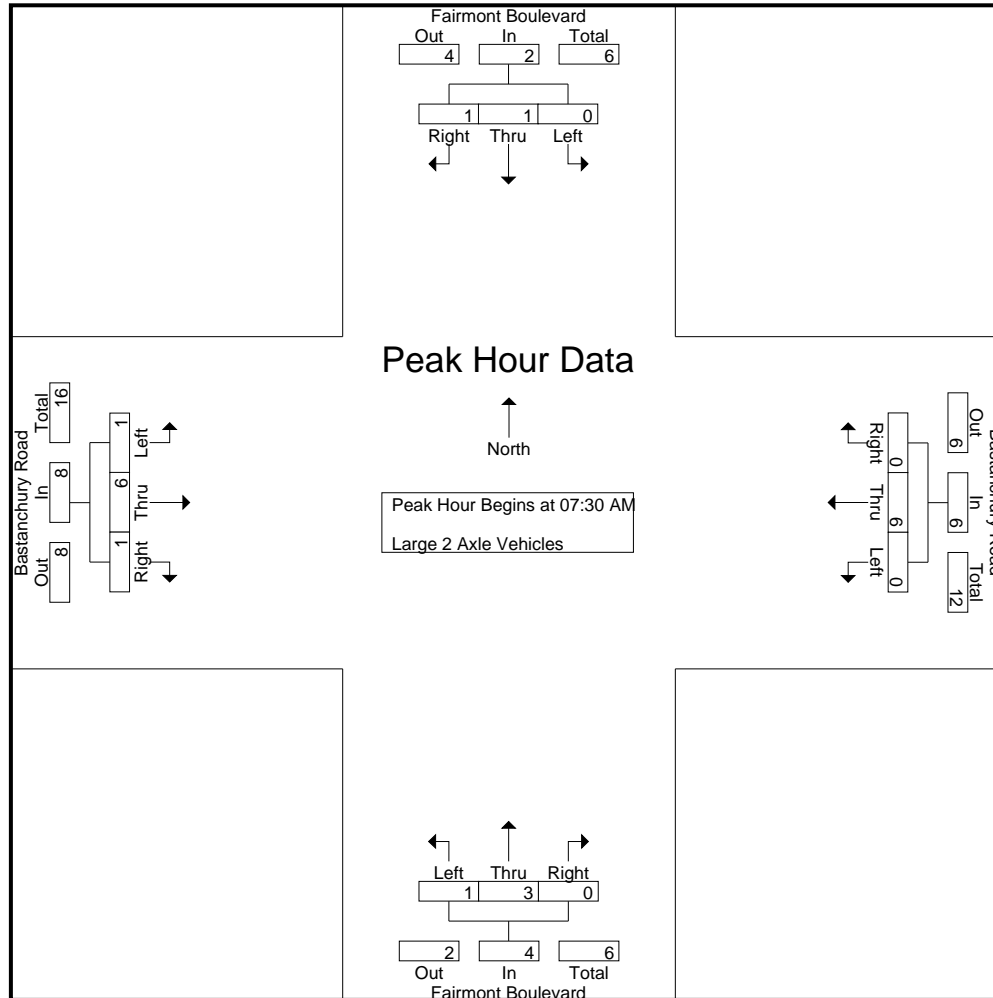
Groups Printed- Large 2 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	1	0	0	0	1	0	0	5	5
07:15 AM	0	0	2	1	2	0	1	0	0	1	2	1	0	0	3	0	2	0	0	2	1	8	9	9
07:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2	2	2
07:45 AM	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	0	6	6	6
Total	0	3	2	1	5	0	4	1	0	5	3	3	0	0	6	1	4	0	0	5	1	21	22	22
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	1	2	1	0	4	0	7	7	7
08:15 AM	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	5	6	6
08:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2	2
Total	0	0	1	1	1	0	5	0	0	5	0	2	0	0	2	1	7	1	0	9	1	17	18	18
Grand Total	0	3	3	2	6	0	9	1	0	10	3	5	0	0	8	2	11	1	0	14	2	38	40	40
Apprch %	0	50	50			0	90	10			37.5	62.5	0			14.3	78.6	7.1						
Total %	0	7.9	7.9		15.8	0	23.7	2.6		26.3	7.9	13.2	0		21.1	5.3	28.9	2.6		36.8	5	95		

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
07:45 AM	0	1	0	1	0	2	0	2	0	1	0	1	0	2	0	2	6
08:00 AM	0	0	0	0	0	1	0	1	0	2	0	2	1	2	1	4	7
08:15 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	2	0	2	5
Total Volume	0	1	1	2	0	6	0	6	1	3	0	4	1	6	1	8	20
% App. Total	0	50	50		0	100	0		25	75	0		12.5	75	12.5		
PHF	.000	.250	.250	.500	.000	.750	.000	.750	.250	.375	.000	.500	.250	.750	.250	.500	.714

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	
+15 mins.	0	1	0	1	0	2	0	2	0	1	0	1	0	2	0	2	
+30 mins.	0	0	0	0	0	1	0	1	0	2	0	2	1	2	1	4	
+45 mins.	0	0	1	1	0	2	0	2	0	0	0	0	0	2	0	2	
Total Volume	0	1	1	2	0	6	0	6	1	3	0	4	1	6	1	8	
% App. Total	0	50	50		0	100	0		25	75	0		12.5	75	12.5		
PHF	.000	.250	.250	.500	.000	.750	.000	.750	.250	.375	.000	.500	.250	.750	.250	.500	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

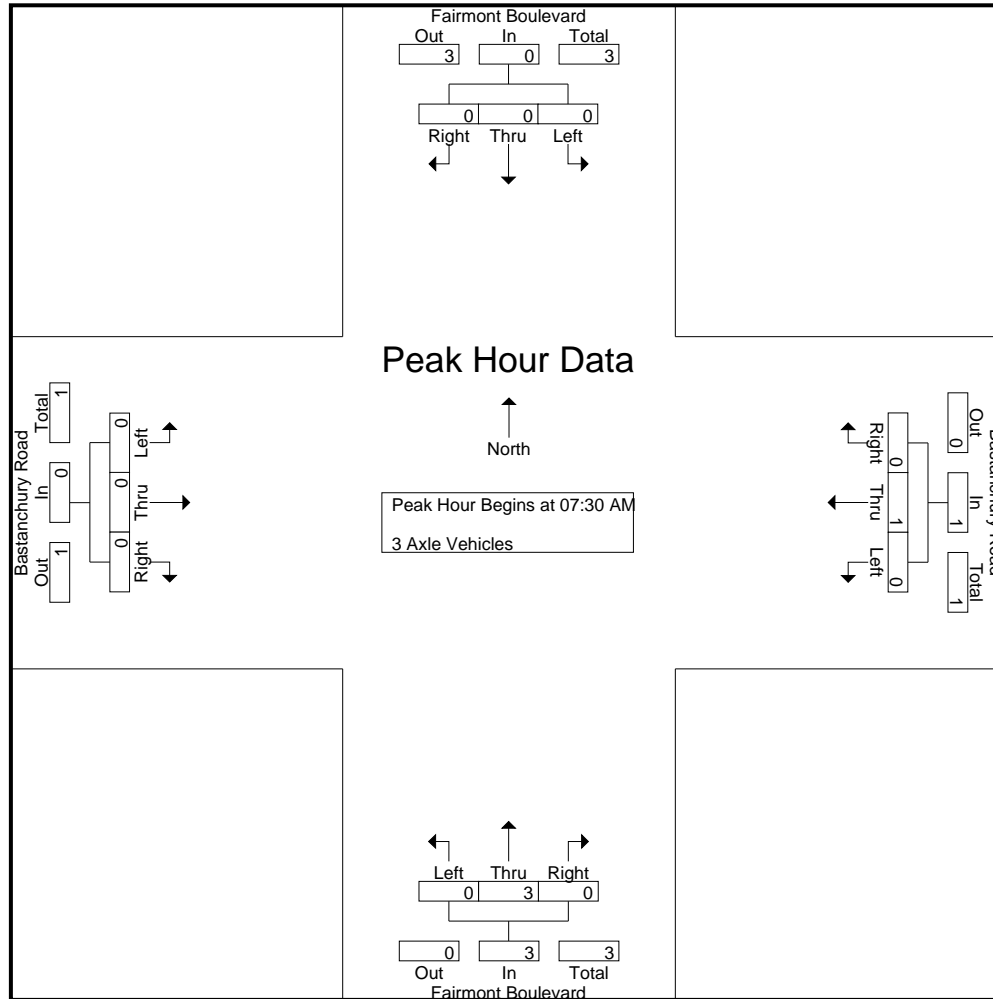
Groups Printed- 3 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
Apprch %	0	0	0			0	100	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	0	0			0	25	0		25	0	75	0		75	0	0	0			0	0	0			0	100	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	3	0	3	0	0	0	0	4
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	1	0	1	0	3	0	3	0	0	0	0	
% App. Total	0	0	0	0	0	100	0	100	0	100	0	100	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

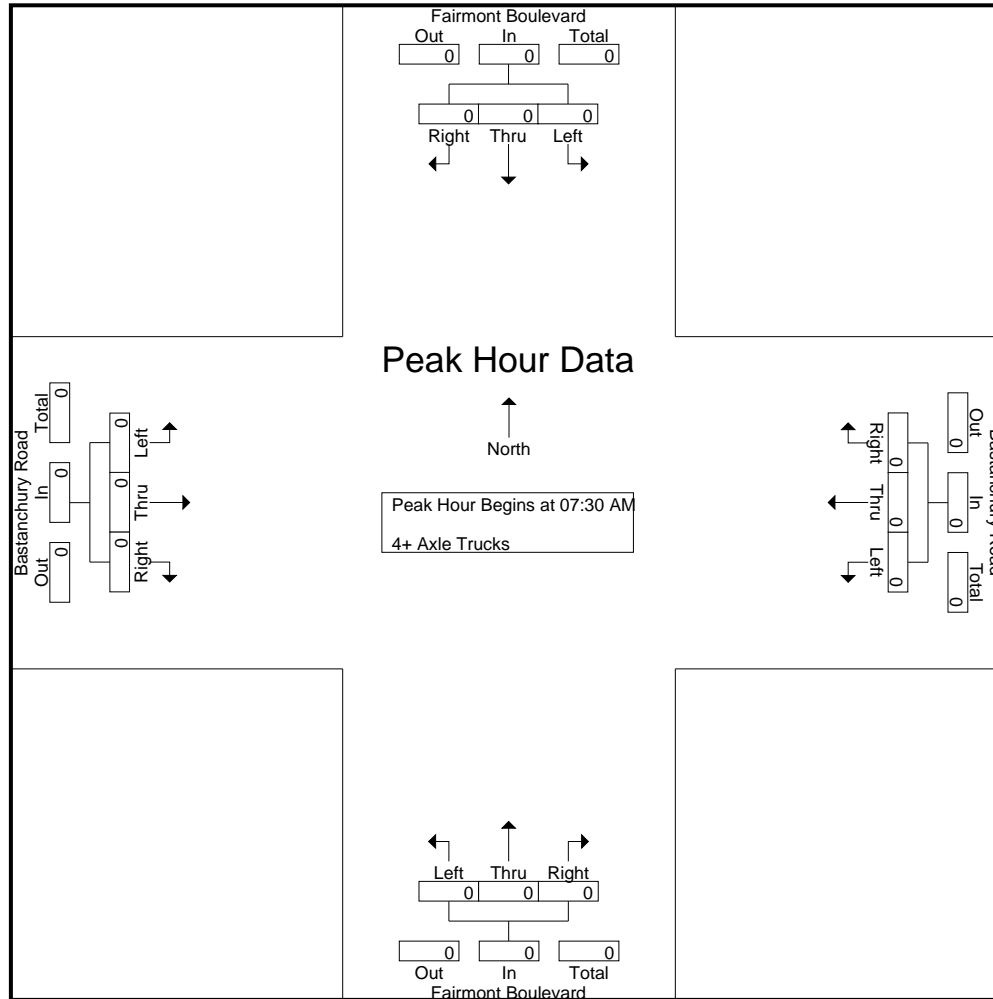
Groups Printed- 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	0	0			0	0	0			0	100	0			0	0	0			0				0		
Total %	0	0	0			0	0	0			0	100	0		100	0	0	0			0				0	100	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

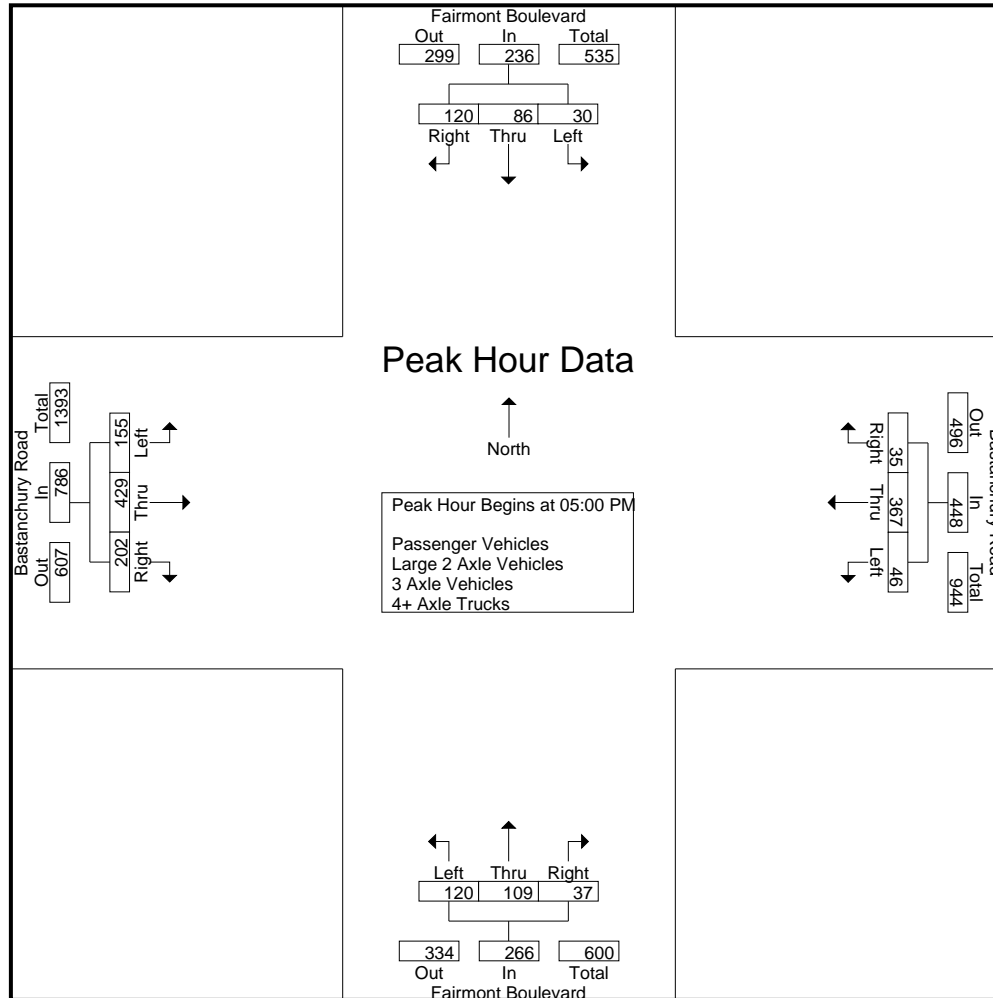
Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	6	23	20	12	49	6	92	16	6	114	33	28	5	0	66	36	108	55	9	199	27	428	455
04:15 PM	5	20	27	20	52	4	102	9	0	115	25	17	9	4	51	39	105	38	8	182	32	400	432
04:30 PM	5	11	22	19	38	7	92	8	3	107	34	25	5	1	64	47	114	48	10	209	33	418	451
04:45 PM	7	29	29	16	65	1	98	10	1	109	29	18	7	0	54	29	95	46	8	170	25	398	423
Total	23	83	98	67	204	18	384	43	10	445	121	88	26	5	235	151	422	187	35	760	117	1644	1761
05:00 PM	10	21	21	13	52	9	84	10	1	103	28	33	4	2	65	38	112	41	6	191	22	411	433
05:15 PM	5	27	26	18	58	17	104	5	2	126	38	32	13	3	83	40	97	57	14	194	37	461	498
05:30 PM	6	23	25	18	54	15	90	8	2	113	33	23	12	1	68	44	111	54	5	209	26	444	470
05:45 PM	9	15	48	39	72	5	89	12	3	106	21	21	8	2	50	33	109	50	5	192	49	420	469
Total	30	86	120	88	236	46	367	35	8	448	120	109	37	8	266	155	429	202	30	786	134	1736	1870
Grand Total	53	169	218	155	440	64	751	78	18	893	241	197	63	13	501	306	851	389	65	1546	251	3380	3631
Apprch %	12	38.4	49.5			7.2	84.1	8.7			48.1	39.3	12.6			19.8	55	25.2					
Total %	1.6	5	6.4		13	1.9	22.2	2.3		26.4	7.1	5.8	1.9		14.8	9.1	25.2	11.5		45.7	6.9	93.1	
Passenger Vehicles	53	166	216		589	64	748	78		908	240	197	63		513	305	848	387		1605	0	0	3615
% Passenger Vehicles	100	98.2	99.1	99.4	99	100	99.6	100	100	99.7	99.6	100	100	100	99.8	99.7	99.6	99.5	100	99.6	0	0	99.6
Large 2 Axle Vehicles	0	2	1		4	0	1	0		1	1	0	0		1	0	2	2		4	0	0	10
% Large 2 Axle Vehicles	0	1.2	0.5	0.6	0.7	0	0.1	0	0	0.1	0.4	0	0	0	0.2	0	0.2	0.5	0	0.2	0	0	0.3
3 Axle Vehicles	0	1	0		1	0	2	0		2	0	0	0		0	0	1	0		1	0	0	4
% 3 Axle Vehicles	0	0.6	0	0	0.2	0	0.3	0	0	0.2	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	1		1	0	0	0		0	0	0	0		0	1	0	0		1	0	0	2
% 4+ Axle Trucks	0	0	0.5	0	0.2	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0.1	0	0	0.1

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	10	21	21	52	9	84	10	103	28	33	4	65	38	112	41	191	411
05:15 PM	5	27	26	58	17	104	5	126	38	32	13	83	40	97	57	194	461
05:30 PM	6	23	25	54	15	90	8	113	33	23	12	68	44	111	54	209	444
05:45 PM	9	15	48	72	5	89	12	106	21	21	8	50	33	109	50	192	420
Total Volume	30	86	120	236	46	367	35	448	120	109	37	266	155	429	202	786	1736
% App. Total	12.7	36.4	50.8		10.3	81.9	7.8		45.1	41	13.9		19.7	54.6	25.7		
PHF	.750	.796	.625	.819	.676	.882	.729	.889	.789	.826	.712	.801	.881	.958	.886	.940	.941

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 05:00 PM

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				04:45 PM				05:00 PM				
+0 mins.	10	21	21	52	1	98	10	109	29	18	7	54	38	112	41	191	
+15 mins.	5	27	26	58	9	84	10	103	28	33	4	65	40	97	57	194	
+30 mins.	6	23	25	54	17	104	5	126	38	32	13	83	44	111	54	209	
+45 mins.	9	15	48	72	15	90	8	113	33	23	12	68	33	109	50	192	
Total Volume	30	86	120	236	42	376	33	451	128	106	36	270	155	429	202	786	
% App. Total	12.7	36.4	50.8		9.3	83.4	7.3		47.4	39.3	13.3		19.7	54.6	25.7		
PHF	.750	.796	.625	.819	.618	.904	.825	.895	.842	.803	.692	.813	.881	.958	.886	.940	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

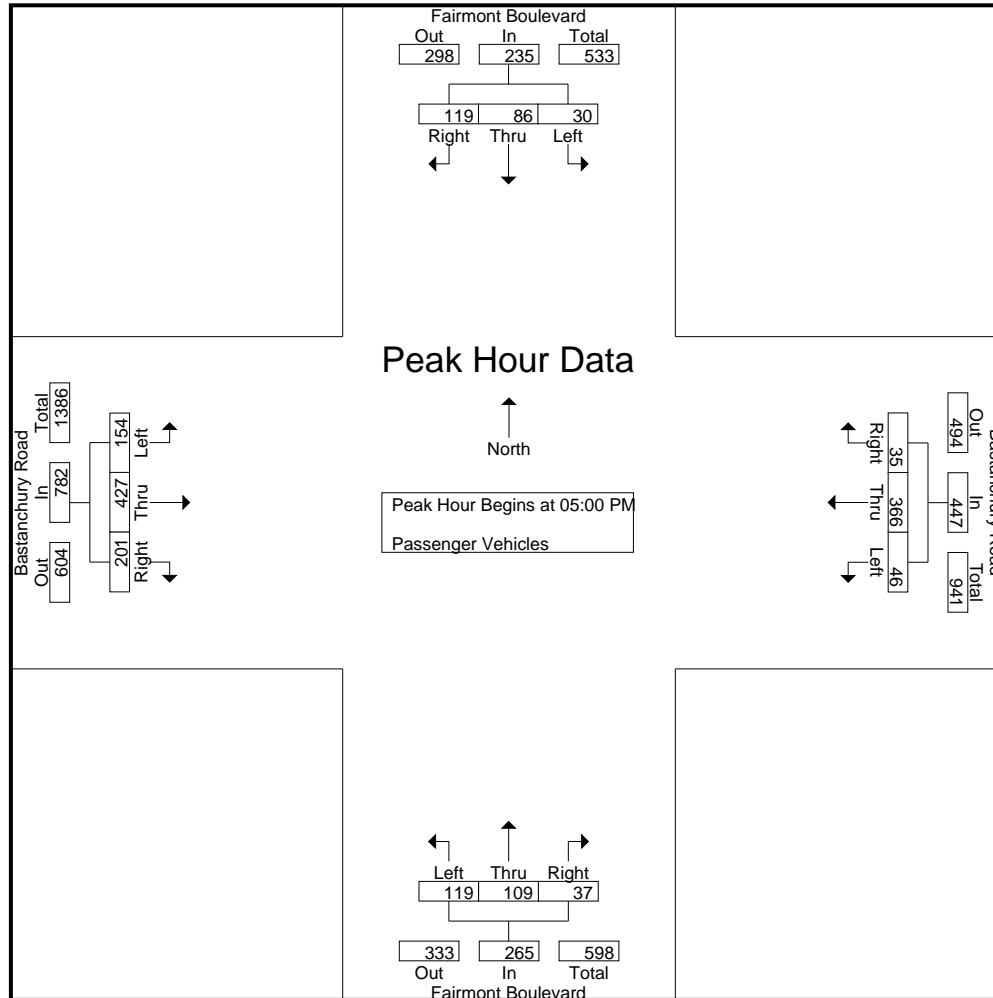
Groups Printed- Passenger Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	6	20	20	12	46	6	91	16	6	113	33	28	5	0	66	36	107	54	9	197	27	422	449
04:15 PM	5	20	26	19	51	4	102	9	0	115	25	17	9	4	51	39	105	38	8	182	31	399	430
04:30 PM	5	11	22	19	38	7	92	8	3	107	34	25	5	1	64	47	114	48	10	209	33	418	451
04:45 PM	7	29	29	16	65	1	97	10	1	108	29	18	7	0	54	29	95	46	8	170	25	397	422
Total	23	80	97	66	200	18	382	43	10	443	121	88	26	5	235	151	421	186	35	758	116	1636	1752
05:00 PM	10	21	21	13	52	9	84	10	1	103	28	33	4	2	65	37	110	41	6	188	22	408	430
05:15 PM	5	27	26	18	58	17	104	5	2	126	38	32	13	3	83	40	97	57	14	194	37	461	498
05:30 PM	6	23	24	18	53	15	89	8	2	112	33	23	12	1	68	44	111	53	5	208	26	441	467
05:45 PM	9	15	48	39	72	5	89	12	3	106	20	21	8	2	49	33	109	50	5	192	49	419	468
Total	30	86	119	88	235	46	366	35	8	447	119	109	37	8	265	154	427	201	30	782	134	1729	1863
Grand Total	53	166	216	154	435	64	748	78	18	890	240	197	63	13	500	305	848	387	65	1540	250	3365	3615
Apprch %	12.2	38.2	49.7			7.2	84	8.8			48	39.4	12.6			19.8	55.1	25.1					
Total %	1.6	4.9	6.4		12.9	1.9	22.2	2.3		26.4	7.1	5.9	1.9		14.9	9.1	25.2	11.5		45.8	6.9	93.1	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	10	21	21	52	9	84	10	103	28	33	4	65	37	110	41	188	408
05:15 PM	5	27	26	58	17	104	5	126	38	32	13	83	40	97	57	194	461
05:30 PM	6	23	24	53	15	89	8	112	33	23	12	68	44	111	53	208	441
05:45 PM	9	15	48	72	5	89	12	106	20	21	8	49	33	109	50	192	419
Total Volume	30	86	119	235	46	366	35	447	119	109	37	265	154	427	201	782	1729
% App. Total	12.8	36.6	50.6		10.3	81.9	7.8		44.9	41.1	14		19.7	54.6	25.7		
PHF	.750	.796	.620	.816	.676	.880	.729	.887	.783	.826	.712	.798	.875	.962	.882	.940	.938

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	10	21	21	52	9	84	10	103	28	33	4	65	37	110	41	188	
+15 mins.	5	27	26	58	17	104	5	126	38	32	13	83	40	97	57	194	
+30 mins.	6	23	24	53	15	89	8	112	33	23	12	68	44	111	53	208	
+45 mins.	9	15	48	72	5	89	12	106	20	21	8	49	33	109	50	192	
Total Volume	30	86	119	235	46	366	35	447	119	109	37	265	154	427	201	782	
% App. Total	12.8	36.6	50.6		10.3	81.9	7.8		44.9	41.1	14		19.7	54.6	25.7		
PHF	.750	.796	.620	.816	.676	.880	.729	.887	.783	.826	.712	.798	.875	.962	.882	.940	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

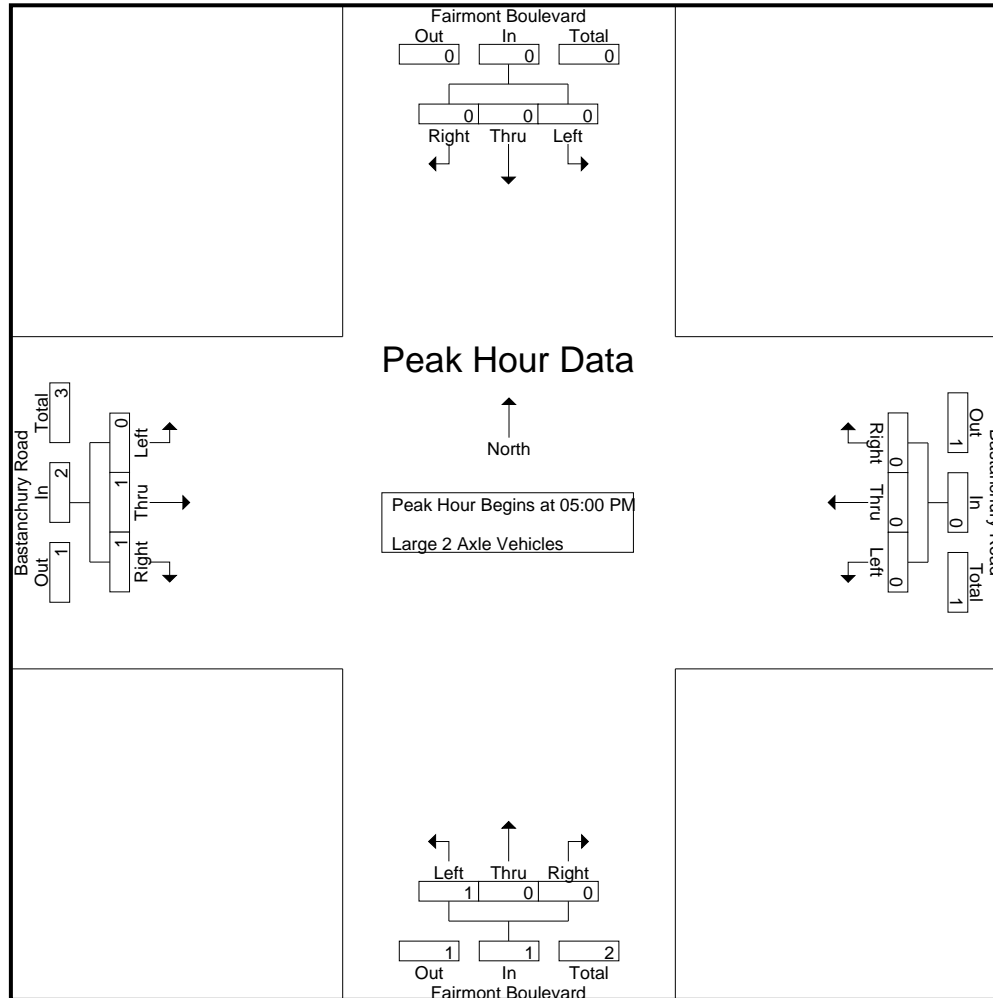
Groups Printed- Large 2 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total						
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total									
04:00 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	5	5
04:15 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	1	3	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	1	6	7	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	3	3	3
Grand Total	0	2	1	1	3	0	1	0	0	1	1	0	0	0	1	0	2	2	0	4	0	0	0	0	0	1	9	10	10
Apprch %	0	66.7	33.3			0	100	0			100	0	0			0	50	50			0	0	0	0	0	0	0	0	0
Total %	0	22.2	11.1		33.3	0	11.1	0		11.1	11.1	0	0		11.1	0	22.2	22.2		44.4	0	0	0	0	0	10	90		

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2	3
% App. Total	0	0	0	0	0	0	0	0	100	0	0	100	0	50	50		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.500	.750

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2	
% App. Total	0	0	0	0	0	0	0	0	100	0	0	0	0	50	50	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.500	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

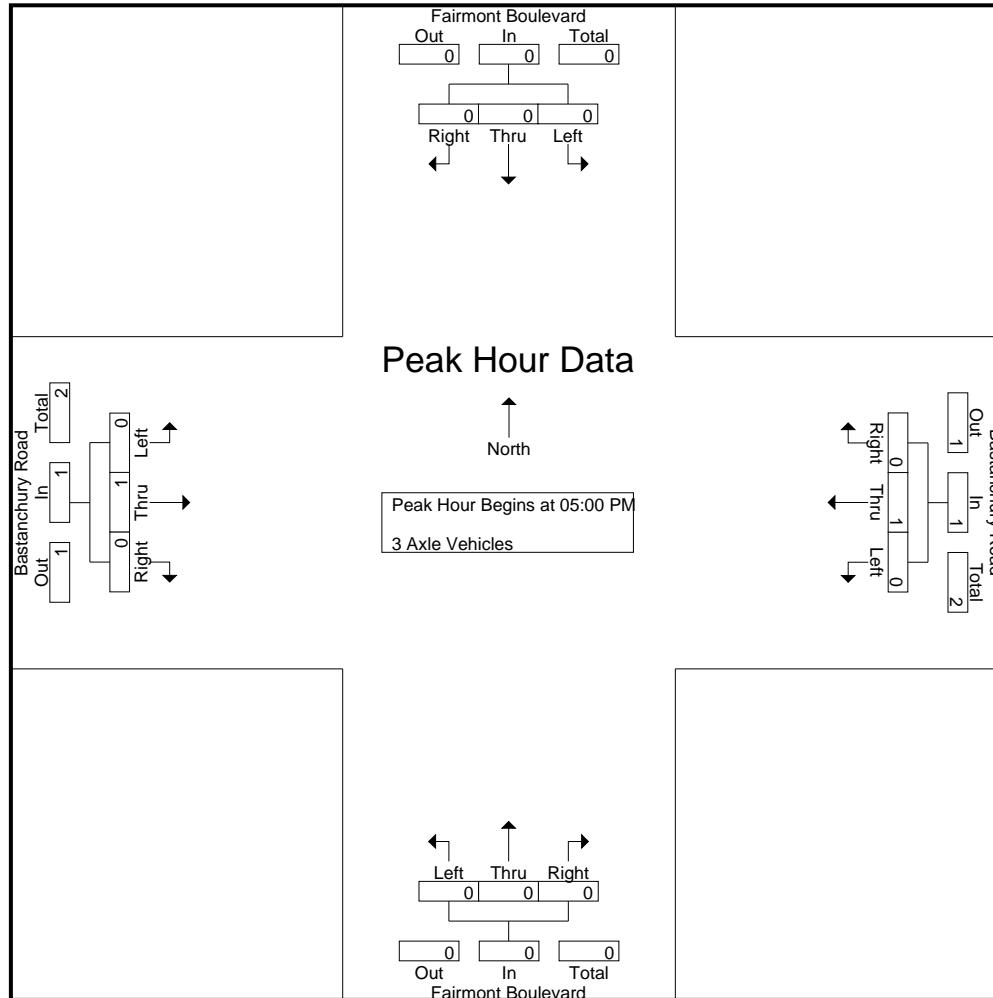
Groups Printed- 3 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	2
Grand Total	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	4	4
Apprch %	0	100	0			0	100	0			0	0	0			0	100	0			0	100	0			0	100	
Total %	0	25	0		25	0	50	0		50	0	0	0		0	0	25	0		25	0	25	0		25	0	100	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0	0	0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

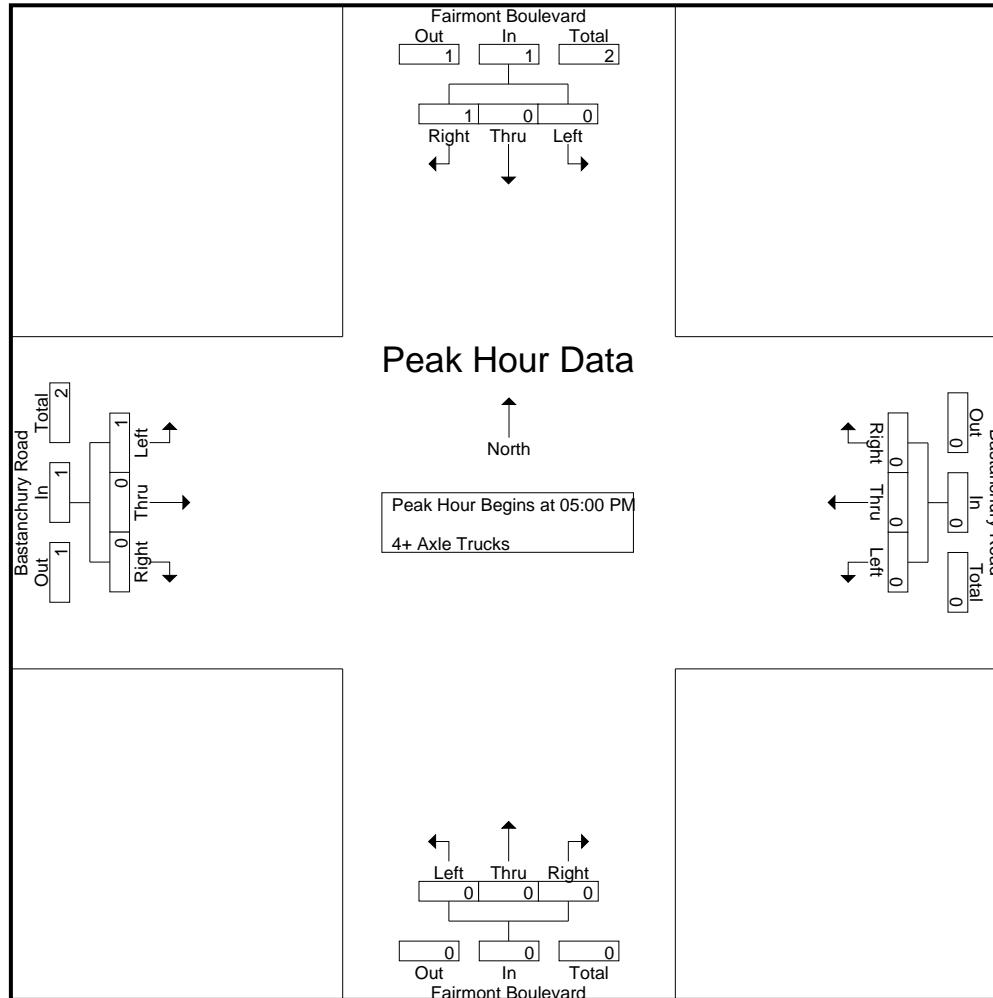
Groups Printed- 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Bastanchury Road Westbound					Fairmont Boulevard Northbound					Bastanchury Road Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
Grand Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
Apprch %	0	0	100			0	0	0			0	0	0			100	0	0			0	0	0			0	100	
Total %	0	0	50		50	0	0	0		0	0	0	0		0	50	0	0		50	0	0	0		0	0	100	

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
% App. Total	0	0	100		0	0	0		0	0	0		100	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.500

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road
 Weather: Clear

File Name : 14_YLA_Fair_Bast PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Bastanchury Road Westbound				Fairmont Boulevard Northbound				Bastanchury Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	
% App. Total	0	0	100		0	0	0		0	0	0		100	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	

Location: Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Fairmont Boulevard Pedestrians	East Leg Bastanchury Road Pedestrians	South Leg Fairmont Boulevard Pedestrians	West Leg Bastanchury Road Pedestrians	
7:00 AM	0	1	1	0	2
7:15 AM	0	0	0	0	0
7:30 AM	1	0	2	4	7
7:45 AM	1	0	1	4	6
8:00 AM	0	1	0	0	1
8:15 AM	0	1	1	1	3
8:30 AM	0	2	1	1	4
8:45 AM	1	2	4	1	8
TOTAL VOLUMES:	3	7	10	11	31

	North Leg Fairmont Boulevard Pedestrians	East Leg Bastanchury Road Pedestrians	South Leg Fairmont Boulevard Pedestrians	West Leg Bastanchury Road Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	2	4	0	6
5:00 PM	1	6	0	1	8
5:15 PM	0	1	0	0	1
5:30 PM	3	3	1	1	8
5:45 PM	5	1	1	0	7
TOTAL VOLUMES:	9	13	6	3	31

Location: Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Bastanchury Road



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Fairmont Boulevard			Westbound Bastanchury Road			Northbound Fairmont Boulevard			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	0	0	1	0	0	0	0	0	1	0	4

	Southbound Fairmont Boulevard			Westbound Bastanchury Road			Northbound Fairmont Boulevard			Eastbound Bastanchury Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	1	1	1	0	1	0	0	0	0	5

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

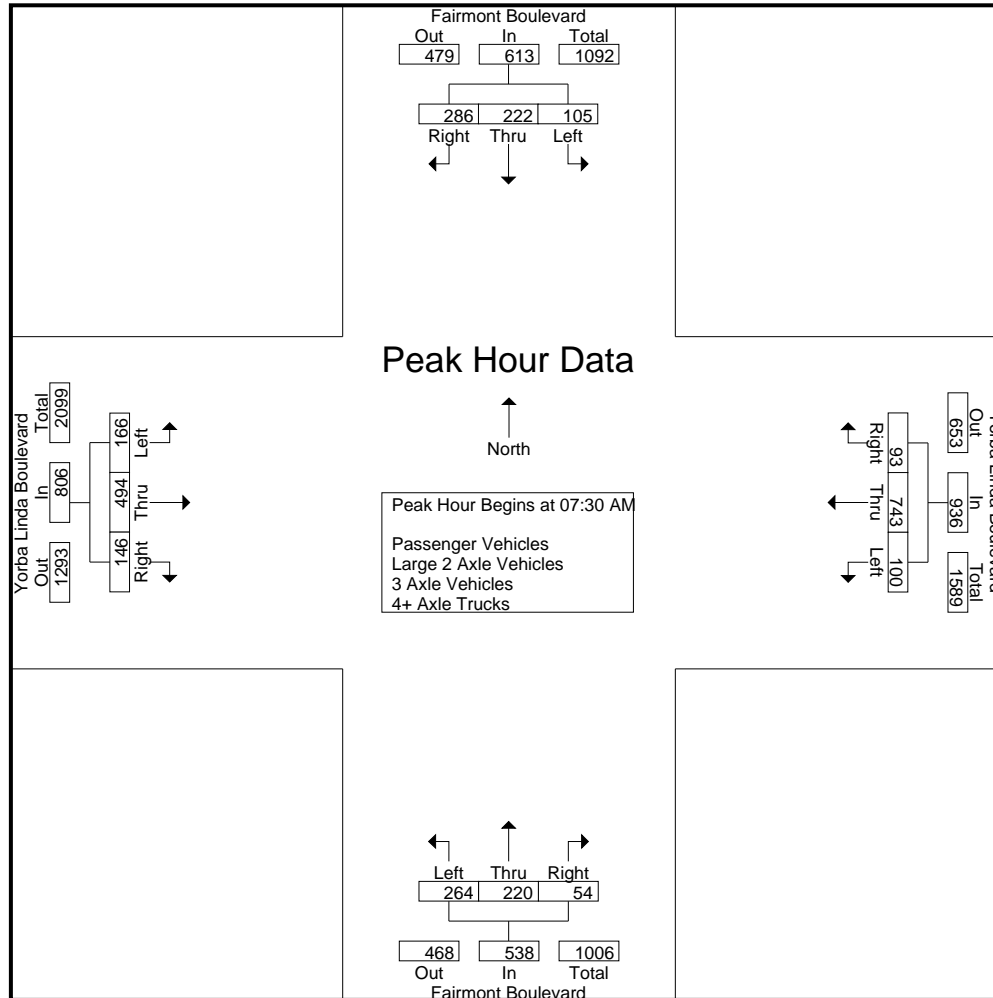
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	7	11	43	37	61	2	122	6	1	130	22	10	4	2	36	23	65	14	7	102	47	329	376
07:15 AM	10	13	50	46	73	3	116	15	4	134	36	14	5	5	55	20	65	17	1	102	56	364	420
07:30 AM	25	33	82	40	140	6	181	50	10	237	53	69	2	0	124	51	99	24	11	174	61	675	736
07:45 AM	42	63	79	32	184	19	193	35	6	247	57	51	10	0	118	47	126	42	22	215	60	764	824
Total	84	120	254	155	458	30	612	106	21	748	168	144	21	7	333	141	355	97	41	593	224	2132	2356
08:00 AM	11	73	72	53	156	45	175	4	0	224	85	45	18	0	148	36	137	48	18	221	71	749	820
08:15 AM	27	53	53	45	133	30	194	4	0	228	69	55	24	1	148	32	132	32	16	196	62	705	767
08:30 AM	19	26	34	21	79	9	195	8	1	212	75	29	19	4	123	37	136	42	5	215	31	629	660
08:45 AM	17	28	51	24	96	9	159	8	5	176	53	17	9	5	79	22	146	25	16	193	50	544	594
Total	74	180	210	143	464	93	723	24	6	840	282	146	70	10	498	127	551	147	55	825	214	2627	2841
Grand Total	158	300	464	298	922	123	1335	130	27	1588	450	290	91	17	831	268	906	244	96	1418	438	4759	5197
Apprch %	17.1	32.5	50.3			7.7	84.1	8.2			54.2	34.9	11			18.9	63.9	17.2					
Total %	3.3	6.3	9.7		19.4	2.6	28.1	2.7		33.4	9.5	6.1	1.9		17.5	5.6	19	5.1		29.8	8.4	91.6	
Passenger Vehicles	157	297	460		1210	122	1306	127		1581	445	288	89		838	259	872	243		1469	0	0	5098
% Passenger Vehicles	99.4	99	99.1	99.3	99.2	99.2	97.8	97.7	96.3	97.9	98.9	99.3	97.8	94.1	98.8	96.6	96.2	99.6	99	97	0	0	98.1
Large 2 Axle Vehicles	1	3	4		10	1	23	3		28	5	2	2		10	6	26	1		34	0	0	82
% Large 2 Axle Vehicles	0.6	1	0.9	0.7	0.8	0.8	1.7	2.3	3.7	1.7	1.1	0.7	2.2	5.9	1.2	2.2	2.9	0.4	1	2.2	0	0	1.6
3 Axle Vehicles	0	0	0		0	0	2	0		2	0	0	0		0	3	4	0		7	0	0	9
% 3 Axle Vehicles	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	1.1	0.4	0	0	0.5	0	0	0.2
4+ Axle Trucks	0	0	0		0	0	4	0		4	0	0	0		0	0	4	0		4	0	0	8
% 4+ Axle Trucks	0	0	0	0	0	0	0.3	0	0	0.2	0	0	0	0	0	0	0.4	0	0	0.3	0	0	0.2

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	25	33	82	140	6	181	50	237	53	69	2	124	51	99	24	174	675
07:45 AM	42	63	79	184	19	193	35	247	57	51	10	118	47	126	42	215	764
08:00 AM	11	73	72	156	45	175	4	224	85	45	18	148	36	137	48	221	749
08:15 AM	27	53	53	133	30	194	4	228	69	55	24	148	32	132	32	196	767
Total Volume	105	222	286	613	100	743	93	936	264	220	54	538	166	494	146	806	2893
% App. Total	17.1	36.2	46.7		10.7	79.4	9.9		49.1	40.9	10		20.6	61.3	18.1		
PHF	.625	.760	.872	.833	.556	.957	.465	.947	.776	.797	.563	.909	.814	.901	.760	.912	.947

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:45 AM				
+0 mins.	25	33	82	140	6	181	50	237	53	69	2	124	47	126	42	215	
+15 mins.	42	63	79	184	19	193	35	247	57	51	10	118	36	137	48	221	
+30 mins.	11	73	72	156	45	175	4	224	85	45	18	148	32	132	32	196	
+45 mins.	27	53	53	133	30	194	4	228	69	55	24	148	37	136	42	215	
Total Volume	105	222	286	613	100	743	93	936	264	220	54	538	152	531	164	847	
% App. Total	17.1	36.2	46.7		10.7	79.4	9.9		49.1	40.9	10		17.9	62.7	19.4		
PHF	.625	.760	.872	.833	.556	.957	.465	.947	.776	.797	.563	.909	.809	.969	.854	.958	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

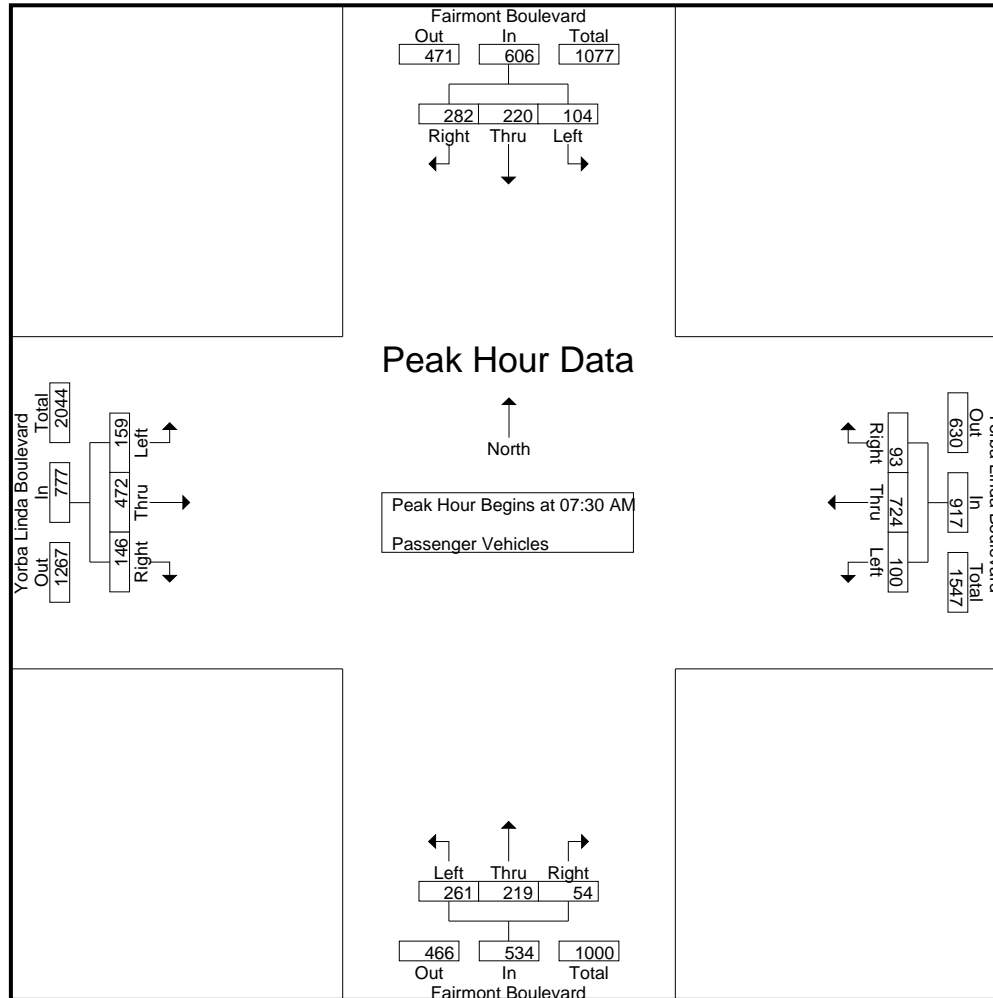
Groups Printed- Passenger Vehicles

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	7	11	43	37	61	2	120	6	1	128	22	10	3	2	35	21	61	14	7	96	47	320	367
07:15 AM	10	12	50	46	72	3	115	12	3	130	36	13	4	4	53	20	64	17	1	101	54	356	410
07:30 AM	25	31	82	40	138	6	176	50	10	232	53	69	2	0	124	48	95	24	11	167	61	661	722
07:45 AM	42	63	78	32	183	19	189	35	6	243	56	51	10	0	117	45	123	42	22	210	60	753	813
Total	84	117	253	155	454	30	600	103	20	733	167	143	19	6	329	134	343	97	41	574	222	2090	2312
08:00 AM	10	73	72	53	155	45	172	4	0	221	83	44	18	0	145	34	129	48	18	211	71	732	803
08:15 AM	27	53	50	43	130	30	187	4	0	221	69	55	24	1	148	32	125	32	16	189	60	688	748
08:30 AM	19	26	34	21	79	9	191	8	1	208	75	29	19	4	123	37	132	42	5	211	31	621	652
08:45 AM	17	28	51	24	96	8	156	8	5	172	51	17	9	5	77	22	143	24	15	189	49	534	583
Total	73	180	207	141	460	92	706	24	6	822	278	145	70	10	493	125	529	146	54	800	211	2575	2786
Grand Total	157	297	460	296	914	122	1306	127	26	1555	445	288	89	16	822	259	872	243	95	1374	433	4665	5098
Apprch %	17.2	32.5	50.3			7.8	84	8.2			54.1	35	10.8			18.9	63.5	17.7					
Total %	3.4	6.4	9.9		19.6	2.6	28	2.7		33.3	9.5	6.2	1.9		17.6	5.6	18.7	5.2		29.5	8.5	91.5	

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	25	31	82	138	6	176	50	232	53	69	2	124	48	95	24	167	661
07:45 AM	42	63	78	183	19	189	35	243	56	51	10	117	45	123	42	210	753
08:00 AM	10	73	72	155	45	172	4	221	83	44	18	145	34	129	48	211	732
08:15 AM	27	53	50	130	30	187	4	221	69	55	24	148	32	125	32	189	688
Total Volume	104	220	282	606	100	724	93	917	261	219	54	534	159	472	146	777	2834
% App. Total	17.2	36.3	46.5		10.9	79	10.1		48.9	41	10.1		20.5	60.7	18.8		
PHF	.619	.753	.860	.828	.556	.958	.465	.943	.786	.793	.563	.902	.828	.915	.760	.921	.941

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	25	31	82	138	6	176	50	232	53	69	2	124	48	95	24	167	
+15 mins.	42	63	78	183	19	189	35	243	56	51	10	117	45	123	42	210	
+30 mins.	10	73	72	155	45	172	4	221	83	44	18	145	34	129	48	211	
+45 mins.	27	53	50	130	30	187	4	221	69	55	24	148	32	125	32	189	
Total Volume	104	220	282	606	100	724	93	917	261	219	54	534	159	472	146	777	
% App. Total	17.2	36.3	46.5		10.9	79	10.1		48.9	41	10.1		20.5	60.7	18.8		
PHF	.619	.753	.860	.828	.556	.958	.465	.943	.786	.793	.563	.902	.828	.915	.760	.921	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

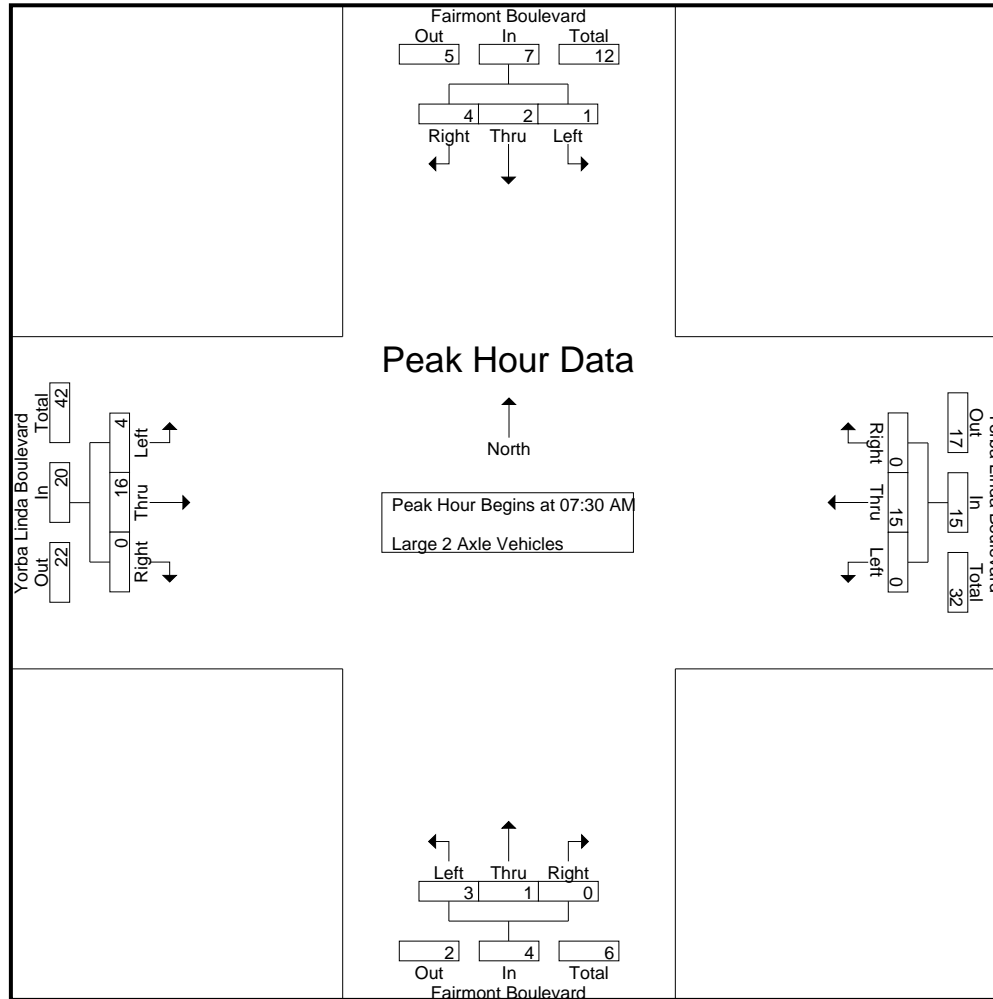
Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	2	3	0	0	5	0	8	8
07:15 AM	0	1	0	0	1	0	1	3	1	4	0	1	1	1	2	0	1	0	0	1	2	8	10
07:30 AM	0	2	0	0	2	0	5	0	0	5	0	0	0	0	0	1	3	0	0	4	0	11	11
07:45 AM	0	0	1	0	1	0	2	0	0	2	1	0	0	0	1	1	2	0	0	3	0	7	7
Total	0	3	1	0	4	0	10	3	1	13	1	1	2	1	4	4	9	0	0	13	2	34	36
08:00 AM	1	0	0	0	1	0	3	0	0	3	2	1	0	0	3	2	5	0	0	7	0	14	14
08:15 AM	0	0	3	2	3	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	2	14	16
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	7	7
08:45 AM	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2	0	2	1	1	3	1	8	9
Total	1	0	3	2	4	1	13	0	0	14	4	1	0	0	5	2	17	1	1	20	3	43	46
Grand Total	1	3	4	2	8	1	23	3	1	27	5	2	2	1	9	6	26	1	1	33	5	77	82
Apprch %	12.5	37.5	50			3.7	85.2	11.1			55.6	22.2	22.2			18.2	78.8	3					
Total %	1.3	3.9	5.2		10.4	1.3	29.9	3.9		35.1	6.5	2.6	2.6		11.7	7.8	33.8	1.3		42.9	6.1	93.9	

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	2	0	2	0	5	0	5	0	0	0	0	1	3	0	4	11
07:45 AM	0	0	1	1	0	2	0	2	1	0	0	1	1	2	0	3	7
08:00 AM	1	0	0	1	0	3	0	3	2	1	0	3	2	5	0	7	14
08:15 AM	0	0	3	3	0	5	0	5	0	0	0	0	0	6	0	6	14
Total Volume	1	2	4	7	0	15	0	15	3	1	0	4	4	16	0	20	46
% App. Total	14.3	28.6	57.1		0	100	0		75	25	0		20	80	0		
PHF	.250	.250	.333	.583	.000	.750	.000	.750	.375	.250	.000	.333	.500	.667	.000	.714	.821

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	0	2	0	5	0	5	0	0	0	0	1	3	0	4	
+15 mins.	0	0	1	1	0	2	0	2	1	0	0	1	1	2	0	3	
+30 mins.	1	0	0	1	0	3	0	3	2	1	0	3	2	5	0	7	
+45 mins.	0	0	3	3	0	5	0	5	0	0	0	0	0	6	0	6	
Total Volume	1	2	4	7	0	15	0	15	3	1	0	4	4	16	0	20	
% App. Total	14.3	28.6	57.1		0	100	0		75	25	0		20	80	0		
PHF	.250	.250	.333	.583	.000	.750	.000	.750	.375	.250	.000	.333	.500	.667	.000	.714	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

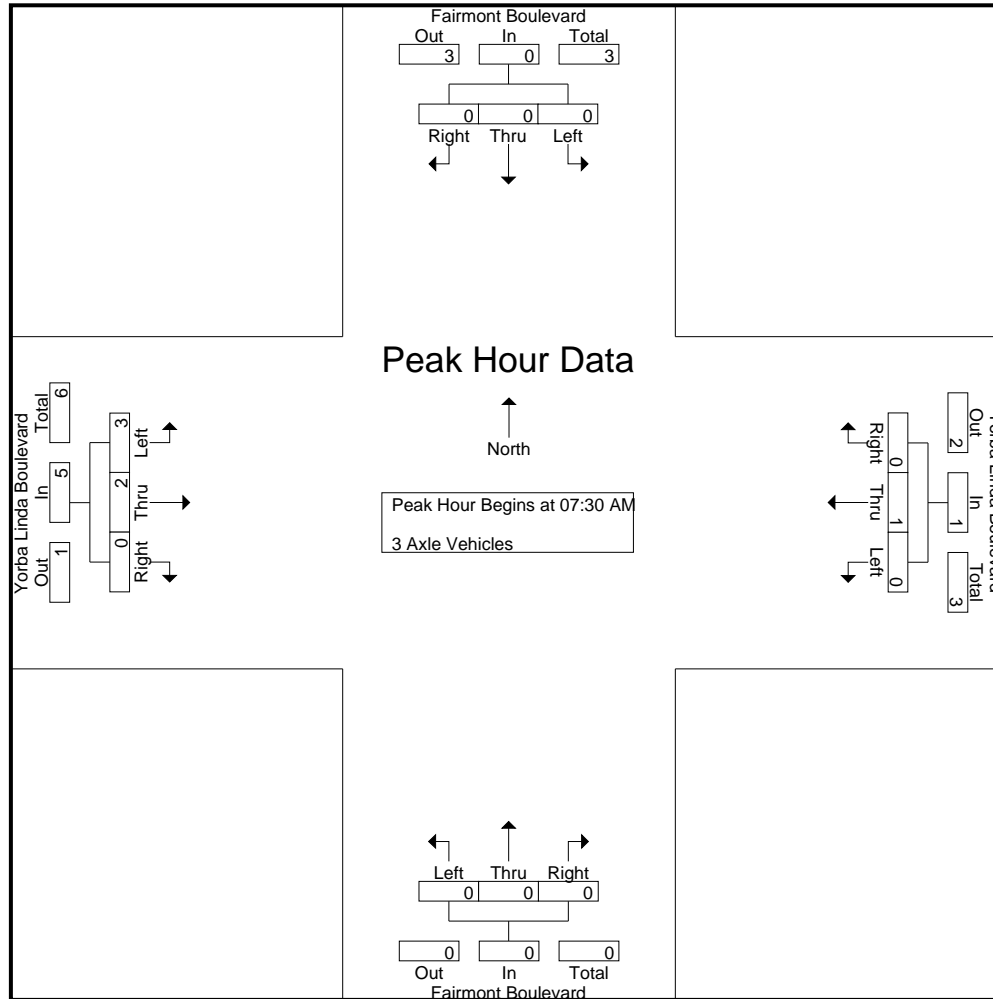
Groups Printed- 3 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	3	3	3
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	2	0	0	5	0	0	0	0	0	6	6	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3	3	3
Grand Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3	4	0	0	7	0	0	0	0	0	9	9	9
Apprch %	0	0	0			0	100	0			0	0	0			42.9	57.1	0										
Total %	0	0	0			0	22.2	0		22.2	0	0	0			33.3	44.4	0		77.8	0	0	0		0	100	100	100

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	3	2	0	5	6
% App. Total	0	0	0		0	100	0		0	0	0		60	40	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.375	.500	.000	.417	.500

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	3	2	0	5	
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	60	40	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.375	.500	.000	.417	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

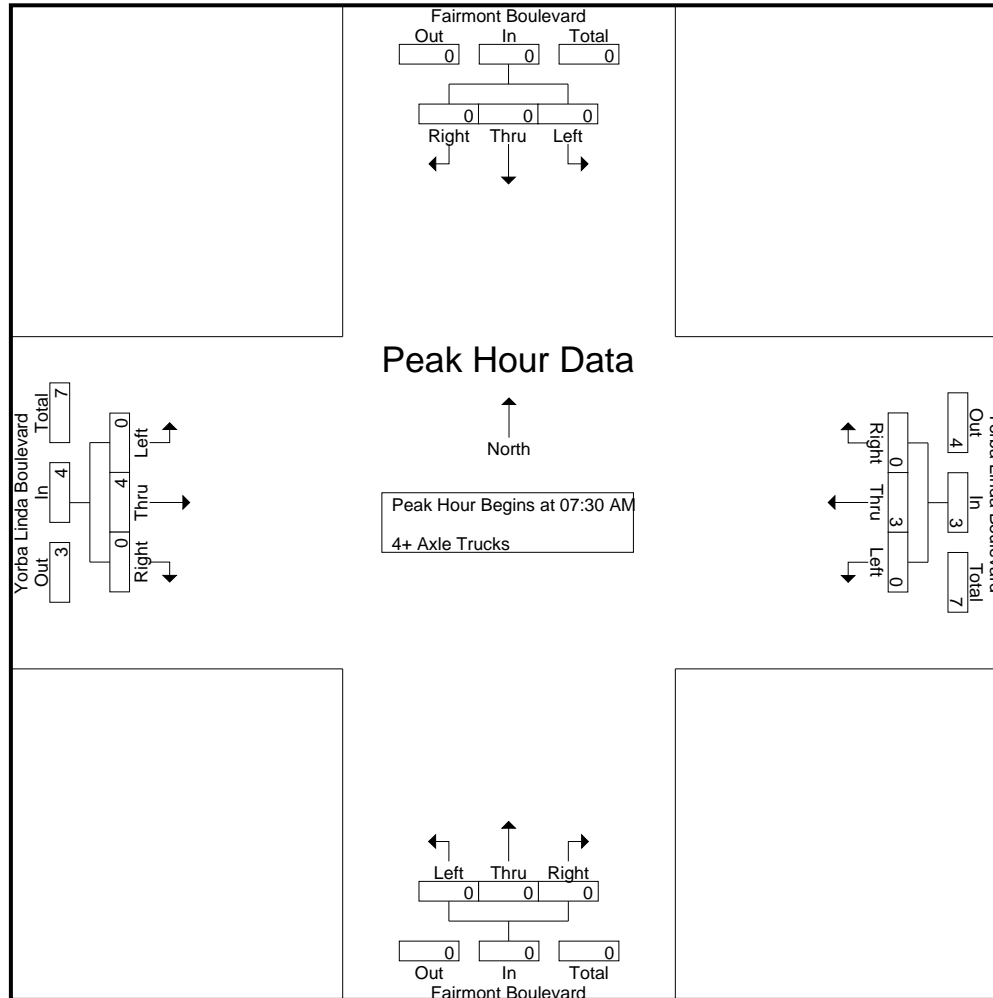
Groups Printed- 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	2
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	0	3	3
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	0	6	6
Grand Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	0	8	8
Apprch %	0	0	0			0	100	0			0	0	0			0	100	0			0	100	0			0		
Total %	0	0	0			0	50	0		50	0	0	0		0	0	50	0		50	0	100	0		100	0		

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.000	.333	.583

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	4
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	100
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.000	.333	.333

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

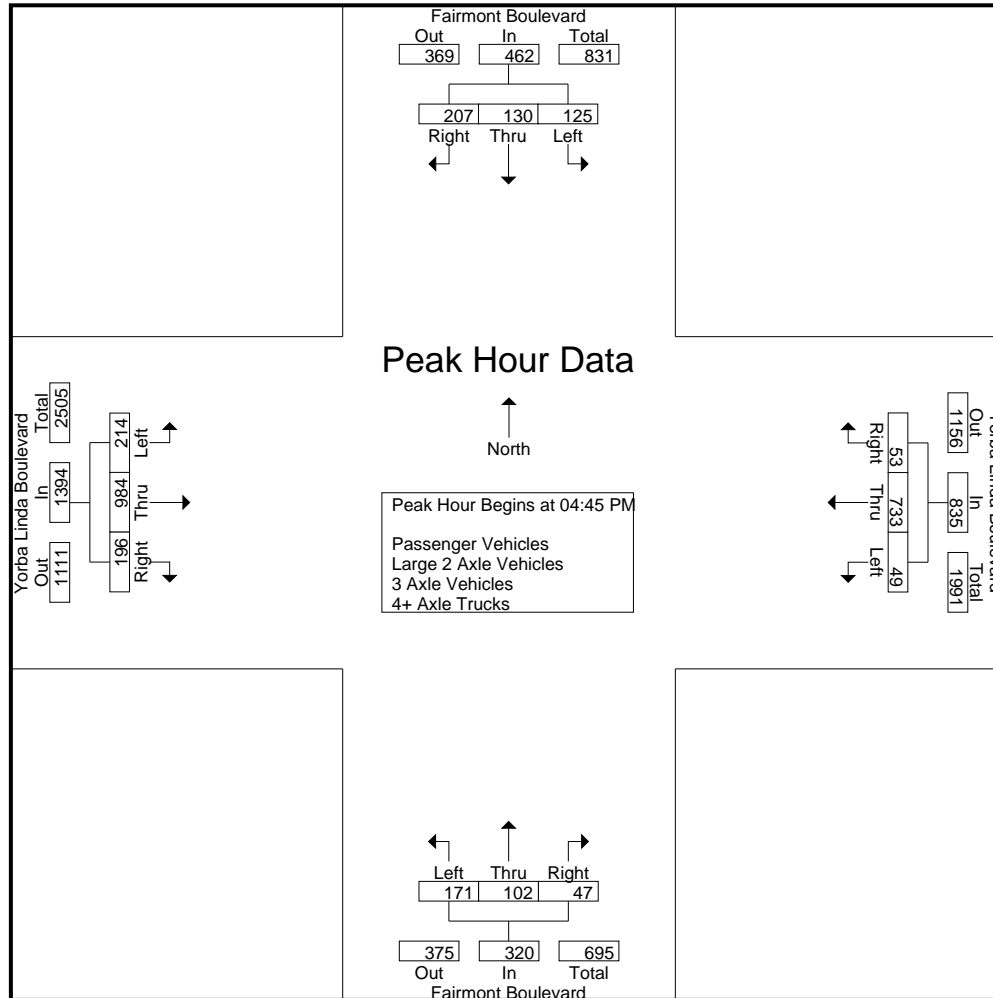
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	30	41	50	32	121	7	204	19	3	230	30	16	14	7	60	57	229	43	8	329	50	740	790
04:15 PM	26	28	40	16	94	3	175	7	2	185	60	18	20	11	98	50	241	53	12	344	41	721	762
04:30 PM	29	36	41	19	106	16	160	15	4	191	47	14	9	9	70	55	251	46	7	352	39	719	758
04:45 PM	29	35	42	20	106	11	179	13	6	203	38	27	9	2	74	50	231	58	15	339	43	722	765
Total	114	140	173	87	427	37	718	54	15	809	175	75	52	29	302	212	952	200	42	1364	173	2902	3075
05:00 PM	35	24	58	31	117	14	174	19	4	207	39	23	13	5	75	55	256	55	13	366	53	765	818
05:15 PM	29	38	49	27	116	12	183	11	3	206	56	24	13	7	93	51	230	44	8	325	45	740	785
05:30 PM	32	33	58	34	123	12	197	10	4	219	38	28	12	7	78	58	267	39	7	364	52	784	836
05:45 PM	32	31	45	20	108	7	166	14	2	187	55	28	7	0	90	50	237	44	14	331	36	716	752
Total	128	126	210	112	464	45	720	54	13	819	188	103	45	19	336	214	990	182	42	1386	186	3005	3191
Grand Total	242	266	383	199	891	82	1438	108	28	1628	363	178	97	48	638	426	1942	382	84	2750	359	5907	6266
Apprch %	27.2	29.9	43			5	88.3	6.6			56.9	27.9	15.2			15.5	70.6	13.9					
Total %	4.1	4.5	6.5		15.1	1.4	24.3	1.8		27.6	6.1	3	1.6		10.8	7.2	32.9	6.5		46.6	5.7	94.3	
Passenger Vehicles	239	265	380		1082	82	1432	108		1650	362	178	97		685	422	1938	380		2823	0	0	6240
% Passenger Vehicles	98.8	99.6	99.2	99.5	99.3	100	99.6	100	100	99.6	99.7	100	100	100	99.9	99.1	99.8	99.5	98.8	99.6	0	0	99.6
Large 2 Axle Vehicles	3	1	2		6	0	3	0		3	1	0	0		1	4	3	2		10	0	0	20
% Large 2 Axle Vehicles	1.2	0.4	0.5	0	0.6	0	0.2	0	0	0.2	0.3	0	0	0	0.1	0.9	0.2	0.5	1.2	0.4	0	0	0.3
3 Axle Vehicles	0	0	1		2	0	1	0		1	0	0	0		0	0	1	0		1	0	0	4
% 3 Axle Vehicles	0	0	0.3	0.5	0.2	0	0.1	0	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	2	0		2	0	0	0		0	0	0	0		0	0	0	2
% 4+ Axle Trucks	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	29	35	42	106	11	179	13	203	38	27	9	74	50	231	58	339	722
05:00 PM	35	24	58	117	14	174	19	207	39	23	13	75	55	256	55	366	765
05:15 PM	29	38	49	116	12	183	11	206	56	24	13	93	51	230	44	325	740
05:30 PM	32	33	58	123	12	197	10	219	38	28	12	78	58	267	39	364	784
Total Volume	125	130	207	462	49	733	53	835	171	102	47	320	214	984	196	1394	3011
% App. Total	27.1	28.1	44.8		5.9	87.8	6.3		53.4	31.9	14.7		15.4	70.6	14.1		
PHF	.893	.855	.892	.939	.875	.930	.697	.953	.763	.911	.904	.860	.922	.921	.845	.952	.960

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				05:00 PM				04:15 PM				
+0 mins.	35	24	58	117	11	179	13	203	39	23	13	75	50	241	53	344	
+15 mins.	29	38	49	116	14	174	19	207	56	24	13	93	55	251	46	352	
+30 mins.	32	33	58	123	12	183	11	206	38	28	12	78	50	231	58	339	
+45 mins.	32	31	45	108	12	197	10	219	55	28	7	90	55	256	55	366	
Total Volume	128	126	210	464	49	733	53	835	188	103	45	336	210	979	212	1401	
% App. Total	27.6	27.2	45.3		5.9	87.8	6.3		56	30.7	13.4		15	69.9	15.1		
PHF	.914	.829	.905	.943	.875	.930	.697	.953	.839	.920	.865	.903	.955	.956	.914	.957	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

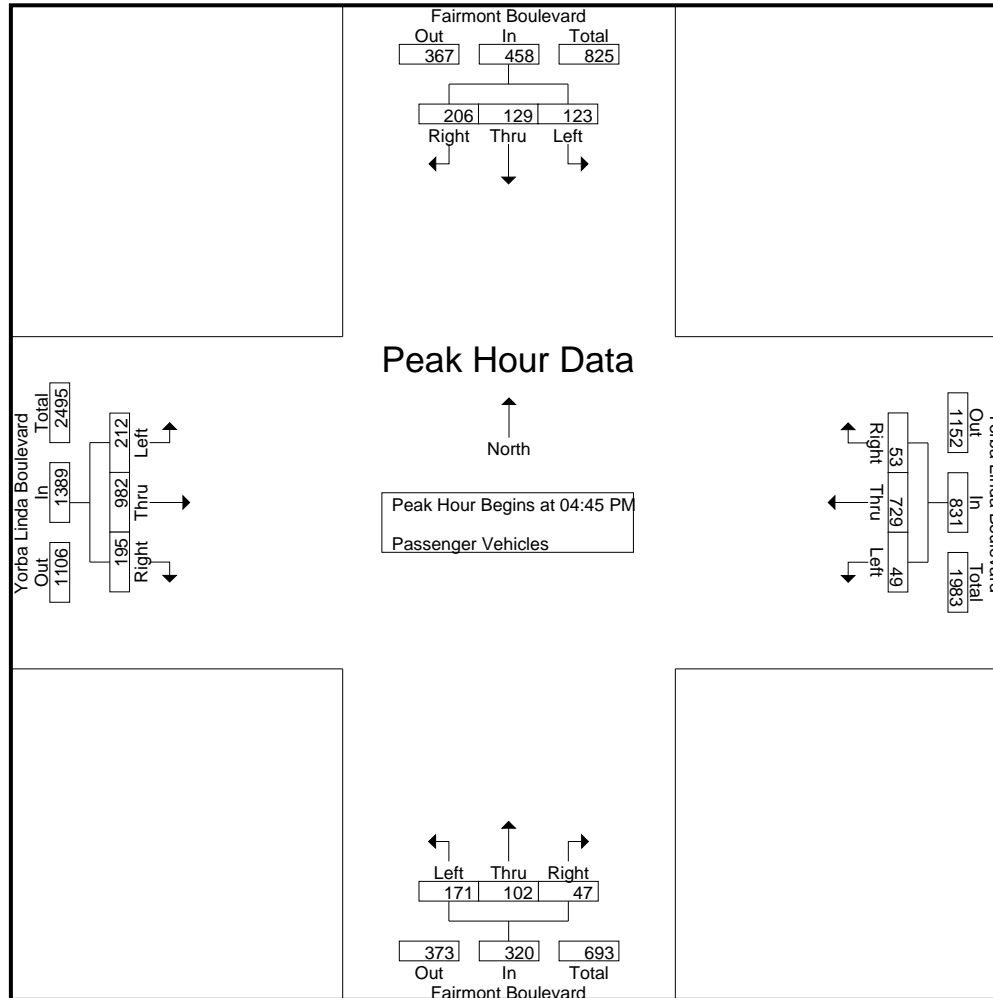
Groups Printed- Passenger Vehicles

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	29	41	48	31	118	7	204	19	3	230	29	16	14	7	59	57	228	42	7	327	48	734	782
04:15 PM	26	28	40	16	94	3	174	7	2	184	60	18	20	11	98	49	241	53	12	343	41	719	760
04:30 PM	29	36	41	19	106	16	159	15	4	190	47	14	9	9	70	55	251	46	7	352	39	718	757
04:45 PM	29	35	42	20	106	11	179	13	6	203	38	27	9	2	74	50	231	58	15	339	43	722	765
Total	113	140	171	86	424	37	716	54	15	807	174	75	52	29	301	211	951	199	41	1361	171	2893	3064
05:00 PM	34	24	58	31	116	14	171	19	4	204	39	23	13	5	75	54	256	55	13	365	53	760	813
05:15 PM	29	37	49	27	115	12	182	11	3	205	56	24	13	7	93	50	229	43	8	322	45	735	780
05:30 PM	31	33	57	34	121	12	197	10	4	219	38	28	12	7	78	58	266	39	7	363	52	781	833
05:45 PM	32	31	45	20	108	7	166	14	2	187	55	28	7	0	90	49	236	44	14	329	36	714	750
Total	126	125	209	112	460	45	716	54	13	815	188	103	45	19	336	211	987	181	42	1379	186	2990	3176
Grand Total	239	265	380	198	884	82	1432	108	28	1622	362	178	97	48	637	422	1938	380	83	2740	357	5883	6240
Apprch %	27	30	43			5.1	88.3	6.7			56.8	27.9	15.2			15.4	70.7	13.9					
Total %	4.1	4.5	6.5		15	1.4	24.3	1.8		27.6	6.2	3	1.6		10.8	7.2	32.9	6.5		46.6	5.7	94.3	

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	29	35	42	106	11	179	13	203	38	27	9	74	50	231	58	339	722
05:00 PM	34	24	58	116	14	171	19	204	39	23	13	75	54	256	55	365	760
05:15 PM	29	37	49	115	12	182	11	205	56	24	13	93	50	229	43	322	735
05:30 PM	31	33	57	121	12	197	10	219	38	28	12	78	58	266	39	363	781
Total Volume	123	129	206	458	49	729	53	831	171	102	47	320	212	982	195	1389	2998
% App. Total	26.9	28.2	45		5.9	87.7	6.4		53.4	31.9	14.7		15.3	70.7	14		
PHF	.904	.872	.888	.946	.875	.925	.697	.949	.763	.911	.904	.860	.914	.923	.841	.951	.960

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	29	35	42	106	11	179	13	203	38	27	9	74	50	231	58	339	
+15 mins.	34	24	58	116	14	171	19	204	39	23	13	75	54	256	55	365	
+30 mins.	29	37	49	115	12	182	11	205	56	24	13	93	50	229	43	322	
+45 mins.	31	33	57	121	12	197	10	219	38	28	12	78	58	266	39	363	
Total Volume	123	129	206	458	49	729	53	831	171	102	47	320	212	982	195	1389	
% App. Total	26.9	28.2	45		5.9	87.7	6.4		53.4	31.9	14.7		15.3	70.7	14		
PHF	.904	.872	.888	.946	.875	.925	.697	.949	.763	.911	.904	.860	.914	.923	.841	.951	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

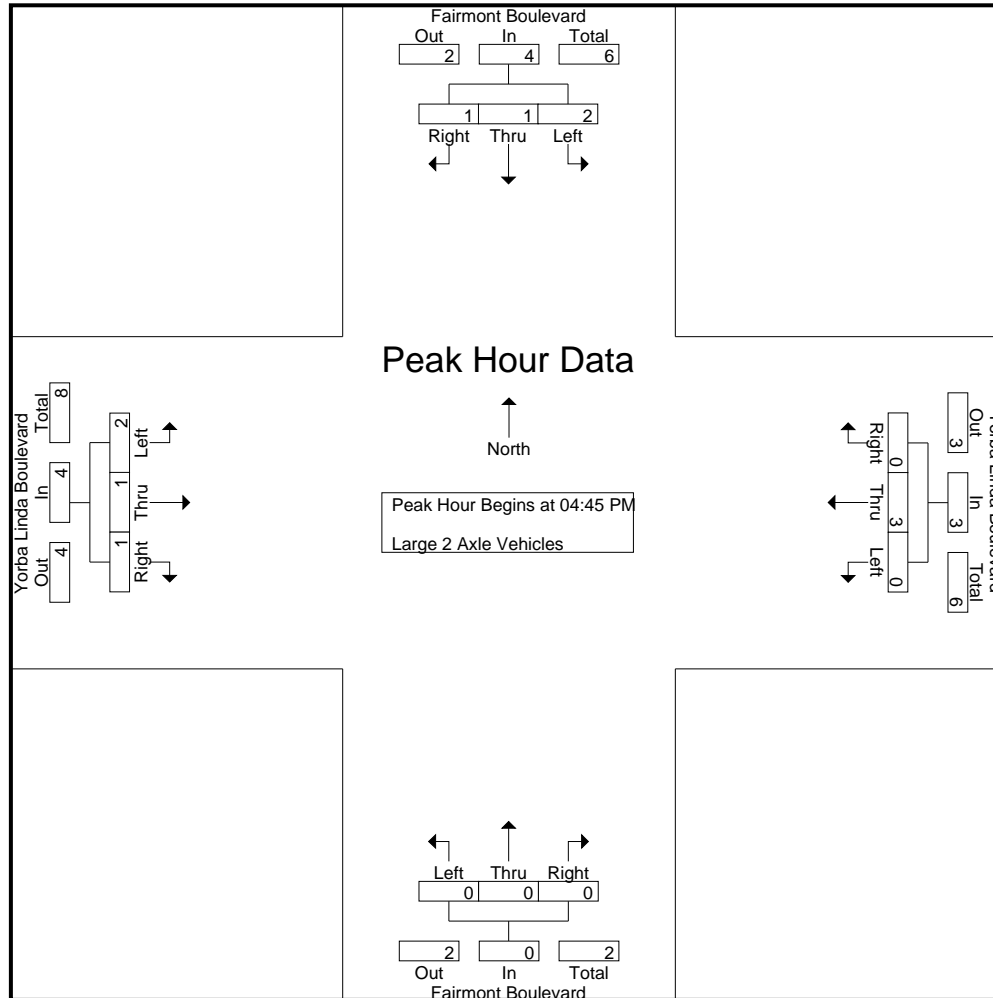
Groups Printed- Large 2 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	1	0	1	0	2	0	0	0	0	0	1	0	0	0	1	0	1	1	1	2	1	5	6
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	2	0	0	0	0	0	1	0	0	0	1	1	1	1	1	3	1	6	7
05:00 PM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	0	0	0	1	0	5	5
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	3	3
05:30 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	2
Total	2	1	1	0	4	0	3	0	0	3	0	0	0	0	0	3	2	1	0	6	0	13	13
Grand Total	3	1	2	0	6	0	3	0	0	3	1	0	0	0	1	4	3	2	1	9	1	19	20
Apprch %	50	16.7	33.3			0	100	0			100	0	0			44.4	33.3	22.2					
Total %	15.8	5.3	10.5		31.6	0	15.8	0		15.8	5.3	0	0		5.3	21.1	15.8	10.5		47.4	5	95	

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	1	0	0	1	0	3	0	3	0	0	0	0	1	0	0	1	5
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	2	3
05:30 PM	1	0	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
Total Volume	2	1	1	4	0	3	0	3	0	0	0	0	2	1	1	4	11
% App. Total	50	25	25		0	100	0		0	0	0		50	25	25		
PHF	.500	.250	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	.500	.250	.250	.500	.550

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	1	0	0	1	0	3	0	3	0	0	0	0	1	0	0	1	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	2	
+45 mins.	1	0	1	2	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	2	1	1	4	0	3	0	3	0	0	0	0	2	1	1	4	
% App. Total	50	25	25		0	100	0		0	0	0		50	25	25		
PHF	.500	.250	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	.500	.250	.250	.500	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

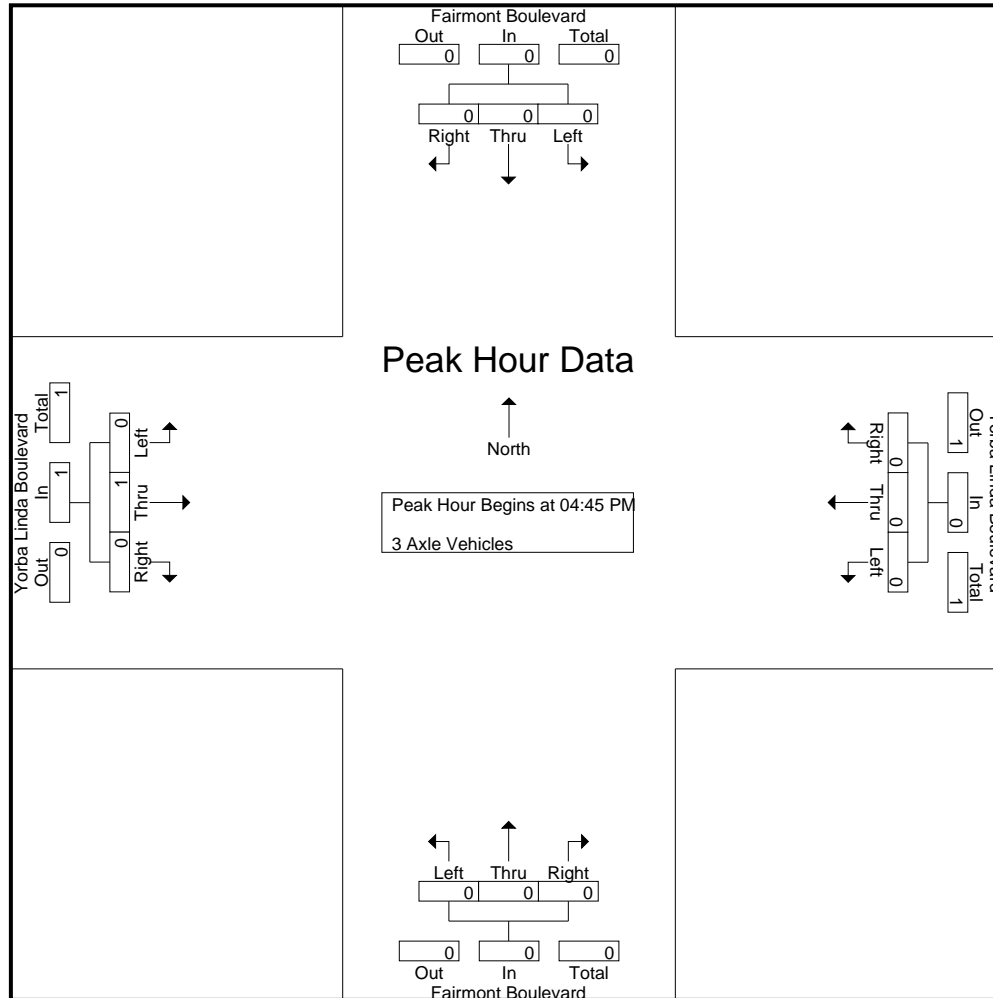
Groups Printed- 3 Axle Vehicles

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1	0	1	1
Grand Total	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	3	0	1	4	1	3	4
Apprch %	0	0	100			0	100	0			0	0	0			0	100	0			0	100	0			25	75	
Total %	0	0	33.3		33.3	0	33.3	0		33.3	0	0	0		0	0	33.3	0		33.3	25	75						

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

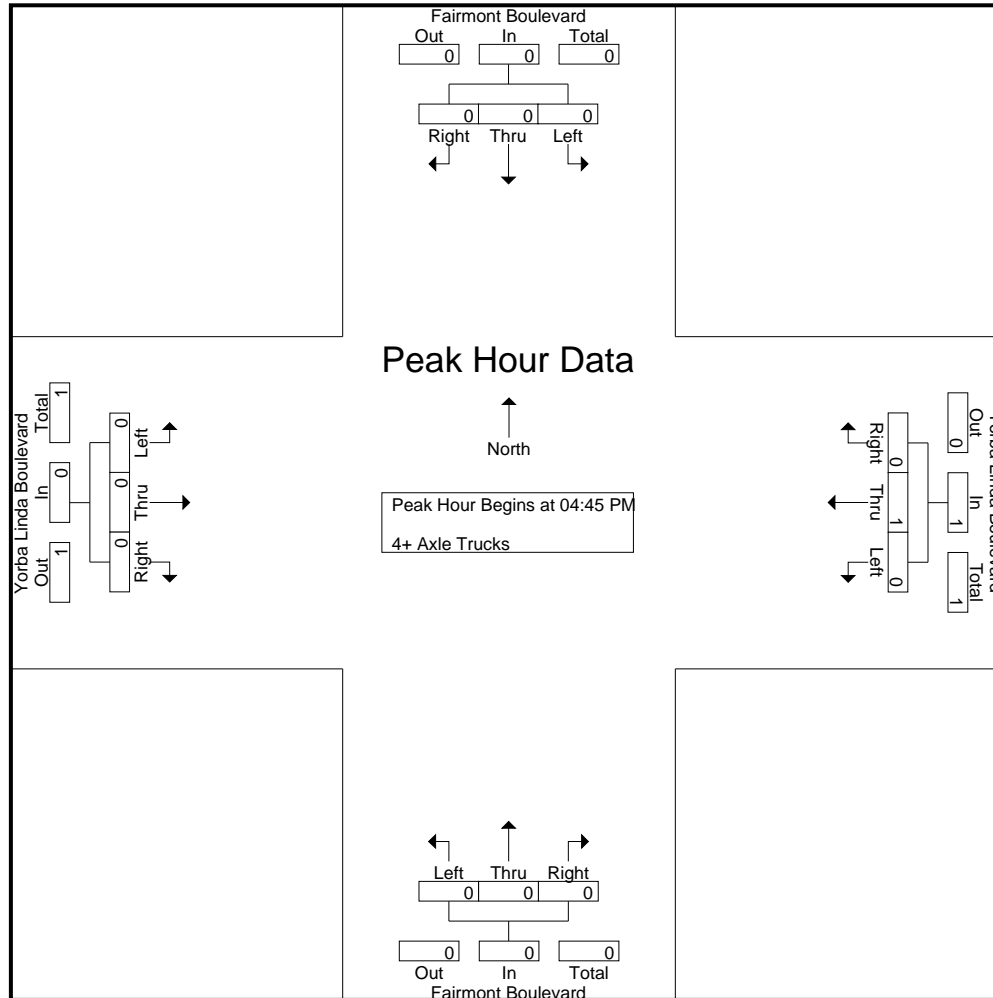
Groups Printed- 4+ Axle Trucks

Start Time	Fairmont Boulevard Southbound					Yorba Linda Boulevard Westbound					Fairmont Boulevard Northbound					Yorba Linda Boulevard Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Apprch %	0	0	0			0	100	0			0	0	0			0	0	0			0	0	0		0		
Total %	0	0	0			0	100	0		100	0	0	0			0	0	0			0	0	0		0	100	

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard
 Weather: Clear

File Name : 15_YLA_Fair_Yorba PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Fairmont Boulevard Southbound				Yorba Linda Boulevard Westbound				Fairmont Boulevard Northbound				Yorba Linda Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Fairmont Boulevard Pedestrians	East Leg Yorba Linda Boulevard Pedestrians	South Leg Fairmont Boulevard Pedestrians	West Leg Yorba Linda Boulevard Pedestrians	
7:00 AM	0	0	1	1	2
7:15 AM	0	0	0	0	0
7:30 AM	2	1	0	1	4
7:45 AM	2	7	6	9	24
8:00 AM	23	22	27	105	177
8:15 AM	7	14	25	73	119
8:30 AM	0	2	0	1	3
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	34	47	59	190	330

	North Leg Fairmont Boulevard Pedestrians	East Leg Yorba Linda Boulevard Pedestrians	South Leg Fairmont Boulevard Pedestrians	West Leg Yorba Linda Boulevard Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	1	1
4:30 PM	1	1	0	0	2
4:45 PM	2	1	0	0	3
5:00 PM	0	1	0	1	2
5:15 PM	0	0	0	0	0
5:30 PM	2	0	0	0	2
5:45 PM	1	0	0	2	3
TOTAL VOLUMES:	6	3	0	5	14

Location: Yorba Linda
 N/S: Fairmont Boulevard
 E/W: Yorba Linda Boulevard



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Fairmont Boulevard			Westbound Yorba Linda Boulevard			Northbound Fairmont Boulevard			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	2	0	0	0	1	0	0	0	0	3

	Southbound Fairmont Boulevard			Westbound Yorba Linda Boulevard			Northbound Fairmont Boulevard			Eastbound Yorba Linda Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	1	0	0	0	2	0	0	1	0	0	1	0	5

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

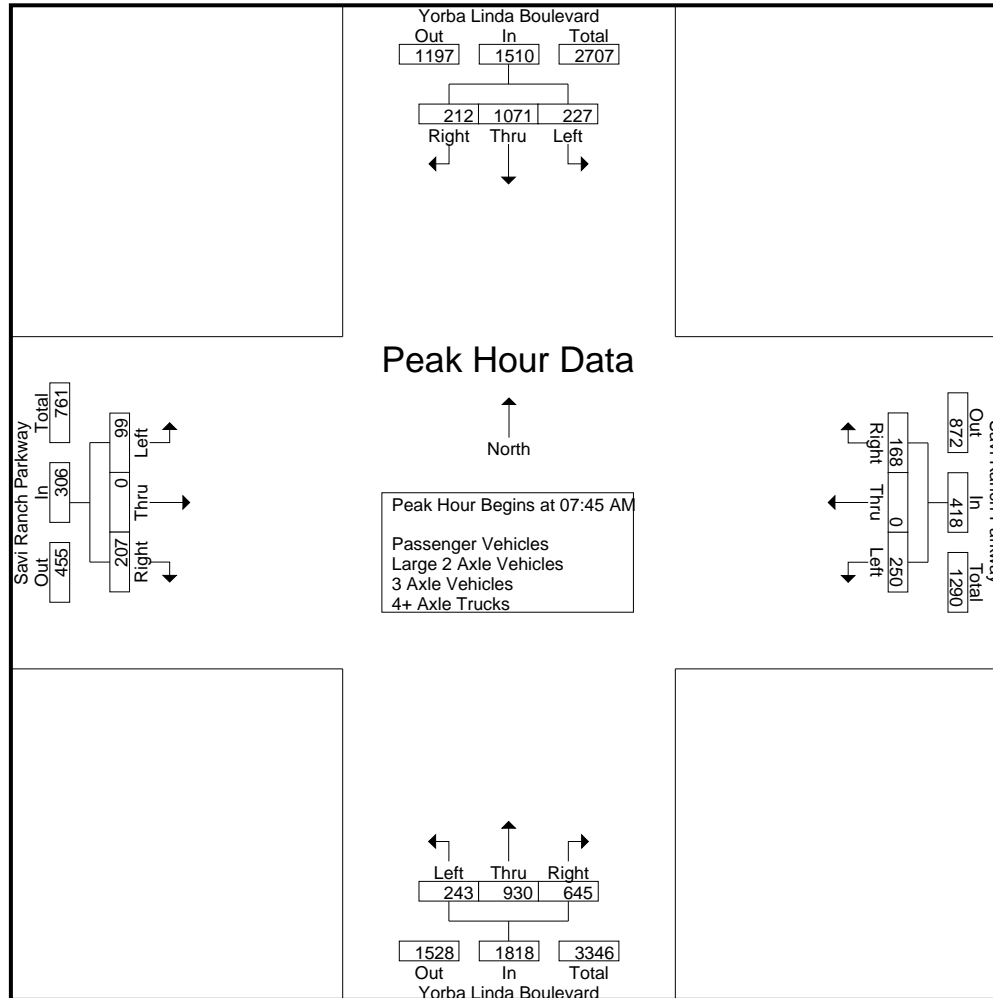
Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	18	192	21	6	231	36	0	23	21	59	65	150	108	0	323	8	0	42	36	50	63	663	726
07:15 AM	28	215	25	7	268	60	0	28	24	88	35	185	124	0	344	10	0	26	25	36	56	736	792
07:30 AM	41	244	41	12	326	46	0	41	31	87	36	268	111	0	415	24	0	48	37	72	80	900	980
07:45 AM	55	285	53	12	393	57	0	37	30	94	63	280	189	0	532	18	0	36	33	54	75	1073	1148
Total	142	936	140	37	1218	199	0	129	106	328	199	883	532	0	1614	60	0	152	131	212	274	3372	3646
08:00 AM	59	248	47	5	354	52	0	48	41	100	57	232	151	1	440	25	0	59	57	84	104	978	1082
08:15 AM	52	262	40	10	354	71	0	43	36	114	71	227	156	0	454	26	0	51	47	77	93	999	1092
08:30 AM	61	276	72	16	409	70	0	40	38	110	52	191	149	0	392	30	0	61	61	91	115	1002	1117
08:45 AM	72	229	64	14	365	52	0	52	48	104	61	224	176	0	461	28	0	63	60	91	122	1021	1143
Total	244	1015	223	45	1482	245	0	183	163	428	241	874	632	1	1747	109	0	234	225	343	434	4000	4434
Grand Total	386	1951	363	82	2700	444	0	312	269	756	440	1757	1164	1	3361	169	0	386	356	555	708	7372	8080
Apprch %	14.3	72.3	13.4			58.7	0	41.3			13.1	52.3	34.6			30.5	0	69.5					
Total %	5.2	26.5	4.9		36.6	6	0	4.2		10.3	6	23.8	15.8		45.6	2.3	0	5.2		7.5	8.8	91.2	
Passenger Vehicles	378	1911	359		2730	423	0	304		988	426	1686	1143		3256	164	0	372		882	0	0	7856
% Passenger Vehicles	97.9	97.9	98.9	100	98.1	95.3	0	97.4	97	96.4	96.8	96	98.2	100	96.8	97	0	96.4	97.2	96.8	0	0	97.2
Large 2 Axle Vehicles	7	28	4		39	16	0	6		28	13	40	16		69	5	0	9		21	0	0	157
% Large 2 Axle Vehicles	1.8	1.4	1.1	0	1.4	3.6	0	1.9	2.2	2.7	3	2.3	1.4	0	2.1	3	0	2.3	2	2.3	0	0	1.9
3 Axle Vehicles	0	7	0		7	1	0	0		1	0	26	3		29	0	0	0		0	0	0	37
% 3 Axle Vehicles	0	0.4	0	0	0.3	0.2	0	0	0	0.1	0	1.5	0.3	0	0.9	0	0	0	0	0	0	0	0.5
4+ Axle Trucks	1	5	0		6	4	0	2		8	1	5	2		8	0	0	5		8	0	0	30
% 4+ Axle Trucks	0.3	0.3	0	0	0.2	0.9	0	0.6	0.7	0.8	0.2	0.3	0.2	0	0.2	0	0	1.3	0.8	0.9	0	0	0.4

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	55	285	53	393	57	0	37	94	63	280	189	532	18	0	36	54	1073
08:00 AM	59	248	47	354	52	0	48	100	57	232	151	440	25	0	59	84	978
08:15 AM	52	262	40	354	71	0	43	114	71	227	156	454	26	0	51	77	999
08:30 AM	61	276	72	409	70	0	40	110	52	191	149	392	30	0	61	91	1002
Total Volume	227	1071	212	1510	250	0	168	418	243	930	645	1818	99	0	207	306	4052
% App. Total	15	70.9	14		59.8	0	40.2		13.4	51.2	35.5		32.4	0	67.6		
PHF	.930	.939	.736	.923	.880	.000	.875	.917	.856	.830	.853	.854	.825	.000	.848	.841	.944

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				07:30 AM				08:00 AM				
+0 mins.	55	285	53	393	52	0	48	100	36	268	111	415	25	0	59	84	
+15 mins.	59	248	47	354	71	0	43	114	63	280	189	532	26	0	51	77	
+30 mins.	52	262	40	354	70	0	40	110	57	232	151	440	30	0	61	91	
+45 mins.	61	276	72	409	52	0	52	104	71	227	156	454	28	0	63	91	
Total Volume	227	1071	212	1510	245	0	183	428	227	1007	607	1841	109	0	234	343	
% App. Total	15	70.9	14		57.2	0	42.8		12.3	54.7	33		31.8	0	68.2		
PHF	.930	.939	.736	.923	.863	.000	.880	.939	.799	.899	.803	.865	.908	.000	.929	.942	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

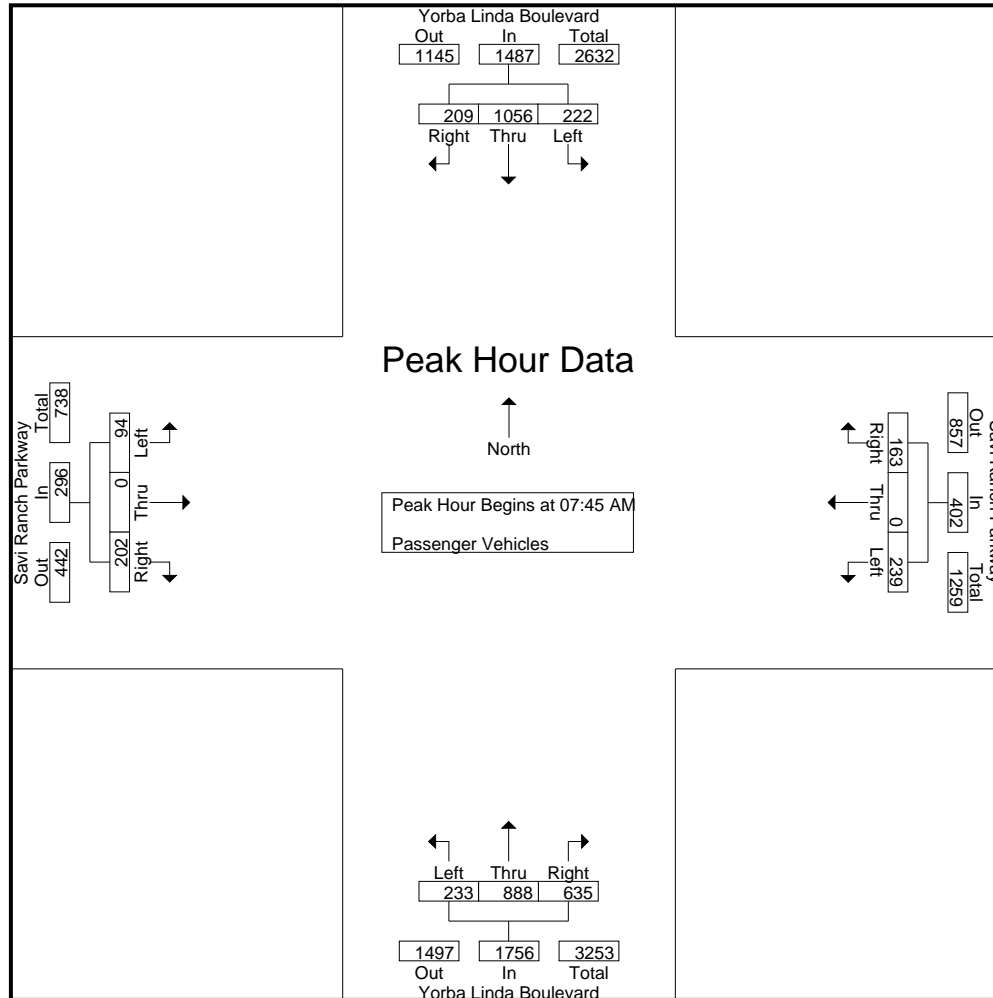
Groups Printed- Passenger Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	17	183	21	6	221	33	0	22	20	55	65	140	104	0	309	8	0	41	36	49	62	634	696
07:15 AM	28	208	25	7	261	55	0	27	23	82	34	178	122	0	334	10	0	23	22	33	52	710	762
07:30 AM	40	240	40	12	320	46	0	41	31	87	36	260	111	0	407	24	0	47	36	71	79	885	964
07:45 AM	55	282	53	12	390	53	0	35	28	88	62	266	187	0	515	17	0	35	32	52	72	1045	1117
Total	140	913	139	37	1192	187	0	125	102	312	197	844	524	0	1565	59	0	146	126	205	265	3274	3539
08:00 AM	56	244	46	5	346	49	0	47	40	96	55	221	151	1	427	24	0	57	56	81	102	950	1052
08:15 AM	50	256	40	10	346	70	0	42	35	112	64	218	150	0	432	24	0	50	47	74	92	964	1056
08:30 AM	61	274	70	16	405	67	0	39	37	106	52	183	147	0	382	29	0	60	60	89	113	982	1095
08:45 AM	71	224	64	14	359	50	0	51	47	101	58	220	171	0	449	28	0	59	57	87	118	996	1114
Total	238	998	220	45	1456	236	0	179	159	415	229	842	619	1	1690	105	0	226	220	331	425	3892	4317
Grand Total	378	1911	359	82	2648	423	0	304	261	727	426	1686	1143	1	3255	164	0	372	346	536	690	7166	7856
Apprch %	14.3	72.2	13.6			58.2	0	41.8			13.1	51.8	35.1			30.6	0	69.4					
Total %	5.3	26.7	5		37	5.9	0	4.2		10.1	5.9	23.5	16		45.4	2.3	0	5.2		7.5	8.8	91.2	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	55	282	53	390	53	0	35	88	62	266	187	515	17	0	35	52	1045
08:00 AM	56	244	46	346	49	0	47	96	55	221	151	427	24	0	57	81	950
08:15 AM	50	256	40	346	70	0	42	112	64	218	150	432	24	0	50	74	964
08:30 AM	61	274	70	405	67	0	39	106	52	183	147	382	29	0	60	89	982
Total Volume	222	1056	209	1487	239	0	163	402	233	888	635	1756	94	0	202	296	3941
% App. Total	14.9	71	14.1		59.5	0	40.5		13.3	50.6	36.2		31.8	0	68.2		
PHF	.910	.936	.746	.918	.854	.000	.867	.897	.910	.835	.849	.852	.810	.000	.842	.831	.943

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	55	282	53	390	53	0	35	88	62	266	187	515	17	0	35	52	
+15 mins.	56	244	46	346	49	0	47	96	55	221	151	427	24	0	57	81	
+30 mins.	50	256	40	346	70	0	42	112	64	218	150	432	24	0	50	74	
+45 mins.	61	274	70	405	67	0	39	106	52	183	147	382	29	0	60	89	
Total Volume	222	1056	209	1487	239	0	163	402	233	888	635	1756	94	0	202	296	
% App. Total	14.9	71	14.1		59.5	0	40.5		13.3	50.6	36.2		31.8	0	68.2		
PHF	.910	.936	.746	.918	.854	.000	.867	.897	.910	.835	.849	.852	.810	.000	.842	.831	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

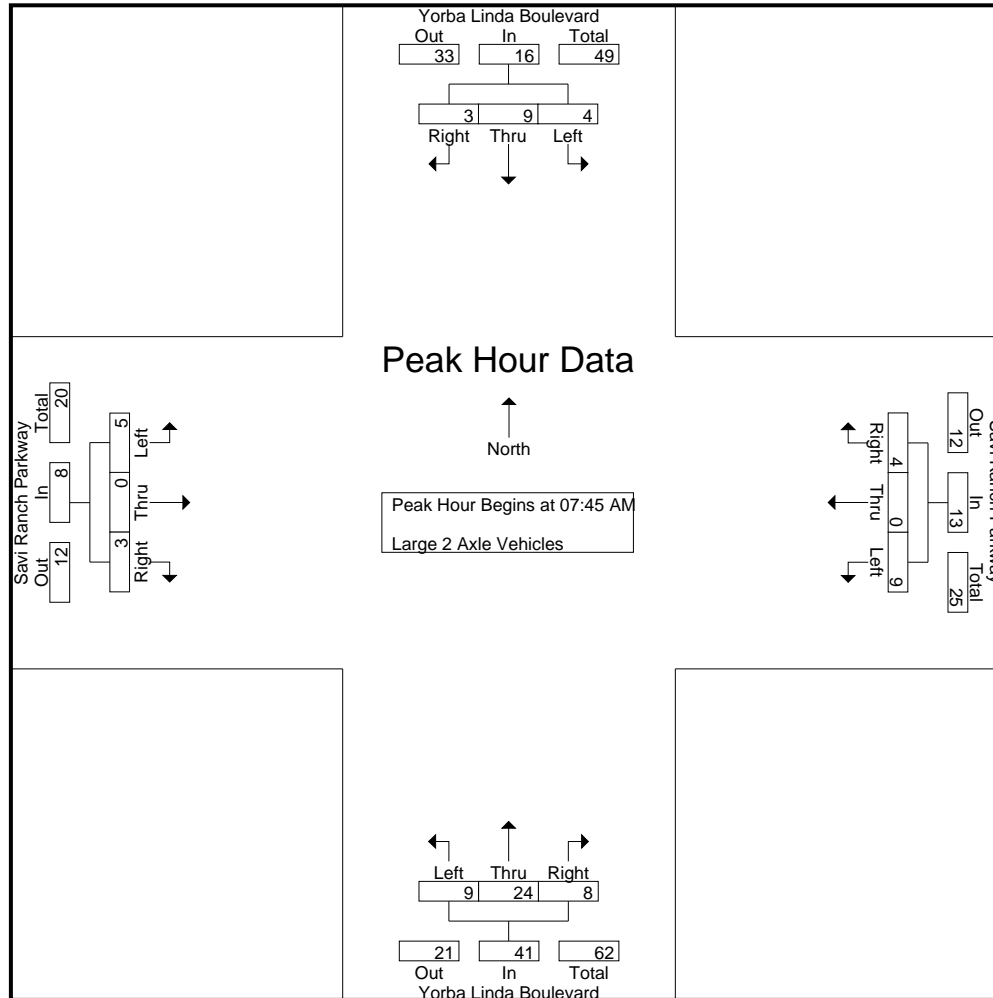
Groups Printed- Large 2 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	1	7	0	0	8	2	0	0	0	2	0	4	3	0	7	0	0	1	0	1	0	0	18	18
07:15 AM	0	7	0	0	7	4	0	1	1	5	1	3	1	0	5	0	0	2	2	2	3	19	22	
07:30 AM	1	3	1	0	5	0	0	0	0	0	0	6	0	0	6	0	0	1	1	1	1	12	13	
07:45 AM	0	3	0	0	3	4	0	2	2	6	1	5	1	0	7	1	0	1	1	2	3	18	21	
Total	2	20	1	0	23	10	0	3	3	13	2	18	5	0	25	1	0	5	4	6	7	67	74	
08:00 AM	2	1	1	0	4	2	0	1	1	3	2	5	0	0	7	1	0	0	0	1	1	15	16	
08:15 AM	2	3	0	0	5	1	0	0	0	1	6	9	5	0	20	2	0	1	0	3	0	29	29	
08:30 AM	0	2	2	0	4	2	0	1	1	3	0	5	2	0	7	1	0	1	1	2	2	16	18	
08:45 AM	1	2	0	0	3	1	0	1	1	2	3	3	4	0	10	0	0	2	2	2	3	17	20	
Total	5	8	3	0	16	6	0	3	3	9	11	22	11	0	44	4	0	4	3	8	6	77	83	
Grand Total	7	28	4	0	39	16	0	6	6	22	13	40	16	0	69	5	0	9	7	14	13	144	157	
Apprch %	17.9	71.8	10.3			72.7	0	27.3			18.8	58	23.2			35.7	0	64.3						
Total %	4.9	19.4	2.8		27.1	11.1	0	4.2		15.3	9	27.8	11.1		47.9	3.5	0	6.2		9.7	8.3	91.7		

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	3	0	3	4	0	2	6	1	5	1	7	1	0	1	2	18
08:00 AM	2	1	1	4	2	0	1	3	2	5	0	7	1	0	0	1	15
08:15 AM	2	3	0	5	1	0	0	1	6	9	5	20	2	0	1	3	29
08:30 AM	0	2	2	4	2	0	1	3	0	5	2	7	1	0	1	2	16
Total Volume	4	9	3	16	9	0	4	13	9	24	8	41	5	0	3	8	78
% App. Total	25	56.2	18.8		69.2	0	30.8		22	58.5	19.5		62.5	0	37.5		
PHF	.500	.750	.375	.800	.563	.000	.500	.542	.375	.667	.400	.513	.625	.000	.750	.667	.672

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	3	0	3	4	0	2	6	1	5	1	7	1	0	1	2	
+15 mins.	2	1	1	4	2	0	1	3	2	5	0	7	1	0	0	1	
+30 mins.	2	3	0	5	1	0	0	1	6	9	5	20	2	0	1	3	
+45 mins.	0	2	2	4	2	0	1	3	0	5	2	7	1	0	1	2	
Total Volume	4	9	3	16	9	0	4	13	9	24	8	41	5	0	3	8	
% App. Total	25	56.2	18.8		69.2	0	30.8		22	58.5	19.5		62.5	0	37.5		
PHF	.500	.750	.375	.800	.563	.000	.500	.542	.375	.667	.400	.513	.625	.000	.750	.667	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

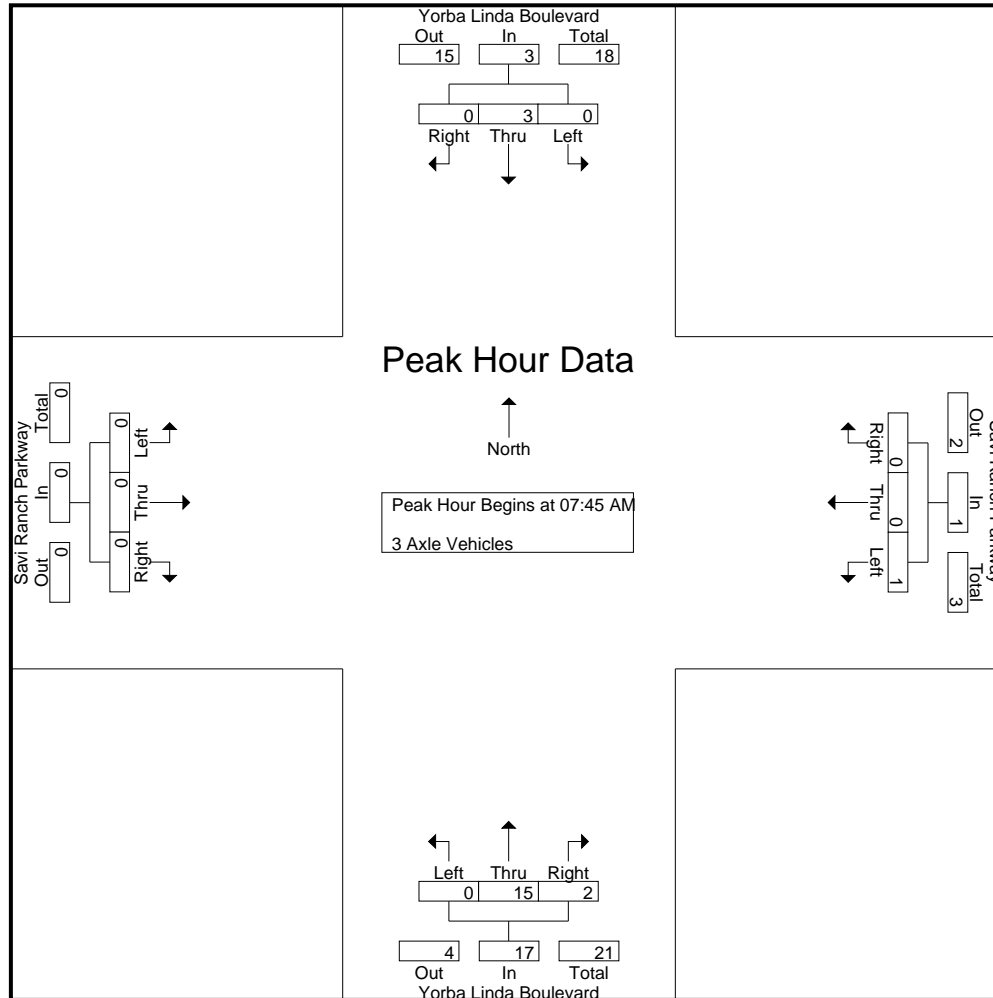
Groups Printed- 3 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	7	7
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	0	0	0	0	0	9	9
Total	0	2	0	0	2	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	0	0	0	0	0	21	21
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6	6
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:30 AM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	0	5	0	0	5	1	0	0	0	1	0	8	2	0	10	0	0	0	0	0	0	0	0	0	0	0	16	16
Grand Total	0	7	0	0	7	1	0	0	0	1	0	26	3	0	29	0	0	0	0	0	0	0	0	0	0	0	37	37
Apprch %	0	100	0			100	0	0			0	89.7	10.3			0	0	0			0	0	0			0		
Total %	0	18.9	0		18.9	2.7	0	0		2.7	0	70.3	8.1		78.4	0	0	0		0	0	0	0		0	0	100	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	9
08:00 AM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
08:15 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
08:30 AM	0	0	0	0	1	0	0	1	0	3	0	3	0	0	0	0	4
Total Volume	0	3	0	3	1	0	0	1	0	15	2	17	0	0	0	0	21
% App. Total	0	100	0		100	0	0		0	88.2	11.8		0	0	0		
PHF	.000	.375	.000	.375	.250	.000	.000	.250	.000	.469	.500	.472	.000	.000	.000	.000	.583

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	
+15 mins.	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	
+45 mins.	0	0	0	0	1	0	0	1	0	3	0	3	0	0	0	0	
Total Volume	0	3	0	3	1	0	0	1	0	15	2	17	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	88.2	11.8		0	0	0		
PHF	.000	.375	.000	.375	.250	.000	.000	.250	.000	.469	.500	.472	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

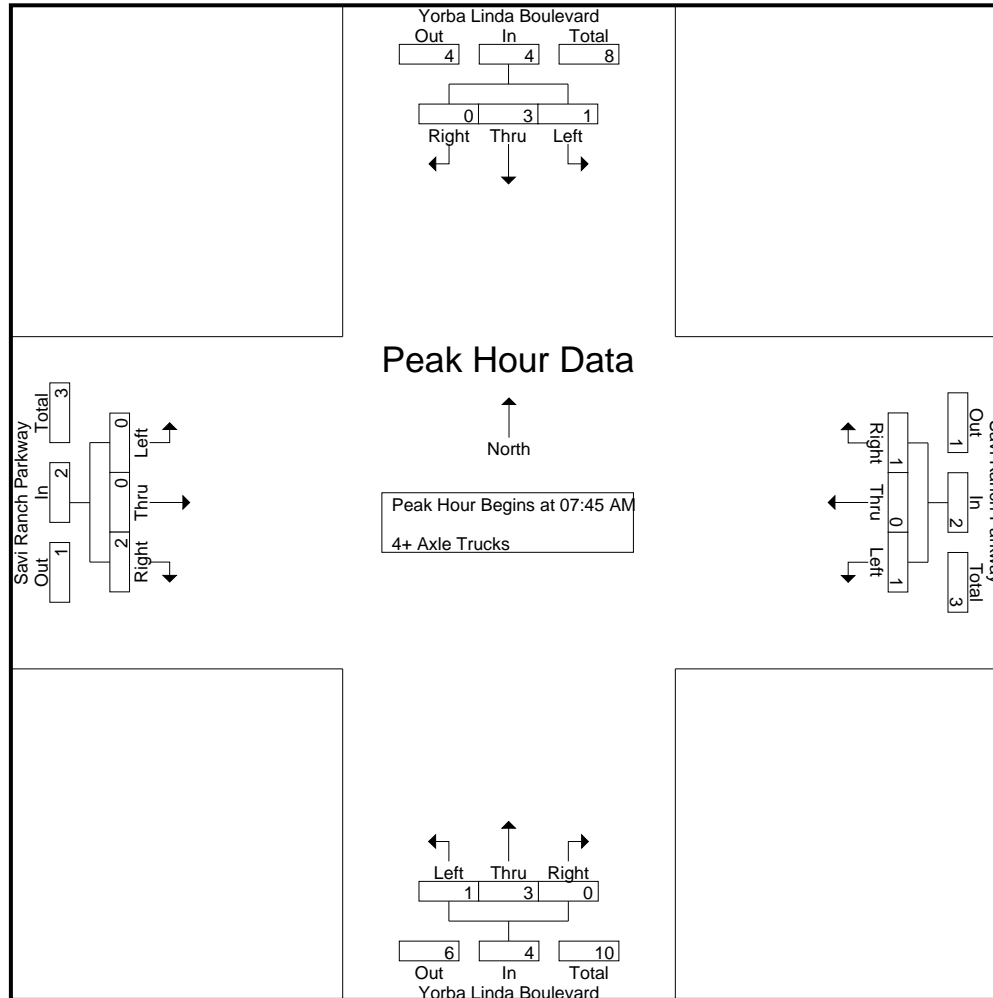
Groups Printed- 4+ Axle Trucks

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	1	0	0	1	1	0	1	1	2	0	0	1	0	1	0	0	0	0	0	1	4	5
07:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	1	0	2	0	0	1	1	1	1	4	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	2	0	1	1	3	0	3	2	0	5	0	0	1	1	1	2	10	12
08:00 AM	1	1	0	0	2	1	0	0	0	1	0	2	0	0	2	0	0	2	1	2	1	7	8
08:15 AM	0	2	0	0	2	0	0	1	1	1	1	0	0	0	1	0	0	0	0	0	1	4	5
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	1	2	1	4	5
Total	1	4	0	0	5	2	0	1	1	3	1	2	0	0	3	0	0	4	2	4	3	15	18
Grand Total	1	5	0	0	6	4	0	2	2	6	1	5	2	0	8	0	0	5	3	5	5	25	30
Apprch %	16.7	83.3	0			66.7	0	33.3			12.5	62.5	25			0	0	100					
Total %	4	20	0		24	16	0	8		24	4	20	8		32	0	0	20		20	16.7	83.3	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	1	1	0	2	1	0	0	1	0	2	0	2	0	0	2	2	7
08:15 AM	0	2	0	2	0	0	1	1	1	0	0	1	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	3	0	4	1	0	1	2	1	3	0	4	0	0	2	2	12
% App. Total	25	75	0		50	0	50		25	75	0		0	0	100		
PHF	.250	.375	.000	.500	.250	.000	.250	.500	.250	.375	.000	.500	.000	.000	.250	.250	.429

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	1	1	0	2	1	0	0	1	0	2	0	2	0	0	2	2	
+30 mins.	0	2	0	2	0	0	1	1	1	0	0	1	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	1	3	0	4	1	0	1	2	1	3	0	4	0	0	2	2	
% App. Total	25	75	0		50	0	50		25	75	0		0	0	100		
PHF	.250	.375	.000	.500	.250	.000	.250	.500	.250	.375	.000	.500	.000	.000	.250	.250	

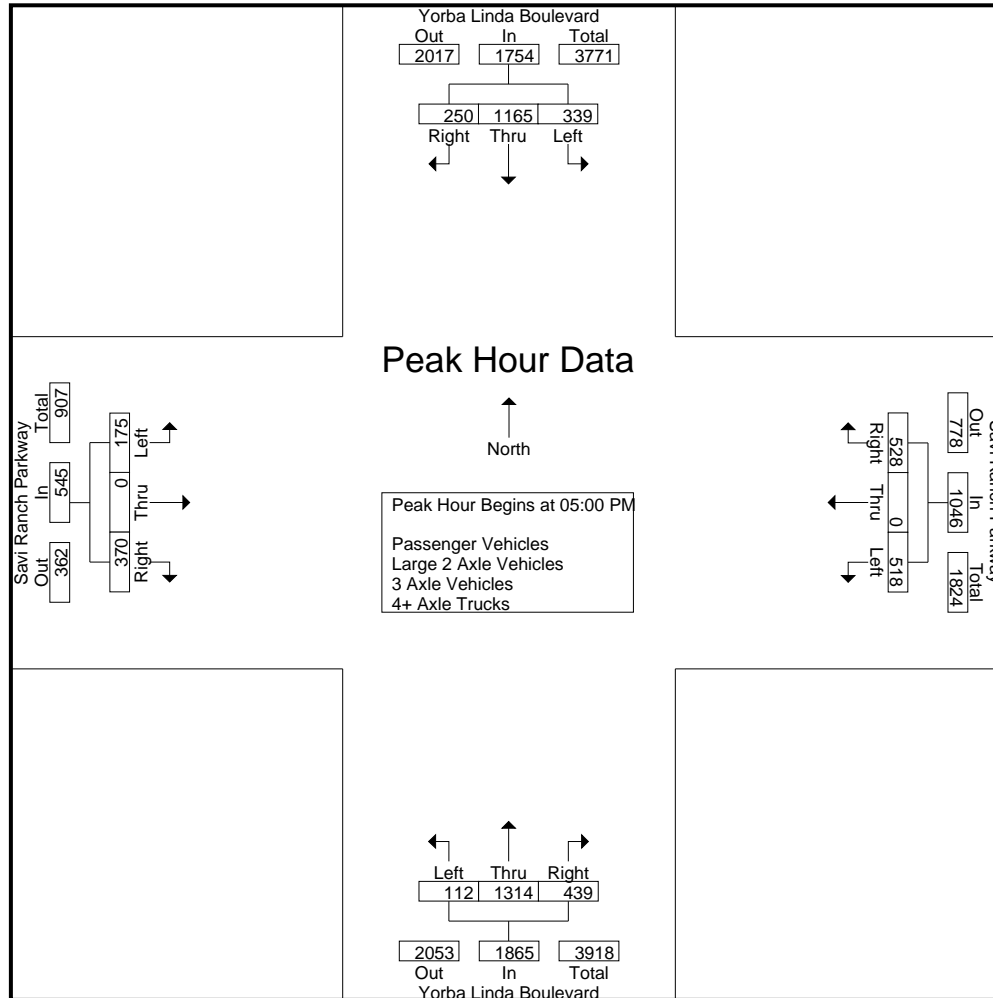
City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 0512223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	88	282	71	23	441	126	0	135	117	261	32	269	131	0	432	47	0	115	96	162	236	1296	1532
04:15 PM	81	255	64	23	400	136	0	106	68	242	33	290	118	0	441	45	0	104	65	149	156	1232	1388
04:30 PM	86	279	65	21	430	112	0	152	127	264	25	303	117	0	445	41	0	117	52	158	200	1297	1497
04:45 PM	86	270	76	21	432	142	0	142	123	284	23	308	139	0	470	54	0	88	58	142	202	1328	1530
Total	341	1086	276	88	1703	516	0	535	435	1051	113	1170	505	0	1788	187	0	424	271	611	794	5153	5947
05:00 PM	72	290	66	23	428	117	0	124	97	241	31	347	100	0	478	48	0	110	92	158	212	1305	1517
05:15 PM	92	291	52	27	435	132	0	139	118	271	21	291	84	1	396	53	0	93	87	146	233	1248	1481
05:30 PM	74	291	67	19	432	146	0	132	105	278	31	325	129	0	485	37	0	76	76	113	200	1308	1508
05:45 PM	101	293	65	14	459	123	0	133	111	256	29	351	126	2	506	37	0	91	91	128	218	1349	1567
Total	339	1165	250	83	1754	518	0	528	431	1046	112	1314	439	3	1865	175	0	370	346	545	863	5210	6073
Grand Total	680	2251	526	171	3457	1034	0	1063	866	2097	225	2484	944	3	3653	362	0	794	617	1156	1657	10363	12020
Apprch %	19.7	65.1	15.2			49.3	0	50.7			6.2	68	25.8			31.3	0	68.7					
Total %	6.6	21.7	5.1		33.4	10	0	10.3		20.2	2.2	24	9.1		35.3	3.5	0	7.7		11.2	13.8	86.2	
Passenger Vehicles	678	2233	514		3593	1024	0	1055		2938	218	2467	937		3625	360	0	784		1752	0	0	11908
% Passenger Vehicles	99.7	99.2	97.7	98.2	99	99	0	99.2	99.2	99.2	96.9	99.3	99.3	100	99.2	99.4	0	98.7	98.5	98.8	0	0	99.1
Large 2 Axle Vehicles	2	15	10		29	8	0	7		21	5	14	6		25	2	0	8		17	0	0	92
% Large 2 Axle Vehicles	0.3	0.7	1.9	1.2	0.8	0.8	0	0.7	0.7	0.7	2.2	0.6	0.6	0	0.7	0.6	0	1	1.1	1	0	0	0.8
3 Axle Vehicles	0	2	1		4	1	0	1		3	0	2	0		2	0	0	0		0	0	0	9
% 3 Axle Vehicles	0	0.1	0.2	0.6	0.1	0.1	0	0.1	0.1	0.1	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	1	1		2	1	0	0		1	2	1	1		4	0	0	2		4	0	0	11
% 4+ Axle Trucks	0	0	0.2	0	0.1	0.1	0	0	0	0	0.9	0	0.1	0	0.1	0	0	0.3	0.3	0.2	0	0	0.1

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	72	290	66	428	117	0	124	241	31	347	100	478	48	0	110	158	1305
05:15 PM	92	291	52	435	132	0	139	271	21	291	84	396	53	0	93	146	1248
05:30 PM	74	291	67	432	146	0	132	278	31	325	129	485	37	0	76	113	1308
05:45 PM	101	293	65	459	123	0	133	256	29	351	126	506	37	0	91	128	1349
Total Volume	339	1165	250	1754	518	0	528	1046	112	1314	439	1865	175	0	370	545	5210
% App. Total	19.3	66.4	14.3		49.5	0	50.5		6	70.5	23.5		32.1	0	67.9		
PHF	.839	.994	.933	.955	.887	.000	.950	.941	.903	.936	.851	.921	.825	.000	.841	.862	.966



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				05:00 PM				04:00 PM				
+0 mins.	72	290	66	428	142	0	142	284	31	347	100	478	47	0	115	162	
+15 mins.	92	291	52	435	117	0	124	241	21	291	84	396	45	0	104	149	
+30 mins.	74	291	67	432	132	0	139	271	31	325	129	485	41	0	117	158	
+45 mins.	101	293	65	459	146	0	132	278	29	351	126	506	54	0	88	142	
Total Volume	339	1165	250	1754	537	0	537	1074	112	1314	439	1865	187	0	424	611	
% App. Total	19.3	66.4	14.3		50	0	50		6	70.5	23.5		30.6	0	69.4		
PHF	.839	.994	.933	.955	.920	.000	.945	.945	.903	.936	.851	.921	.866	.000	.906	.943	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

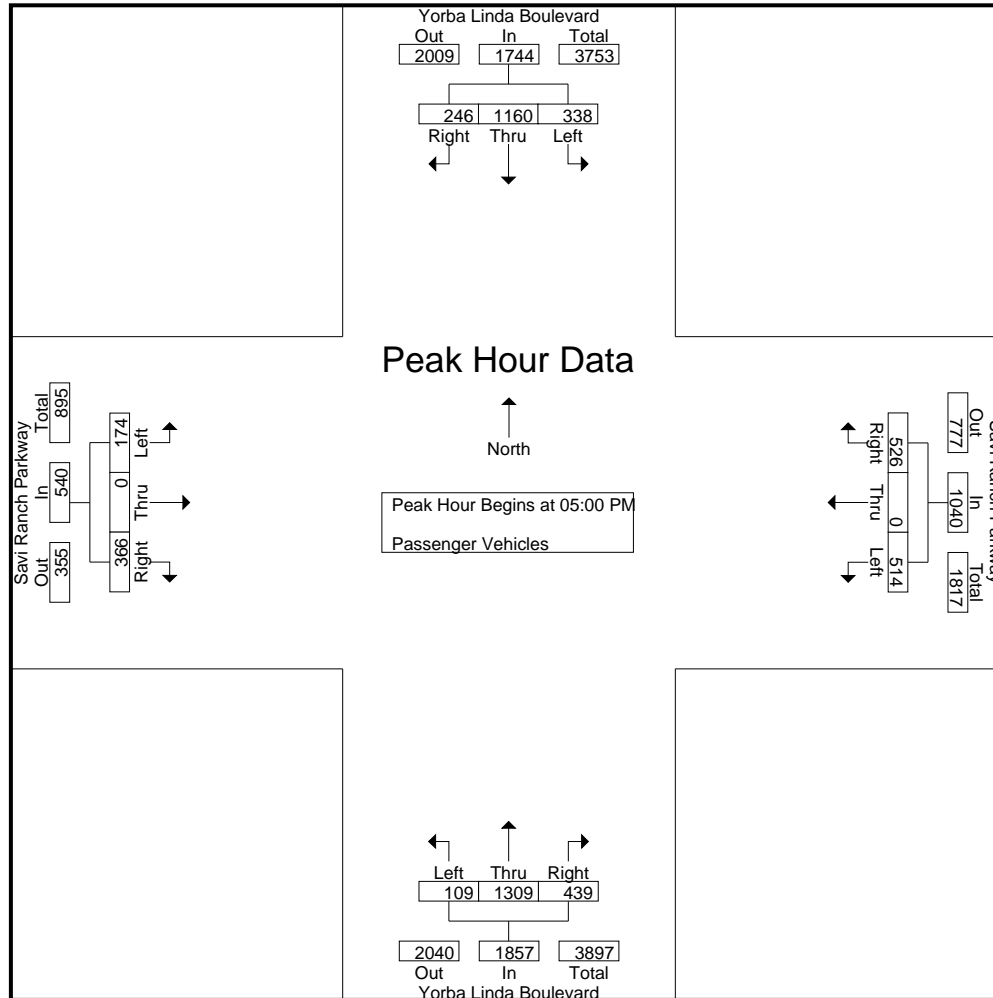
Groups Printed- Passenger Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	88	275	68	21	431	126	0	135	117	261	30	266	129	0	425	47	0	114	96	161	234	1278	1512
04:15 PM	81	251	61	23	393	135	0	105	67	240	33	287	115	0	435	44	0	100	61	144	151	1212	1363
04:30 PM	86	278	64	21	428	108	0	147	123	255	24	300	116	0	440	41	0	116	51	157	195	1280	1475
04:45 PM	85	269	75	21	429	141	0	142	123	283	22	305	138	0	465	54	0	88	58	142	202	1319	1521
Total	340	1073	268	86	1681	510	0	529	430	1039	109	1158	498	0	1765	186	0	418	266	604	782	5089	5871
05:00 PM	72	286	65	23	423	115	0	123	96	238	30	346	100	0	476	48	0	110	92	158	211	1295	1506
05:15 PM	91	291	51	27	433	132	0	139	118	271	21	289	84	1	394	53	0	92	86	145	232	1243	1475
05:30 PM	74	290	65	18	429	146	0	131	104	277	30	324	129	0	483	36	0	74	74	110	196	1299	1495
05:45 PM	101	293	65	14	459	121	0	133	111	254	28	350	126	2	504	37	0	90	90	127	217	1344	1561
Total	338	1160	246	82	1744	514	0	526	429	1040	109	1309	439	3	1857	174	0	366	342	540	856	5181	6037
Grand Total	678	2233	514	168	3425	1024	0	1055	859	2079	218	2467	937	3	3622	360	0	784	608	1144	1638	10270	11908
Apprch %	19.8	65.2	15			49.3	0	50.7			6	68.1	25.9			31.5	0	68.5					
Total %	6.6	21.7	5		33.3	10	0	10.3		20.2	2.1	24	9.1		35.3	3.5	0	7.6		11.1	13.8	86.2	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	72	286	65	423	115	0	123	238	30	346	100	476	48	0	110	158	1295
05:15 PM	91	291	51	433	132	0	139	271	21	289	84	394	53	0	92	145	1243
05:30 PM	74	290	65	429	146	0	131	277	30	324	129	483	36	0	74	110	1299
05:45 PM	101	293	65	459	121	0	133	254	28	350	126	504	37	0	90	127	1344
Total Volume	338	1160	246	1744	514	0	526	1040	109	1309	439	1857	174	0	366	540	5181
% App. Total	19.4	66.5	14.1		49.4	0	50.6		5.9	70.5	23.6		32.2	0	67.8		
PHF	.837	.990	.946	.950	.880	.000	.946	.939	.908	.935	.851	.921	.821	.000	.832	.854	.964

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	72	286	65	423	115	0	123	238	30	346	100	476	48	0	110	158	
+15 mins.	91	291	51	433	132	0	139	271	21	289	84	394	53	0	92	145	
+30 mins.	74	290	65	429	146	0	131	277	30	324	129	483	36	0	74	110	
+45 mins.	101	293	65	459	121	0	133	254	28	350	126	504	37	0	90	127	
Total Volume	338	1160	246	1744	514	0	526	1040	109	1309	439	1857	174	0	366	540	
% App. Total	19.4	66.5	14.1		49.4	0	50.6		5.9	70.5	23.6		32.2	0	67.8		
PHF	.837	.990	.946	.950	.880	.000	.946	.939	.908	.935	.851	.921	.821	.000	.832	.854	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

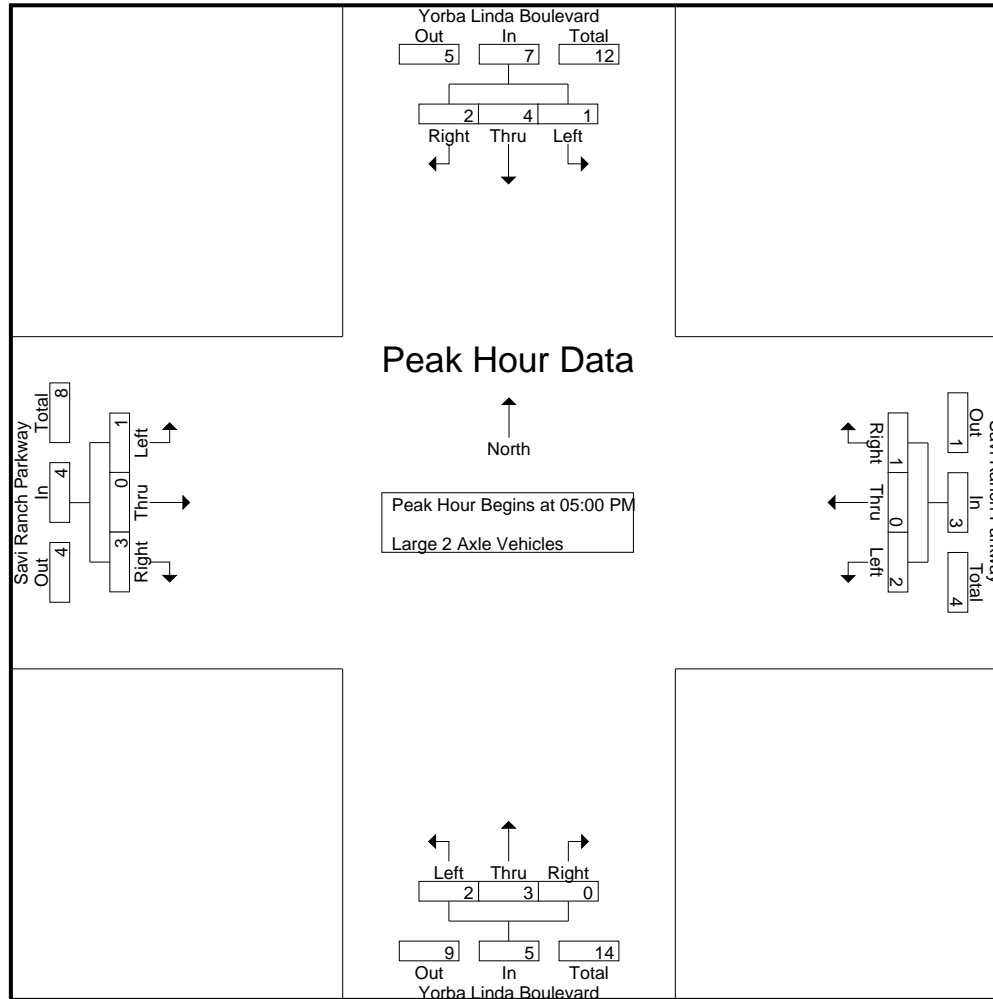
Groups Printed- Large 2 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	7	3	2	10	0	0	0	0	0	2	3	2	0	7	0	0	1	0	1	2	18	20
04:15 PM	0	2	3	0	5	1	0	1	1	2	0	3	3	0	6	1	0	3	3	4	4	17	21
04:30 PM	0	1	1	0	2	4	0	5	4	9	0	3	1	0	4	0	0	1	1	1	5	16	21
04:45 PM	1	1	1	0	3	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	7	7
Total	1	11	8	2	20	6	0	6	5	12	3	11	6	0	20	1	0	5	4	6	11	58	69
05:00 PM	0	3	1	0	4	2	0	1	1	3	0	1	0	0	1	0	0	0	0	0	1	8	9
05:15 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	3	4
05:30 PM	0	1	1	0	2	0	0	0	0	0	1	0	0	0	1	1	0	1	1	2	1	5	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	1	1	1	1	3	4
Total	1	4	2	0	7	2	0	1	1	3	2	3	0	0	5	1	0	3	3	4	4	19	23
Grand Total	2	15	10	2	27	8	0	7	6	15	5	14	6	0	25	2	0	8	7	10	15	77	92
Apprch %	7.4	55.6	37			53.3	0	46.7			20	56	24			20	0	80					
Total %	2.6	19.5	13		35.1	10.4	0	9.1		19.5	6.5	18.2	7.8		32.5	2.6	0	10.4		13	16.3	83.7	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	3	1	4	2	0	1	3	0	1	0	1	0	0	0	0	8
05:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
05:30 PM	0	1	1	2	0	0	0	0	1	0	0	1	1	0	1	2	5
05:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	1	3
Total Volume	1	4	2	7	2	0	1	3	2	3	0	5	1	0	3	4	19
% App. Total	14.3	57.1	28.6		66.7	0	33.3		40	60	0		25	0	75		
PHF	.250	.333	.500	.438	.250	.000	.250	.250	.500	.750	.000	.625	.250	.000	.750	.500	.594

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	3	1	4	2	0	1	3	0	1	0	1	0	0	0	0	
+15 mins.	1	0	0	1	0	0	0	0	0	1	0	1	0	0	1	1	
+30 mins.	0	1	1	2	0	0	0	0	1	0	0	1	1	0	1	2	
+45 mins.	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	1	
Total Volume	1	4	2	7	2	0	1	3	2	3	0	5	1	0	3	4	
% App. Total	14.3	57.1	28.6		66.7	0	33.3		40	60	0		25	0	75		
PHF	.250	.333	.500	.438	.250	.000	.250	.250	.500	.750	.000	.625	.250	.000	.750	.500	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

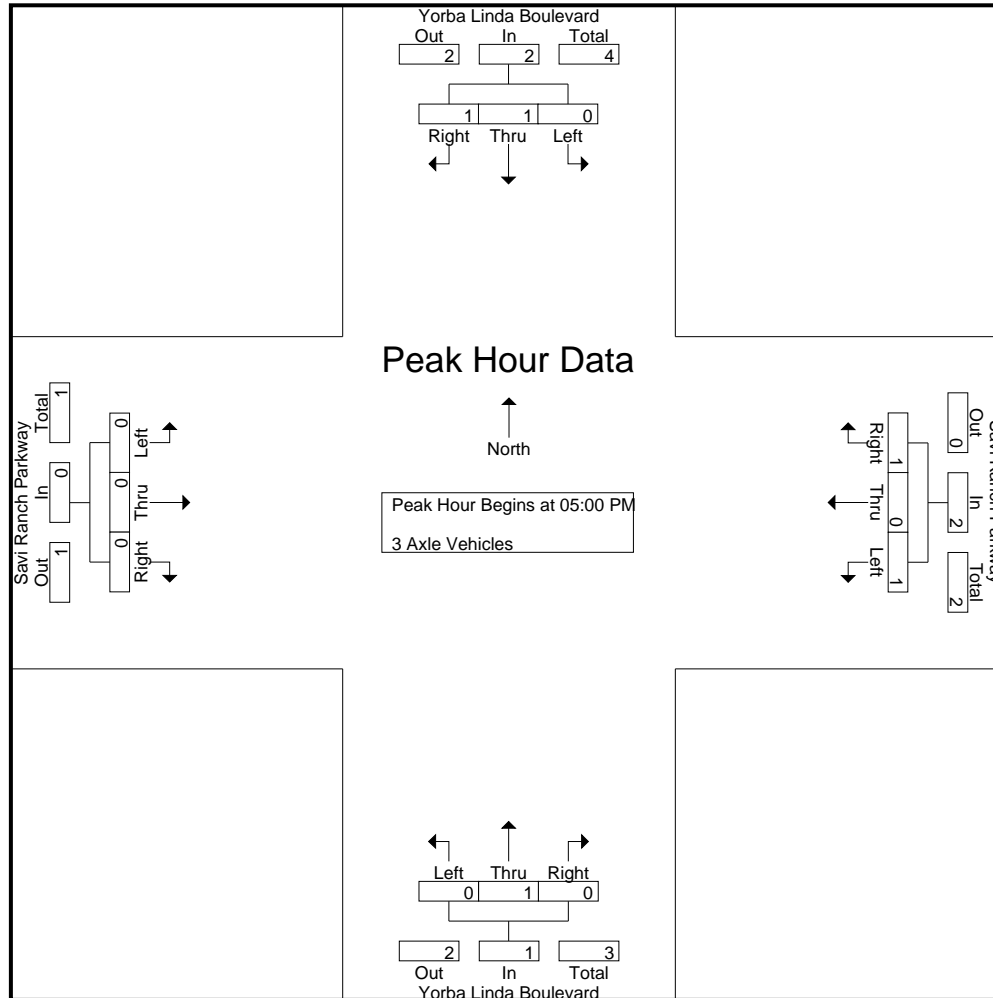
Groups Printed- 3 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	1	1	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3	5
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	1	1	2	1	0	1	1	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	5	7
Grand Total	0	2	1	1	3	1	0	1	1	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2	7	9
Apprch %	0	66.7	33.3			50	0	50			0	100	0			0	0	0			0	0	0					
Total %	0	28.6	14.3		42.9	14.3	0	14.3		28.6	0	28.6	0		28.6	0	0	0		0						22.2	77.8	

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	1	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	1	2	1	0	1	2	0	1	0	1	0	0	0	0	0	0	0	0	5
% App. Total	0	50	50		50	0	50		0	100	0		0	0	0		0	0	0		
PHF	.000	.250	.250	.500	.250	.000	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.417

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	1	1	0	0	1	1	0	1	0	1	0	0	0	0	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	1	1	2	1	0	1	2	0	1	0	1	0	0	0	0	
% App. Total	0	50	50		50	0	50		0	100	0		0	0	0		
PHF	.000	.250	.250	.500	.250	.000	.250	.500	.000	.250	.000	.250	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

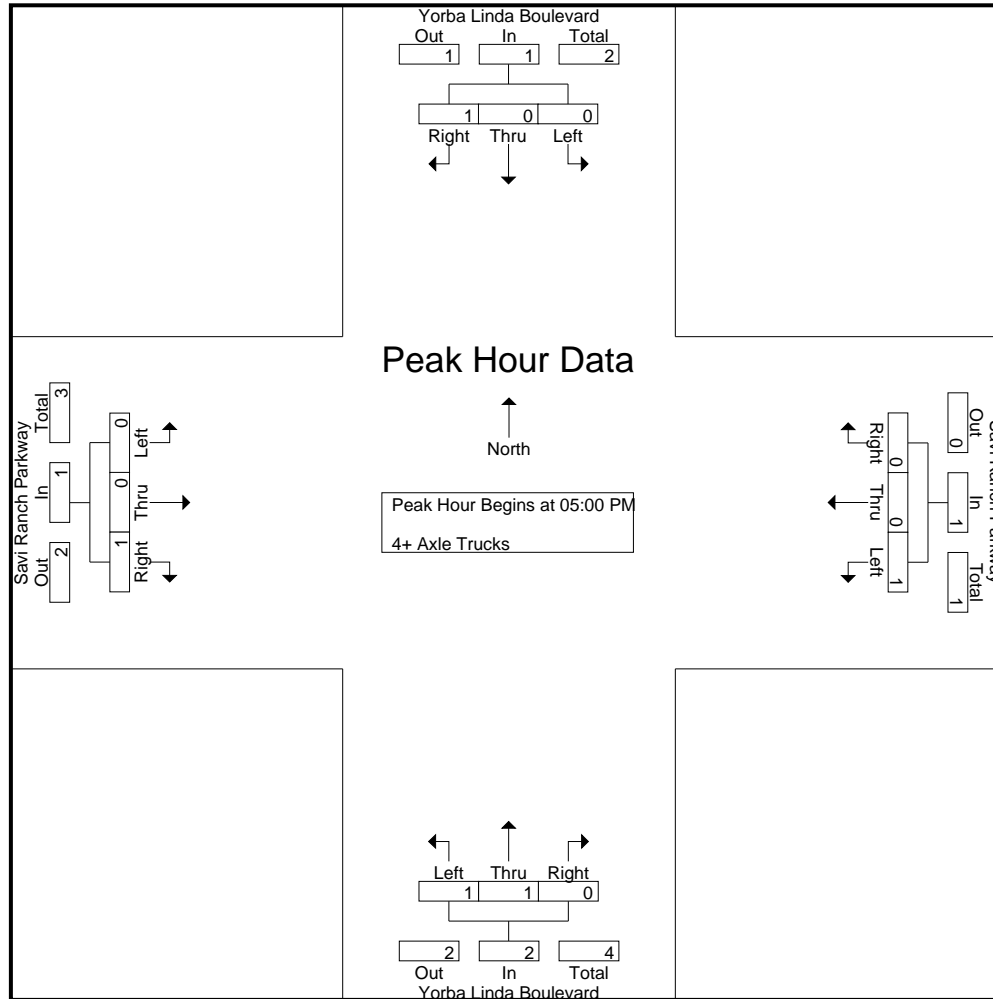
Groups Printed- 4+ Axle Trucks

Start Time	Yorba Linda Boulevard Southbound					Savi Ranch Parkway Westbound					Yorba Linda Boulevard Northbound					Savi Ranch Parkway Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	0	1	1	1	1	1	1	1	1	1	4	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	1	0	1	1	0	0	0	1	1	1	0	0	2	0	0	1	1	1	1	1	1	1	1	1	5	6
Grand Total	0	1	1	0	2	1	0	0	0	1	2	1	1	0	4	0	0	2	2	2	2	2	2	2	2	2	9	11
Apprch %	0	50	50			100	0	0			50	25	25			0	0	100										
Total %	0	11.1	11.1		22.2	11.1	0	0		11.1	22.2	11.1	11.1		44.4	0	0	22.2		22.2	18.2	18.2	18.2	18.2	18.2	81.8	81.8	81.8

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:15 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	1	1	0	0	1	1	1	0	2	0	0	1	1	5
% App. Total	0	0	100		100	0	0		50	50	0		0	0	100		
PHF	.000	.000	.250	.250	.250	.000	.000	.250	.250	.250	.000	.500	.000	.000	.250	.250	.625

City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway
 Weather: Clear

File Name : 16_YLA_Yorba_Savi PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				Savi Ranch Parkway Westbound				Yorba Linda Boulevard Northbound				Savi Ranch Parkway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	1	0	0	1	1	1	0	2	0	0	1	1	
% App. Total	0	0	100		100	0	0		50	50	0		0	0	100		
PHF	.000	.000	.250	.250	.250	.000	.000	.250	.250	.250	.000	.500	.000	.000	.250	.250	

Location: Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Yorba Linda Boulevard Pedestrians	East Leg Savi Ranch Parkway Pedestrians	South Leg Yorba Linda Boulevard Pedestrians	West Leg Savi Ranch Parkway Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	1	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	2	4

	North Leg Yorba Linda Boulevard Pedestrians	East Leg Savi Ranch Parkway Pedestrians	South Leg Yorba Linda Boulevard Pedestrians	West Leg Savi Ranch Parkway Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: Yorba Linda
 N/S: Yorba Linda Boulevard
 E/W: Savi Ranch Parkway



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Yorba Linda Boulevard			Westbound Savi Ranch Parkway			Northbound Yorba Linda Boulevard			Eastbound Savi Ranch Parkway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Yorba Linda Boulevard			Westbound Savi Ranch Parkway			Northbound Yorba Linda Boulevard			Eastbound Savi Ranch Parkway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	2	0	0	0	0	3

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

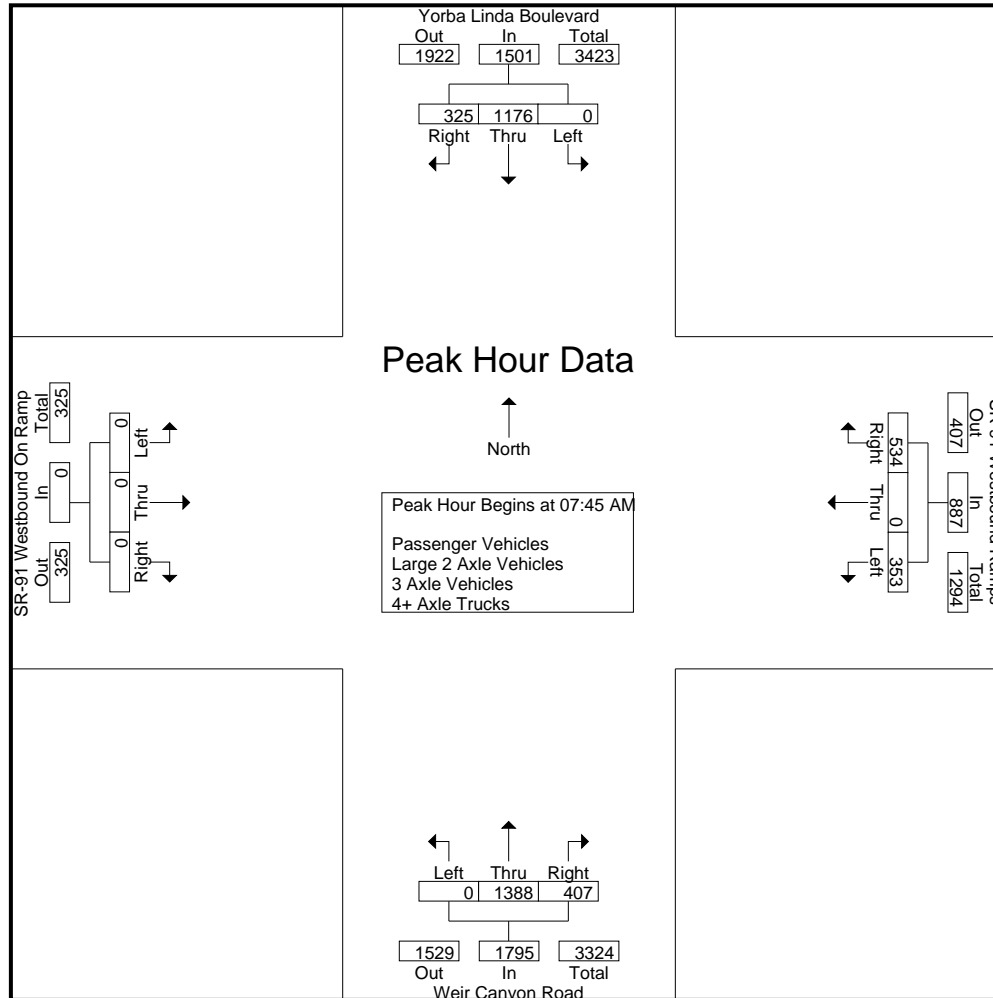
Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	192	86	0	278	56	0	113	72	169	0	201	94	0	295	0	0	0	0	0	72	742	814
07:15 AM	0	216	78	0	294	65	0	100	43	165	0	254	137	0	391	0	0	0	0	0	43	850	893
07:30 AM	0	245	78	0	323	76	0	135	52	211	0	307	142	0	449	0	0	0	0	0	52	983	1035
07:45 AM	0	305	79	0	384	85	0	174	30	259	0	401	107	0	508	0	0	0	0	0	30	1151	1181
Total	0	958	321	0	1279	282	0	522	197	804	0	1163	480	0	1643	0	0	0	0	0	197	3726	3923
08:00 AM	0	298	74	0	372	83	0	126	50	209	0	327	94	0	421	0	0	0	0	0	50	1002	1052
08:15 AM	0	283	85	0	368	92	0	126	37	218	0	333	108	0	441	0	0	0	0	0	37	1027	1064
08:30 AM	0	290	87	0	377	93	0	108	43	201	0	327	98	0	425	0	0	0	0	0	43	1003	1046
08:45 AM	0	257	84	0	341	93	0	133	32	226	0	333	82	0	415	0	0	0	0	0	32	982	1014
Total	0	1128	330	0	1458	361	0	493	162	854	0	1320	382	0	1702	0	0	0	0	0	162	4014	4176
Grand Total	0	2086	651	0	2737	643	0	1015	359	1658	0	2483	862	0	3345	0	0	0	0	0	359	7740	8099
Apprch %	0	76.2	23.8			38.8	0	61.2			0	74.2	25.8			0	0	0					
Total %	0	27	8.4		35.4	8.3	0	13.1		21.4	0	32.1	11.1		43.2	0	0	0		0	4.4	95.6	
Passenger Vehicles	0	2052	620		2672	626	0	980		1948	0	2405	856		3261	0	0	0		0	0	0	7881
% Passenger Vehicles	0	98.4	95.2	0	97.6	97.4	0	96.6	95.3	96.6	0	96.9	99.3	0	97.5	0	0	0	0	0	0	0	97.3
Large 2 Axle Vehicles	0	24	21		45	12	0	29		54	0	50	6		56	0	0	0		0	0	0	155
% Large 2 Axle Vehicles	0	1.2	3.2	0	1.6	1.9	0	2.9	3.6	2.7	0	2	0.7	0	1.7	0	0	0	0	0	0	0	1.9
3 Axle Vehicles	0	2	5		7	5	0	2		8	0	24	0		24	0	0	0		0	0	0	39
% 3 Axle Vehicles	0	0.1	0.8	0	0.3	0.8	0	0.2	0.3	0.4	0	1	0	0	0.7	0	0	0	0	0	0	0	0.5
4+ Axle Trucks	0	8	5		13	0	0	4		7	0	4	0		4	0	0	0		0	0	0	24
% 4+ Axle Trucks	0	0.4	0.8	0	0.5	0	0	0.4	0.8	0.3	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0.3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	305	79	384	85	0	174	259	0	401	107	508	0	0	0	0	1151
08:00 AM	0	298	74	372	83	0	126	209	0	327	94	421	0	0	0	0	1002
08:15 AM	0	283	85	368	92	0	126	218	0	333	108	441	0	0	0	0	1027
08:30 AM	0	290	87	377	93	0	108	201	0	327	98	425	0	0	0	0	1003
Total Volume	0	1176	325	1501	353	0	534	887	0	1388	407	1795	0	0	0	0	4183
% App. Total	0	78.3	21.7		39.8	0	60.2		0	77.3	22.7		0	0	0		
PHF	.000	.964	.934	.977	.949	.000	.767	.856	.000	.865	.942	.883	.000	.000	.000	.000	.909

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:30 AM				07:30 AM				07:00 AM				
+0 mins.	0	305	79	384	76	0	135	211	0	307	142	449	0	0	0	0	
+15 mins.	0	298	74	372	85	0	174	259	0	401	107	508	0	0	0	0	
+30 mins.	0	283	85	368	83	0	126	209	0	327	94	421	0	0	0	0	
+45 mins.	0	290	87	377	92	0	126	218	0	333	108	441	0	0	0	0	
Total Volume	0	1176	325	1501	336	0	561	897	0	1368	451	1819	0	0	0	0	
% App. Total	0	78.3	21.7		37.5	0	62.5		0	75.2	24.8		0	0	0		
PHF	.000	.964	.934	.977	.913	.000	.806	.866	.000	.853	.794	.895	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

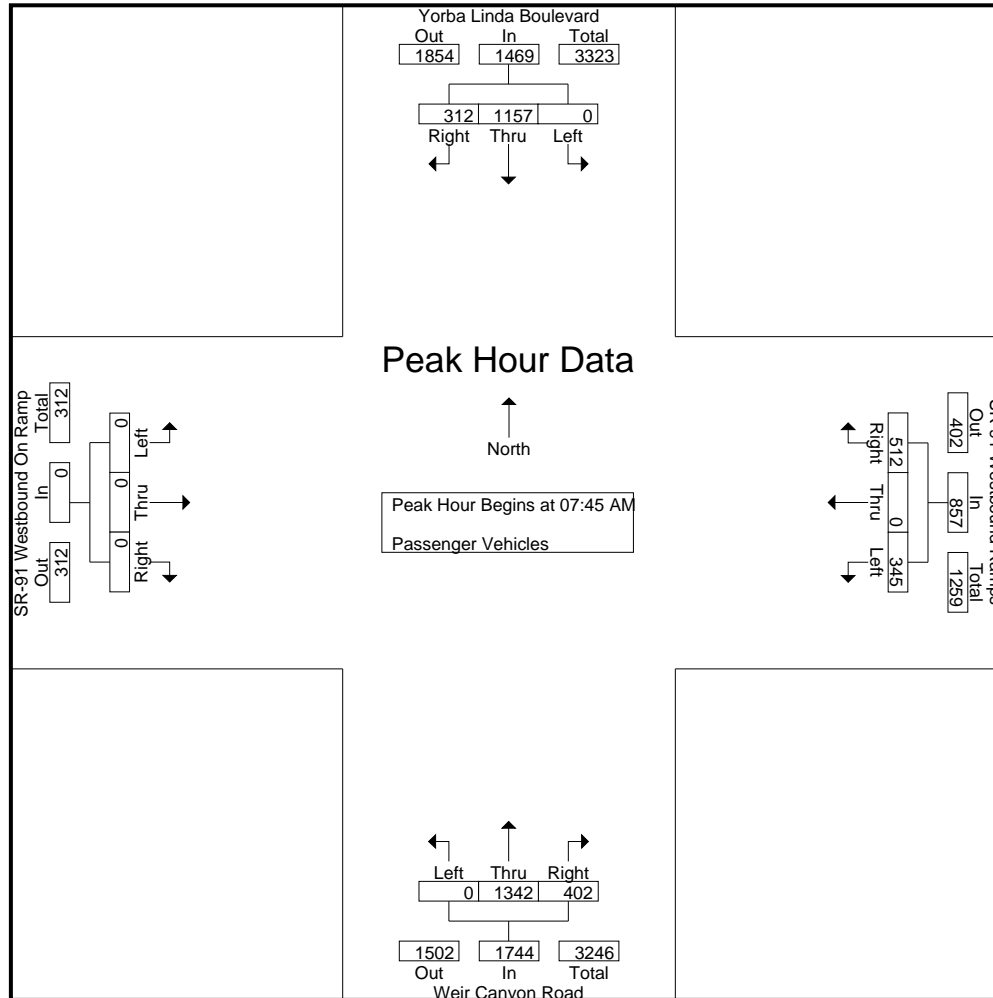
Groups Printed- Passenger Vehicles

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	186	81	0	267	54	0	111	70	165	0	191	94	0	285	0	0	0	0	0	70	717	787
07:15 AM	0	209	72	0	281	63	0	97	41	160	0	246	137	0	383	0	0	0	0	0	41	824	865
07:30 AM	0	245	75	0	320	73	0	131	48	204	0	302	142	0	444	0	0	0	0	0	48	968	1016
07:45 AM	0	300	75	0	375	83	0	169	30	252	0	385	104	0	489	0	0	0	0	0	30	1116	1146
Total	0	940	303	0	1243	273	0	508	189	781	0	1124	477	0	1601	0	0	0	0	0	189	3625	3814
08:00 AM	0	292	72	0	364	82	0	122	47	204	0	316	94	0	410	0	0	0	0	0	47	978	1025
08:15 AM	0	278	82	0	360	90	0	116	32	206	0	323	107	0	430	0	0	0	0	0	32	996	1028
08:30 AM	0	287	83	0	370	90	0	105	43	195	0	318	97	0	415	0	0	0	0	0	43	980	1023
08:45 AM	0	255	80	0	335	91	0	129	31	220	0	324	81	0	405	0	0	0	0	0	31	960	991
Total	0	1112	317	0	1429	353	0	472	153	825	0	1281	379	0	1660	0	0	0	0	0	153	3914	4067
Grand Total	0	2052	620	0	2672	626	0	980	342	1606	0	2405	856	0	3261	0	0	0	0	0	342	7539	7881
Apprch %	0	76.8	23.2			39	0	61			0	73.8	26.2			0	0	0					
Total %	0	27.2	8.2		35.4	8.3	0	13		21.3	0	31.9	11.4		43.3	0	0	0			4.3	95.7	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	300	75	375	83	0	169	252	0	385	104	489	0	0	0	0	1116
08:00 AM	0	292	72	364	82	0	122	204	0	316	94	410	0	0	0	0	978
08:15 AM	0	278	82	360	90	0	116	206	0	323	107	430	0	0	0	0	996
08:30 AM	0	287	83	370	90	0	105	195	0	318	97	415	0	0	0	0	980
Total Volume	0	1157	312	1469	345	0	512	857	0	1342	402	1744	0	0	0	0	4070
% App. Total	0	78.8	21.2		40.3	0	59.7		0	76.9	23.1		0	0	0		
PHF	.000	.964	.940	.979	.958	.000	.757	.850	.000	.871	.939	.892	.000	.000	.000	.000	.912

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	300	75	375	83	0	169	252	0	385	104	489	0	0	0	0	
+15 mins.	0	292	72	364	82	0	122	204	0	316	94	410	0	0	0	0	
+30 mins.	0	278	82	360	90	0	116	206	0	323	107	430	0	0	0	0	
+45 mins.	0	287	83	370	90	0	105	195	0	318	97	415	0	0	0	0	
Total Volume	0	1157	312	1469	345	0	512	857	0	1342	402	1744	0	0	0	0	
% App. Total	0	78.8	21.2		40.3	0	59.7		0	76.9	23.1		0	0	0		
PHF	.000	.964	.940	.979	.958	.000	.757	.850	.000	.871	.939	.892	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

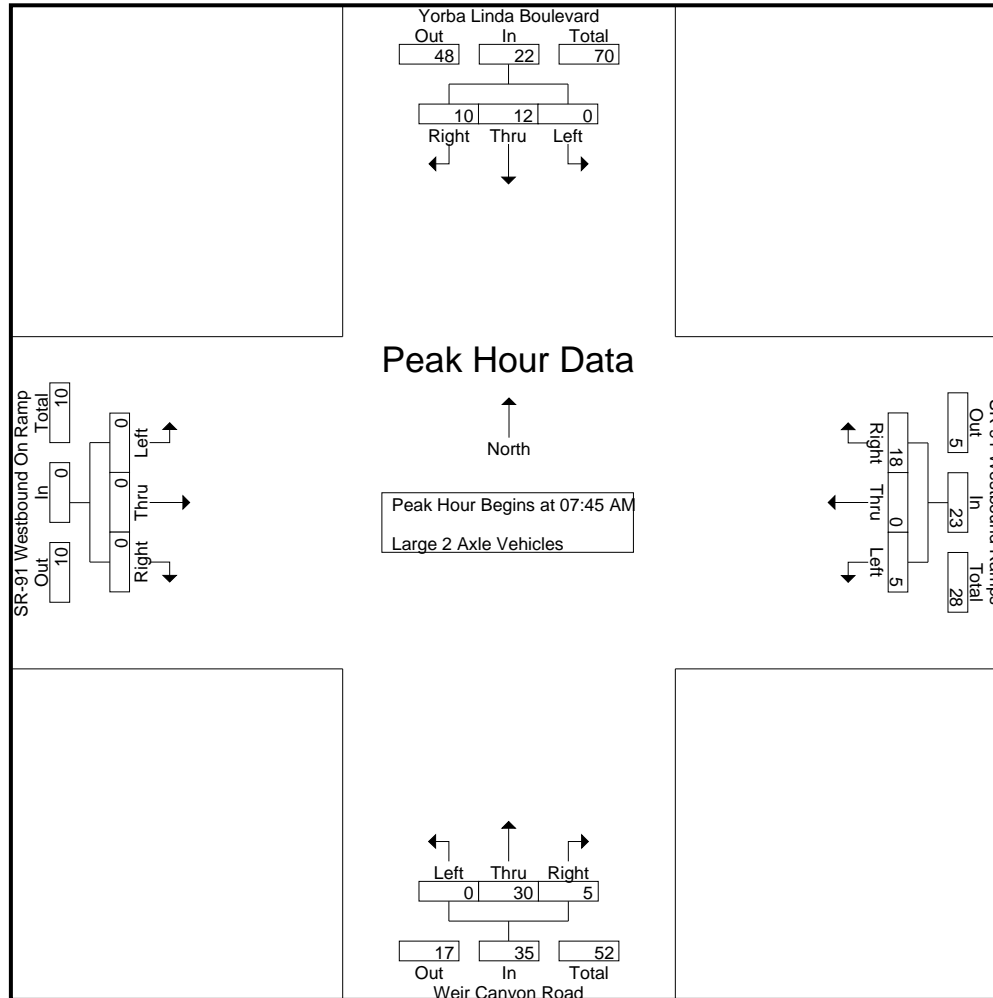
Groups Printed- Large 2 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	5	3	0	8	1	0	1	1	2	0	5	0	0	5	0	0	0	0	0	1	15	16
07:15 AM	0	6	5	0	11	1	0	2	1	3	0	4	0	0	4	0	0	0	0	0	1	18	19
07:30 AM	0	0	2	0	2	3	0	4	4	7	0	3	0	0	3	0	0	0	0	0	4	12	16
07:45 AM	0	5	3	0	8	1	0	4	0	5	0	8	3	0	11	0	0	0	0	0	0	24	24
Total	0	16	13	0	29	6	0	11	6	17	0	20	3	0	23	0	0	0	0	0	6	69	75
08:00 AM	0	2	1	0	3	0	0	3	2	3	0	6	0	0	6	0	0	0	0	0	2	12	14
08:15 AM	0	3	2	0	5	1	0	9	4	10	0	9	1	0	10	0	0	0	0	0	4	25	29
08:30 AM	0	2	4	0	6	3	0	2	0	5	0	7	1	0	8	0	0	0	0	0	0	19	19
08:45 AM	0	1	1	0	2	2	0	4	1	6	0	8	1	0	9	0	0	0	0	0	1	17	18
Total	0	8	8	0	16	6	0	18	7	24	0	30	3	0	33	0	0	0	0	0	7	73	80
Grand Total	0	24	21	0	45	12	0	29	13	41	0	50	6	0	56	0	0	0	0	0	13	142	155
Apprch %	0	53.3	46.7			29.3	0	70.7			0	89.3	10.7			0	0	0					
Total %	0	16.9	14.8		31.7	8.5	0	20.4		28.9	0	35.2	4.2		39.4	0	0	0		0	8.4	91.6	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	5	3	8	1	0	4	5	0	8	3	11	0	0	0	0	24
08:00 AM	0	2	1	3	0	0	3	3	0	6	0	6	0	0	0	0	12
08:15 AM	0	3	2	5	1	0	9	10	0	9	1	10	0	0	0	0	25
08:30 AM	0	2	4	6	3	0	2	5	0	7	1	8	0	0	0	0	19
Total Volume	0	12	10	22	5	0	18	23	0	30	5	35	0	0	0	0	80
% App. Total	0	54.5	45.5		21.7	0	78.3		0	85.7	14.3		0	0	0		
PHF	.000	.600	.625	.688	.417	.000	.500	.575	.000	.833	.417	.795	.000	.000	.000	.000	.800

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	5	3	8	1	0	4	5	0	8	3	11	0	0	0	0	
+15 mins.	0	2	1	3	0	0	3	3	0	6	0	6	0	0	0	0	
+30 mins.	0	3	2	5	1	0	9	10	0	9	1	10	0	0	0	0	
+45 mins.	0	2	4	6	3	0	2	5	0	7	1	8	0	0	0	0	
Total Volume	0	12	10	22	5	0	18	23	0	30	5	35	0	0	0	0	
% App. Total	0	54.5	45.5		21.7	0	78.3		0	85.7	14.3		0	0	0		
PHF	.000	.600	.625	.688	.417	.000	.500	.575	.000	.833	.417	.795	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

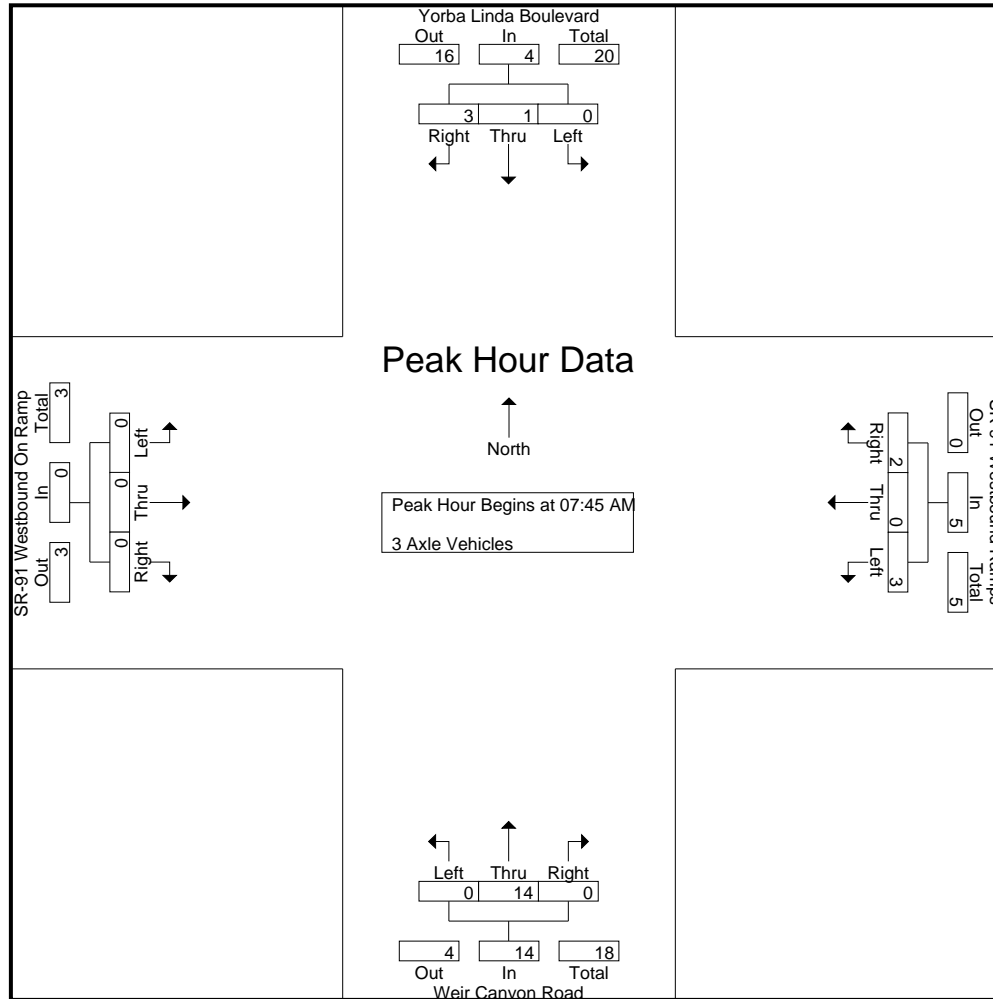
Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	1	0	0	1	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	7	7
07:15 AM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	4	4
07:30 AM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
07:45 AM	0	0	1	0	1	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	10	10
Total	0	1	2	0	3	3	0	0	0	3	0	17	0	0	17	0	0	0	0	0	0	23	23
08:00 AM	0	0	1	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	6	6
08:15 AM	0	0	1	0	1	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	3	4
08:30 AM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	4	4
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	1	3	0	4	2	0	2	1	4	0	7	0	0	7	0	0	0	0	0	1	15	16
Grand Total	0	2	5	0	7	5	0	2	1	7	0	24	0	0	24	0	0	0	0	0	1	38	39
Apprch %	0	28.6	71.4			71.4	0	28.6			0	100	0			0	0	0					
Total %	0	5.3	13.2		18.4	13.2	0	5.3		18.4	0	63.2	0		63.2	0	0	0		0	2.6	97.4	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	1	1	1	0	0	1	0	8	0	8	0	0	0	0	10
08:00 AM	0	0	1	1	1	0	0	1	0	4	0	4	0	0	0	0	6
08:15 AM	0	0	1	1	1	0	1	2	0	0	0	0	0	0	0	0	3
08:30 AM	0	1	0	1	0	0	1	1	0	2	0	2	0	0	0	0	4
Total Volume	0	1	3	4	3	0	2	5	0	14	0	14	0	0	0	0	23
% App. Total	0	25	75		60	0	40		0	100	0		0	0	0		
PHF	.000	.250	.750	1.00	.750	.000	.500	.625	.000	.438	.000	.438	.000	.000	.000	.000	.575

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	1	1	1	0	0	1	0	8	0	8	0	0	0	0	
+15 mins.	0	0	1	1	1	0	0	1	0	4	0	4	0	0	0	0	
+30 mins.	0	0	1	1	1	0	1	2	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	1	1	0	2	0	2	0	0	0	0	
Total Volume	0	1	3	4	3	0	2	5	0	14	0	14	0	0	0	0	
% App. Total	0	25	75		60	0	40		0	100	0		0	0	0		
PHF	.000	.250	.750	1.000	.750	.000	.500	.625	.000	.438	.000	.438	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

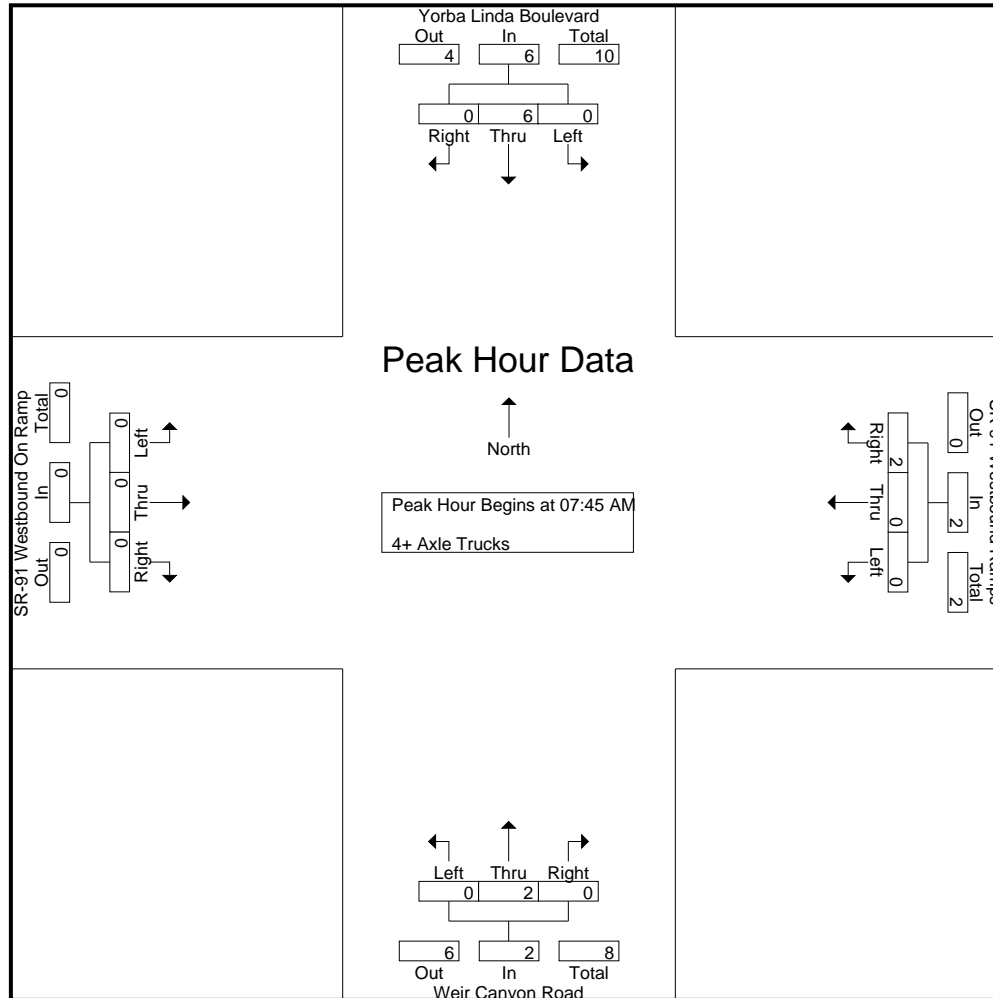
Groups Printed- 4+ Axle Trucks

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	2	0	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	3	4
07:15 AM	0	1	1	0	2	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	1	4	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	3	0	4	0	0	3	2	3	0	2	0	0	2	0	0	0	0	0	2	9	11
08:00 AM	0	4	0	0	4	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	1	6	7
08:15 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	7	2	0	9	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	1	12	13
Grand Total	0	8	5	0	13	0	0	4	3	4	0	4	0	0	4	0	0	0	0	0	3	21	24
Apprch %	0	61.5	38.5			0	0	100			0	100	0			0	0	0					
Total %	0	38.1	23.8		61.9	0	0	19		19	0	19	0		19	0	0	0		0	12.5	87.5	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	4	0	4	0	0	1	1	0	1	0	1	0	0	0	0	6
08:15 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	0	0	2	2	0	2	0	2	0	0	0	0	10
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.500	.000	.500	.000	.000	.000	.000	.417

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
+15 mins.	0	4	0	4	0	0	1	1	0	1	0	1	0	0	0	0	
+30 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	6	0	6	0	0	2	2	0	2	0	2	0	0	0	0	
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.500	.000	.500	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

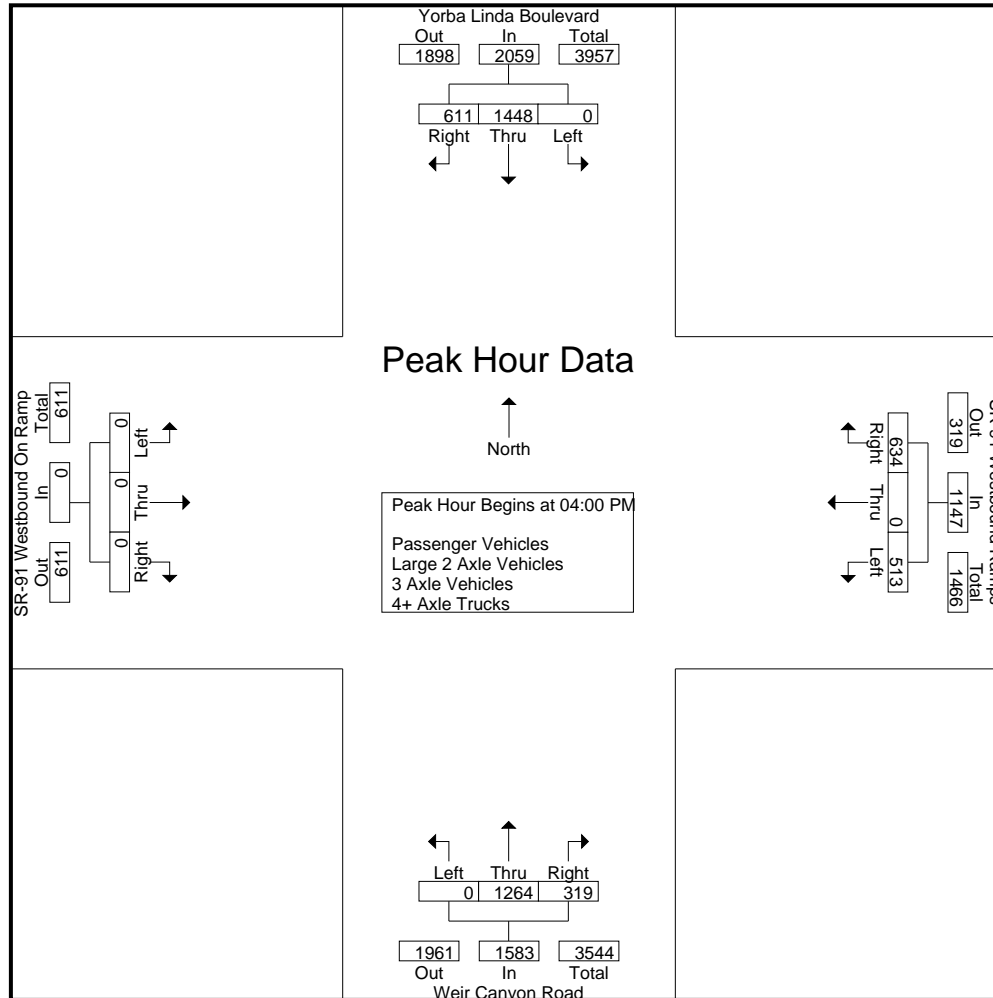
Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	388	163	0	551	86	0	124	33	210	0	333	81	0	414	0	0	0	0	0	33	1175	1208
04:15 PM	0	347	144	0	491	140	0	151	47	291	0	314	72	0	386	0	0	0	0	0	47	1168	1215
04:30 PM	0	325	182	0	507	138	0	171	57	309	0	282	93	0	375	0	0	0	0	0	57	1191	1248
04:45 PM	0	388	122	0	510	149	0	188	45	337	0	335	73	0	408	0	0	0	0	0	45	1255	1300
Total	0	1448	611	0	2059	513	0	634	182	1147	0	1264	319	0	1583	0	0	0	0	0	182	4789	4971
05:00 PM	0	367	152	0	519	106	0	131	52	237	0	311	98	0	409	0	0	0	0	0	52	1165	1217
05:15 PM	0	389	137	0	526	92	0	133	54	225	0	318	93	0	411	0	0	0	0	0	54	1162	1216
05:30 PM	0	346	125	0	471	140	0	133	39	273	0	321	92	0	413	0	0	0	0	0	39	1157	1196
05:45 PM	0	371	115	0	486	171	0	156	36	327	0	362	81	0	443	0	0	0	0	0	36	1256	1292
Total	0	1473	529	0	2002	509	0	553	181	1062	0	1312	364	0	1676	0	0	0	0	0	181	4740	4921
Grand Total	0	2921	1140	0	4061	1022	0	1187	363	2209	0	2576	683	0	3259	0	0	0	0	0	363	9529	9892
Apprch %	0	71.9	28.1			46.3	0	53.7			0	79	21			0	0	0					
Total %	0	30.7	12		42.6	10.7	0	12.5		23.2	0	27	7.2		34.2	0	0	0		0	3.7	96.3	
Passenger Vehicles	0	2901	1124		4025	1011	0	1176		2548	0	2554	675		3229	0	0	0		0	0	0	9802
% Passenger Vehicles	0	99.3	98.6	0	99.1	98.9	0	99.1	99.4	99.1	0	99.1	98.8	0	99.1	0	0	0	0	0	0	0	99.1
Large 2 Axle Vehicles	0	17	11		28	7	0	8		17	0	19	6		25	0	0	0		0	0	0	70
% Large 2 Axle Vehicles	0	0.6	1	0	0.7	0.7	0	0.7	0.6	0.7	0	0.7	0.9	0	0.8	0	0	0	0	0	0	0	0.7
3 Axle Vehicles	0	1	2		3	4	0	1		5	0	1	0		1	0	0	0		0	0	0	9
% 3 Axle Vehicles	0	0	0.2	0	0.1	0.4	0	0.1	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	2	3		5	0	0	2		2	0	2	2		4	0	0	0		0	0	0	11
% 4+ Axle Trucks	0	0.1	0.3	0	0.1	0	0	0.2	0	0.1	0	0.1	0.3	0	0.1	0	0	0	0	0	0	0	0.1

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	388	163	551	86	0	124	210	0	333	81	414	0	0	0	0	1175
04:15 PM	0	347	144	491	140	0	151	291	0	314	72	386	0	0	0	0	1168
04:30 PM	0	325	182	507	138	0	171	309	0	282	93	375	0	0	0	0	1191
04:45 PM	0	388	122	510	149	0	188	337	0	335	73	408	0	0	0	0	1255
Total Volume	0	1448	611	2059	513	0	634	1147	0	1264	319	1583	0	0	0	0	4789
% App. Total	0	70.3	29.7		44.7	0	55.3		0	79.8	20.2		0	0	0		
PHF	.000	.933	.839	.934	.861	.000	.843	.851	.000	.943	.858	.956	.000	.000	.000	.000	.954

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:15 PM				05:00 PM				04:00 PM				
+0 mins.	0	325	182	507	140	0	151	291	0	311	98	409	0	0	0	0	
+15 mins.	0	388	122	510	138	0	171	309	0	318	93	411	0	0	0	0	
+30 mins.	0	367	152	519	149	0	188	337	0	321	92	413	0	0	0	0	
+45 mins.	0	389	137	526	106	0	131	237	0	362	81	443	0	0	0	0	
Total Volume	0	1469	593	2062	533	0	641	1174	0	1312	364	1676	0	0	0	0	
% App. Total	0	71.2	28.8		45.4	0	54.6		0	78.3	21.7		0	0	0		
PHF	.000	.944	.815	.980	.894	.000	.852	.871	.000	.906	.929	.946	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

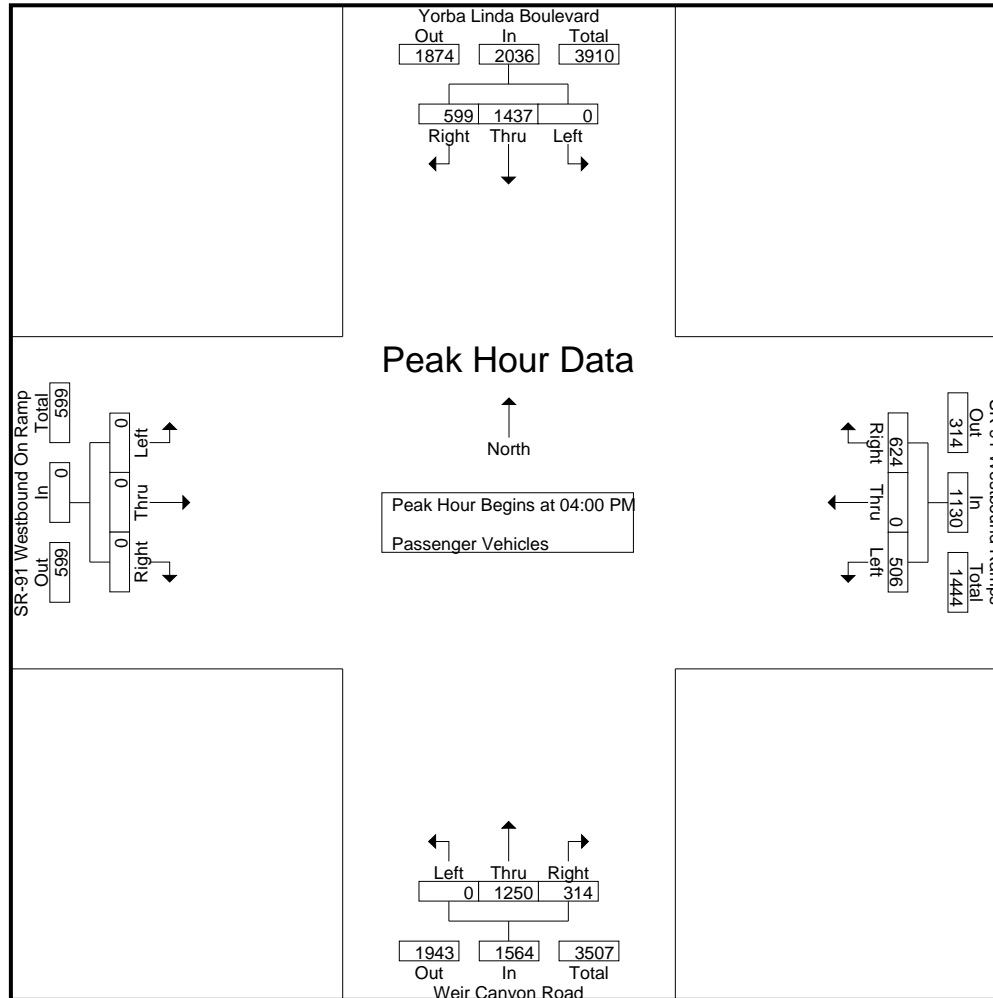
Groups Printed- Passenger Vehicles

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	383	160	0	543	84	0	121	32	205	0	329	81	0	410	0	0	0	0	0	32	1158	1190
04:15 PM	0	345	139	0	484	137	0	149	47	286	0	308	71	0	379	0	0	0	0	0	47	1149	1196
04:30 PM	0	323	178	0	501	137	0	169	57	306	0	281	91	0	372	0	0	0	0	0	57	1179	1236
04:45 PM	0	386	122	0	508	148	0	185	45	333	0	332	71	0	403	0	0	0	0	0	45	1244	1289
Total	0	1437	599	0	2036	506	0	624	181	1130	0	1250	314	0	1564	0	0	0	0	0	181	4730	4911
05:00 PM	0	363	150	0	513	106	0	131	52	237	0	310	97	0	407	0	0	0	0	0	52	1157	1209
05:15 PM	0	389	136	0	525	92	0	133	54	225	0	315	92	0	407	0	0	0	0	0	54	1157	1211
05:30 PM	0	343	125	0	468	138	0	133	39	271	0	319	91	0	410	0	0	0	0	0	39	1149	1188
05:45 PM	0	369	114	0	483	169	0	155	35	324	0	360	81	0	441	0	0	0	0	0	35	1248	1283
Total	0	1464	525	0	1989	505	0	552	180	1057	0	1304	361	0	1665	0	0	0	0	0	180	4711	4891
Grand Total	0	2901	1124	0	4025	1011	0	1176	361	2187	0	2554	675	0	3229	0	0	0	0	0	361	9441	9802
Apprch %	0	72.1	27.9			46.2	0	53.8			0	79.1	20.9			0	0	0					
Total %	0	30.7	11.9		42.6	10.7	0	12.5		23.2	0	27.1	7.1		34.2	0	0	0			3.7	96.3	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	383	160	543	84	0	121	205	0	329	81	410	0	0	0	0	1158
04:15 PM	0	345	139	484	137	0	149	286	0	308	71	379	0	0	0	0	1149
04:30 PM	0	323	178	501	137	0	169	306	0	281	91	372	0	0	0	0	1179
04:45 PM	0	386	122	508	148	0	185	333	0	332	71	403	0	0	0	0	1244
Total Volume	0	1437	599	2036	506	0	624	1130	0	1250	314	1564	0	0	0	0	4730
% App. Total	0	70.6	29.4		44.8	0	55.2		0	79.9	20.1		0	0	0		
PHF	.000	.931	.841	.937	.855	.000	.843	.848	.000	.941	.863	.954	.000	.000	.000	.000	.951

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	383	160	543	84	0	121	205	0	329	81	410	0	0	0	0	
+15 mins.	0	345	139	484	137	0	149	286	0	308	71	379	0	0	0	0	
+30 mins.	0	323	178	501	137	0	169	306	0	281	91	372	0	0	0	0	
+45 mins.	0	386	122	508	148	0	185	333	0	332	71	403	0	0	0	0	
Total Volume	0	1437	599	2036	506	0	624	1130	0	1250	314	1564	0	0	0	0	
% App. Total	0	70.6	29.4		44.8	0	55.2		0	79.9	20.1		0	0	0		
PHF	.000	.931	.841	.937	.855	.000	.843	.848	.000	.941	.863	.954	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

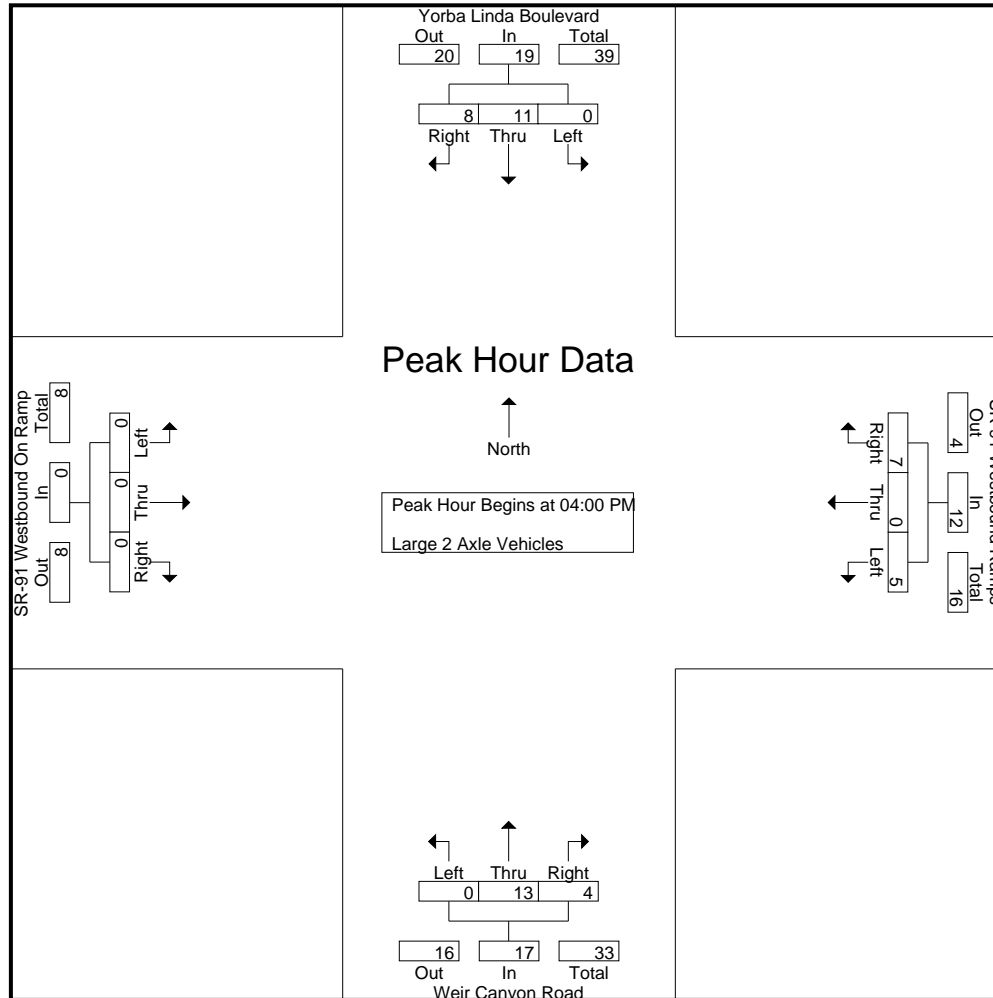
Groups Printed- Large 2 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	5	3	0	8	1	0	3	1	4	0	4	0	0	4	0	0	0	0	0	1	16	17
04:15 PM	0	2	2	0	4	2	0	2	0	4	0	6	1	0	7	0	0	0	0	0	0	15	15
04:30 PM	0	2	3	0	5	1	0	1	0	2	0	1	2	0	3	0	0	0	0	0	0	10	10
04:45 PM	0	2	0	0	2	1	0	1	0	2	0	2	1	0	3	0	0	0	0	0	0	7	7
Total	0	11	8	0	19	5	0	7	1	12	0	13	4	0	17	0	0	0	0	0	1	48	49
05:00 PM	0	3	2	0	5	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	7	7
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	4	4
05:30 PM	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	4	4
05:45 PM	0	1	0	0	1	1	0	1	1	2	0	2	0	0	2	0	0	0	0	0	1	5	6
Total	0	6	3	0	9	2	0	1	1	3	0	6	2	0	8	0	0	0	0	0	1	20	21
Grand Total	0	17	11	0	28	7	0	8	2	15	0	19	6	0	25	0	0	0	0	0	2	68	70
Apprch %	0	60.7	39.3			46.7	0	53.3			0	76	24			0	0	0					
Total %	0	25	16.2		41.2	10.3	0	11.8		22.1	0	27.9	8.8		36.8	0	0	0		0	2.9	97.1	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	5	3	8	1	0	3	4	0	4	0	4	0	0	0	0	16
04:15 PM	0	2	2	4	2	0	2	4	0	6	1	7	0	0	0	0	15
04:30 PM	0	2	3	5	1	0	1	2	0	1	2	3	0	0	0	0	10
04:45 PM	0	2	0	2	1	0	1	2	0	2	1	3	0	0	0	0	7
Total Volume	0	11	8	19	5	0	7	12	0	13	4	17	0	0	0	0	48
% App. Total	0	57.9	42.1		41.7	0	58.3		0	76.5	23.5		0	0	0		
PHF	.000	.550	.667	.594	.625	.000	.583	.750	.000	.542	.500	.607	.000	.000	.000	.000	.750

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	5	3	8	1	0	3	4	0	4	0	4	0	0	0	0	
+15 mins.	0	2	2	4	2	0	2	4	0	6	1	7	0	0	0	0	
+30 mins.	0	2	3	5	1	0	1	2	0	1	2	3	0	0	0	0	
+45 mins.	0	2	0	2	1	0	1	2	0	2	1	3	0	0	0	0	
Total Volume	0	11	8	19	5	0	7	12	0	13	4	17	0	0	0	0	
% App. Total	0	57.9	42.1		41.7	0	58.3		0	76.5	23.5		0	0	0		
PHF	.000	.550	.667	.594	.625	.000	.583	.750	.000	.542	.500	.607	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

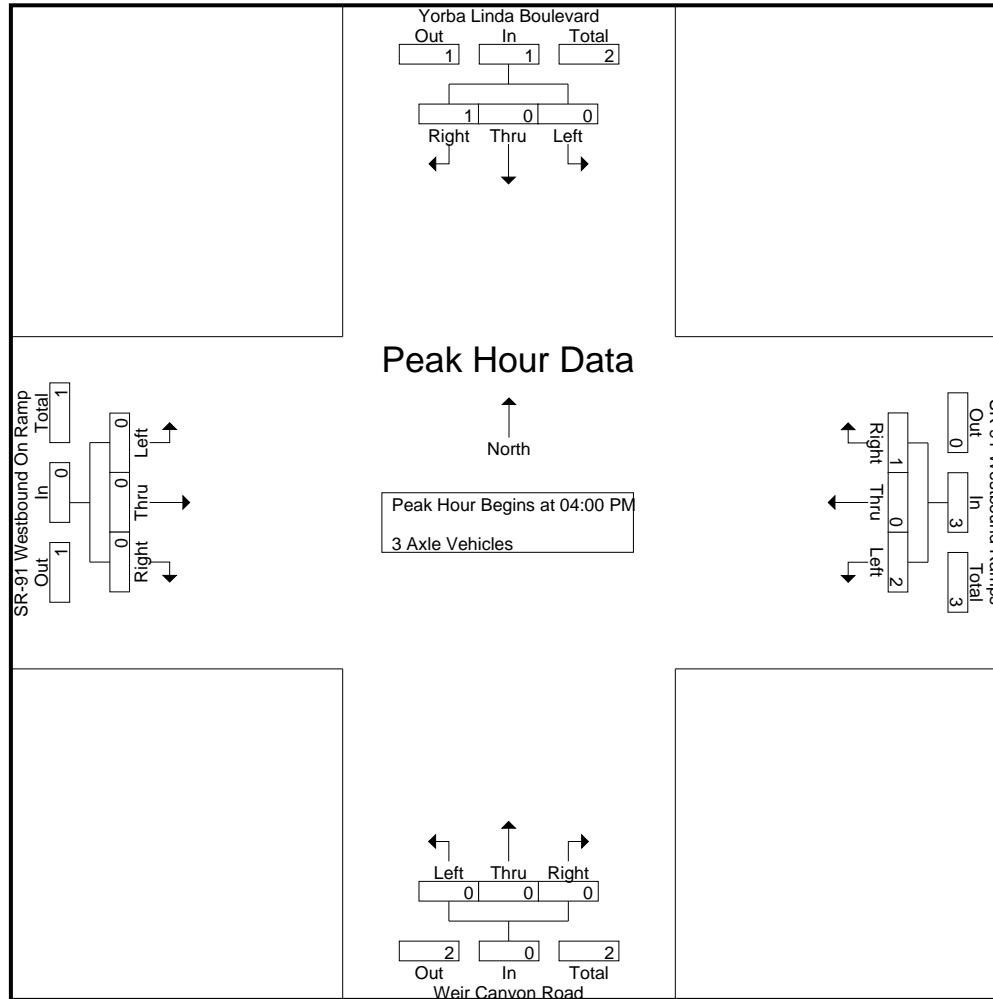
Groups Printed- 3 Axle Vehicles

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	1	0	1	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4	4
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2	2
05:45 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	0	1	1	0	2	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	5	5	5
Grand Total	0	1	2	0	3	4	0	1	0	5	0	1	0	0	1	0	0	0	0	0	0	9	9	9
Apprch %	0	33.3	66.7			80	0	20			0	100	0			0	0	0			0			
Total %	0	11.1	22.2		33.3	44.4	0	11.1		55.6	0	11.1	0		11.1	0	0	0		0	0	100		

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	1	2	0	1	3	0	0	0	0	0	0	0	0	4
% App. Total	0	0	100		66.7	0	33.3		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.500	.000	.250	.750	.000	.000	.000	.000	.000	.000	.000	.000	.500

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
+15 mins.	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	2	0	1	3	0	0	0	0	0	0	0	0	
% App. Total	0	0	100		66.7	0	33.3		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.500	.000	.250	.750	.000	.000	.000	.000	.000	.000	.000	.000	

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

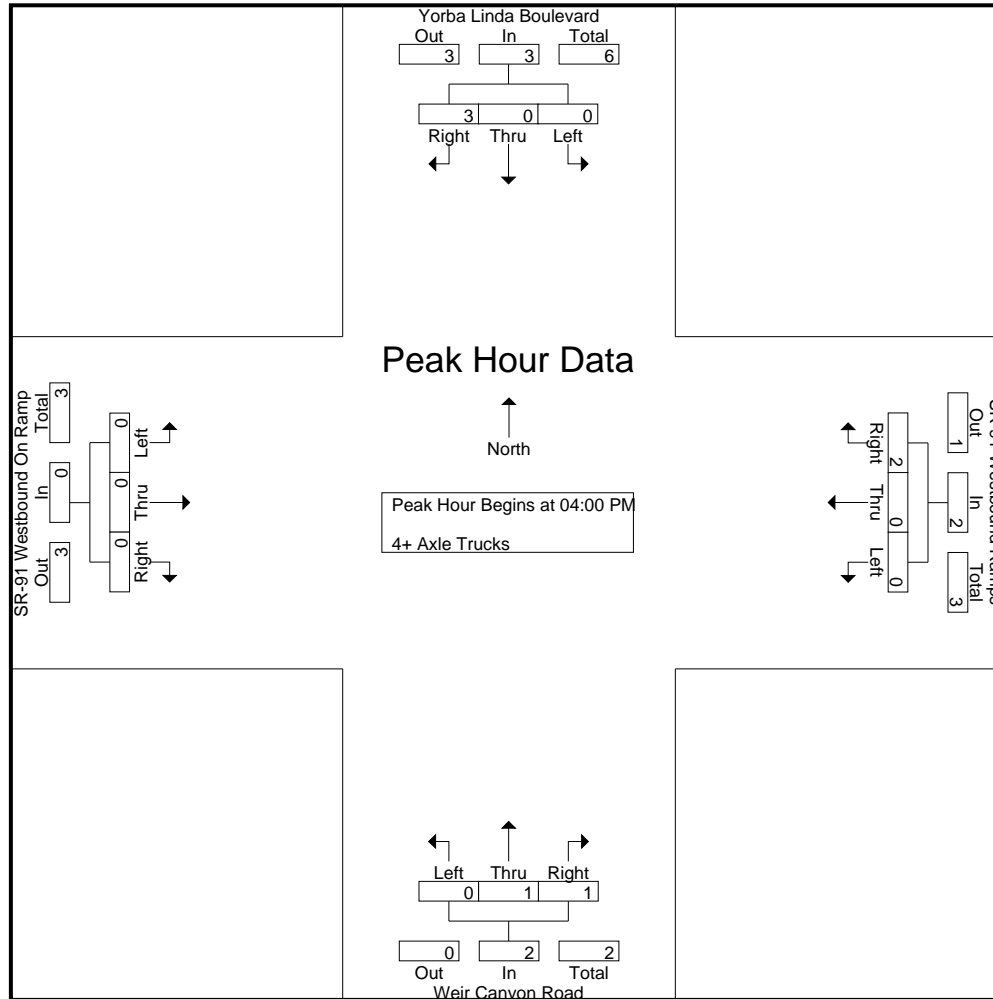
Groups Printed- 4+ Axle Trucks

Start Time	Yorba Linda Boulevard Southbound					SR-91 Westbound Ramps Westbound					Weir Canyon Road Northbound					SR-91 Westbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	3	3
Total	0	0	3	0	3	0	0	2	0	2	0	1	1	0	2	0	0	0	0	0	0	0	0	0	7	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4	4
Grand Total	0	2	3	0	5	0	0	2	0	2	0	2	2	0	4	0	0	0	0	0	0	0	0	0	11	11
Apprch %	0	40	60			0	0	100			0	50	50			0	0	0			0	0	0	0		
Total %	0	18.2	27.3		45.5	0	0	18.2		18.2	0	18.2	18.2		36.4	0	0	0		0	0	0	0	0	100	

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	1	0	1	1	2	0	0	0	0	3
Total Volume	0	0	3	3	0	0	2	2	0	1	1	2	0	0	0	0	7
% App. Total	0	0	100		0	0	100		0	50	50		0	0	0		
PHF	.000	.000	.375	.375	.000	.000	.500	.500	.000	.250	.250	.250	.000	.000	.000	.000	.583

City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 Westbound Ramps
 Weather: Clear

File Name : 17_YLA_Yorba_91W PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Yorba Linda Boulevard Southbound				SR-91 Westbound Ramps Westbound				Weir Canyon Road Northbound				SR-91 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	1	1	0	1	1	2	0	0	0	0	
Total Volume	0	0	3	3	0	0	2	2	0	1	1	2	0	0	0	0	
% App. Total	0	0	100		0	0	100		0	50	50		0	0	0		
PHF	.000	.000	.375	.375	.000	.000	.500	.500	.000	.250	.250	.250	.000	.000	.000	.000	

Location: Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 WB Ramps



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Yorba Linda Boulevard Pedestrians	East Leg SR-91 WB Ramps Pedestrians	South Leg Weir Canyon Road Pedestrians	West Leg SR-91 WB Ramps Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg Yorba Linda Boulevard Pedestrians	East Leg SR-91 WB Ramps Pedestrians	South Leg Weir Canyon Road Pedestrians	West Leg SR-91 WB Ramps Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	0	3	0	0	3

Location: Yorba Linda
 N/S: Yorba Linda Blvd/Weir Canyon Rd
 E/W: SR-91 WB Ramps



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Yorba Linda Boulevard			Westbound SR-91 WB Ramps			Northbound Weir Canyon Road			Eastbound SR-91 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Yorba Linda Boulevard			Westbound SR-91 WB Ramps			Northbound Weir Canyon Road			Eastbound SR-91 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	3	0	0	0	0	4

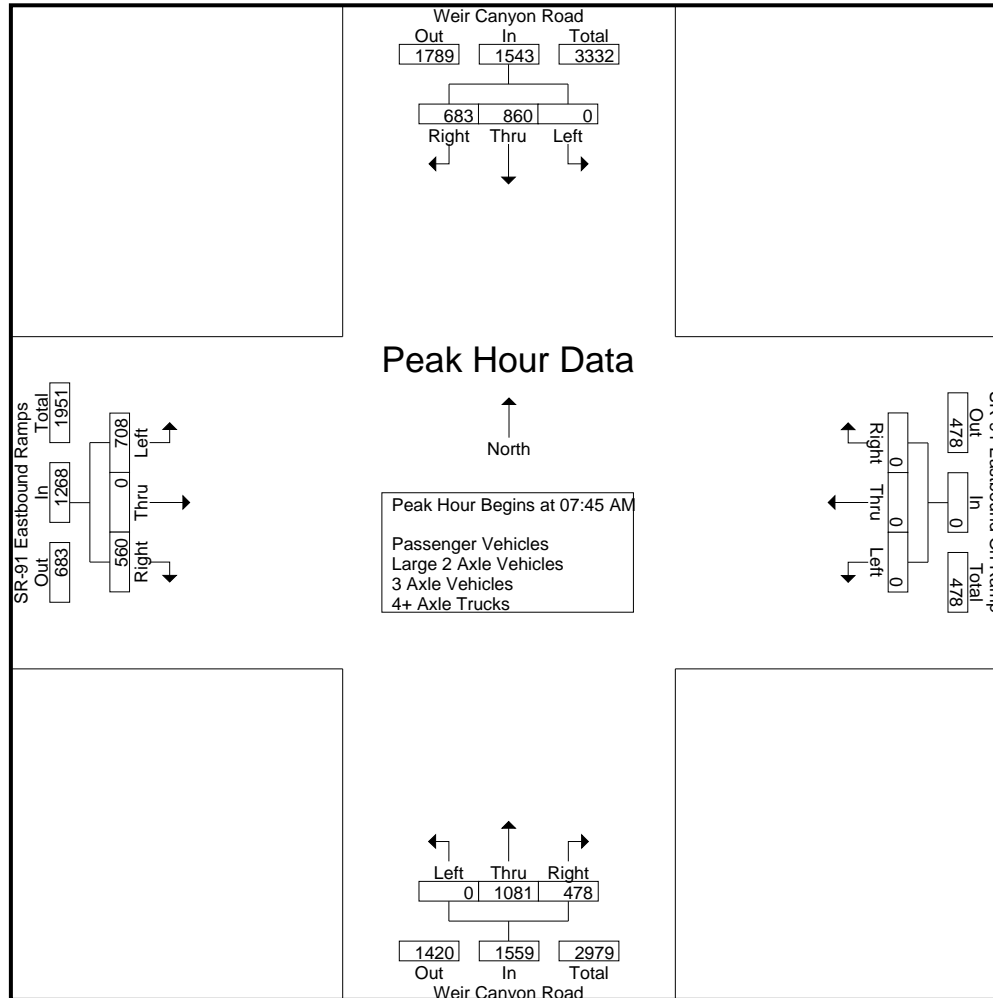
City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	124	132	0	256	0	0	0	0	0	0	172	117	0	289	128	0	61	31	189	31	734	765
07:15 AM	0	123	158	0	281	0	0	0	0	0	0	255	138	0	393	142	0	88	47	230	47	904	951
07:30 AM	0	155	172	0	327	0	0	0	0	0	0	312	135	0	447	146	0	128	65	274	65	1048	1113
07:45 AM	0	222	174	0	396	0	0	0	0	0	0	308	133	0	441	189	0	153	54	342	54	1179	1233
Total	0	624	636	0	1260	0	0	0	0	0	0	1047	523	0	1570	605	0	430	197	1035	197	3865	4062
08:00 AM	0	199	184	0	383	0	0	0	0	0	0	222	138	0	360	199	0	150	43	349	43	1092	1135
08:15 AM	0	208	165	0	373	0	0	0	0	0	0	283	99	0	382	160	0	130	43	290	43	1045	1088
08:30 AM	0	231	160	0	391	0	0	0	0	0	0	268	108	0	376	160	0	127	40	287	40	1054	1094
08:45 AM	0	215	129	0	344	0	0	0	0	0	0	230	103	0	333	174	0	145	45	319	45	996	1041
Total	0	853	638	0	1491	0	0	0	0	0	0	1003	448	0	1451	693	0	552	171	1245	171	4187	4358
Grand Total	0	1477	1274	0	2751	0	0	0	0	0	0	2050	971	0	3021	1298	0	982	368	2280	368	8052	8420
Apprch %	0	53.7	46.3			0	0	0			0	67.9	32.1			56.9	0	43.1					
Total %	0	18.3	15.8		34.2	0	0	0		0	0	25.5	12.1		37.5	16.1	0	12.2		28.3	4.4	95.6	
Passenger Vehicles	0	1441	1256		2697	0	0	0		0	0	2026	958		2984	1238	0	945		2544	0	0	8225
% Passenger Vehicles	0	97.6	98.6	0	98	0	0	0	0	0	0	98.8	98.7	0	98.8	95.4	0	96.2	98.1	96.1	0	0	97.7
Large 2 Axle Vehicles	0	32	7		39	0	0	0		0	0	20	11		31	35	0	32		73	0	0	143
% Large 2 Axle Vehicles	0	2.2	0.5	0	1.4	0	0	0	0	0	0	1	1.1	0	1	2.7	0	3.3	1.6	2.8	0	0	1.7
3 Axle Vehicles	0	4	3		7	0	0	0		0	0	2	1		3	23	0	4		28	0	0	38
% 3 Axle Vehicles	0	0.3	0.2	0	0.3	0	0	0	0	0	0	0.1	0.1	0	0.1	1.8	0	0.4	0.3	1.1	0	0	0.5
4+ Axle Trucks	0	0	8		8	0	0	0		0	0	2	1		3	2	0	1		3	0	0	14
% 4+ Axle Trucks	0	0	0.6	0	0.3	0	0	0	0	0	0	0.1	0.1	0	0.1	0.2	0	0.1	0	0.1	0	0	0.2

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	222	174	396	0	0	0	0	0	308	133	441	189	0	153	342	1179
08:00 AM	0	199	184	383	0	0	0	0	0	222	138	360	199	0	150	349	1092
08:15 AM	0	208	165	373	0	0	0	0	0	283	99	382	160	0	130	290	1045
08:30 AM	0	231	160	391	0	0	0	0	0	268	108	376	160	0	127	287	1054
Total Volume	0	860	683	1543	0	0	0	0	0	1081	478	1559	708	0	560	1268	4370
% App. Total	0	55.7	44.3		0	0	0		0	69.3	30.7		55.8	0	44.2		
PHF	.000	.931	.928	.974	.000	.000	.000	.000	.000	.877	.866	.884	.889	.000	.915	.908	.927



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:00 AM				07:15 AM				07:45 AM				
+0 mins.	0	222	174	396	0	0	0	0	0	255	138	393	189	0	153	342	
+15 mins.	0	199	184	383	0	0	0	0	0	312	135	447	199	0	150	349	
+30 mins.	0	208	165	373	0	0	0	0	0	308	133	441	160	0	130	290	
+45 mins.	0	231	160	391	0	0	0	0	0	222	138	360	160	0	127	287	
Total Volume	0	860	683	1543	0	0	0	0	0	1097	544	1641	708	0	560	1268	
% App. Total	0	55.7	44.3		0	0	0		0	66.8	33.2		55.8	0	44.2		
PHF	.000	.931	.928	.974	.000	.000	.000	.000	.000	.879	.986	.918	.889	.000	.915	.908	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles

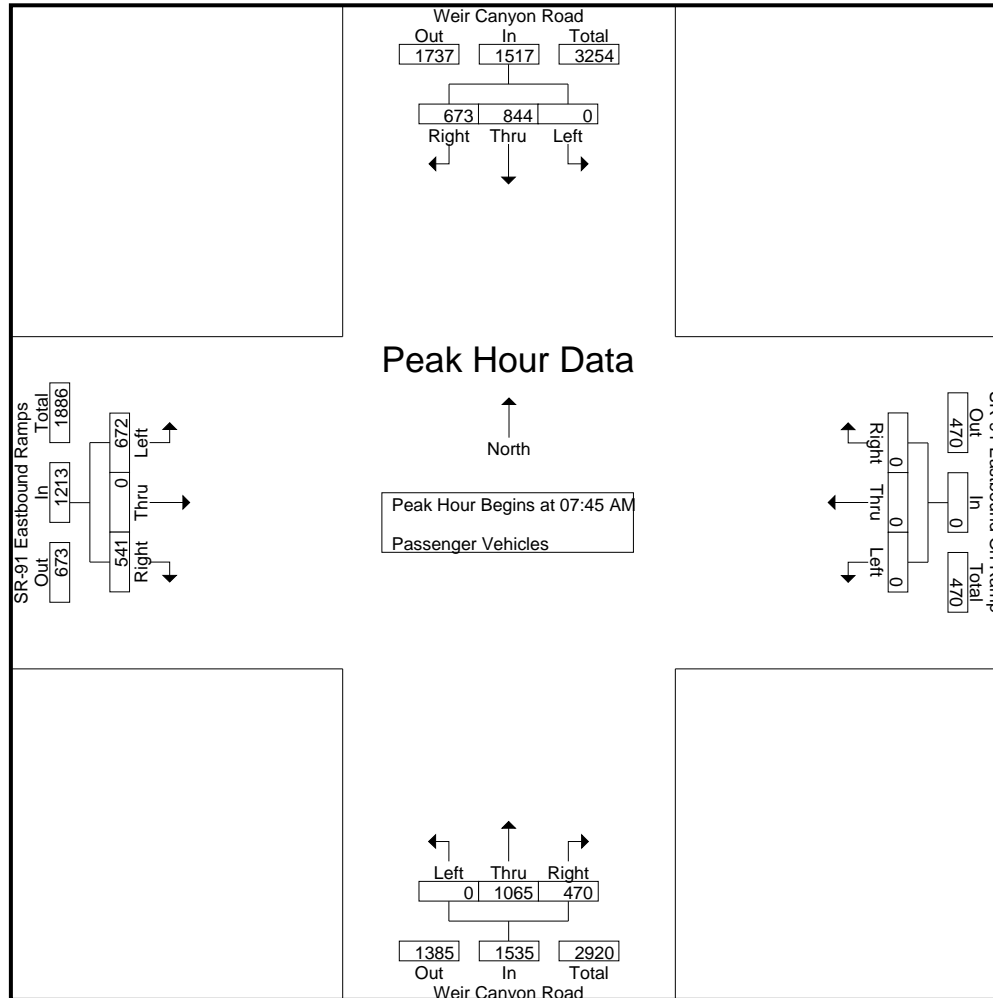
Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	117	129	0	246	0	0	0	0	0	0	170	114	0	284	118	0	59	30	177	30	707	737
07:15 AM	0	118	154	0	272	0	0	0	0	0	0	252	137	0	389	137	0	81	45	218	45	879	924
07:30 AM	0	151	172	0	323	0	0	0	0	0	0	310	135	0	445	143	0	122	63	265	63	1033	1096
07:45 AM	0	217	172	0	389	0	0	0	0	0	0	302	129	0	431	178	0	146	54	324	54	1144	1198
Total	0	603	627	0	1230	0	0	0	0	0	0	1034	515	0	1549	576	0	408	192	984	192	3763	3955
08:00 AM	0	197	181	0	378	0	0	0	0	0	0	219	137	0	356	191	0	150	43	341	43	1075	1118
08:15 AM	0	204	161	0	365	0	0	0	0	0	0	280	99	0	379	150	0	120	42	270	42	1014	1056
08:30 AM	0	226	159	0	385	0	0	0	0	0	0	264	105	0	369	153	0	125	40	278	40	1032	1072
08:45 AM	0	211	128	0	339	0	0	0	0	0	0	229	102	0	331	168	0	142	44	310	44	980	1024
Total	0	838	629	0	1467	0	0	0	0	0	0	992	443	0	1435	662	0	537	169	1199	169	4101	4270
Grand Total	0	1441	1256	0	2697	0	0	0	0	0	0	2026	958	0	2984	1238	0	945	361	2183	361	7864	8225
Apprch %	0	53.4	46.6			0	0	0			0	67.9	32.1			56.7	0	43.3					
Total %	0	18.3	16		34.3	0	0	0		0	0	25.8	12.2		37.9	15.7	0	12		27.8	4.4	95.6	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	217	172	389	0	0	0	0	0	302	129	431	178	0	146	324	1144
08:00 AM	0	197	181	378	0	0	0	0	0	219	137	356	191	0	150	341	1075
08:15 AM	0	204	161	365	0	0	0	0	0	280	99	379	150	0	120	270	1014
08:30 AM	0	226	159	385	0	0	0	0	0	264	105	369	153	0	125	278	1032
Total Volume	0	844	673	1517	0	0	0	0	0	1065	470	1535	672	0	541	1213	4265
% App. Total	0	55.6	44.4		0	0	0		0	69.4	30.6		55.4	0	44.6		
PHF	.000	.934	.930	.975	.000	.000	.000	.000	.000	.882	.858	.890	.880	.000	.902	.889	.932

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	217	172	389	0	0	0	0	0	302	129	431	178	0	146	324	
+15 mins.	0	197	181	378	0	0	0	0	0	219	137	356	191	0	150	341	
+30 mins.	0	204	161	365	0	0	0	0	0	280	99	379	150	0	120	270	
+45 mins.	0	226	159	385	0	0	0	0	0	264	105	369	153	0	125	278	
Total Volume	0	844	673	1517	0	0	0	0	0	1065	470	1535	672	0	541	1213	
% App. Total	0	55.6	44.4		0	0	0		0	69.4	30.6		55.4	0	44.6		
PHF	.000	.934	.930	.975	.000	.000	.000	.000	.000	.882	.858	.890	.880	.000	.902	.889	

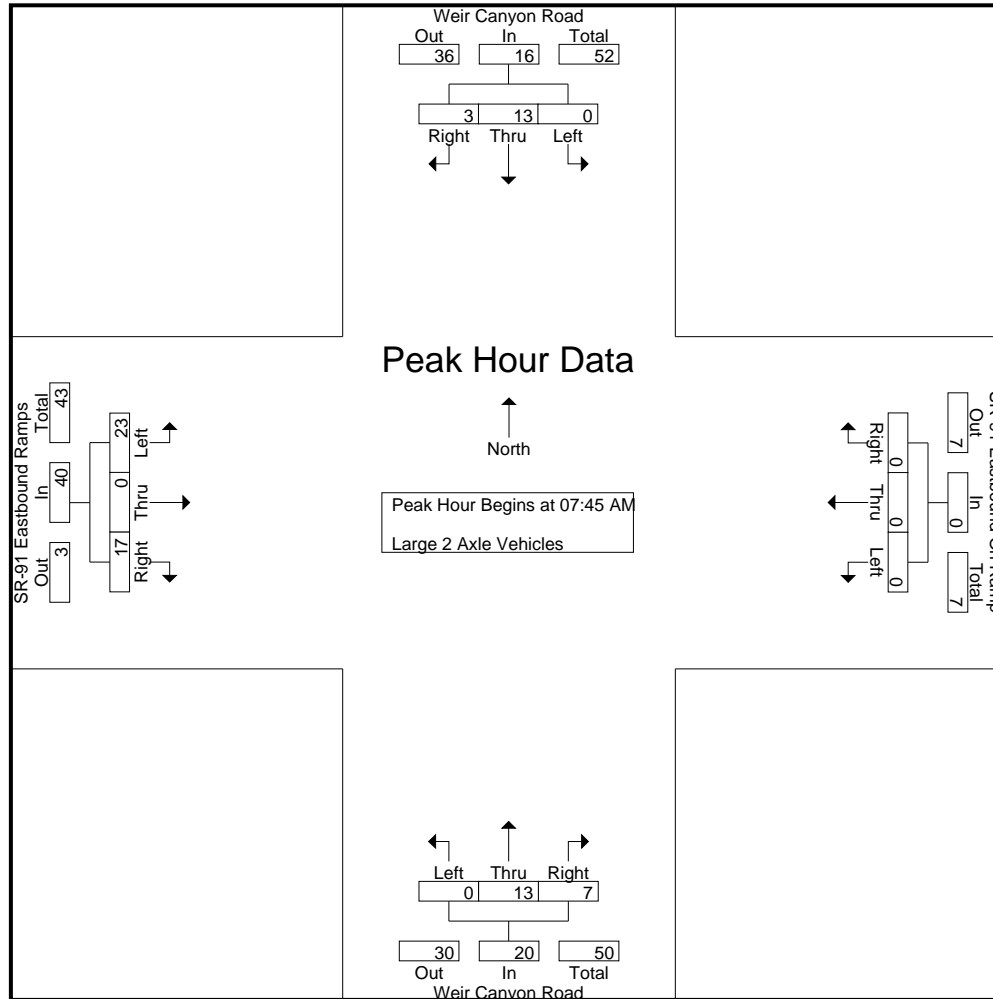
City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	7	1	0	8	0	0	0	0	0	0	2	2	0	4	4	0	1	1	5	1	17	18
07:15 AM	0	4	3	0	7	0	0	0	0	0	0	3	1	0	4	1	0	6	2	7	2	18	20
07:30 AM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	2	0	5	1	7	1	12	13
07:45 AM	0	4	2	0	6	0	0	0	0	0	0	5	4	0	9	4	0	6	0	10	0	25	25
Total	0	19	6	0	25	0	0	0	0	0	0	11	7	0	18	11	0	18	4	29	4	72	76
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	5	0	0	0	5	0	8	8
08:15 AM	0	3	1	0	4	0	0	0	0	0	0	3	0	0	3	9	0	9	1	18	1	25	26
08:30 AM	0	5	0	0	5	0	0	0	0	0	0	4	2	0	6	5	0	2	0	7	0	18	18
08:45 AM	0	4	0	0	4	0	0	0	0	0	0	1	1	0	2	5	0	3	1	8	1	14	15
Total	0	13	1	0	14	0	0	0	0	0	0	9	4	0	13	24	0	14	2	38	2	65	67
Grand Total	0	32	7	0	39	0	0	0	0	0	0	20	11	0	31	35	0	32	6	67	6	137	143
Apprch %	0	82.1	17.9			0	0	0			0	64.5	35.5			52.2	0	47.8					
Total %	0	23.4	5.1		28.5	0	0	0			0	14.6	8		22.6	25.5	0	23.4		48.9	4.2	95.8	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	4	2	6	0	0	0	0	0	5	4	9	4	0	6	10	25
08:00 AM	0	1	0	1	0	0	0	0	0	1	1	2	5	0	0	5	8
08:15 AM	0	3	1	4	0	0	0	0	0	3	0	3	9	0	9	18	25
08:30 AM	0	5	0	5	0	0	0	0	0	4	2	6	5	0	2	7	18
Total Volume	0	13	3	16	0	0	0	0	0	13	7	20	23	0	17	40	76
% App. Total	0	81.2	18.8		0	0	0			0	65	35	57.5	0	42.5		
PHF	.000	.650	.375	.667	.000	.000	.000	.000	.000	.000	.650	.438	.556	.639	.000	.472	.556



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	4	2	6	0	0	0	0	0	5	4	9	4	0	6	10	
+15 mins.	0	1	0	1	0	0	0	0	0	1	1	2	5	0	0	5	
+30 mins.	0	3	1	4	0	0	0	0	0	3	0	3	9	0	9	18	
+45 mins.	0	5	0	5	0	0	0	0	0	4	2	6	5	0	2	7	
Total Volume	0	13	3	16	0	0	0	0	0	13	7	20	23	0	17	40	
% App. Total	0	81.2	18.8		0	0	0		0	65	35		57.5	0	42.5		
PHF	.000	.650	.375	.667	.000	.000	.000	.000	.000	.650	.438	.556	.639	.000	.472	.556	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

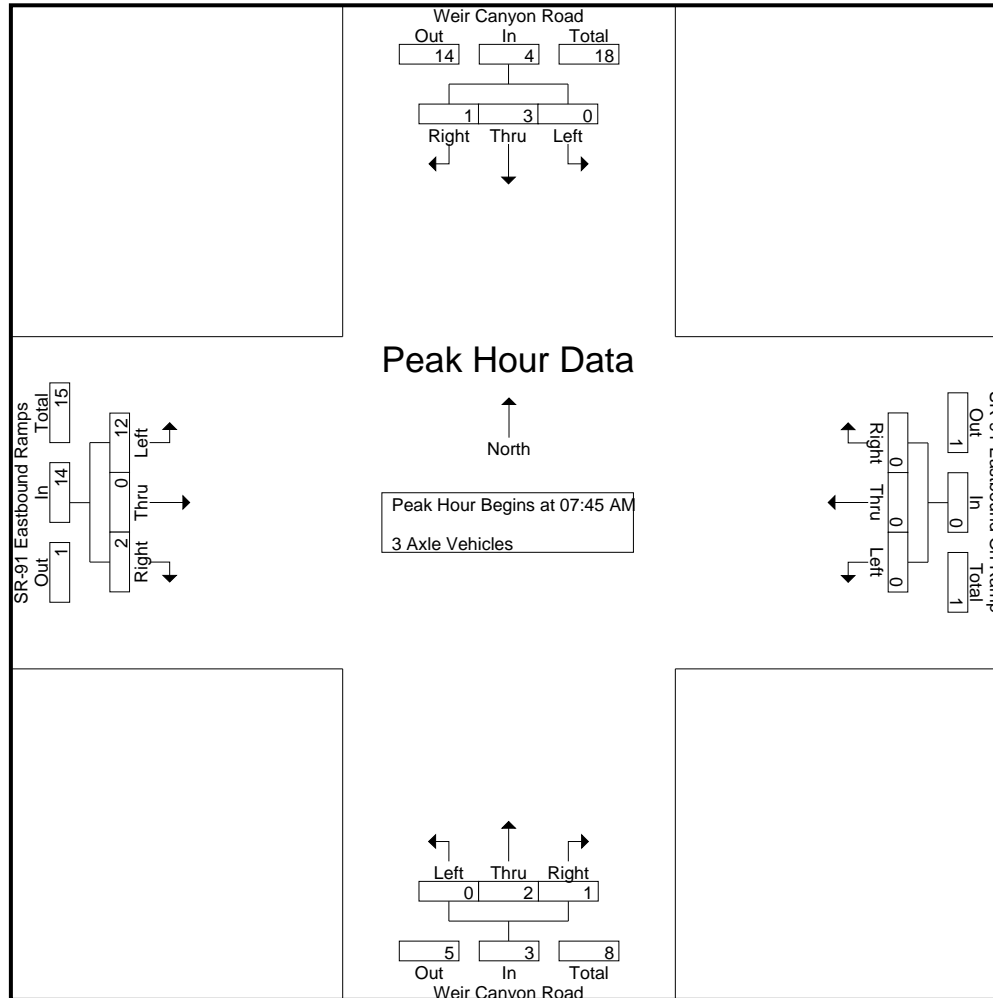
Groups Printed- 3 Axle Vehicles

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	8	8
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4	0	5	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	1	2	3
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	7	0	1	0	8	0	10	10
Total	0	2	2	0	4	0	0	0	0	0	0	1	0	0	1	17	0	3	1	20	1	25	26
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	0	5	5
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2
08:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	4	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
Total	0	2	1	0	3	0	0	0	0	0	0	1	1	0	2	6	0	1	0	7	0	12	12
Grand Total	0	4	3	0	7	0	0	0	0	0	0	2	1	0	3	23	0	4	1	27	1	37	38
Apprch %	0	57.1	42.9			0	0	0			0	66.7	33.3			85.2	0	14.8					
Total %	0	10.8	8.1		18.9	0	0	0		0	0	5.4	2.7		8.1	62.2	0	10.8		73	2.6	97.4	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	7	0	1	8	10
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	3	0	0	3	5
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:30 AM	0	0	1	1	0	0	0	0	0	0	1	1	2	0	0	2	4
Total Volume	0	3	1	4	0	0	0	0	0	2	1	3	12	0	2	14	21
% App. Total	0	75	25		0	0	0		0	66.7	33.3		85.7	0	14.3		
PHF	.000	.750	.250	1.00	.000	.000	.000	.000	.000	.500	.250	.750	.429	.000	.500	.438	.525

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	1	0	1	7	0	1	8	
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	3	0	0	3	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	0	0	1	1	0	0	0	0	0	0	1	1	2	0	0	2	
Total Volume	0	3	1	4	0	0	0	0	0	2	1	3	12	0	2	14	
% App. Total	0	75	25		0	0	0		0	66.7	33.3		85.7	0	14.3		
PHF	.000	.750	.250	1.000	.000	.000	.000	.000	.000	.500	.250	.750	.429	.000	.500	.438	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

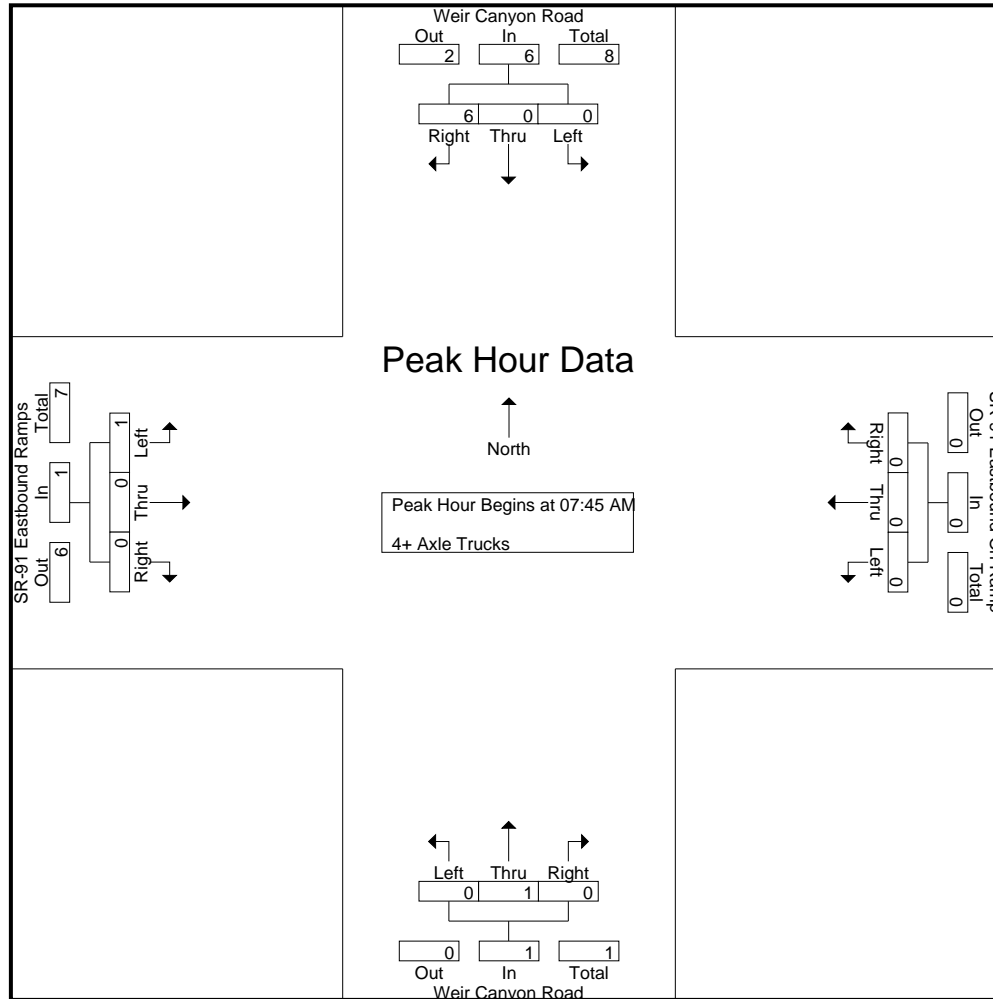
Groups Printed- 4+ Axle Trucks

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	2	2
07:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	0	0	5	5
08:00 AM	0	0	3	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4	4
08:15 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	7	0	7	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	9	9
Grand Total	0	0	8	0	8	0	0	0	0	0	0	2	1	0	3	2	0	1	0	3	0	0	14	14
Apprch %	0	0	100			0	0	0			0	66.7	33.3			66.7	0	33.3			0	0		
Total %	0	0	57.1		57.1	0	0	0		0	0	14.3	7.1		21.4	14.3	0	7.1		21.4	0	0	100	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:00 AM	0	0	3	3	0	0	0	0	0	1	0	1	0	0	0	0	
08:15 AM	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	1	
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	6	6	0	0	0	0	0	1	0	1	1	0	0	1	
% App. Total	0	0	100		0	0	0		0	100	0		100	0	0		
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	3	3	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	1	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	6	6	0	0	0	0	0	1	0	1	1	0	0	1	
% App. Total	0	0	100		0	0	0		0	100	0		100	0	0		
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	

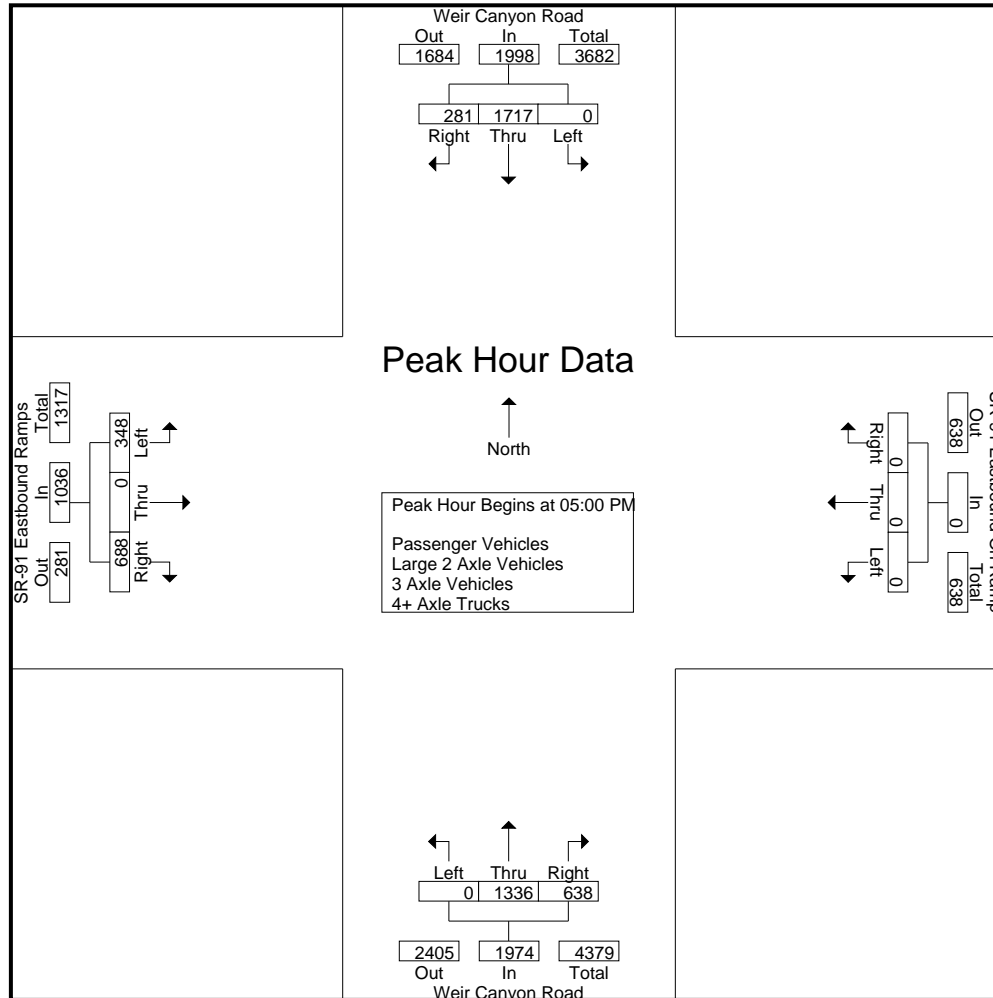
City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	370	90	0	460	0	0	0	0	0	0	318	172	0	490	99	0	193	38	292	38	1242	1280
04:15 PM	0	398	89	0	487	0	0	0	0	0	0	303	171	0	474	91	0	183	27	274	27	1235	1262
04:30 PM	0	380	95	0	475	0	0	0	0	0	0	317	202	0	519	60	0	155	48	215	48	1209	1257
04:45 PM	0	436	91	0	527	0	0	0	0	0	0	336	203	0	539	79	0	152	15	231	15	1297	1312
Total	0	1584	365	0	1949	0	0	0	0	0	0	1274	748	0	2022	329	0	683	128	1012	128	4983	5111
05:00 PM	0	402	62	0	464	0	0	0	0	0	0	333	185	0	518	84	0	179	21	263	21	1245	1266
05:15 PM	0	417	74	0	491	0	0	0	0	0	0	337	145	0	482	77	0	155	25	232	25	1205	1230
05:30 PM	0	424	70	0	494	0	0	0	0	0	0	321	168	0	489	94	0	174	14	268	14	1251	1265
05:45 PM	0	474	75	0	549	0	0	0	0	0	0	345	140	0	485	93	0	180	7	273	7	1307	1314
Total	0	1717	281	0	1998	0	0	0	0	0	0	1336	638	0	1974	348	0	688	67	1036	67	5008	5075
Grand Total	0	3301	646	0	3947	0	0	0	0	0	0	2610	1386	0	3996	677	0	1371	195	2048	195	9991	10186
Apprch %	0	83.6	16.4			0	0	0			0	65.3	34.7			33.1	0	66.9					
Total %	0	33	6.5		39.5	0	0	0		0	0	26.1	13.9		40	6.8	0	13.7		20.5	1.9	98.1	
Passenger Vehicles	0	3282	637		3919	0	0	0		0	0	2588	1377		3965	669	0	1350		2212	0	0	10096
% Passenger Vehicles	0	99.4	98.6	0	99.3	0	0	0	0	0	0	99.2	99.4	0	99.2	98.8	0	98.5	99	98.6	0	0	99.1
Large 2 Axle Vehicles	0	15	5		20	0	0	0		0	0	20	5		25	5	0	18		25	0	0	70
% Large 2 Axle Vehicles	0	0.5	0.8	0	0.5	0	0	0	0	0	0	0.8	0.4	0	0.6	0.7	0	1.3	1	1.1	0	0	0.7
3 Axle Vehicles	0	4	1		5	0	0	0		0	0	1	3		4	0	0	2		2	0	0	11
% 3 Axle Vehicles	0	0.1	0.2	0	0.1	0	0	0	0	0	0	0	0.2	0	0.1	0	0	0.1	0	0.1	0	0	0.1
4+ Axle Trucks	0	0	3		3	0	0	0		0	0	1	1		2	3	0	1		4	0	0	9
% 4+ Axle Trucks	0	0	0.5	0	0.1	0	0	0	0	0	0	0	0.1	0	0.1	0.4	0	0.1	0	0.2	0	0	0.1

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	402	62	464	0	0	0	0	0	333	185	518	84	0	179	263	1245
05:15 PM	0	417	74	491	0	0	0	0	0	337	145	482	77	0	155	232	1205
05:30 PM	0	424	70	494	0	0	0	0	0	321	168	489	94	0	174	268	1251
05:45 PM	0	474	75	549	0	0	0	0	0	345	140	485	93	0	180	273	1307
Total Volume	0	1717	281	1998	0	0	0	0	0	1336	638	1974	348	0	688	1036	5008
% App. Total	0	85.9	14.1		0	0	0		0	67.7	32.3		33.6	0	66.4		
PHF	.000	.906	.937	.910	.000	.000	.000	.000	.000	.968	.862	.953	.926	.000	.956	.949	.958



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:00 PM				04:30 PM				05:00 PM				
+0 mins.	0	402	62	464	0	0	0	0	0	317	202	519	84	0	179	263	
+15 mins.	0	417	74	491	0	0	0	0	0	336	203	539	77	0	155	232	
+30 mins.	0	424	70	494	0	0	0	0	0	333	185	518	94	0	174	268	
+45 mins.	0	474	75	549	0	0	0	0	0	337	145	482	93	0	180	273	
Total Volume	0	1717	281	1998	0	0	0	0	0	1323	735	2058	348	0	688	1036	
% App. Total	0	85.9	14.1		0	0	0		0	64.3	35.7		33.6	0	66.4		
PHF	.000	.906	.937	.910	.000	.000	.000	.000	.000	.981	.905	.955	.926	.000	.956	.949	

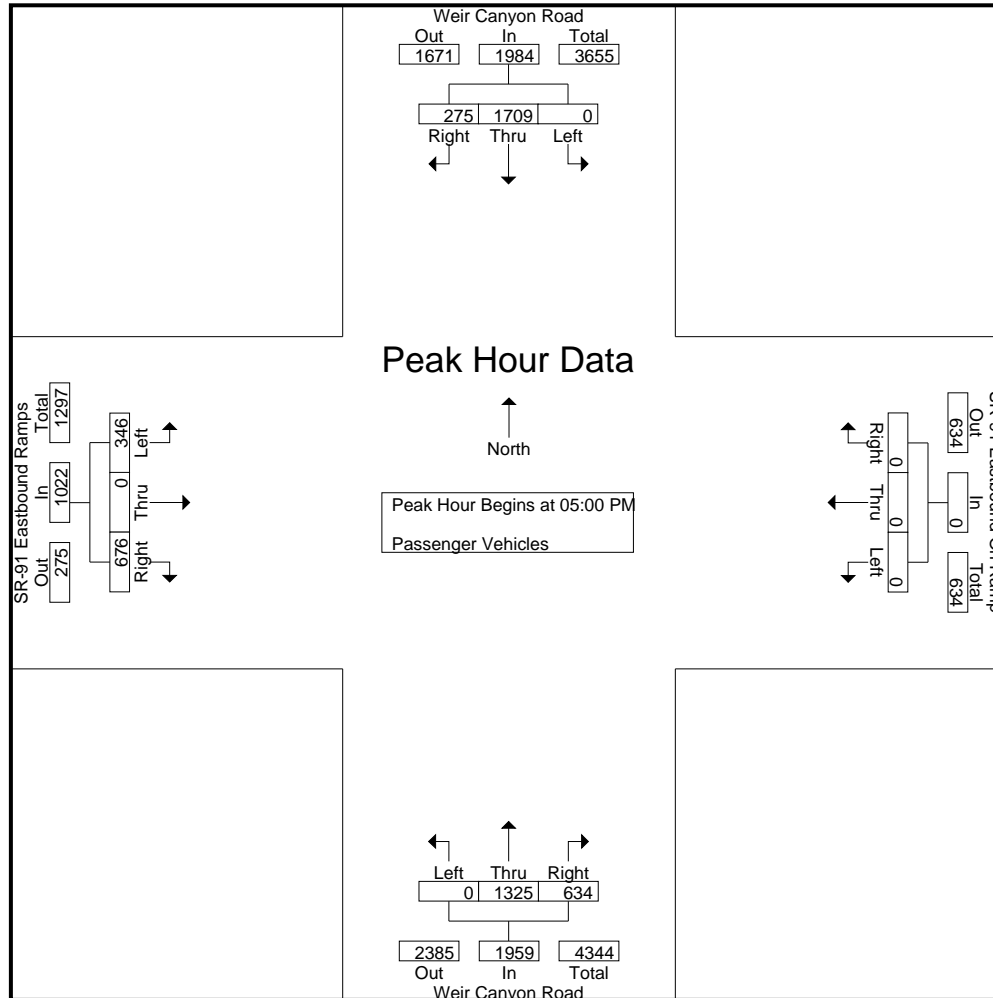
City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	367	88	0	455	0	0	0	0	0	0	317	172	0	489	98	0	192	38	290	38	1234	1272
04:15 PM	0	394	89	0	483	0	0	0	0	0	0	298	171	0	469	89	0	179	26	268	26	1220	1246
04:30 PM	0	378	95	0	473	0	0	0	0	0	0	314	200	0	514	60	0	155	48	215	48	1202	1250
04:45 PM	0	434	90	0	524	0	0	0	0	0	0	334	200	0	534	76	0	148	15	224	15	1282	1297
Total	0	1573	362	0	1935	0	0	0	0	0	0	1263	743	0	2006	323	0	674	127	997	127	4938	5065
05:00 PM	0	399	62	0	461	0	0	0	0	0	0	329	184	0	513	84	0	175	21	259	21	1233	1254
05:15 PM	0	417	73	0	490	0	0	0	0	0	0	335	142	0	477	76	0	150	24	226	24	1193	1217
05:30 PM	0	421	68	0	489	0	0	0	0	0	0	318	168	0	486	94	0	173	14	267	14	1242	1256
05:45 PM	0	472	72	0	544	0	0	0	0	0	0	343	140	0	483	92	0	178	7	270	7	1297	1304
Total	0	1709	275	0	1984	0	0	0	0	0	0	1325	634	0	1959	346	0	676	66	1022	66	4965	5031
Grand Total	0	3282	637	0	3919	0	0	0	0	0	0	2588	1377	0	3965	669	0	1350	193	2019	193	9903	10096
Apprch %	0	83.7	16.3			0	0	0			0	65.3	34.7			33.1	0	66.9					
Total %	0	33.1	6.4		39.6	0	0	0		0	0	26.1	13.9		40	6.8	0	13.6		20.4	1.9	98.1	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	399	62	461	0	0	0	0	0	329	184	513	84	0	175	259	1233
05:15 PM	0	417	73	490	0	0	0	0	0	335	142	477	76	0	150	226	1193
05:30 PM	0	421	68	489	0	0	0	0	0	318	168	486	94	0	173	267	1242
05:45 PM	0	472	72	544	0	0	0	0	0	343	140	483	92	0	178	270	1297
Total Volume	0	1709	275	1984	0	0	0	0	0	1325	634	1959	346	0	676	1022	4965
% App. Total	0	86.1	13.9		0	0	0		0	67.6	32.4		33.9	0	66.1		
PHF	.000	.905	.942	.912	.000	.000	.000	.000	.000	.966	.861	.955	.920	.000	.949	.946	.957



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	399	62	461	0	0	0	0	0	329	184	513	84	0	175	259	
+15 mins.	0	417	73	490	0	0	0	0	0	335	142	477	76	0	150	226	
+30 mins.	0	421	68	489	0	0	0	0	0	318	168	486	94	0	173	267	
+45 mins.	0	472	72	544	0	0	0	0	0	343	140	483	92	0	178	270	
Total Volume	0	1709	275	1984	0	0	0	0	0	1325	634	1959	346	0	676	1022	
% App. Total	0	86.1	13.9		0	0	0		0	67.6	32.4		33.9	0	66.1		
PHF	.000	.905	.942	.912	.000	.000	.000	.000	.000	.966	.861	.955	.920	.000	.949	.946	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

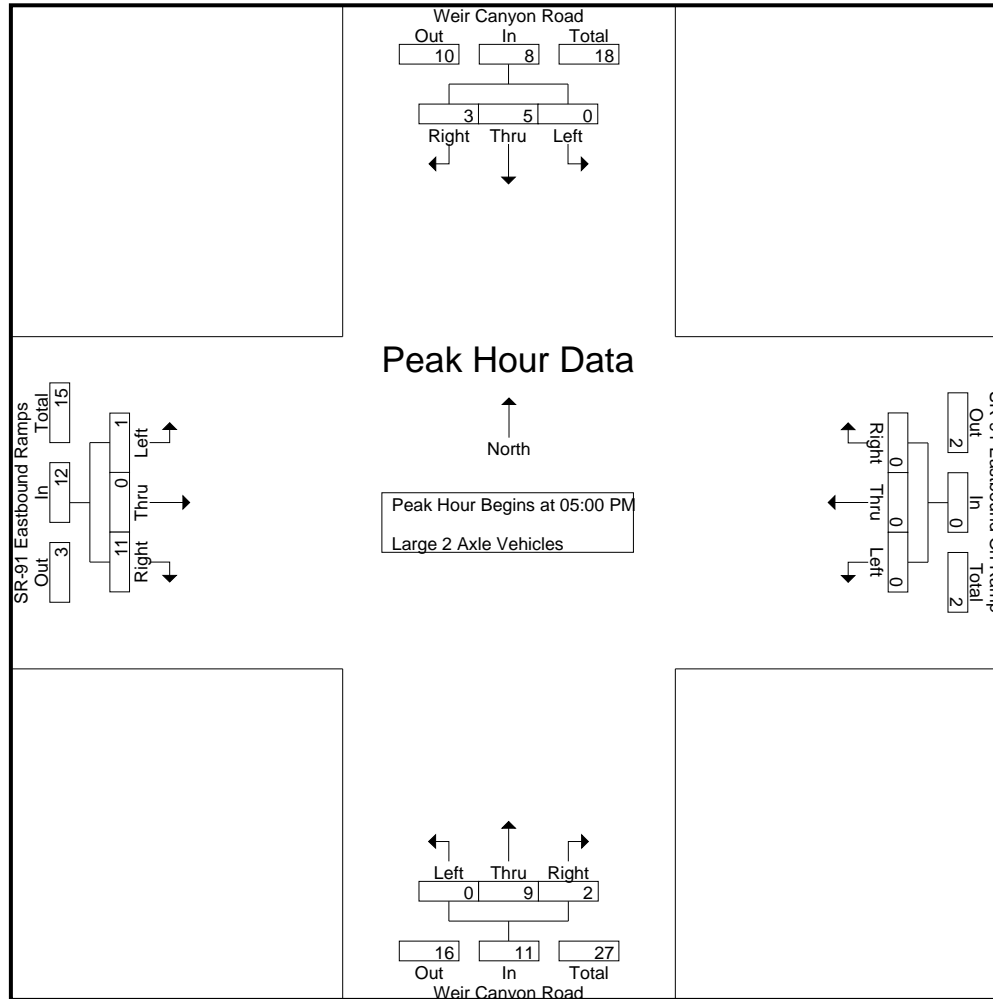
Groups Printed- Large 2 Axle Vehicles

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	1	0	4	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	7	7
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	2	0	2	1	4	1	12	13
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	7	7
04:45 PM	0	2	1	0	3	0	0	0	0	0	0	2	1	0	3	1	0	4	0	5	0	11	11
Total	0	10	2	0	12	0	0	0	0	0	0	11	3	0	14	4	0	7	1	11	1	37	38
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	3	0	3	0	9	9
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	5	1	5	1	9	10
05:30 PM	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	5	5
05:45 PM	0	1	2	0	3	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	0	8	8
Total	0	5	3	0	8	0	0	0	0	0	0	9	2	0	11	1	0	11	1	12	1	31	32
Grand Total	0	15	5	0	20	0	0	0	0	0	0	20	5	0	25	5	0	18	2	23	2	68	70
Apprch %	0	75	25			0	0	0			0	80	20			21.7	0	78.3					
Total %	0	22.1	7.4		29.4	0	0	0		0	0	29.4	7.4		36.8	7.4	0	26.5		33.8	2.9	97.1	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	3	3	9
05:15 PM	0	0	0	0	0	0	0	0	0	2	2	4	0	0	5	5	9
05:30 PM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	1	1	5
05:45 PM	0	1	2	3	0	0	0	0	0	2	0	2	1	0	2	3	8
Total Volume	0	5	3	8	0	0	0	0	0	9	2	11	1	0	11	12	31
% App. Total	0	62.5	37.5		0	0	0		0	81.8	18.2		8.3	0	91.7		
PHF	.000	.625	.375	.667	.000	.000	.000	.000	.000	.563	.250	.688	.250	.000	.550	.600	.861

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	4	0	4	0	0	3	3	
+15 mins.	0	0	0	0	0	0	0	0	0	2	2	4	0	0	5	5	
+30 mins.	0	2	1	3	0	0	0	0	0	1	0	1	0	0	1	1	
+45 mins.	0	1	2	3	0	0	0	0	0	2	0	2	1	0	2	3	
Total Volume	0	5	3	8	0	0	0	0	0	9	2	11	1	0	11	12	
% App. Total	0	62.5	37.5		0	0	0		0	81.8	18.2		8.3	0	91.7		
PHF	.000	.625	.375	.667	.000	.000	.000	.000	.000	.563	.250	.688	.250	.000	.550	.600	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

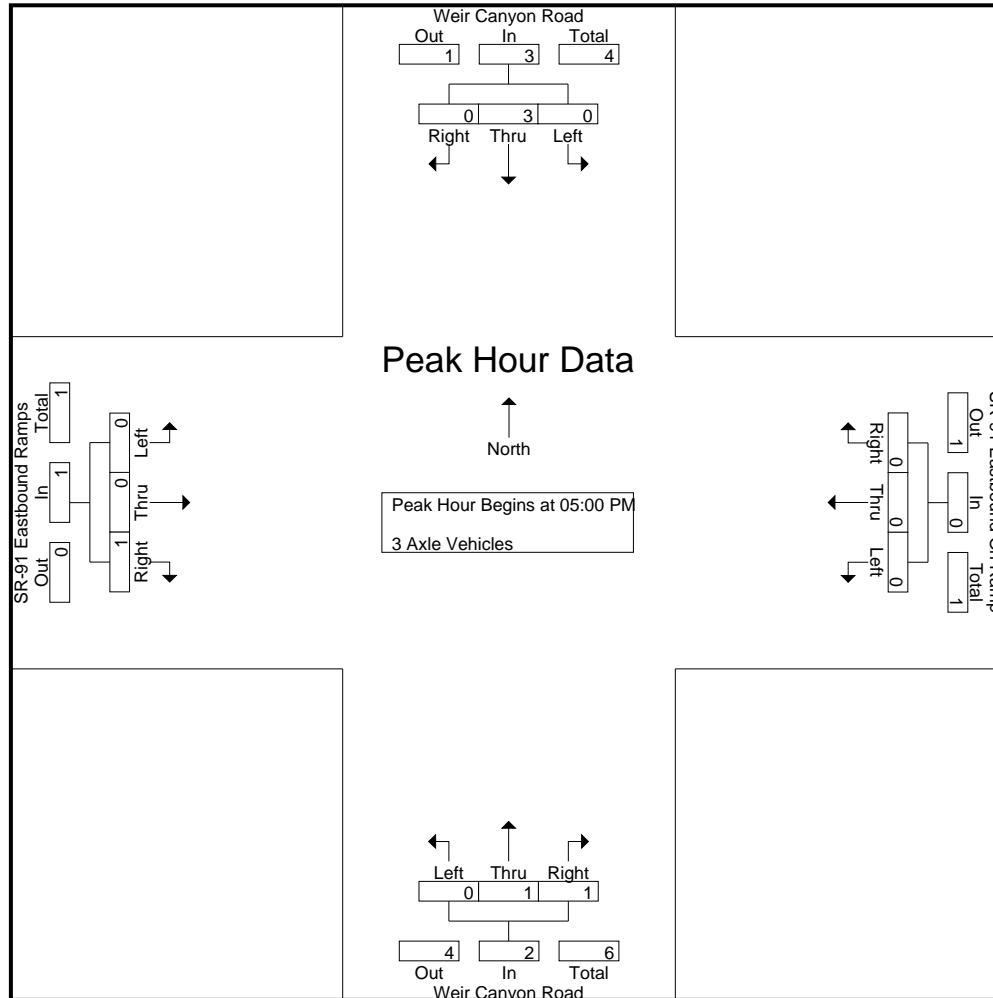
Groups Printed- 3 Axle Vehicles

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	1	1	0	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0	5	5
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	0	6	6
Grand Total	0	4	1	0	5	0	0	0	0	0	0	1	3	0	4	0	0	2	0	2	0	0	0	0	0	0	11	11
Apprch %	0	80	20			0	0	0			0	25	75			0	0	100										
Total %	0	36.4	9.1		45.5	0	0	0		0	0	9.1	27.3		36.4	0	0	18.2		18.2	0	0				0	100	

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	3	0	3	0	0	0	0	0	1	1	2	0	0	1	1	6
% App. Total	0	100	0		0	0	0		0	50	50		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.250	.500	.000	.000	.250	.250	.500

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	3	0	3	0	0	0	0	0	1	1	2	0	0	1	1	
% App. Total	0	100	0		0	0	0		0	50	50		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.250	.500	.000	.000	.250	.250	

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

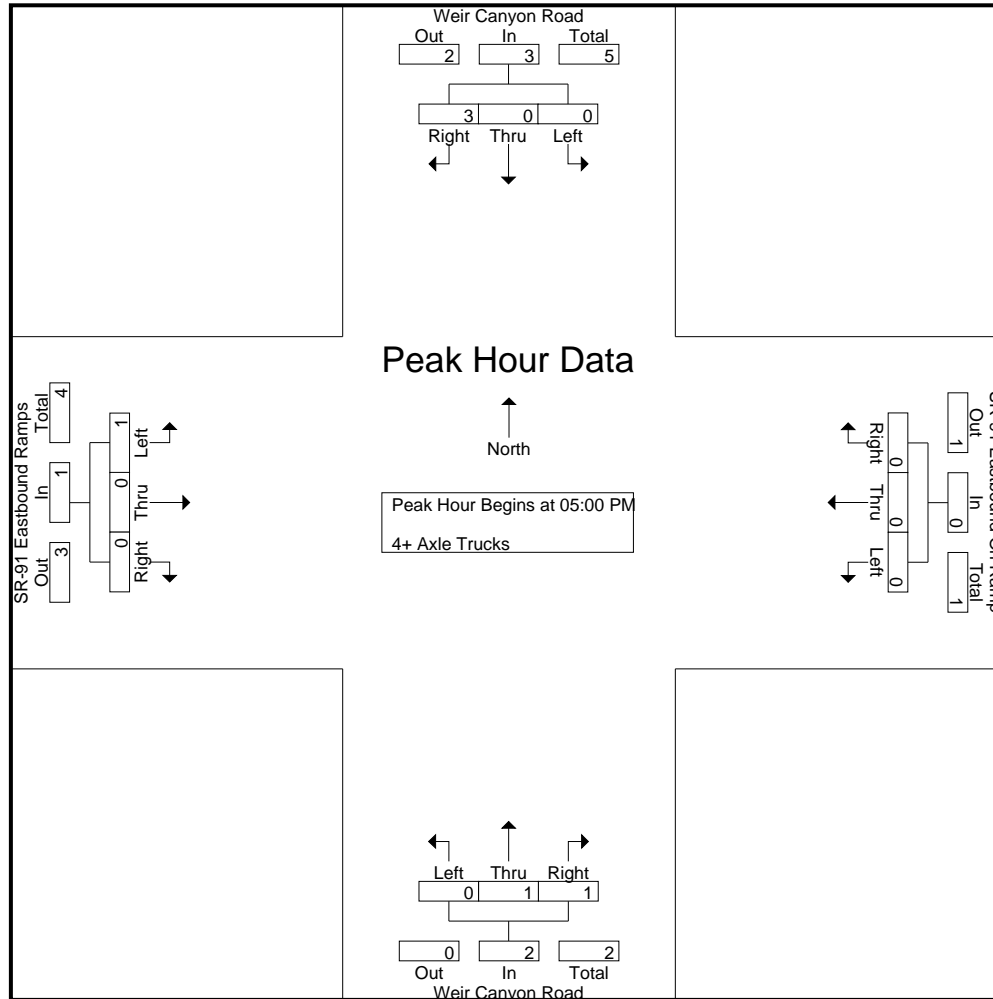
Groups Printed- 4+ Axle Trucks

Start Time	Weir Canyon Road Southbound					SR-91 Eastbound On Ramp Westbound					Weir Canyon Road Northbound					SR-91 Eastbound Ramps Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	0	3	0	3	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	3	0	3	0	3	3
05:30 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	2	2
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Total	0	0	3	0	3	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	0	6	0	6	0	6	6
Grand Total	0	0	3	0	3	0	0	0	0	0	0	1	1	0	2	3	0	1	0	4	0	0	9	0	9	0	9	9
Apprch %	0	0	100			0	0	0			0	50	50			75	0	25			0	0	100			0	100	100
Total %	0	0	33.3		33.3	0	0	0		0	0	11.1	11.1		22.2	33.3	0	11.1		44.4	0	0	100		100	0	100	100

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	1	3
05:30 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	3	3	0	0	0	0	0	1	1	2	1	0	0	1	6
% App. Total	0	0	100		0	0	0		0	50	50		100	0	0		100
PHF	.000	.000	.750	.750	.000	.000	.000	.000	.000	.250	.250	.500	.250	.000	.000	.250	.500

City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 Eastbound Ramps
 Weather: Clear

File Name : 18_ANA_Weir_91E PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Weir Canyon Road Southbound				SR-91 Eastbound On Ramp Westbound				Weir Canyon Road Northbound				SR-91 Eastbound Ramps Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	1	
+30 mins.	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	3	3	0	0	0	0	0	1	1	2	1	0	0	1	
% App. Total	0	0	100		0	0	0		0	50	50		100	0	0		
PHF	.000	.000	.750	.750	.000	.000	.000	.000	.000	.250	.250	.500	.250	.000	.000	.250	

Location: Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 EB Ramps



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Weir Canyon Road	East Leg SR-91 EB Ramps	South Leg Weir Canyon Road	West Leg SR-91 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Weir Canyon Road	East Leg SR-91 EB Ramps	South Leg Weir Canyon Road	West Leg SR-91 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: Anaheim
 N/S: Weir Canyon Road
 E/W: SR-91 EB Ramps



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Weir Canyon Road			Westbound SR-91 EB Ramps			Northbound Weir Canyon Road			Eastbound SR-91 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Weir Canyon Road			Westbound SR-91 EB Ramps			Northbound Weir Canyon Road			Eastbound SR-91 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	3	0	0	0	0	3

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

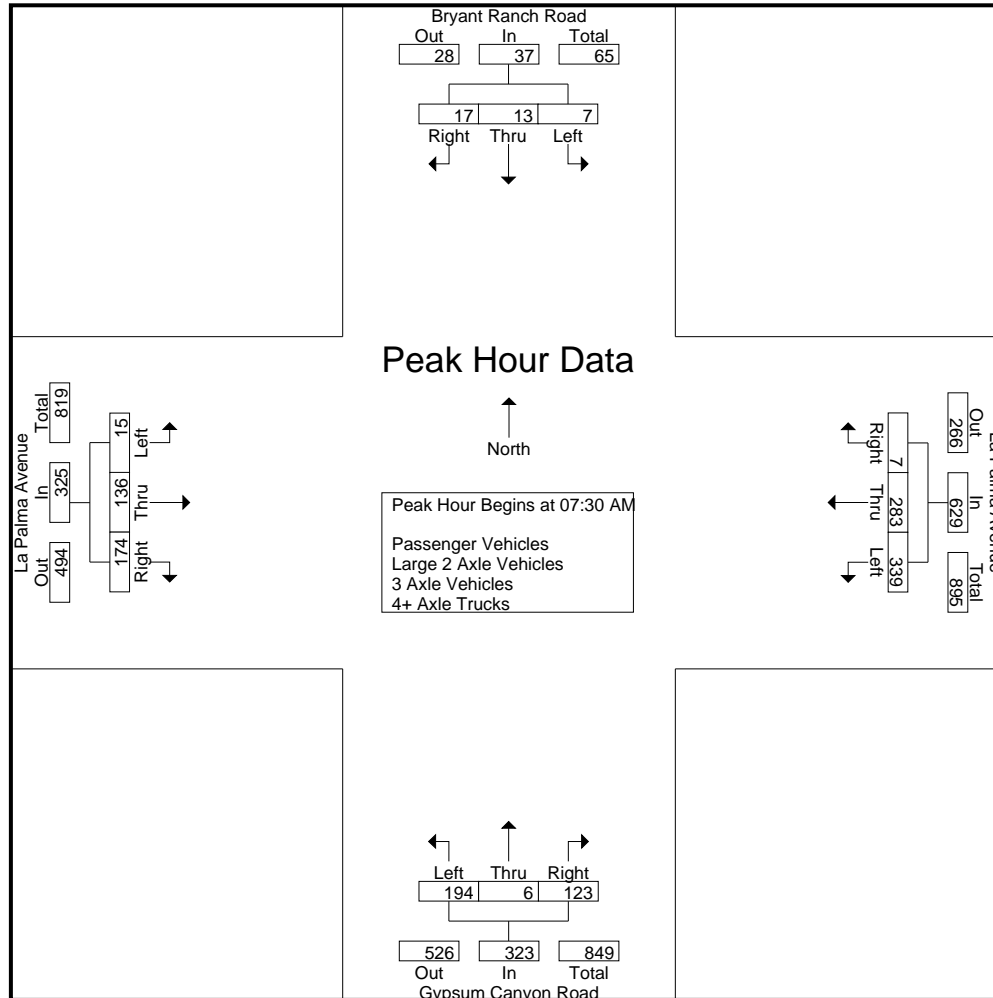
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	6	3	3	9	61	40	0	0	101	35	0	16	12	51	1	6	40	20	47	35	208	243
07:15 AM	2	4	5	5	11	94	73	0	0	167	34	1	24	17	59	2	15	39	15	56	37	293	330
07:30 AM	5	3	7	7	15	90	103	2	0	195	52	3	39	23	94	2	24	53	33	79	63	383	446
07:45 AM	1	3	1	1	5	101	45	3	0	149	41	0	25	13	66	8	47	49	21	104	35	324	359
Total	8	16	16	16	40	346	261	5	0	612	162	4	104	65	270	13	92	181	89	286	170	1208	1378
08:00 AM	1	1	4	3	6	84	54	0	0	138	51	2	30	19	83	3	40	36	18	79	40	306	346
08:15 AM	0	6	5	3	11	64	81	2	0	147	50	1	29	19	80	2	25	36	15	63	37	301	338
08:30 AM	0	4	0	0	4	65	63	2	1	130	41	3	27	11	71	4	41	47	18	92	30	297	327
08:45 AM	1	4	1	0	6	51	33	1	0	85	41	1	29	19	71	3	50	31	15	84	34	246	280
Total	2	15	10	6	27	264	231	5	1	500	183	7	115	68	305	12	156	150	66	318	141	1150	1291
Grand Total	10	31	26	22	67	610	492	10	1	1112	345	11	219	133	575	25	248	331	155	604	311	2358	2669
Apprch %	14.9	46.3	38.8			54.9	44.2	0.9			60	1.9	38.1			4.1	41.1	54.8					
Total %	0.4	1.3	1.1		2.8	25.9	20.9	0.4		47.2	14.6	0.5	9.3		24.4	1.1	10.5	14		25.6	11.7	88.3	
Passenger Vehicles	10	31	26		89	608	480	10		1099	308	9	209		653	24	234	300		700	0	0	2541
% Passenger Vehicles	100	100	100	100	100	99.7	97.6	100	100	98.7	89.3	81.8	95.4	95.5	92.2	96	94.4	90.6	91.6	92.2	0	0	95.2
Large 2 Axle Vehicles	0	0	0		0	2	12	0		14	27	2	10		45	1	14	8		25	0	0	84
% Large 2 Axle Vehicles	0	0	0	0	0	0.3	2.4	0	0	1.3	7.8	18.2	4.6	4.5	6.4	4	5.6	2.4	1.3	3.3	0	0	3.1
3 Axle Vehicles	0	0	0		0	0	0	0		0	3	0	0		3	0	0	18		27	0	0	30
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0.9	0	0	0	0.4	0	0	5.4	5.8	3.6	0	0	1.1
4+ Axle Trucks	0	0	0		0	0	0	0		0	7	0	0		7	0	0	5		7	0	0	14
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1.5	1.3	0.9	0	0	0.5

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	5	3	7	15	90	103	2	195	52	3	39	94	2	24	53	79	383
07:45 AM	1	3	1	5	101	45	3	149	41	0	25	66	8	47	49	104	324
08:00 AM	1	1	4	6	84	54	0	138	51	2	30	83	3	40	36	79	306
08:15 AM	0	6	5	11	64	81	2	147	50	1	29	80	2	25	36	63	301
Total Volume	7	13	17	37	339	283	7	629	194	6	123	323	15	136	174	325	1314
% App. Total	18.9	35.1	45.9		53.9	45	1.1		60.1	1.9	38.1		4.6	41.8	53.5		
PHF	.350	.542	.607	.617	.839	.687	.583	.806	.933	.500	.788	.859	.469	.723	.821	.781	.858

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:15 AM				07:30 AM				07:45 AM				
+0 mins.	0	6	3	9	94	73	0	167	52	3	39	94	8	47	49	104	
+15 mins.	2	4	5	11	90	103	2	195	41	0	25	66	3	40	36	79	
+30 mins.	5	3	7	15	101	45	3	149	51	2	30	83	2	25	36	63	
+45 mins.	1	3	1	5	84	54	0	138	50	1	29	80	4	41	47	92	
Total Volume	8	16	16	40	369	275	5	649	194	6	123	323	17	153	168	338	
% App. Total	20	40	40		56.9	42.4	0.8		60.1	1.9	38.1		5	45.3	49.7		
PHF	.400	.667	.571	.667	.913	.667	.417	.832	.933	.500	.788	.859	.531	.814	.857	.813	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

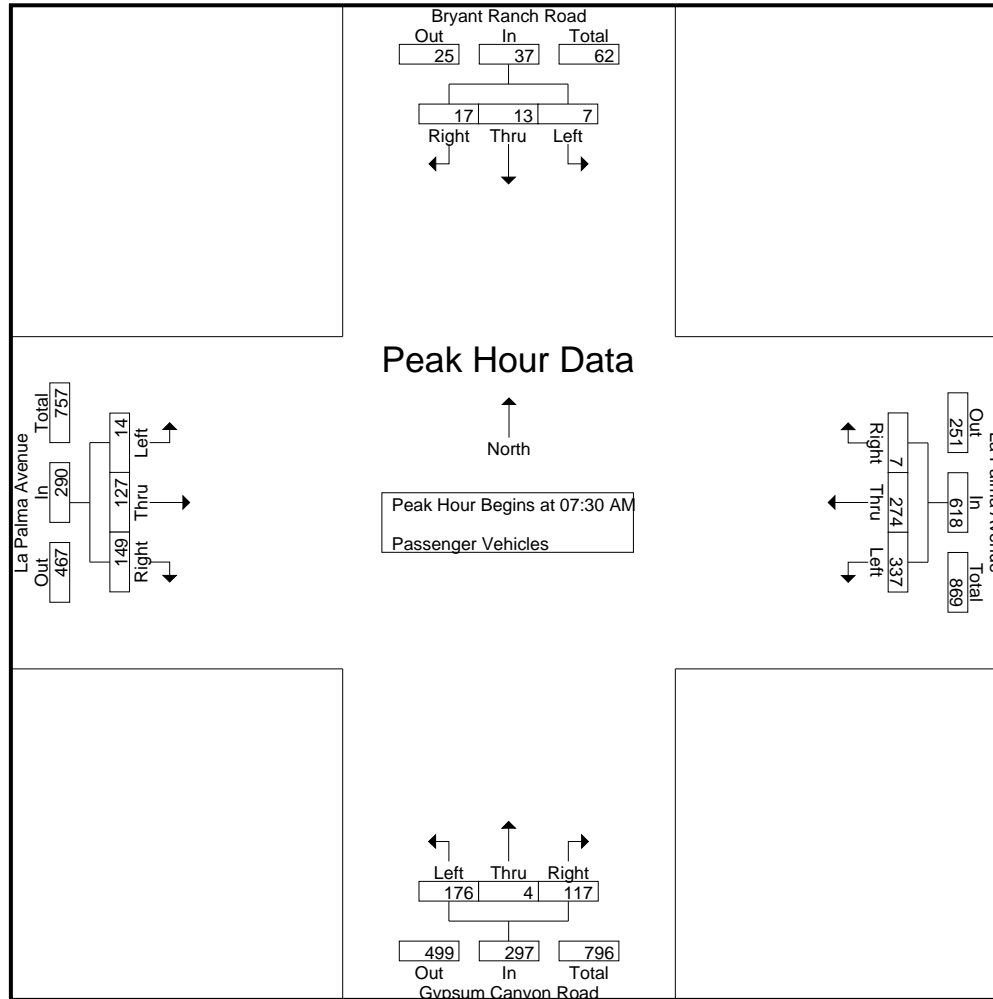
Groups Printed- Passenger Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	6	3	3	9	61	38	0	0	99	29	0	15	11	44	1	5	40	20	46	34	198	232
07:15 AM	2	4	5	5	11	94	73	0	0	167	28	1	24	17	53	2	14	39	15	55	37	286	323
07:30 AM	5	3	7	7	15	89	101	2	0	192	46	2	38	22	86	1	22	39	26	62	55	355	410
07:45 AM	1	3	1	1	5	101	43	3	0	147	39	0	24	13	63	8	43	45	21	96	35	311	346
Total	8	16	16	16	40	345	255	5	0	605	142	3	101	63	246	12	84	163	82	259	161	1150	1311
08:00 AM	1	1	4	3	6	83	53	0	0	136	44	1	26	16	71	3	38	32	14	73	33	286	319
08:15 AM	0	6	5	3	11	64	77	2	0	143	47	1	29	19	77	2	24	33	13	59	35	290	325
08:30 AM	0	4	0	0	4	65	63	2	1	130	37	3	26	10	66	4	38	43	18	85	29	285	314
08:45 AM	1	4	1	0	6	51	32	1	0	84	38	1	27	19	66	3	50	29	15	82	34	238	272
Total	2	15	10	6	27	263	225	5	1	493	166	6	108	64	280	12	150	137	60	299	131	1099	1230
Grand Total	10	31	26	22	67	608	480	10	1	1098	308	9	209	127	526	24	234	300	142	558	292	2249	2541
Apprch %	14.9	46.3	38.8			55.4	43.7	0.9			58.6	1.7	39.7			4.3	41.9	53.8					
Total %	0.4	1.4	1.2		3	27	21.3	0.4		48.8	13.7	0.4	9.3		23.4	1.1	10.4	13.3		24.8	11.5	88.5	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	3	7	15	89	101	2	192	46	2	38	86	1	22	39	62	355
07:45 AM	1	3	1	5	101	43	3	147	39	0	24	63	8	43	45	96	311
08:00 AM	1	1	4	6	83	53	0	136	44	1	26	71	3	38	32	73	286
08:15 AM	0	6	5	11	64	77	2	143	47	1	29	77	2	24	33	59	290
Total Volume	7	13	17	37	337	274	7	618	176	4	117	297	14	127	149	290	1242
% App. Total	18.9	35.1	45.9		54.5	44.3	1.1		59.3	1.3	39.4		4.8	43.8	51.4		
PHF	.350	.542	.607	.617	.834	.678	.583	.805	.936	.500	.770	.863	.438	.738	.828	.755	.875

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	5	3	7	15	89	101	2	192	46	2	38	86	1	22	39	62	
+15 mins.	1	3	1	5	101	43	3	147	39	0	24	63	8	43	45	96	
+30 mins.	1	1	4	6	83	53	0	136	44	1	26	71	3	38	32	73	
+45 mins.	0	6	5	11	64	77	2	143	47	1	29	77	2	24	33	59	
Total Volume	7	13	17	37	337	274	7	618	176	4	117	297	14	127	149	290	
% App. Total	18.9	35.1	45.9		54.5	44.3	1.1		59.3	1.3	39.4		4.8	43.8	51.4		
PHF	.350	.542	.607	.617	.834	.678	.583	.805	.936	.500	.770	.863	.438	.738	.828	.755	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

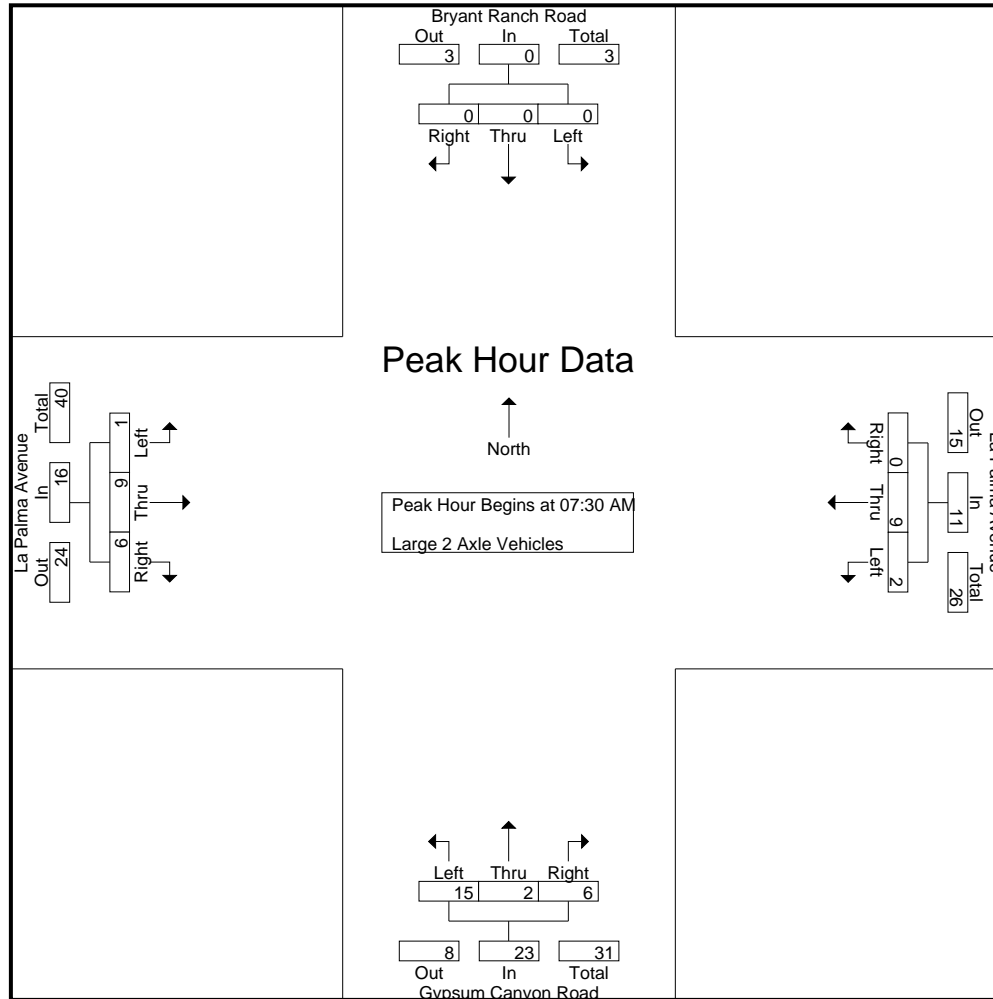
Groups Printed- Large 2 Axle Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	2	0	0	2	5	0	1	1	6	0	1	0	0	1	1	9	10
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	0	3	3
07:30 AM	0	0	0	0	0	1	2	0	0	3	5	1	1	1	7	1	2	3	1	6	2	16	18
07:45 AM	0	0	0	0	0	0	2	0	0	2	2	0	1	0	3	0	4	2	0	6	0	11	11
Total	0	0	0	0	0	1	6	0	0	7	14	1	3	2	18	1	8	5	1	14	3	39	42
08:00 AM	0	0	0	0	0	1	1	0	0	2	6	1	4	3	11	0	2	1	1	3	4	16	20
08:15 AM	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	1	0	0	1	0	7	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	1	1	4	0	3	1	0	4	1	8	9
08:45 AM	0	0	0	0	0	0	1	0	0	1	2	0	2	0	4	0	0	1	0	1	0	6	6
Total	0	0	0	0	0	1	6	0	0	7	13	1	7	4	21	0	6	3	1	9	5	37	42
Grand Total	0	0	0	0	0	2	12	0	0	14	27	2	10	6	39	1	14	8	2	23	8	76	84
Apprch %	0	0	0			14.3	85.7	0			69.2	5.1	25.6			4.3	60.9	34.8					
Total %	0	0	0			2.6	15.8	0		18.4	35.5	2.6	13.2		51.3	1.3	18.4	10.5		30.3	9.5	90.5	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	1	2	0	3	5	1	1	7	1	2	3	6	16
07:45 AM	0	0	0	0	0	2	0	2	2	0	1	3	0	4	2	6	11
08:00 AM	0	0	0	0	1	1	0	2	6	1	4	11	0	2	1	3	16
08:15 AM	0	0	0	0	0	4	0	4	2	0	0	2	0	1	0	1	7
Total Volume	0	0	0	0	2	9	0	11	15	2	6	23	1	9	6	16	50
% App. Total	0	0	0		18.2	81.8	0		65.2	8.7	26.1		6.2	56.2	37.5		
PHF	.000	.000	.000	.000	.500	.563	.000	.688	.625	.500	.375	.523	.250	.563	.500	.667	.781

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	1	2	0	3	5	1	1	7	1	2	3	6	
+15 mins.	0	0	0	0	0	2	0	2	2	0	1	3	0	4	2	6	
+30 mins.	0	0	0	0	1	1	0	2	6	1	4	11	0	2	1	3	
+45 mins.	0	0	0	0	0	4	0	4	2	0	0	2	0	1	0	1	
Total Volume	0	0	0	0	2	9	0	11	15	2	6	23	1	9	6	16	
% App. Total	0	0	0	0	18.2	81.8	0		65.2	8.7	26.1		6.2	56.2	37.5		
PHF	.000	.000	.000	.000	.500	.563	.000	.688	.625	.500	.375	.523	.250	.563	.500	.667	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

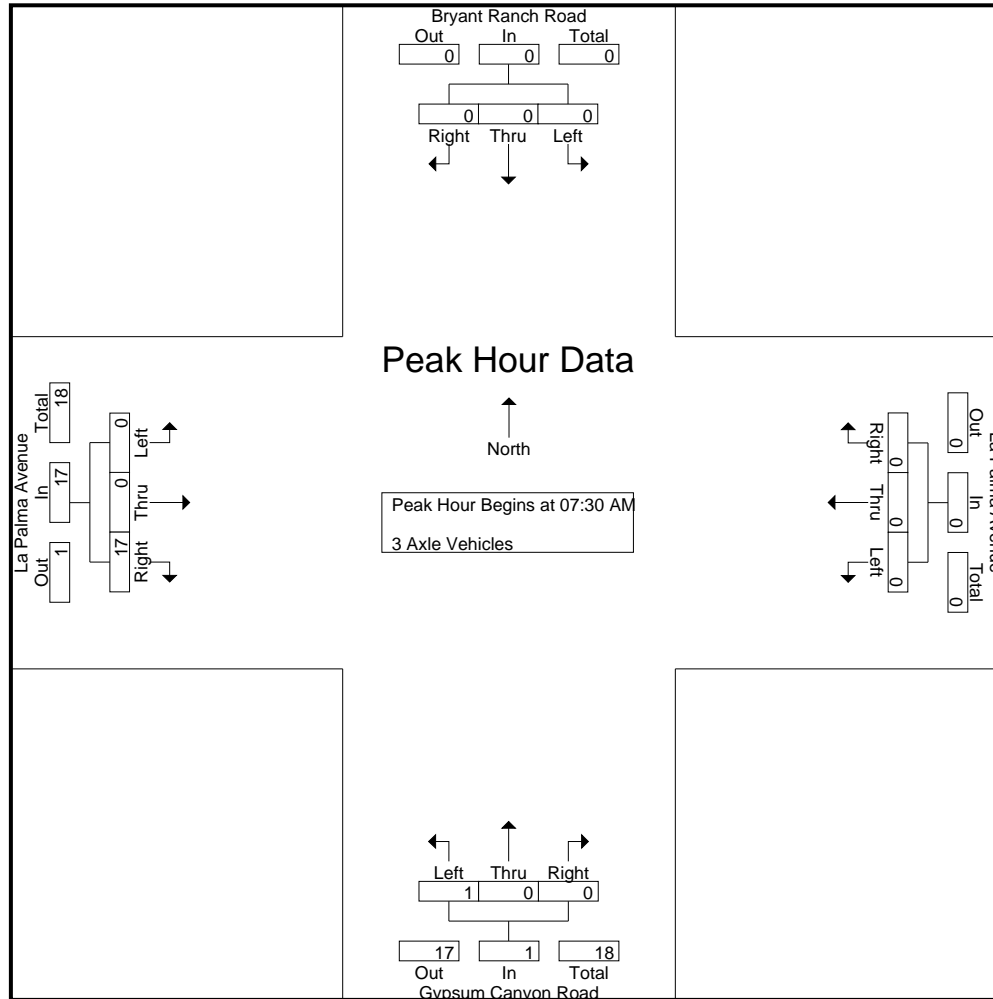
Groups Printed- 3 Axle Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	10	5	10	5	11	16					
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2					
Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	12	5	12	5	15	20					
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	4					
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	3	2	3	5					
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1					
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	6	4	6	10					
Grand Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	18	9	18	9	21	30					
Apprch %	0	0	0			0	0	0			100	0	0			0	0	100										
Total %	0	0	0			0	0	0			14.3	0	0		14.3	0	0	85.7		85.7	30	70						

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	10	10	11
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	0	17	17	18
% App. Total	0	0	0		0	0	0		100	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.425	.425	.409

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	10	10	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	0	17	17	
% App. Total	0	0	0	0	0	0	0	0	100	0	0	100	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.425	.425	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

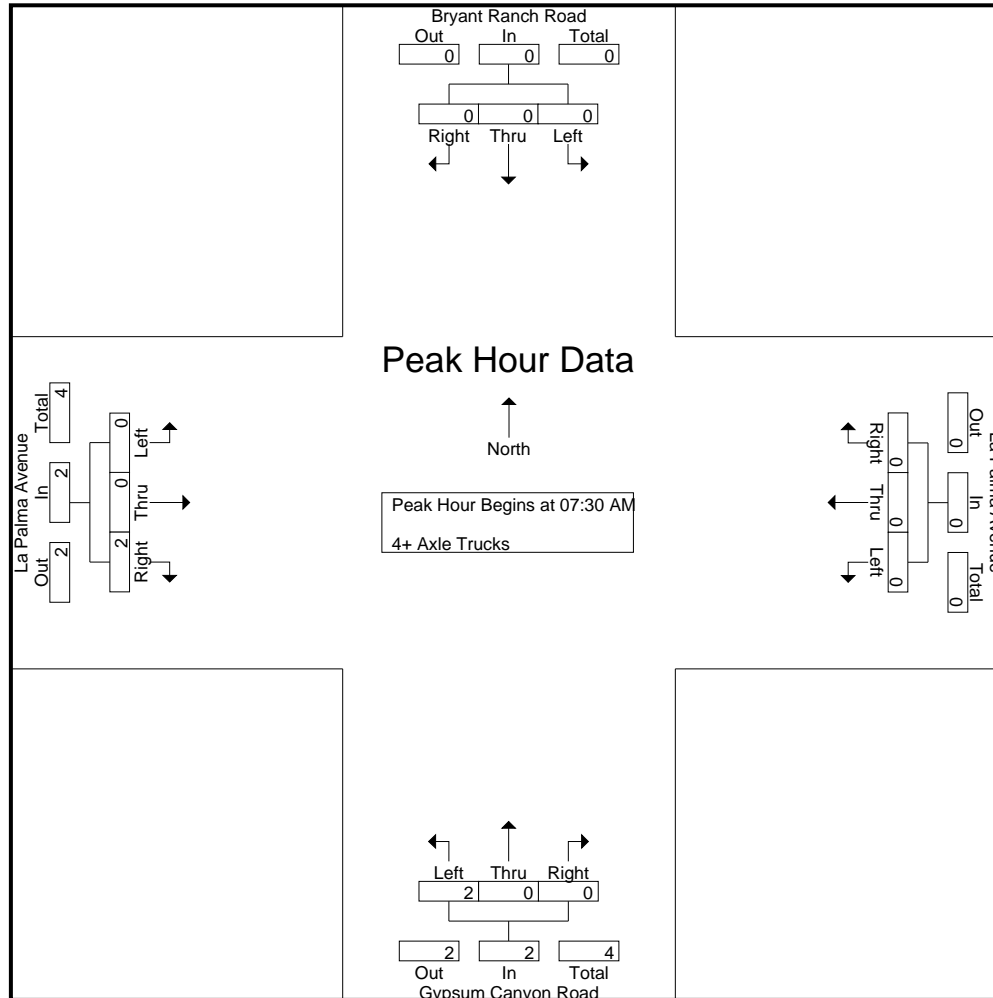
Groups Printed- 4+ Axle Trucks

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total				
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total							
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	1	1	1	1	1	1	1	1	4	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	2	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	2	0	2	2	0	3	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1	0	1	1	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	4	1	4	4	0	4	4	1	8	9
Grand Total	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	5	2	5	5	0	5	5	2	12	14
Apprch %	0	0	0			0	0	0			100	0	0			0	0	100									
Total %	0	0	0			0	0	0			58.3	0	0		58.3	0	0	41.7		41.7	41.7				14.3	85.7	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
08:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2	4
% App. Total	0	0	0		0	0	0		100	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.000	.000	.500	.500	.500

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P AM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2	
% App. Total	0	0	0	0	0	0	0	0	100	0	0	100	0	0	100	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.000	.000	.500	.500	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

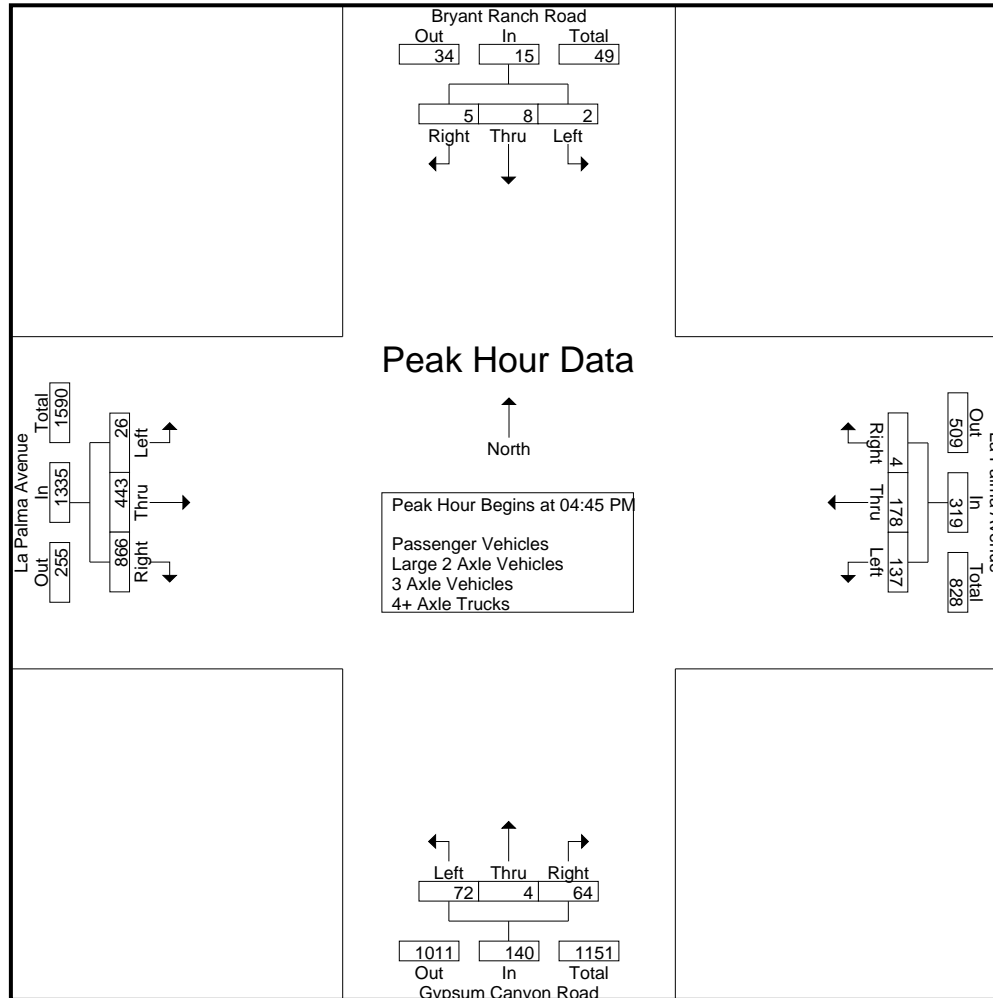
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	7	7	7	14	57	0	0	71	27	2	17	12	46	7	116	190	43	313	62	437	499
04:15 PM	0	3	4	4	7	35	55	0	0	90	31	0	9	7	40	1	97	158	33	256	44	393	437
04:30 PM	0	3	0	0	3	33	51	0	0	84	35	1	17	13	53	11	104	153	28	268	41	408	449
04:45 PM	0	3	1	1	4	43	37	0	0	80	28	2	15	13	45	8	101	201	70	310	84	439	523
Total	0	9	12	12	21	125	200	0	0	325	121	5	58	45	184	27	418	702	174	1147	231	1677	1908
05:00 PM	0	2	2	2	4	34	60	3	0	97	9	2	15	13	26	8	121	239	42	368	57	495	552
05:15 PM	2	2	1	1	5	28	39	0	0	67	16	0	12	8	28	5	107	224	32	336	41	436	477
05:30 PM	0	1	1	1	2	32	42	1	0	75	19	0	22	18	41	5	114	202	38	321	57	439	496
05:45 PM	1	2	6	4	9	31	46	1	0	78	22	1	17	15	40	10	97	165	50	272	69	399	468
Total	3	7	10	8	20	125	187	5	0	317	66	3	66	54	135	28	439	830	162	1297	224	1769	1993
Grand Total	3	16	22	20	41	250	387	5	0	642	187	8	124	99	319	55	857	1532	336	2444	455	3446	3901
Apprch %	7.3	39	53.7			38.9	60.3	0.8			58.6	2.5	38.9			2.3	35.1	62.7					
Total %	0.1	0.5	0.6		1.2	7.3	11.2	0.1		18.6	5.4	0.2	3.6		9.3	1.6	24.9	44.5		70.9	11.7	88.3	
Passenger Vehicles	3	16	22		61	246	382	5		633	183	8	124		414	55	853	1493		2726	0	0	3834
% Passenger Vehicles	100	100	100	100	100	98.4	98.7	100	0	98.6	97.9	100	100	100	99	100	99.5	97.5	96.7	98.1	0	0	98.3
Large 2 Axle Vehicles	0	0	0		0	3	5	0		8	4	0	0		4	0	4	37		52	0	0	64
% Large 2 Axle Vehicles	0	0	0	0	0	1.2	1.3	0	0	1.2	2.1	0	0	0	1	0	0.5	2.4	3.3	1.9	0	0	1.6
3 Axle Vehicles	0	0	0		0	1	0	0		1	0	0	0		0	0	0	1		1	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0	0	0.2	0	0	0	0	0	0	0	0.1	0	0	0	0	0.1
4+ Axle Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1		1	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1	Peak Hour for Entire Intersection Begins at 04:45 PM																
04:45 PM	0	3	1	4	43	37	0	80	28	2	15	45	8	101	201	310	439
05:00 PM	0	2	2	4	34	60	3	97	9	2	15	26	8	121	239	368	495
05:15 PM	2	2	1	5	28	39	0	67	16	0	12	28	5	107	224	336	436
05:30 PM	0	1	1	2	32	42	1	75	19	0	22	41	5	114	202	321	439
Total Volume	2	8	5	15	137	178	4	319	72	4	64	140	26	443	866	1335	1809
% App. Total	13.3	53.3	33.3		42.9	55.8	1.3		51.4	2.9	45.7		1.9	33.2	64.9		
PHF	.250	.667	.625	.750	.797	.742	.333	.822	.643	.500	.727	.778	.813	.915	.906	.907	.914

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:15 PM				04:00 PM				04:45 PM				
+0 mins.	0	0	7	7	35	55	0	90	27	2	17	46	8	101	201	310	
+15 mins.	0	3	4	7	33	51	0	84	31	0	9	40	8	121	239	368	
+30 mins.	0	3	0	3	43	37	0	80	35	1	17	53	5	107	224	336	
+45 mins.	0	3	1	4	34	60	3	97	28	2	15	45	5	114	202	321	
Total Volume	0	9	12	21	145	203	3	351	121	5	58	184	26	443	866	1335	
% App. Total	0	42.9	57.1		41.3	57.8	0.9		65.8	2.7	31.5		1.9	33.2	64.9		
PHF	.000	.750	.429	.750	.843	.846	.250	.905	.864	.625	.853	.868	.813	.915	.906	.907	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

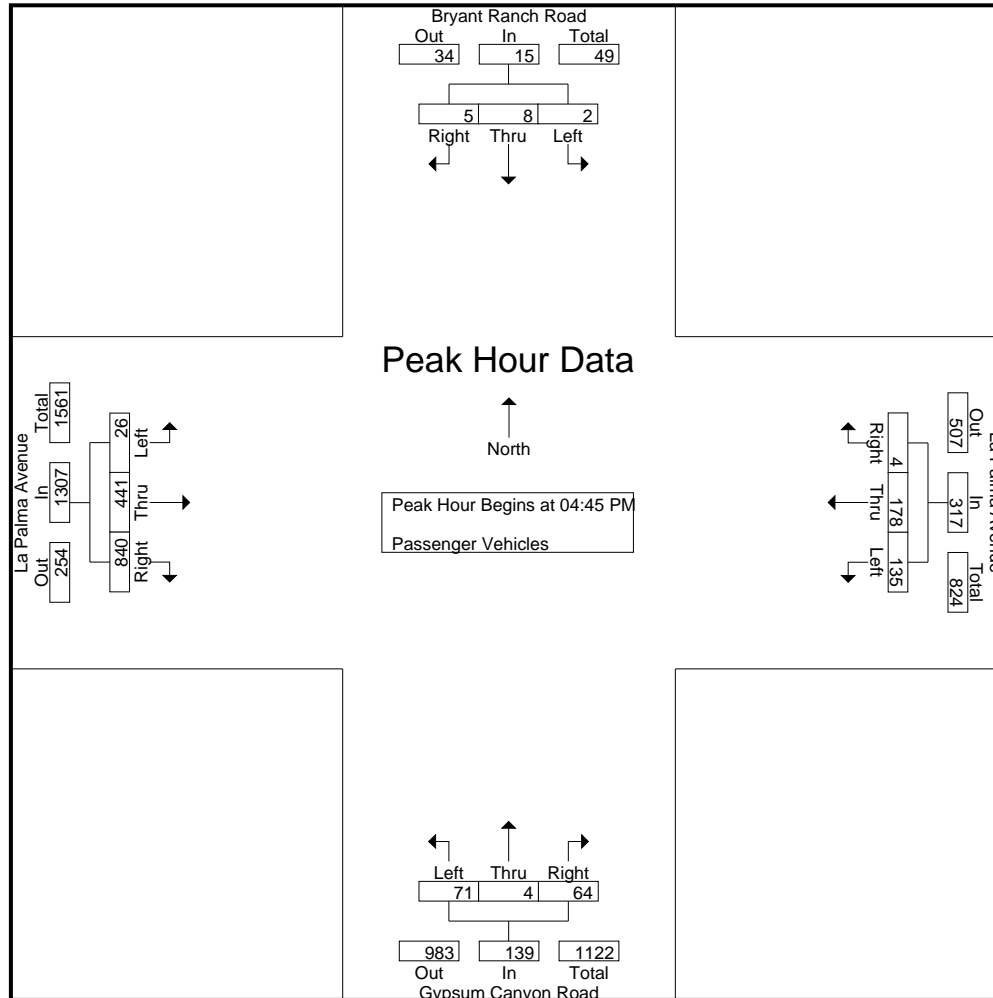
Groups Printed- Passenger Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	7	7	7	12	52	0	0	64	26	2	17	12	45	7	114	185	39	306	58	422	480
04:15 PM	0	3	4	4	7	35	55	0	0	90	30	0	9	7	39	1	97	154	33	252	44	388	432
04:30 PM	0	3	0	0	3	33	51	0	0	84	35	1	17	13	53	11	104	150	28	265	41	405	446
04:45 PM	0	3	1	1	4	41	37	0	0	78	27	2	15	13	44	8	101	197	69	306	83	432	515
Total	0	9	12	12	21	121	195	0	0	316	118	5	58	45	181	27	416	686	169	1129	226	1647	1873
05:00 PM	0	2	2	2	4	34	60	3	0	97	9	2	15	13	26	8	120	233	40	361	55	488	543
05:15 PM	2	2	1	1	5	28	39	0	0	67	16	0	12	8	28	5	106	218	31	329	40	429	469
05:30 PM	0	1	1	1	2	32	42	1	0	75	19	0	22	18	41	5	114	192	36	311	55	429	484
05:45 PM	1	2	6	4	9	31	46	1	0	78	21	1	17	15	39	10	97	164	49	271	68	397	465
Total	3	7	10	8	20	125	187	5	0	317	65	3	66	54	134	28	437	807	156	1272	218	1743	1961
Grand Total	3	16	22	20	41	246	382	5	0	633	183	8	124	99	315	55	853	1493	325	2401	444	3390	3834
Apprch %	7.3	39	53.7			38.9	60.3	0.8			58.1	2.5	39.4			2.3	35.5	62.2					
Total %	0.1	0.5	0.6		1.2	7.3	11.3	0.1		18.7	5.4	0.2	3.7		9.3	1.6	25.2	44		70.8	11.6	88.4	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	3	1	4	41	37	0	78	27	2	15	44	8	101	197	306	432
05:00 PM	0	2	2	4	34	60	3	97	9	2	15	26	8	120	233	361	488
05:15 PM	2	2	1	5	28	39	0	67	16	0	12	28	5	106	218	329	429
05:30 PM	0	1	1	2	32	42	1	75	19	0	22	41	5	114	192	311	429
Total Volume	2	8	5	15	135	178	4	317	71	4	64	139	26	441	840	1307	1778
% App. Total	13.3	53.3	33.3		42.6	56.2	1.3		51.1	2.9	46		2	33.7	64.3		
PHF	.250	.667	.625	.750	.823	.742	.333	.817	.657	.500	.727	.790	.813	.919	.901	.905	.911

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	3	1	4	41	37	0	78	27	2	15	44	8	101	197	306	
+15 mins.	0	2	2	4	34	60	3	97	9	2	15	26	8	120	233	361	
+30 mins.	2	2	1	5	28	39	0	67	16	0	12	28	5	106	218	329	
+45 mins.	0	1	1	2	32	42	1	75	19	0	22	41	5	114	192	311	
Total Volume	2	8	5	15	135	178	4	317	71	4	64	139	26	441	840	1307	
% App. Total	13.3	53.3	33.3		42.6	56.2	1.3		51.1	2.9	46		2	33.7	64.3		
PHF	.250	.667	.625	.750	.823	.742	.333	.817	.657	.500	.727	.790	.813	.919	.901	.905	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

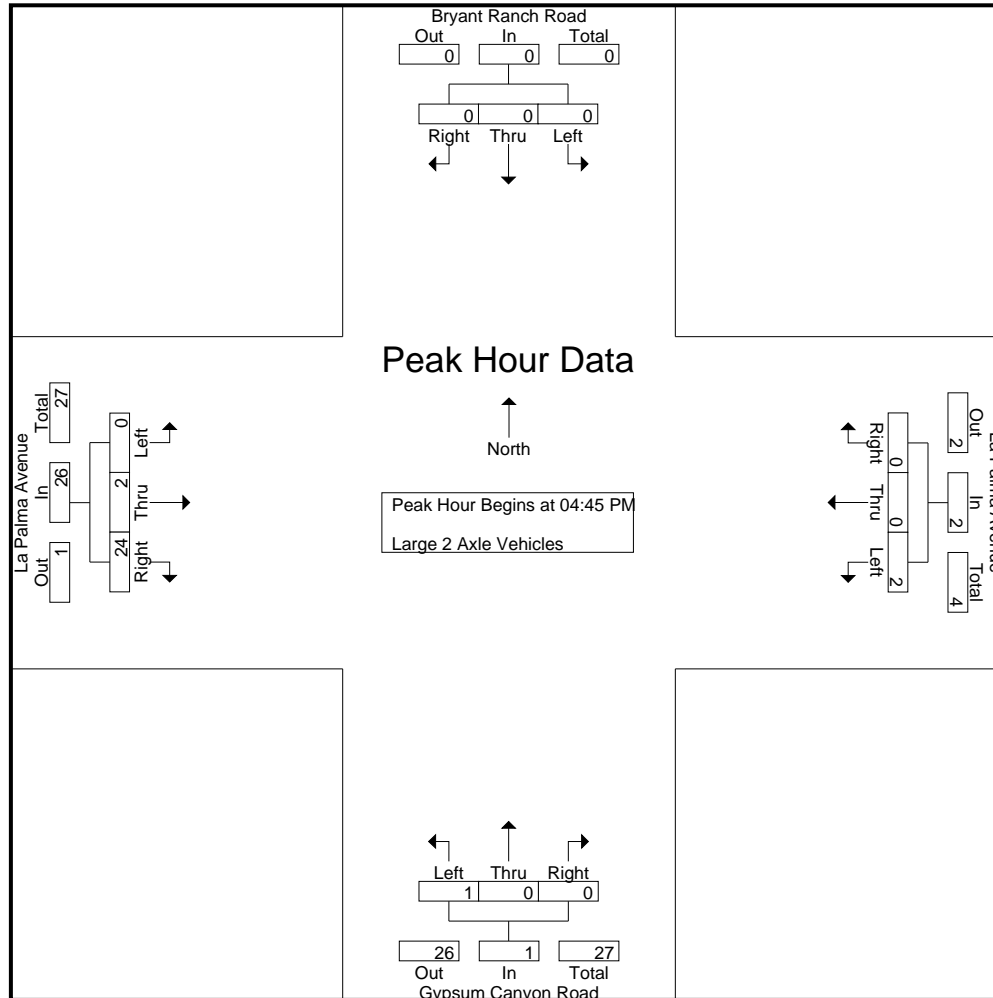
Groups Printed- Large 2 Axle Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	0	2	5	4	7	4	14	18
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4	0	4	0	5	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	3	3
04:45 PM	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	0	0	4	1	4	1	7	8
Total	0	0	0	0	0	3	5	0	0	8	3	0	0	0	3	0	2	16	5	18	5	29	34
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	2	6	2	6	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	1	7	1	7	8
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2	9	2	9	11
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	2	3
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	21	6	23	6	24	30
Grand Total	0	0	0	0	0	3	5	0	0	8	4	0	0	0	4	0	4	37	11	41	11	53	64
Apprch %	0	0	0			37.5	62.5	0			100	0	0			0	9.8	90.2					
Total %	0	0	0			5.7	9.4	0		15.1	7.5	0	0		7.5	0	7.5	69.8		77.4	17.2	82.8	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	2	0	0	2	1	0	0	1	0	0	4	4	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	6	6
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7	7
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	9
Total Volume	0	0	0	0	2	0	0	2	1	0	0	1	0	2	24	26	29
% App. Total	0	0	0		100	0	0		100	0	0		0	7.7	92.3		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.000	.250	.000	.500	.667	.722	.806

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	2	0	0	2	1	0	0	1	0	0	4	4	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	6	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	
Total Volume	0	0	0	0	2	0	0	2	1	0	0	1	0	2	24	26	
% App. Total	0	0	0	0	100	0	0	100	100	0	0	100	0	7.7	92.3		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.000	.250	.000	.500	.667	.722	

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

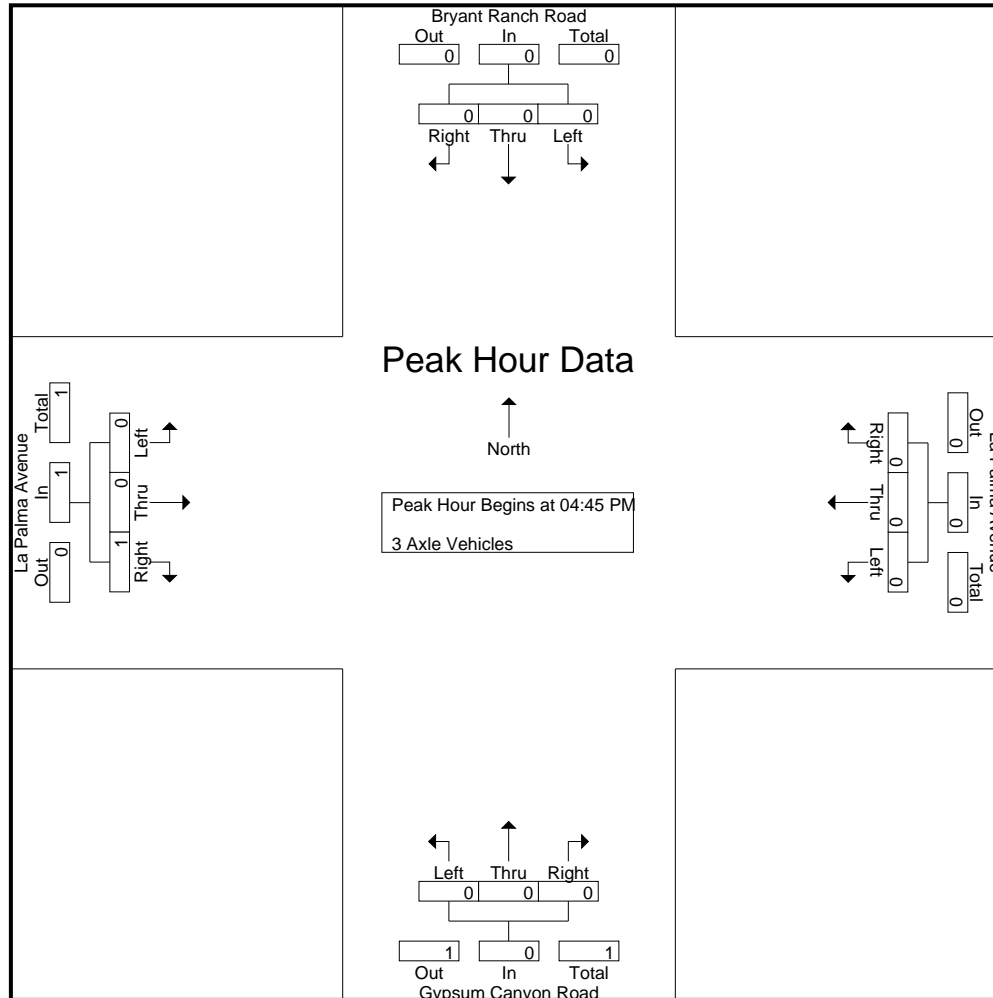
Groups Printed- 3 Axle Vehicles

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1
Grand Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	0	2	2
Apprch %	0	0	0			100	0	0			0	0	0			0	0	100										
Total %	0	0	0			50	0	0		50	0	0	0		0	0	0	50		50	0	0	100		100	0	100	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 1

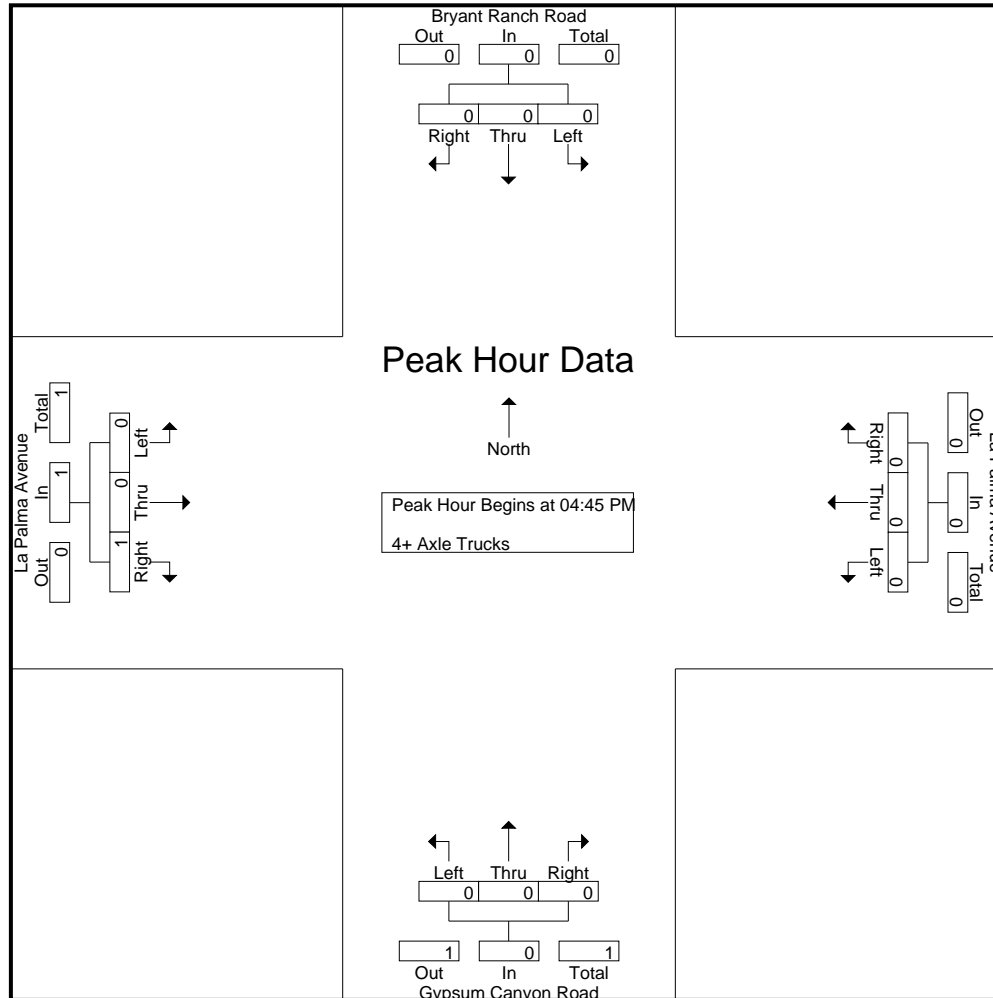
Groups Printed- 4+ Axle Trucks

Start Time	Bryant Ranch Road Southbound					La Palma Avenue Westbound					Gypsum Canyon Road Northbound					La Palma Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1
Apprch %	0	0	0			0	0	0			0	0	0			0	0	100								
Total %	0	0	0		0	0	0	0		0	0	0	0		0	0	0	100		100	0	0	100	0	100	

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 2



City of Yorba Linda
 N/S: Bryant Ranch Rd/Gypsum Canyon Rd
 E/W: La Palma Avenue
 Weather: Clear

File Name : 19_YLA_Gyp_La P PM
 Site Code : 05122223
 Start Date : 3/15/2022
 Page No : 3

Start Time	Bryant Ranch Road Southbound				La Palma Avenue Westbound				Gypsum Canyon Road Northbound				La Palma Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

Location: Yorba Linda
 N/S: Gypsum Canyon Rd
 E/W: La Palma Avenue



Date: 3/15/2022
 Day: Tuesday

PEDESTRIANS

	North Leg Bryant Ranch Road	East Leg La Palma Avenue	South Leg Gypsum Canyon Rd	West Leg La Palma Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	1	0	0	2
7:45 AM	2	0	0	0	2
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	2	0	0	0	2
TOTAL VOLUMES:	6	1	1	0	8

	North Leg Bryant Ranch Road	East Leg La Palma Avenue	South Leg Gypsum Canyon Rd	West Leg La Palma Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	3	2	0	5
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	2	0	0	0	2
5:30 PM	0	0	0	0	0
5:45 PM	0	1	1	0	2
TOTAL VOLUMES:	2	4	3	0	9

Location: Yorba Linda
 N/S: Gypsum Canyon Rd
 E/W: La Palma Avenue



Date: 3/15/2022
 Day: Tuesday

BICYCLES

	Southbound Bryant Ranch Road			Westbound La Palma Avenue			Northbound Gypsum Canyon Rd			Eastbound La Palma Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	2
8:15 AM	0	0	0	1	1	0	0	0	0	0	0	1	3
8:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
TOTAL VOLUMES:	0	0	1	2	1	0	2	0	0	1	2	2	11

	Southbound Bryant Ranch Road			Westbound La Palma Avenue			Northbound Gypsum Canyon Rd			Eastbound La Palma Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0	0	0	1	1	3
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	6	7
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	2
5:15 PM	0	0	0	0	0	0	4	0	0	0	0	6	10
5:30 PM	0	0	0	0	0	0	2	0	0	0	1	3	6
5:45 PM	0	0	1	0	0	0	6	0	0	1	0	2	10
TOTAL VOLUMES:	0	0	1	0	0	0	16	0	0	1	2	19	39

**APPENDIX 4.2: EXISTING (2022) CONDITIONS INTERSECTION
OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors across four approaches.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Prospect Av. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.869
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 87 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	2	1	0	2

Volume Module:

Base Vol:	40	95	8	65	82	127	147	1373	24	42	1481	911
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	95	8	65	82	127	147	1373	24	42	1481	911
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	95	8	65	82	127	147	1373	24	42	1481	911
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	95	8	65	82	127	147	1373	24	42	1481	911
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	95	8	65	82	127	147	1373	24	42	1481	911

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.39	0.61	1.00	2.95	0.05	1.00	2.00	1.00
Final Sat.:	1700	1568	132	1700	667	1033	1700	5012	88	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.02	0.06	0.06	0.04	0.12	0.12	0.09	0.27	0.27	0.02	0.44	0.54
Crit Moves:	****			****			****			****		

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.462
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.797
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	318	926	198	336	1018	37	26	326	316	200	525	438
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	318	926	198	336	1018	37	26	326	316	200	525	438
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	318	926	198	336	1018	37	26	326	316	200	525	438
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	926	198	336	1018	37	26	326	316	200	525	438
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	318	926	198	336	1018	37	26	326	316	200	525	438
OvlAdjVol:												102

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.47	0.53	2.00	2.89	0.11	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4202	898	3400	4921	179	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.19	0.22	0.22	0.10	0.21	0.21	0.02	0.10	0.19	0.12	0.10	0.13	
OvlAdjV/S:												0.03	
Crit Moves:	****						****						****

Intersection	
Intersection Delay, s/veh	93.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	
Traffic Vol, veh/h	139	113	73	88	127	72	52	295	56	48	582	101
Future Vol, veh/h	139	113	73	88	127	72	52	295	56	48	582	101
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	138	89	107	155	88	63	360	68	59	710	123
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	33.5	36.4	88.6	145
HCM LOS	D	E	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	61%	0%	64%	0%	100%	66%
Vol Right, %	0%	0%	100%	0%	39%	0%	36%	0%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	295	56	139	186	88	199	48	388	295
LT Vol	52	0	0	139	0	88	0	48	0	0
Through Vol	0	295	0	0	113	0	127	0	388	194
RT Vol	0	0	56	0	73	0	72	0	0	101
Lane Flow Rate	63	360	68	170	227	107	243	59	473	360
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.202	1.097	0.195	0.554	0.693	0.355	0.753	0.176	1.356	1.007
Departure Headway (Hd)	12.112	11.585	10.846	12.313	11.512	12.46	11.681	11.287	10.759	10.506
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	298	317	333	295	315	291	311	320	341	349
Service Time	9.812	9.285	8.546	10.013	9.212	10.16	9.381	8.987	8.459	8.206
HCM Lane V/C Ratio	0.211	1.136	0.204	0.576	0.721	0.368	0.781	0.184	1.387	1.032
HCM Control Delay	17.9	114.8	16.2	29.3	36.6	21.9	42.8	16.4	207.5	83.8
HCM Lane LOS	C	F	C	D	E	C	E	C	F	F
HCM 95th-tile Q	0.7	13.3	0.7	3.1	4.8	1.5	5.7	0.6	22.5	11.5

Intersection

Int Delay, s/veh	10.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	18	0	267	0	0	0	0	435	144	280	465	0
Future Vol, veh/h	18	0	267	0	0	0	0	435	144	280	465	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	411	0	0	0	0	669	222	431	715	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1912	-	358	-	0	0	894	0	0
Stage 1	1577	-	-	-	-	-	-	-	-
Stage 2	335	-	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	60	0	638	0	-	-	755	-	0
Stage 1	155	0	-	0	-	-	-	-	0
Stage 2	697	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 26	0	638	-	-	-	755	-	-
Mov Cap-2 Maneuver	~ 26	0	-	-	-	-	-	-	-
Stage 1	155	0	-	-	-	-	-	-	-
Stage 2	299	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.3	0	6
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	26	638	755	-
HCM Lane V/C Ratio	-	-	1.065	0.644	0.571	-
HCM Control Delay (s)	-	-	\$ 416.1	20.3	15.9	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	3.3	4.7	3.7	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
8: Kellog Dr. & SR 90 WB Ramps

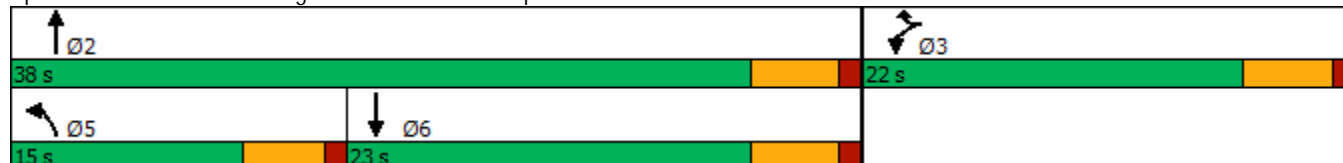


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations	↶	↶	↶	↕	↕
Traffic Volume (vph)	127	286	159	294	618
Future Volume (vph)	127	286	159	294	618
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	14.0	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 52.9
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated

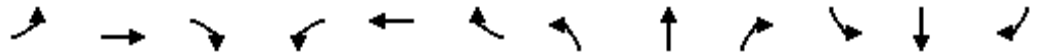
Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↕			↕	↗
Traffic Volume (veh/h)	0	0	0	127	0	286	159	294	0	0	618	73
Future Volume (veh/h)	0	0	0	127	0	286	159	294	0	0	618	73
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				169	0	109	212	392	0	0	824	89
Peak Hour Factor				0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				371	0	330	266	2052	0	0	1062	115
Arrive On Green				0.21	0.00	0.21	0.15	0.58	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3318	348
Grp Volume(v), veh/h				169	0	109	212	392	0	0	454	459
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1796
Q Serve(g_s), s				3.9	0.0	2.7	5.4	2.4	0.0	0.0	10.7	10.7
Cycle Q Clear(g_c), s				3.9	0.0	2.7	5.4	2.4	0.0	0.0	10.7	10.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.19
Lane Grp Cap(c), veh/h				371	0	330	266	2052	0	0	585	592
V/C Ratio(X)				0.46	0.00	0.33	0.80	0.19	0.00	0.00	0.78	0.78
Avail Cap(c_a), veh/h				649	0	577	397	2512	0	0	685	693
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.2	0.0	15.7	19.2	4.7	0.0	0.0	14.1	14.1
Incr Delay (d2), s/veh				0.9	0.0	0.6	3.6	0.0	0.0	0.0	4.8	4.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	0.9	2.2	0.6	0.0	0.0	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.0	0.0	16.3	22.8	4.7	0.0	0.0	18.9	18.8
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					278			604			913	
Approach Delay, s/veh					16.7			11.1			18.9	
Approach LOS					B			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.0			11.6	20.4		14.7				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.4			7.4	12.7		5.9				
Green Ext Time (p_c), s		2.7			0.1	2.6		0.6				

Intersection Summary

HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.391
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	102	0	108	0	0	0	0	527	58	70	785	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	0	108	0	0	0	0	527	58	70	785	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	0	108	0	0	0	0	527	58	70	785	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	0	108	0	0	0	0	527	58	70	785	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	0	108	0	0	0	0	527	58	70	785	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3063	337	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.17	0.17	0.04	0.23	0.00
Crit Moves:	****						****				****	

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.594
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.305
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:

Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module:

Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Lakeview Av. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module table with 12 columns representing capacity analysis metrics.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.350
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	70	0	20	20	1066	0	0	726	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	70	0	20	20	1066	0	0	726	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	70	0	20	20	1066	0	0	726	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	70	0	20	20	1066	0	0	726	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	70	0	20	20	1066	0	0	726	50

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.81	0.19
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4771	329

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.21	0.00	0.00	0.15	0.15
Crit Moves:				****				****				

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Fairmont Bl. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.552
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
Optimal Cycle: 36 Level Of Service: A

Table with columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, Lanes.

Volume Module:

Table with columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module:

Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with columns: Vol/Sat, Crit Moves.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.570
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	1	0	3	0	1	0

Volume Module:

Base Vol:	264	220	54	105	222	286	166	494	146	100	743	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	264	220	54	105	222	286	166	494	146	100	743	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	264	220	54	105	222	286	166	494	146	100	743	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	264	220	54	105	222	286	166	494	146	100	743	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	264	220	54	105	222	286	166	494	146	100	743	93
OvlAdjVol:						0			14			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.61	0.39	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.67	0.33
Final Sat.:	3400	2730	670	1700	1700	3400	1700	5100	1700	1700	4533	567

Capacity Analysis Module:

Vol/Sat:	0.08	0.08	0.08	0.06	0.13	0.08	0.10	0.10	0.09	0.06	0.16	0.16
OvlAdjV/S:						0.00			0.01			
Crit Moves:	****			****			****			****		

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.591
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat and Crit Moves.

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

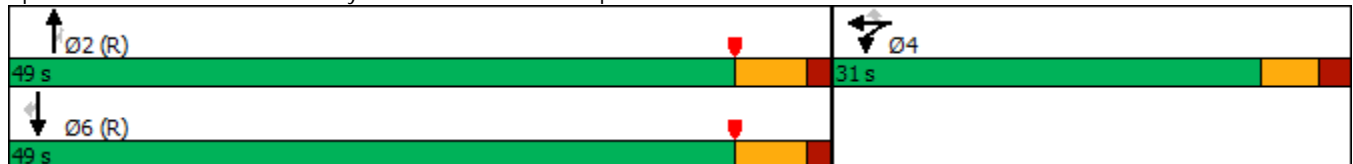


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	357	0	534	1384	405	1186	325
Future Volume (vph)	357	0	534	1384	405	1186	325
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

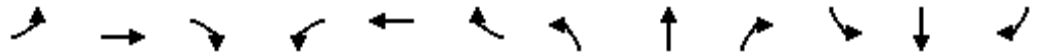
Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗		↑↑↑	↗		↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	357	0	534	0	1384	405	0	1186	325
Future Volume (veh/h)	0	0	0	357	0	534	0	1384	405	0	1186	325
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				259	0	726	0	1521	0	0	1303	0
Peak Hour Factor				0.92	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				489	0	869	0	2984	0	0	3280	0
Arrive On Green				0.27	0.00	0.27	0.00	1.00	0.00	0.00	0.58	0.00
Sat Flow, veh/h				1781	0	3170	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				259	0	726	0	1521	0	0	1303	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				9.9	0.0	17.2	0.0	0.0	0.0	0.0	10.1	0.0
Cycle Q Clear(g_c), s				9.9	0.0	17.2	0.0	0.0	0.0	0.0	10.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				489	0	869	0	2984	0	0	3280	0
V/C Ratio(X)				0.53	0.00	0.84	0.00	0.51		0.00	0.40	
Avail Cap(c_a), veh/h				568	0	1010	0	2984	0	0	3280	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.81	0.00	0.00	0.80	0.00
Uniform Delay (d), s/veh				24.7	0.0	27.3	0.0	0.0	0.0	0.0	9.0	0.0
Incr Delay (d2), s/veh				1.1	0.0	5.7	0.0	0.5	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	0.0	6.9	0.0	0.1	0.0	0.0	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.7	0.0	33.0	0.0	0.5	0.0	0.0	9.3	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					985			1521	A		1303	A
Approach Delay, s/veh					31.1			0.5			9.3	
Approach LOS					C			A			A	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		52.6		27.4		52.6						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		19.2		12.1						
Green Ext Time (p_c), s		14.8		2.7		10.8						

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

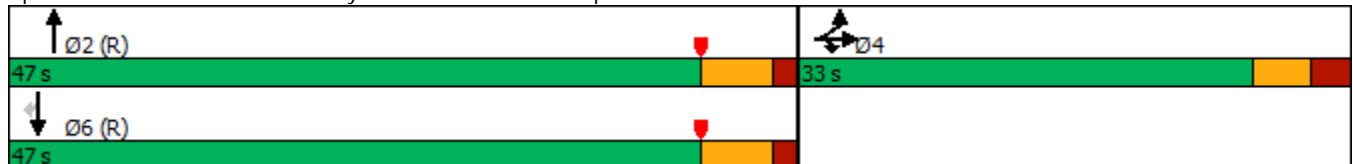


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	708	0	560	1081	478	860	683
Future Volume (vph)	708	0	560	1081	478	860	683
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 78.2 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	708	0	560	0	0	0	0	1081	478	0	860	683
Future Volume (veh/h)	708	0	560	0	0	0	0	1081	478	0	860	683
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	888	0	272				0	1162	0	0	925	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	1058	0	471				0	2837	0	0	2837	0
Arrive On Green	0.30	0.00	0.30				0.00	0.56	0.00	0.00	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	888	0	272				0	1162	0	0	925	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	18.7	0.0	11.7				0.0	10.5	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.7	0.0	11.7				0.0	10.5	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1058	0	471				0	2837	0	0	2837	0
V/C Ratio(X)	0.84	0.00	0.58				0.00	0.41		0.00	0.33	
Avail Cap(c_a), veh/h	1202	0	535				0	2837	0	0	2837	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.83	0.00
Uniform Delay (d), s/veh	26.3	0.0	23.9				0.0	10.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.1	0.0	1.4				0.0	0.4	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	4.4				0.0	3.4	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	0.0	25.3				0.0	10.7	0.0	0.0	0.3	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		1160						1162	A		925	A
Approach Delay, s/veh		30.0						10.7			0.3	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		50.2		29.8				50.2				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		12.5		20.7				2.0				
Green Ext Time (p_c), s		15.9		3.1				14.2				

Intersection Summary

HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.455
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different volume metrics like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow metrics like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, OvlAdjV/S, Crit Moves.

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.856
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 82 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Imperial Hwy. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors across four directions.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 1 0	0	0	1! 0 0	0	0	1! 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol:	0	1325	62	108	1667	19	18	4	15	70	10	156
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1325	62	108	1667	19	18	4	15	70	10	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1325	62	108	1667	19	18	4	15	70	10	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1325	62	108	1667	19	18	4	15	70	10	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1325	62	108	1667	19	18	4	15	70	10	156

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	0.13	1.00	2.97	0.03	0.49	0.11	0.40	0.30	0.04	0.66
Final Sat.:	0	4872	228	1700	5043	57	827	184	689	504	72	1124

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.00	0.27	0.27	0.06	0.33	0.33	0.01	0.02	0.02	0.04	0.14	0.14
Crit Moves:	****			****			****			****		

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.768
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: C

Table with columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, Lanes.

Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, OvlAdjV/S, Crit Moves.

Intersection	
Intersection Delay, s/veh	47.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	
Traffic Vol, veh/h	223	88	67	34	46	49	91	453	56	35	394	135
Future Vol, veh/h	223	88	67	34	46	49	91	453	56	35	394	135
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	230	91	69	35	47	51	94	467	58	36	406	139
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	23.2	16	90.4	25.8
HCM LOS	C	C	F	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	57%	0%	48%	0%	100%	49%
Vol Right, %	0%	0%	100%	0%	43%	0%	52%	0%	0%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	453	56	223	155	34	95	35	263	266
LT Vol	91	0	0	223	0	34	0	35	0	0
Through Vol	0	453	0	0	88	0	46	0	263	131
RT Vol	0	0	56	0	67	0	49	0	0	135
Lane Flow Rate	94	467	58	230	160	35	98	36	271	275
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.241	1.134	0.129	0.612	0.39	0.103	0.264	0.092	0.656	0.638
Departure Headway (Hd)	9.261	8.745	8.021	9.945	9.127	11.02	10.134	9.626	9.107	8.739
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	387	416	445	366	396	327	356	375	398	417
Service Time	7.046	6.529	5.805	7.645	6.827	8.72	7.834	7.326	6.807	6.439
HCM Lane V/C Ratio	0.243	1.123	0.13	0.628	0.404	0.107	0.275	0.096	0.681	0.659
HCM Control Delay	15	115.3	12	27.1	17.5	15	16.4	13.3	27.6	25.6
HCM Lane LOS	B	F	B	D	C	B	C	B	D	D
HCM 95th-tile Q	0.9	17	0.4	3.9	1.8	0.3	1	0.3	4.5	4.3

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	73	0	153	0	0	0	0	409	102	243	268	0
Future Vol, veh/h	73	0	153	0	0	0	0	409	102	243	268	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	11	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	0	172	0	0	0	0	460	115	273	301	0

Major/Minor	Minor2		Major1			Major2			
Conflicting Flow All	1077	-	152	-	0	0	586	0	0
Stage 1	847	-	-	-	-	-	-	-	-
Stage 2	230	-	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	214	0	867	0	-	-	985	-	0
Stage 1	381	0	-	0	-	-	-	-	0
Stage 2	786	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	155	0	866	-	-	-	985	-	-
Mov Cap-2 Maneuver	155	0	-	-	-	-	-	-	-
Stage 1	381	0	-	-	-	-	-	-	-
Stage 2	568	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.6	0	4.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	866	985	-
HCM Lane V/C Ratio	-	-	0.529	0.199	0.277	-
HCM Control Delay (s)	-	-	51.7	10.2	10.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	2.6	0.7	1.1	-

Timings
8: Kellog Dr. & SR 90 WB Ramps

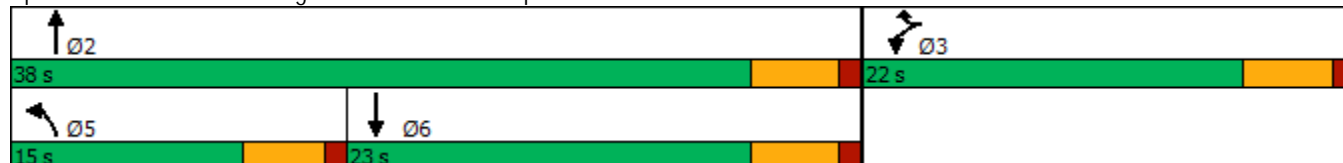


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations	↶	↷	↶	↑↑	↑↑
Traffic Volume (vph)	104	308	151	331	407
Future Volume (vph)	104	308	151	331	407
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	9.6	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 44.6
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↕			↕	↖
Traffic Volume (veh/h)	0	0	0	104	0	308	151	331	0	0	407	46
Future Volume (veh/h)	0	0	0	104	0	308	151	331	0	0	407	46
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				113	0	135	164	360	0	0	442	43
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				429	0	382	212	1776	0	0	854	83
Arrive On Green				0.24	0.00	0.24	0.12	0.50	0.00	0.00	0.26	0.26
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3357	316
Grp Volume(v), veh/h				113	0	135	164	360	0	0	240	245
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1802
Q Serve(g_s), s				2.0	0.0	2.7	3.4	2.2	0.0	0.0	4.4	4.5
Cycle Q Clear(g_c), s				2.0	0.0	2.7	3.4	2.2	0.0	0.0	4.4	4.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				429	0	382	212	1776	0	0	465	472
V/C Ratio(X)				0.26	0.00	0.35	0.77	0.20	0.00	0.00	0.52	0.52
Avail Cap(c_a), veh/h				785	0	698	480	3040	0	0	829	841
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				11.9	0.0	12.1	16.5	5.4	0.0	0.0	12.2	12.2
Incr Delay (d2), s/veh				0.3	0.0	0.6	2.3	0.1	0.0	0.0	0.9	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	0.8	1.3	0.5	0.0	0.0	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				12.2	0.0	12.7	18.8	5.4	0.0	0.0	13.0	13.1
LnGrp LOS				B	A	B	B	A	A	A	B	B
Approach Vol, veh/h					248			524			485	
Approach Delay, s/veh					12.5			9.6			13.1	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		24.3			9.2	15.1		14.3				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.2			5.4	6.5		4.7				
Green Ext Time (p_c), s		2.5			0.1	2.2		0.6				

Intersection Summary

HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.375
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	24	0	29	0	0	0	0	779	54	22	585	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	0	29	0	0	0	0	779	54	22	585	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	0	29	0	0	0	0	779	54	22	585	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	0	29	0	0	0	0	779	54	22	585	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	0	29	0	0	0	0	779	54	22	585	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.87	0.13	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3180	220	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.24	0.25	0.01	0.17	0.00
Crit Moves:	****						****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.578
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	90	131	230	66	91	20	38	619	127	144	480	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	131	230	66	91	20	38	619	127	144	480	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	131	230	66	91	20	38	619	127	144	480	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	131	230	66	91	20	38	619	127	144	480	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	131	230	66	91	20	38	619	127	144	480	81
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.66	0.34	1.00	1.71	0.29
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	2821	579	1700	2909	491

Capacity Analysis Module:

Vol/Sat:	0.05	0.08	0.14	0.04	0.05	0.01	0.02	0.22	0.22	0.08	0.16	0.17
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.349
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	91	414	1	0	354	63	75	1	120	3	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	414	1	0	354	63	75	1	120	3	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	414	1	0	354	63	75	1	120	3	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	414	1	0	354	63	75	1	120	3	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	414	1	0	354	63	75	1	120	3	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.70	0.30	0.99	0.01	1.00	1.00	0.00	0.00
Final Sat.:	1700	3392	8	1700	2886	514	1678	22	1700	1700	0	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.12	0.12	0.00	0.12	0.12	0.04	0.04	0.07	0.00	0.00	0.00
Crit Moves:	****			****			****	****				

Yorba Linda Housing Element / SP (JN 13763)
Existing (2022)
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Lakeview Av. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, and OvlAdjVol.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat, OvlAdjV/S, and Crit Moves.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.410
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	47	0	15	13	951	0	0	1331	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	47	0	15	13	951	0	0	1331	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	47	0	15	13	951	0	0	1331	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	47	0	15	13	951	0	0	1331	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	47	0	15	13	951	0	0	1331	70

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.85	0.15
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4845	255

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.19	0.00	0.00	0.27	0.27
Crit Moves:				****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Fairmont Bl. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.454
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	1	1	0	1

Volume Module:

Base Vol:	120	109	37	30	86	120	155	429	202	46	367	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	109	37	30	86	120	155	429	202	46	367	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	109	37	30	86	120	155	429	202	46	367	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	109	37	30	86	120	155	429	202	46	367	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	109	37	30	86	120	155	429	202	46	367	35

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.36	0.64	1.00	1.83	0.17
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	2312	1088	1700	3104	296

Capacity Analysis Module:

Vol/Sat:	0.07	0.03	0.02	0.02	0.03	0.07	0.09	0.19	0.19	0.03	0.12	0.12
Crit Moves:	****					****	****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.507
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	0	3	0	1	0	2

Volume Module:

Base Vol:	171	10	47	125	130	207	214	984	196	49	733	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	10	47	125	130	207	214	984	196	49	733	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	10	47	125	130	207	214	984	196	49	733	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	10	47	125	130	207	214	984	196	49	733	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	10	47	125	130	207	214	984	196	49	733	53
OvlAdjVol:						0			111			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.80	0.20
Final Sat.:	3400	1700	1700	1700	1700	3400	1700	5100	1700	1700	4756	344

Capacity Analysis Module:

Vol/Sat:	0.05	0.01	0.03	0.07	0.08	0.06	0.13	0.19	0.12	0.03	0.15	0.15
OvlAdjV/S:						0.00			0.07			
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 78 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	2

Volume Module:

Base Vol:	119	1394	465	339	1165	250	175	0	380	541	0	528
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	1394	465	339	1165	250	175	0	380	541	0	528
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	1394	0	339	1165	250	175	0	380	541	0	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1394	0	339	1165	250	175	0	380	541	0	528
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1394	0	339	1165	250	175	0	380	541	0	528

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	2.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	3400	0	3400

Capacity Analysis Module:

Vol/Sat:	0.07	0.27	0.00	0.20	0.23	0.15	0.10	0.00	0.11	0.16	0.00	0.16
Crit Moves:	****			****			****			****		

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

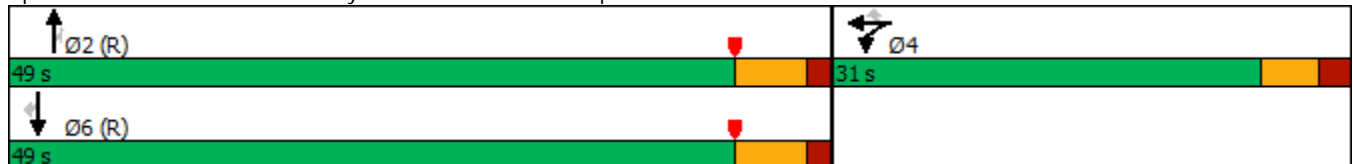


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	523	0	634	1344	340	1475	611
Future Volume (vph)	523	0	634	1344	340	1475	611
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 43.2 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

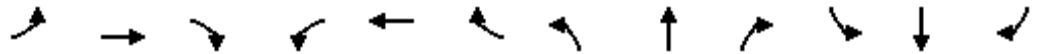
Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗		↑↑↑	↗		↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	523	0	634	0	1344	340	0	1475	611
Future Volume (veh/h)	0	0	0	523	0	634	0	1344	340	0	1475	611
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				791	0	428	0	1415	0	0	1694	0
Peak Hour Factor				0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1082	0	482	0	2834		0	3114	
Arrive On Green				0.30	0.00	0.30	0.00	1.00	0.00	0.00	0.55	0.00
Sat Flow, veh/h				3563	0	1585	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				791	0	428	0	1415	0	0	1694	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				15.9	0.0	20.6	0.0	0.0	0.0	0.0	15.4	0.0
Cycle Q Clear(g_c), s				15.9	0.0	20.6	0.0	0.0	0.0	0.0	15.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1082	0	482	0	2834		0	3114	
V/C Ratio(X)				0.73	0.00	0.89	0.00	0.50		0.00	0.54	
Avail Cap(c_a), veh/h				1136	0	505	0	2834		0	3114	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.84	0.00	0.00	0.65	0.00
Uniform Delay (d), s/veh				24.9	0.0	26.6	0.0	0.0	0.0	0.0	11.3	0.0
Incr Delay (d2), s/veh				2.4	0.0	17.2	0.0	0.5	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.8	0.0	9.7	0.0	0.1	0.0	0.0	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.4	0.0	43.8	0.0	0.5	0.0	0.0	11.8	0.0
LnGrp LOS				C	A	D	A	A		A	B	
Approach Vol, veh/h					1219			1415	A		1694	A
Approach Delay, s/veh					33.1			0.5			11.8	
Approach LOS					C			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.2		29.8		50.2						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		22.6		17.4						
Green Ext Time (p_c), s		13.3		1.7		14.0						

Intersection Summary

HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

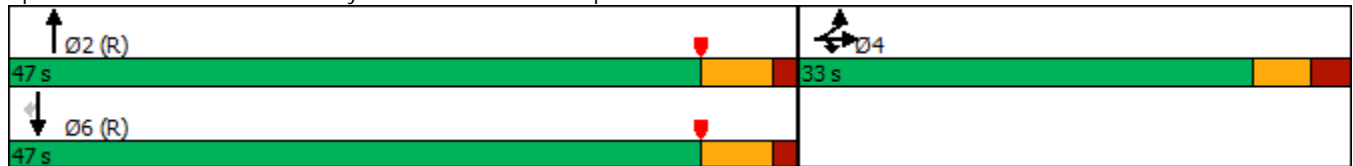


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations	↶	↔	↷	↑↑↑	↷	↑↑↑	↷
Traffic Volume (vph)	348	0	688	1336	638	1717	281
Future Volume (vph)	348	0	688	1336	638	1717	281
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 41.2 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

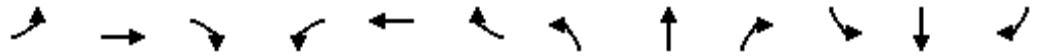
Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	0	688	0	0	0	0	1336	638	0	1717	281
Future Volume (veh/h)	348	0	688	0	0	0	0	1336	638	0	1717	281
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	241	0	776				0	1392	0	0	1789	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	519	0	923				0	2866		0	2866	
Arrive On Green	0.29	0.00	0.29				0.00	0.56	0.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	241	0	776				0	1392	0	0	1789	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	8.9	0.0	18.4				0.0	13.2	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	18.4				0.0	13.2	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	519	0	923				0	2866		0	2866	
V/C Ratio(X)	0.46	0.00	0.84				0.00	0.49		0.00	0.62	
Avail Cap(c_a), veh/h	601	0	1070				0	2866		0	2866	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.66	0.00
Uniform Delay (d), s/veh	23.2	0.0	26.6				0.0	10.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	5.7				0.0	0.6	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	7.3				0.0	4.2	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	0.0	32.3				0.0	11.2	0.0	0.0	0.7	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		1017						1392	A		1789	A
Approach Delay, s/veh		30.3						11.2			0.7	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		50.7		29.3				50.7				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		15.2		20.4				2.0				
Green Ext Time (p_c), s		17.7		2.9				30.1				

Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

 Yorba Linda Housing Element / SP (JN 13763)
 Existing (2022)
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	72	4	64	2	8	5	26	443	866	137	178	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	4	64	2	8	5	26	443	866	137	178	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	4	64	2	8	5	26	443	866	137	178	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	4	64	2	8	5	26	443	866	137	178	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	4	64	2	8	5	26	443	866	137	178	4
OvlAdjVol:									819			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.54	0.09	1.37	0.20	0.80	1.00	1.00	1.00	1.00	1.00	1.96	0.04
Final Sat.:	2623	146	2331	340	1360	1700	1700	1700	1700	1700	3325	75

Capacity Analysis Module:

Vol/Sat:	0.03	0.03	0.03	0.01	0.01	0.00	0.02	0.26	0.51	0.08	0.05	0.05
OvlAdjV/S:									0.48			
Crit Moves:	****			****			****	****		****		

**APPENDIX 4.3: EXISTING (2022) CONDITIONS TRAFFIC SIGNAL
WARRANT ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Lakeview Avenue**

Total of Both Approaches (VPH) = **1134**

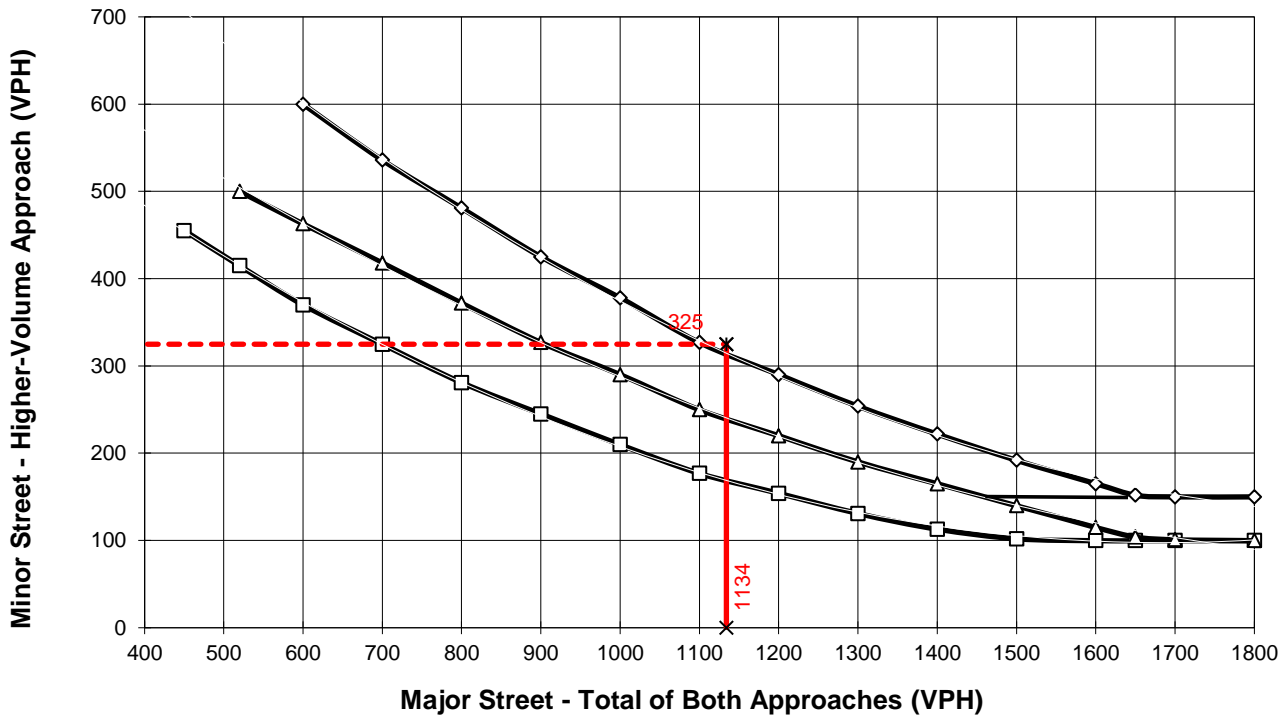
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Buena Vista Avenue**

High Volume Approach (VPH) = **325**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- - - Minor Street Approaches

*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = Existing (2022) Conditions - Weekday AM Peak Hour

Major Street Name = Kellogg Drive

Total of Both Approaches (VPH) = 1324

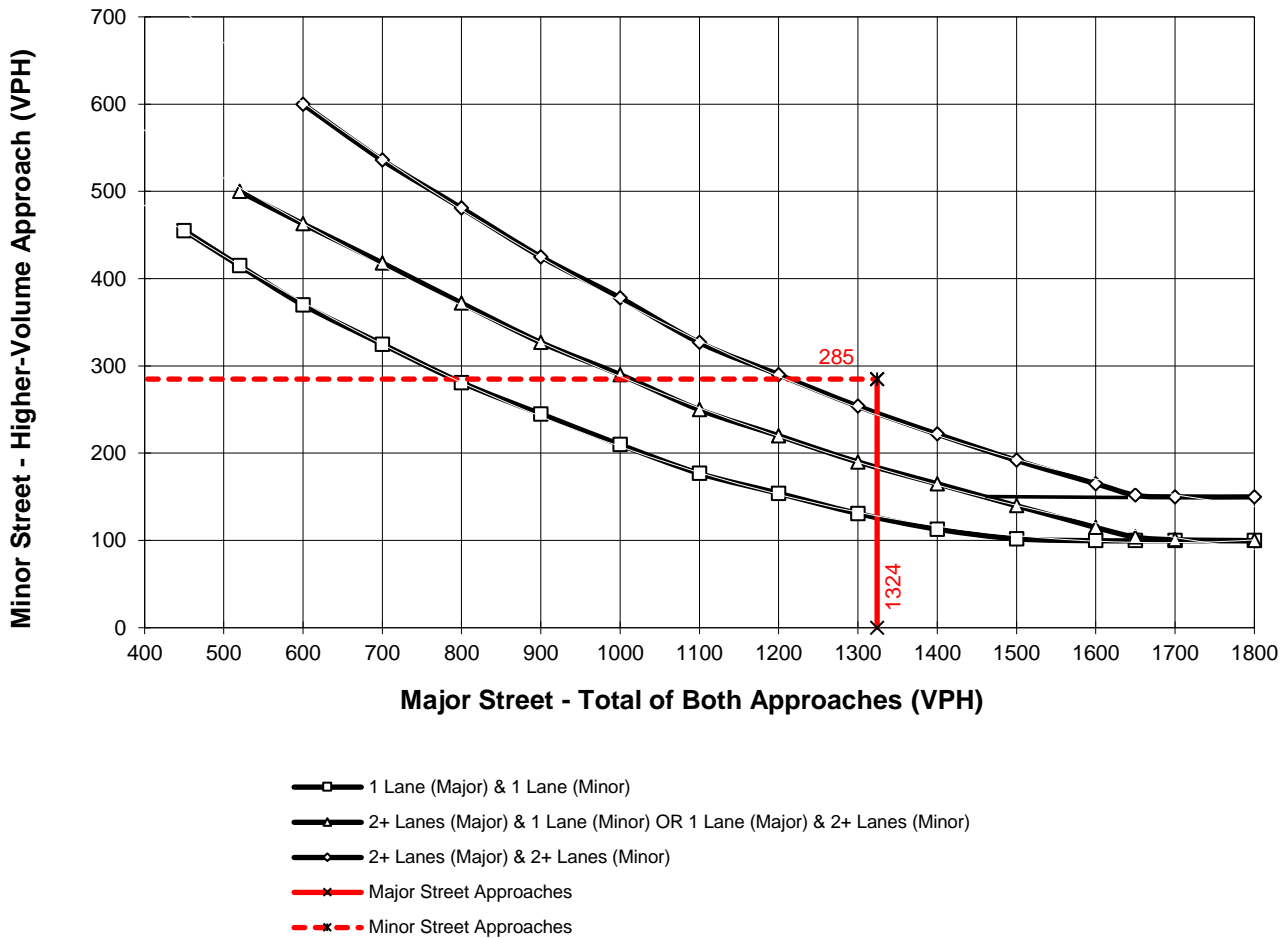
Number of Approach Lanes on Major Street = 2

Minor Street Name = SR 90 EB ramps

High Volume Approach (VPH) = 285

Number of Approach Lanes On Minor Street = 2

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

**APPENDIX 5.1: POST PROCESSING WORKSHEETS FOR HORIZON YEAR
(2045) WITHOUT PROJECT**

This Page Intentionally Left Blank

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Rose Dr. & Imperial Hwy.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	117	120	3	3%	197	233	36	18%
	Through	156	203	47	30%	365	438	73	20%
	Right	141	140	-1	-1%	86	97	11	13%
	NB Total	414	463	49	12%	648	768	120	19%
SOUTH BOUND	Left	650	781	131	20%	816	825	9	1%
	Through	393	459	66	17%	310	339	29	9%
	Right	26	32	6	23%	25	27	2	8%
	SB Total	1,069	1,272	203	19%	1,151	1,191	40	3%
EAST BOUND	Left	28	38	10	36%	42	46	4	10%
	Through	979	999	20	2%	1,250	1,288	38	3%
	Right	147	146	-1	-1%	42	47	5	12%
	EB Total	1,154	1,183	29	3%	1,334	1,381	47	4%
WEST BOUND	Left	193	185	-8	-4%	146	165	19	13%
	Through	991	1,008	17	2%	875	960	85	10%
	Right	400	519	119	30%	652	726	74	11%
	WB Total	1,584	1,712	128	8%	1,673	1,851	178	11%
TOTAL ENTERING VOLUME		4,221	4,630	409	10%	4,806	5,191	385	8%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,272	1,191			
North Leg	Outbound	760	1,210			
North Leg	TOTAL	2,032	2,401	6%	7%	32,128
South Leg	Inbound	463	768			
South Leg	Outbound	790	551			
South Leg	TOTAL	1,253	1,319	9%	9%	14,725
East Leg	Inbound	1,712	1,851			
East Leg	Outbound	1,920	2,210			
East Leg	TOTAL	3,632	4,061	8%	9%	46,489
West Leg	Inbound	1,183	1,381			
West Leg	Outbound	1,160	1,220			
West Leg	TOTAL	2,343	2,601	8%	9%	29,105
OVERALL TOTAL		9,260	10,382	8%	8%	122,447

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-1_Rose Dr. & Imperial Highway.xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Imperial Hwy. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	305	282	-23	-8%	249	292	43	17%
	Through	1,313	1,325	12	1%	1,210	1,338	128	11%
	Right	3	4	1	33%	12	16	4	33%
	NB Total	1,621	1,611	-10	-1%	1,471	1,646	175	12%
SOUTH BOUND	Left	220	245	25	11%	496	587	91	18%
	Through	1,291	1,416	125	10%	1,494	1,477	-17	-1%
	Right	3	3	0	0%	3	3	0	0%
	SB Total	1,514	1,664	150	10%	1,993	2,067	74	4%
EAST BOUND	Left	18	17	-1	-6%	18	18	0	0%
	Through	349	394	45	13%	415	516	101	24%
	Right	296	329	33	11%	369	383	14	4%
	EB Total	663	740	77	12%	802	917	115	14%
WEST BOUND	Left	1	2	1	100%	9	10	1	11%
	Through	524	639	115	22%	292	345	53	18%
	Right	478	635	157	33%	354	394	40	11%
	WB Total	1,003	1,276	273	27%	655	749	94	14%
TOTAL ENTERING VOLUME		4,801	5,291	490	10%	4,921	5,379	458	9%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,664	2,067			
North Leg	Outbound	1,977	1,750			
North Leg	TOTAL	3,641	3,817	8%	9%	44,212
South Leg	Inbound	1,611	1,646			
South Leg	Outbound	1,747	1,870			
South Leg	TOTAL	3,358	3,516	8%	9%	40,182
East Leg	Inbound	1,276	749			
East Leg	Outbound	643	1,119			
East Leg	TOTAL	1,919	1,868	9%	8%	22,338
West Leg	Inbound	740	917			
West Leg	Outbound	924	640			
West Leg	TOTAL	1,664	1,557	9%	8%	19,093
OVERALL TOTAL		10,582	10,758	8%	9%	125,825

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-3_Imperial Highway & Bastanchury Rd..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Imperial Hwy. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	318	365	47	15%	301	354	53	18%
	Through	926	1,031	105	11%	915	1,090	175	19%
	Right	198	221	23	12%	211	207	-4	-2%
	NB Total	1,442	1,617	175	12%	1,427	1,651	224	16%
SOUTH BOUND	Left	336	343	7	2%	586	518	-68	-12%
	Through	1,018	1,180	162	16%	1,025	1,121	96	9%
	Right	37	39	2	5%	67	71	4	6%
	SB Total	1,391	1,562	171	12%	1,678	1,710	32	2%
EAST BOUND	Left	26	27	1	4%	90	100	10	11%
	Through	326	335	9	3%	565	515	-50	-9%
	Right	316	369	53	17%	313	353	40	13%
	EB Total	668	731	63	9%	968	968	0	0%
WEST BOUND	Left	200	200	0	0%	158	167	9	6%
	Through	525	475	-50	-10%	555	566	11	2%
	Right	438	384	-54	-12%	445	460	15	3%
	WB Total	1,163	1,059	-104	-9%	1,158	1,193	35	3%
TOTAL ENTERING VOLUME		4,664	4,969	305	7%	5,231	5,522	291	6%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,562	1,710			
North Leg	Outbound	1,442	1,650			
North Leg	TOTAL	3,004	3,360	8%	9%	37,873
South Leg	Inbound	1,617	1,651			
South Leg	Outbound	1,749	1,641			
South Leg	TOTAL	3,366	3,292	9%	9%	37,002
East Leg	Inbound	1,059	1,193			
East Leg	Outbound	899	1,240			
East Leg	TOTAL	1,958	2,433	8%	10%	24,458
West Leg	Inbound	731	968			
West Leg	Outbound	879	991			
West Leg	TOTAL	1,610	1,959	8%	10%	20,220
OVERALL TOTAL		9,938	11,044	8%	9%	119,553

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-5_Imperial Highway & Yorba Linda Bl..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Lakeview Av. & Buena Vista Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	52	50	-2	-4%	91	80	-11	-12%
	Through	295	318	23	8%	453	567	114	25%
	Right	56	45	-11	-20%	56	39	-17	-30%
	NB Total	403	413	10	2%	600	686	86	14%
SOUTH BOUND	Left	48	82	34	71%	35	33	-2	-6%
	Through	582	726	144	25%	394	430	36	9%
	Right	101	208	107	106%	135	164	29	21%
	SB Total	731	1,016	285	39%	564	627	63	11%
EAST BOUND	Left	139	187	48	35%	223	312	89	40%
	Through	113	112	-1	-1%	88	68	-20	-23%
	Right	73	53	-20	-27%	67	59	-8	-12%
	EB Total	325	352	27	8%	378	439	61	16%
WEST BOUND	Left	88	47	-41	-47%	34	31	-3	-9%
	Through	127	112	-15	-12%	46	47	1	2%
	Right	72	71	-1	-1%	49	71	22	45%
	WB Total	287	230	-57	-20%	129	149	20	16%
TOTAL ENTERING VOLUME		1,746	2,011	265	15%	1,671	1,901	230	14%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,016	627			
North Leg	Outbound	576	950			
North Leg	TOTAL	1,592	1,577	10%	10%	16,293
South Leg	Inbound	413	686			
South Leg	Outbound	826	520			
South Leg	TOTAL	1,239	1,206	10%	10%	12,253
East Leg	Inbound	230	149			
East Leg	Outbound	239	140			
East Leg	TOTAL	469	289	20%	12%	2,391
West Leg	Inbound	352	439			
West Leg	Outbound	370	291			
West Leg	TOTAL	722	730	9%	9%	8,166
OVERALL TOTAL		4,022	3,802	10%	10%	39,104

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-6_Lakeview Av. & Buena Vista Av..xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Kellogg Dr. & SR-90 SB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	435	435	0	0%	409	430	21	5%
	Right	144	167	23	16%	102	90	-12	-12%
	NB Total	579	602	23	4%	511	520	9	2%
SOUTH BOUND	Left	280	413	133	48%	243	241	-2	-1%
	Through	465	446	-19	-4%	268	248	-20	-7%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	745	859	114	15%	511	489	-22	-4%
EAST BOUND	Left	18	23	5	28%	73	94	21	29%
	Through	0	0	0	#DIV/0!	1	1	0	0%
	Right	267	256	-11	-4%	153	155	2	1%
	EB Total	285	279	-6	-2%	227	250	23	10%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,609	1,740	131	8%	1,249	1,259	10	1%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	859	489			
North Leg	Outbound	458	524			
North Leg	TOTAL	1,317	1,013	13%	10%	10,178
South Leg	Inbound	602	520			
South Leg	Outbound	702	403			
South Leg	TOTAL	1,304	923	14%	10%	9,456
East Leg	Inbound	0	0			
East Leg	Outbound	580	332			
East Leg	TOTAL	580	332	16%	9%	3,557
West Leg	Inbound	279	250			
West Leg	Outbound	0	0			
West Leg	TOTAL	279	250	12%	10%	2,407
OVERALL TOTAL		3,480	2,518	14%	10%	25,598

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP[Int-7_Imperial Highway SB Ramps & Kellogg Dr..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: SR-90 NB Ramps & Kellogg Dr.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	159	163	4	3%	151	133	-18	-12%
	Through	294	293	-1	0%	331	415	84	25%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	453	456	3	1%	482	548	66	14%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	618	762	144	23%	407	403	-4	-1%
	Right	73	107	34	47%	46	46	0	0%
	SB Total	691	869	178	26%	453	449	-4	-1%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	127	98	-29	-23%	104	87	-17	-16%
	Through	0	0	0	#DIV/0!	1	1	0	0%
	Right	286	257	-29	-10%	308	375	67	22%
	WB Total	413	355	-58	-14%	413	463	50	12%
TOTAL ENTERING VOLUME		1,557	1,680	123	8%	1,348	1,460	112	8%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	869	449			
North Leg	Outbound	550	790			
North Leg	TOTAL	1,419	1,239	13%	11%	11,063
South Leg	Inbound	456	548			
South Leg	Outbound	860	490			
South Leg	TOTAL	1,316	1,038	13%	10%	10,178
East Leg	Inbound	355	463			
East Leg	Outbound	0	0			
East Leg	TOTAL	355	463	10%	13%	3,479
West Leg	Inbound	0	0			
West Leg	Outbound	270	180			
West Leg	TOTAL	270	180	15%	10%	1,814
OVERALL TOTAL		3,360	2,920	13%	11%	26,535

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP[Int-8_Imperial Highway NB Ramps & Kellogg Dr..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Lakeview Av. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	120	129	9	8%	90	91	1	1%
	Through	59	54	-5	-8%	131	129	-2	-2%
	Right	191	186	-5	-3%	230	241	11	5%
	NB Total	370	369	-1	0%	451	461	10	2%
SOUTH BOUND	Left	108	108	0	0%	66	66	0	0%
	Through	133	127	-6	-5%	91	84	-7	-8%
	Right	59	65	6	10%	20	19	-1	-5%
	SB Total	300	300	0	0%	177	169	-8	-5%
EAST BOUND	Left	31	30	-1	-3%	38	40	2	5%
	Through	488	506	18	4%	619	698	79	13%
	Right	144	143	-1	-1%	127	132	5	4%
	EB Total	663	679	16	2%	784	870	86	11%
WEST BOUND	Left	224	240	16	7%	144	145	1	1%
	Through	722	895	173	24%	480	503	23	5%
	Right	99	105	6	6%	81	82	1	1%
	WB Total	1,045	1,240	195	19%	705	730	25	4%
TOTAL ENTERING VOLUME		2,378	2,588	210	9%	2,117	2,230	113	5%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	300	169			
North Leg	Outbound	189	251			
North Leg	TOTAL	489	420	11%	10%	4,265
South Leg	Inbound	369	461			
South Leg	Outbound	510	361			
South Leg	TOTAL	879	822	10%	9%	9,114
East Leg	Inbound	1,240	730			
East Leg	Outbound	800	1,005			
East Leg	TOTAL	2,040	1,735	10%	9%	19,865
West Leg	Inbound	679	870			
West Leg	Outbound	1,089	613			
West Leg	TOTAL	1,768	1,483	10%	8%	17,620
OVERALL TOTAL		5,176	4,460	10%	9%	50,865

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-10_Lakeview Av. & Bastanchury Rd..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Lakeview Av. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	135	132	-3	-2%	187	239	52	28%
	Through	178	215	37	21%	284	378	94	33%
	Right	196	211	15	8%	265	333	68	26%
	NB Total	509	558	49	10%	736	950	214	29%
SOUTH BOUND	Left	91	89	-2	-2%	183	195	12	7%
	Through	284	387	103	36%	271	311	40	15%
	Right	105	93	-12	-11%	143	155	12	8%
	SB Total	480	569	89	19%	597	661	64	11%
EAST BOUND	Left	142	156	14	10%	171	163	-8	-5%
	Through	672	660	-12	-2%	1,073	964	-109	-10%
	Right	196	269	73	37%	107	103	-4	-4%
	EB Total	1,010	1,085	75	7%	1,351	1,230	-121	-9%
WEST BOUND	Left	318	444	126	40%	175	182	7	4%
	Through	888	805	-83	-9%	867	852	-15	-2%
	Right	89	99	10	11%	84	86	2	2%
	WB Total	1,295	1,348	53	4%	1,126	1,120	-6	-1%
TOTAL ENTERING VOLUME		3,294	3,560	266	8%	3,810	3,961	151	4%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	569	661			
North Leg	Outbound	470	627			
North Leg	TOTAL	1,039	1,288	7%	9%	14,365
South Leg	Inbound	558	950			
South Leg	Outbound	1,100	596			
South Leg	TOTAL	1,658	1,546	10%	10%	16,255
East Leg	Inbound	1,348	1,120			
East Leg	Outbound	960	1,492			
East Leg	TOTAL	2,308	2,612	9%	10%	26,949
West Leg	Inbound	1,085	1,230			
West Leg	Outbound	1,030	1,246			
West Leg	TOTAL	2,115	2,476	9%	10%	24,729
OVERALL TOTAL		7,120	7,922	9%	10%	82,299

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-12_Lakeview Av. & Yorba Linda Bl..xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Ohio St. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	70	69	-1	-1%	47	50	3	6%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	12	-8	-40%	15	11	-4	-27%
	SB Total	90	81	-9	-10%	62	61	-1	-2%
EAST BOUND	Left	20	12	-8	-40%	13	8	-5	-38%
	Through	1,066	1,086	20	2%	951	930	-21	-2%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	1,086	1,098	12	1%	964	938	-26	-3%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	726	742	16	2%	1,331	1,319	-12	-1%
	Right	50	49	-1	-2%	70	62	-8	-11%
	WB Total	776	791	15	2%	1,401	1,381	-20	-1%
TOTAL ENTERING VOLUME		1,952	1,970	18	1%	2,427	2,380	-47	-2%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	81	61			
North Leg	Outbound	61	70			
North Leg	TOTAL	142	131	10%	10%	1,359
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	TOTAL	0	0	#DIV/0!	#DIV/0!	#DIV/0!
East Leg	Inbound	791	1,381			
East Leg	Outbound	1,155	980			
East Leg	TOTAL	1,946	2,361	8%	9%	25,607
West Leg	Inbound	1,098	938			
West Leg	Outbound	754	1,330			
West Leg	TOTAL	1,852	2,268	8%	10%	23,571
OVERALL TOTAL		3,940	4,760	#DIV/0!	#DIV/0!	#DIV/0!

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-13_Ohio St. & Yorba Linda Bl..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Fairmont Bl. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	168	218	50	30%	120	149	29	24%
	Through	177	189	12	7%	109	139	30	28%
	Right	40	42	2	5%	37	42	5	14%
	NB Total	385	449	64	17%	266	330	64	24%
SOUTH BOUND	Left	38	39	1	3%	30	30	0	0%
	Through	239	260	21	9%	86	90	4	5%
	Right	225	281	56	25%	120	130	10	8%
	SB Total	502	580	78	16%	236	250	14	6%
EAST BOUND	Left	97	97	0	0%	155	172	17	11%
	Through	346	343	-3	-1%	429	426	-3	-1%
	Right	180	190	10	6%	202	212	10	5%
	EB Total	623	630	7	1%	786	810	24	3%
WEST BOUND	Left	112	104	-8	-7%	46	44	-2	-4%
	Through	448	479	31	7%	367	361	-6	-2%
	Right	19	17	-2	-11%	35	35	0	0%
	WB Total	579	600	21	4%	448	440	-8	-2%
TOTAL ENTERING VOLUME		2,089	2,259	170	8%	1,736	1,830	94	5%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	580	250			
North Leg	Outbound	303	346			
North Leg	TOTAL	883	596	14%	9%	6,447
South Leg	Inbound	449	330			
South Leg	Outbound	554	346			
South Leg	TOTAL	1,003	676	14%	9%	7,313
East Leg	Inbound	600	440			
East Leg	Outbound	424	498			
East Leg	TOTAL	1,024	938	10%	9%	10,027
West Leg	Inbound	630	810			
West Leg	Outbound	978	640			
West Leg	TOTAL	1,608	1,450	10%	9%	16,890
OVERALL TOTAL		4,518	3,660	11%	9%	40,676

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-14_Fairmont Bl. & Bastanchury Rd..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Fairmont Bl. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	264	302	38	14%	171	238	67	39%
	Through	220	249	29	13%	10	26	16	160%
	Right	54	69	15	28%	47	97	50	106%
	NB Total	538	620	82	15%	228	361	133	58%
SOUTH BOUND	Left	105	113	8	8%	125	140	15	12%
	Through	222	270	48	22%	130	176	46	35%
	Right	286	277	-9	-3%	207	156	-51	-25%
	SB Total	613	660	47	8%	462	472	10	2%
EAST BOUND	Left	166	141	-25	-15%	214	252	38	18%
	Through	494	472	-22	-4%	984	924	-60	-6%
	Right	146	157	11	8%	196	222	26	13%
	EB Total	806	770	-36	-4%	1,394	1,398	4	0%
WEST BOUND	Left	100	127	27	27%	49	82	33	67%
	Through	743	750	7	1%	733	686	-47	-6%
	Right	93	93	0	0%	53	92	39	74%
	WB Total	936	970	34	4%	835	860	25	3%
TOTAL ENTERING VOLUME		2,893	3,020	127	4%	2,919	3,091	172	6%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	660	472			
North Leg	Outbound	483	370			
North Leg	TOTAL	1,143	842	12%	9%	9,332
South Leg	Inbound	620	361			
South Leg	Outbound	554	480			
South Leg	TOTAL	1,174	841	9%	6%	13,568
East Leg	Inbound	970	860			
East Leg	Outbound	654	1,161			
East Leg	TOTAL	1,624	2,021	7%	9%	21,958
West Leg	Inbound	770	1,398			
West Leg	Outbound	1,329	1,080			
West Leg	TOTAL	2,099	2,478	8%	10%	24,977
OVERALL TOTAL		6,040	6,182	9%	9%	69,834

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-15_Fairmont Bl. & Yorba Linda Bl..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Weir Canyon Rd. & SR-91 WB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,384	1,423	39	3%	1,344	1,338	-6	0%
	Right	405	410	5	1%	340	343	3	1%
	NB Total	1,789	1,833	44	2%	1,684	1,681	-3	0%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,186	1,134	-52	-4%	1,475	1,503	28	2%
	Right	325	300	-25	-8%	611	566	-45	-7%
	SB Total	1,511	1,434	-77	-5%	2,086	2,069	-17	-1%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	357	386	29	8%	523	629	106	20%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	534	537	3	1%	634	531	-103	-16%
	WB Total	891	923	32	4%	1,157	1,160	3	0%
TOTAL ENTERING VOLUME		4,191	4,190	-1	0%	4,927	4,910	-17	0%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,434	2,069			
North Leg	Outbound	1,960	1,869			
North Leg	TOTAL	3,394	3,938	8%	10%	40,858
South Leg	Inbound	1,833	1,681			
South Leg	Outbound	1,520	2,132			
South Leg	TOTAL	3,353	3,813	8%	10%	39,525
East Leg	Inbound	923	1,160			
East Leg	Outbound	410	343			
East Leg	TOTAL	1,333	1,503	8%	9%	16,567
West Leg	Inbound	0	0			
West Leg	Outbound	300	566			
West Leg	TOTAL	300	566	5%	10%	5,836
OVERALL TOTAL		8,380	9,820	8%	10%	102,786

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-17_Weir Canyon Rd. & SR-91 WB Ramps.xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Weir Canyon Rd. & SR-91 EB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,081	1,173	92	9%	1,336	1,397	61	5%
	Right	478	420	-58	-12%	638	572	-66	-10%
	NB Total	1,559	1,593	34	2%	1,974	1,969	-5	0%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	860	932	72	8%	1,717	1,950	233	14%
	Right	683	680	-3	0%	281	281	0	0%
	SB Total	1,543	1,612	69	4%	1,998	2,231	233	12%
EAST BOUND	Left	708	597	-111	-16%	348	300	-48	-14%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	560	508	-52	-9%	688	580	-108	-16%
	EB Total	1,268	1,105	-163	-13%	1,036	880	-156	-15%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		4,370	4,310	-60	-1%	5,008	5,080	72	1%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,612	2,231			
North Leg	Outbound	1,770	1,697			
North Leg	TOTAL	3,382	3,928	9%	10%	39,622
South Leg	Inbound	1,593	1,969			
South Leg	Outbound	1,440	2,530			
South Leg	TOTAL	3,033	4,499	6%	9%	47,929
East Leg	Inbound	0	0			
East Leg	Outbound	420	572			
East Leg	TOTAL	420	572	7%	10%	5,990
West Leg	Inbound	1,105	880			
West Leg	Outbound	680	281			
West Leg	TOTAL	1,785	1,161	15%	10%	11,653
OVERALL TOTAL		8,620	10,160	8%	10%	105,195

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-18_Weir Canyon Rd. & SR-91 EB Ramps.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) Without Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Gypsum Canyon Rd. & La Palma Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	194	286	92	47%	72	283	211	293%
	Through	6	27	21	350%	4	34	30	750%
	Right	123	253	130	106%	64	471	407	636%
	NB Total	323	566	243	75%	140	788	648	463%
SOUTH BOUND	Left	7	1	-6	-86%	2	1	-1	-50%
	Through	13	39	26	200%	8	19	11	138%
	Right	17	1	-16	-94%	5	1	-4	-80%
	SB Total	37	41	4	11%	15	21	6	40%
EAST BOUND	Left	15	1	-14	-93%	26	3	-23	-88%
	Through	136	75	-61	-45%	443	423	-20	-5%
	Right	174	266	92	53%	866	915	49	6%
	EB Total	325	342	17	5%	1,335	1,341	6	0%
WEST BOUND	Left	339	635	296	87%	137	359	222	162%
	Through	283	203	-80	-28%	178	100	-78	-44%
	Right	7	2	-5	-71%	4	1	-3	-75%
	WB Total	629	840	211	34%	319	460	141	44%
TOTAL ENTERING VOLUME		1,314	1,789	475	36%	1,809	2,610	801	44%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	41	21			
North Leg	Outbound	30	38			
North Leg	TOTAL	71	59	#DIV/0!	#DIV/0!	-
South Leg	Inbound	566	788			
South Leg	Outbound	940	1,293			
South Leg	TOTAL	1,506	2,081	7%	9%	22,623
East Leg	Inbound	840	460			
East Leg	Outbound	329	895			
East Leg	TOTAL	1,169	1,355	8%	9%	15,541
West Leg	Inbound	342	1,341			
West Leg	Outbound	490	384			
West Leg	TOTAL	832	1,725	9%	19%	8,918
OVERALL TOTAL		3,578	5,220	8%	11%	47,082

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 NP\Int-19_Gypsum Canyon Rd. & La Palma Av_Semi2.xls\Output

**APPENDIX 5.2: POST PROCESSING WORKSHEETS FOR HORIZON YEAR
(2045) WITH PROJECT**

This Page Intentionally Left Blank

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Rose Dr. & Imperial Hwy.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	117	128	11	9%	197	238	41	21%
	Through	156	233	77	49%	365	444	79	22%
	Right	141	154	13	9%	86	109	23	27%
	NB Total	414	515	101	24%	648	791	143	22%
SOUTH BOUND	Left	650	768	118	18%	816	902	86	11%
	Through	393	470	77	20%	310	345	35	11%
	Right	26	31	5	19%	25	26	1	4%
	SB Total	1,069	1,269	200	19%	1,151	1,273	122	11%
EAST BOUND	Left	28	39	11	39%	42	42	0	0%
	Through	979	989	10	1%	1,250	1,299	49	4%
	Right	147	150	3	2%	42	44	2	5%
	EB Total	1,154	1,178	24	2%	1,334	1,385	51	4%
WEST BOUND	Left	193	199	6	3%	146	171	25	17%
	Through	991	1,011	20	2%	875	966	91	10%
	Right	400	558	158	40%	652	725	73	11%
	WB Total	1,584	1,768	184	12%	1,673	1,862	189	11%
TOTAL ENTERING VOLUME		4,221	4,730	509	12%	4,806	5,311	505	11%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,269	1,273			
North Leg	Outbound	830	1,211			
North Leg	TOTAL	2,099	2,484	6%	7%	33,344
South Leg	Inbound	515	791			
South Leg	Outbound	819	560			
South Leg	TOTAL	1,334	1,351	9%	9%	15,521
East Leg	Inbound	1,768	1,862			
East Leg	Outbound	1,911	2,310			
East Leg	TOTAL	3,679	4,172	8%	9%	48,422
West Leg	Inbound	1,178	1,385			
West Leg	Outbound	1,170	1,230			
West Leg	TOTAL	2,348	2,615	8%	9%	29,703
OVERALL TOTAL		9,460	10,622	7%	8%	126,990

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-1_Rose Dr. & Imperial Highway.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Imperial Hwy. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	305	313	8	3%	249	287	38	15%
	Through	1,313	1,306	-7	-1%	1,210	1,327	117	10%
	Right	3	4	1	33%	12	17	5	42%
	NB Total	1,621	1,623	2	0%	1,471	1,631	160	11%
SOUTH BOUND	Left	220	249	29	13%	496	630	134	27%
	Through	1,291	1,401	110	9%	1,494	1,477	-17	-1%
	Right	3	3	0	0%	3	3	0	0%
	SB Total	1,514	1,653	139	9%	1,993	2,110	117	6%
EAST BOUND	Left	18	16	-2	-11%	18	19	1	6%
	Through	349	399	50	14%	415	553	138	33%
	Right	296	324	28	9%	369	383	14	4%
	EB Total	663	739	76	11%	802	955	153	19%
WEST BOUND	Left	1	2	1	100%	9	10	1	11%
	Through	524	728	204	39%	292	350	58	20%
	Right	478	645	167	35%	354	405	51	14%
	WB Total	1,003	1,375	372	37%	655	765	110	17%
TOTAL ENTERING VOLUME		4,801	5,390	589	12%	4,921	5,461	540	11%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,653	2,110			
North Leg	Outbound	1,967	1,751			
North Leg	TOTAL	3,620	3,861	8%	9%	44,972
South Leg	Inbound	1,623	1,631			
South Leg	Outbound	1,727	1,870			
South Leg	TOTAL	3,350	3,501	8%	9%	40,349
East Leg	Inbound	1,375	765			
East Leg	Outbound	652	1,200			
East Leg	TOTAL	2,027	1,965	8%	8%	24,353
West Leg	Inbound	739	955			
West Leg	Outbound	1,044	640			
West Leg	TOTAL	1,783	1,595	8%	8%	21,093
OVERALL TOTAL		10,780	10,922	8%	8%	130,768

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-3_Imperial Highway & Bastanchury Rd.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 4/1/22

LOCATION: Imperial Hwy. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	318	365	47	15%	301	361	60	20%
	Through	926	1,015	89	10%	915	1,103	188	21%
	Right	198	217	19	10%	211	214	3	1%
	NB Total	1,442	1,597	155	11%	1,427	1,678	251	18%
SOUTH BOUND	Left	336	337	1	0%	586	525	-61	-10%
	Through	1,018	1,187	169	17%	1,025	1,110	85	8%
	Right	37	39	2	5%	67	71	4	6%
	SB Total	1,391	1,563	172	12%	1,678	1,706	28	2%
EAST BOUND	Left	26	27	1	4%	90	100	10	11%
	Through	326	340	14	4%	565	530	-35	-6%
	Right	316	384	68	22%	313	355	42	13%
	EB Total	668	751	83	12%	968	985	17	2%
WEST BOUND	Left	200	208	8	4%	158	165	7	4%
	Through	525	490	-35	-7%	555	568	13	2%
	Right	438	391	-47	-11%	445	457	12	3%
	WB Total	1,163	1,089	-74	-6%	1,158	1,190	32	3%
TOTAL ENTERING VOLUME		4,664	5,000	336	7%	5,231	5,559	328	6%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,563	1,706			
North Leg	Outbound	1,433	1,660			
North Leg	TOTAL	2,996	3,366	8%	9%	37,912
South Leg	Inbound	1,597	1,678			
South Leg	Outbound	1,779	1,630			
South Leg	TOTAL	3,376	3,308	9%	9%	37,558
East Leg	Inbound	1,089	1,190			
East Leg	Outbound	894	1,269			
East Leg	TOTAL	1,983	2,459	8%	10%	25,192
West Leg	Inbound	751	985			
West Leg	Outbound	894	1,000			
West Leg	TOTAL	1,645	1,985	8%	10%	20,643
OVERALL TOTAL		10,000	11,118	8%	9%	121,305

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[xint-5_Imperial Highway & Yorba Linda Bl.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Lakeview Av. & Buena Vista Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	52	58	6	12%	91	96	5	5%
	Through	295	318	23	8%	453	593	140	31%
	Right	56	45	-11	-20%	56	36	-20	-36%
	NB Total	403	421	18	4%	600	725	125	21%
SOUTH BOUND	Left	48	73	25	52%	35	29	-6	-17%
	Through	582	761	179	31%	394	457	63	16%
	Right	101	214	113	112%	135	182	47	35%
	SB Total	731	1,048	317	43%	564	668	104	18%
EAST BOUND	Left	139	201	62	45%	223	340	117	52%
	Through	113	122	9	8%	88	66	-22	-25%
	Right	73	68	-5	-7%	67	71	4	6%
	EB Total	325	391	66	20%	378	477	99	26%
WEST BOUND	Left	88	48	-40	-45%	34	32	-2	-6%
	Through	127	111	-16	-13%	46	51	5	11%
	Right	72	61	-11	-15%	49	67	18	37%
	WB Total	287	220	-67	-23%	129	150	21	16%
TOTAL ENTERING VOLUME		1,746	2,080	334	19%	1,671	2,020	349	21%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,048	668			
North Leg	Outbound	580	1,000			
North Leg	TOTAL	1,628	1,668	9%	10%	17,399
South Leg	Inbound	421	725			
South Leg	Outbound	877	560			
South Leg	TOTAL	1,298	1,285	10%	10%	13,399
East Leg	Inbound	220	150			
East Leg	Outbound	240	131			
East Leg	TOTAL	460	281	20%	12%	2,294
West Leg	Inbound	391	477			
West Leg	Outbound	383	329			
West Leg	TOTAL	774	806	8%	8%	9,997
OVERALL TOTAL		4,160	4,040	10%	9%	43,089

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-6_Lakeview Av. & Buena Vista Av..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Kellogg Dr. & SR-90 SB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	435	445	10	2%	409	458	49	12%
	Right	144	158	14	10%	102	97	-5	-5%
	NB Total	579	603	24	4%	511	555	44	9%
SOUTH BOUND	Left	280	459	179	64%	243	242	-1	0%
	Through	465	489	24	5%	268	261	-7	-3%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	745	948	203	27%	511	503	-8	-2%
EAST BOUND	Left	18	26	8	44%	73	92	19	26%
	Through	0	0	0	#DIV/0!	1	1	0	0%
	Right	267	263	-4	-1%	153	159	6	4%
	EB Total	285	289	4	1%	227	252	25	11%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,609	1,840	231	14%	1,249	1,310	61	5%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	948	503			
North Leg	Outbound	471	550			
North Leg	TOTAL	1,419	1,053	13%	10%	10,734
South Leg	Inbound	603	555			
South Leg	Outbound	752	420			
South Leg	TOTAL	1,355	975	14%	10%	9,994
East Leg	Inbound	0	0			
East Leg	Outbound	617	340			
East Leg	TOTAL	617	340	17%	9%	3,659
West Leg	Inbound	289	252			
West Leg	Outbound	0	0			
West Leg	TOTAL	289	252	12%	10%	2,450
OVERALL TOTAL		3,680	2,620	14%	10%	26,837

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\Int-7_Imperial Highway SB Ramps & Kellogg Dr.xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: SR-90 NB Ramps & Kellogg Dr.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	159	157	-2	-1%	151	134	-17	-11%
	Through	294	307	13	4%	331	441	110	33%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	453	464	11	2%	482	575	93	19%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	618	852	234	38%	407	410	3	1%
	Right	73	113	40	55%	46	45	-1	-2%
	SB Total	691	965	274	40%	453	455	2	0%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	127	98	-29	-23%	104	90	-14	-13%
	Through	0	0	0	#DIV/0!	1	1	0	0%
	Right	286	263	-23	-8%	308	389	81	26%
	WB Total	413	361	-52	-13%	413	480	67	16%
TOTAL ENTERING VOLUME		1,557	1,790	233	15%	1,348	1,510	162	12%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	965	455			
North Leg	Outbound	570	830			
North Leg	TOTAL	1,535	1,285	13%	11%	11,619
South Leg	Inbound	464	575			
South Leg	Outbound	950	500			
South Leg	TOTAL	1,414	1,075	13%	10%	10,734
East Leg	Inbound	361	480			
East Leg	Outbound	0	0			
East Leg	TOTAL	361	480	10%	13%	3,559
West Leg	Inbound	0	0			
West Leg	Outbound	270	180			
West Leg	TOTAL	270	180	15%	10%	1,842
OVERALL TOTAL		3,580	3,020	13%	11%	27,755

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\Int-8_Imperial Highway NB Ramps & Kellogg Dr.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Lakeview Av. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	120	140	20	17%	90	108	18	20%
	Through	59	56	-3	-5%	131	133	2	2%
	Right	191	184	-7	-4%	230	243	13	6%
	NB Total	370	380	10	3%	451	484	33	7%
SOUTH BOUND	Left	108	102	-6	-6%	66	62	-4	-6%
	Through	133	131	-2	-2%	91	88	-3	-3%
	Right	59	67	8	14%	20	21	1	5%
	SB Total	300	300	0	0%	177	171	-6	-3%
EAST BOUND	Left	31	33	2	6%	38	42	4	11%
	Through	488	524	36	7%	619	715	96	16%
	Right	144	162	18	13%	127	151	24	19%
	EB Total	663	719	56	8%	784	908	124	16%
WEST BOUND	Left	224	246	22	10%	144	142	-2	-1%
	Through	722	913	191	26%	480	521	41	9%
	Right	99	102	3	3%	81	75	-6	-7%
	WB Total	1,045	1,261	216	21%	705	738	33	5%
TOTAL ENTERING VOLUME		2,378	2,660	282	12%	2,117	2,301	184	9%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	300	171			
North Leg	Outbound	191	250			
North Leg	TOTAL	491	421	11%	10%	4,309
South Leg	Inbound	380	484			
South Leg	Outbound	539	381			
South Leg	TOTAL	919	865	9%	8%	10,343
East Leg	Inbound	1,261	738			
East Leg	Outbound	810	1,020			
East Leg	TOTAL	2,071	1,758	10%	9%	20,462
West Leg	Inbound	719	908			
West Leg	Outbound	1,120	650			
West Leg	TOTAL	1,839	1,558	9%	8%	19,507
OVERALL TOTAL		5,320	4,602	10%	8%	54,621

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-10_Lakeview Av. & Bastanchury Rd..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 4/1/22

LOCATION: Lakeview Av. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	135	139	4	3%	187	238	51	27%
	Through	178	217	39	22%	284	423	139	49%
	Right	196	211	15	8%	265	339	74	28%
	NB Total	509	567	58	11%	736	1,000	264	36%
SOUTH BOUND	Left	91	95	4	4%	183	202	19	10%
	Through	284	419	135	48%	271	330	59	22%
	Right	105	105	0	0%	143	157	14	10%
	SB Total	480	619	139	29%	597	689	92	15%
EAST BOUND	Left	142	157	15	11%	171	180	9	5%
	Through	672	654	-18	-3%	1,073	973	-100	-9%
	Right	196	270	74	38%	107	107	0	0%
	EB Total	1,010	1,081	71	7%	1,351	1,260	-91	-7%
WEST BOUND	Left	318	431	113	36%	175	191	16	9%
	Through	888	816	-72	-8%	867	852	-15	-2%
	Right	89	97	8	9%	84	97	13	15%
	WB Total	1,295	1,344	49	4%	1,126	1,140	14	1%
TOTAL ENTERING VOLUME		3,294	3,611	317	10%	3,810	4,089	279	7%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	619	689			
North Leg	Outbound	471	700			
North Leg	TOTAL	1,090	1,389	7%	9%	15,799
South Leg	Inbound	567	1,000			
South Leg	Outbound	1,120	628			
South Leg	TOTAL	1,687	1,628	10%	9%	17,493
East Leg	Inbound	1,344	1,140			
East Leg	Outbound	960	1,514			
East Leg	TOTAL	2,304	2,654	8%	10%	27,577
West Leg	Inbound	1,081	1,260			
West Leg	Outbound	1,060	1,247			
West Leg	TOTAL	2,141	2,507	8%	10%	25,472
OVERALL TOTAL		7,222	8,178	8%	9%	86,341

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-12_Lakeview Av. & Yorba Linda Bl.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Ohio St. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	70	67	-3	-4%	47	48	1	2%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	14	-6	-30%	15	13	-2	-13%
	SB Total	90	81	-9	-10%	62	61	-1	-2%
EAST BOUND	Left	20	15	-5	-25%	13	11	-2	-15%
	Through	1,066	1,073	7	1%	951	932	-19	-2%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	1,086	1,088	2	0%	964	943	-21	-2%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	726	736	10	1%	1,331	1,327	-4	0%
	Right	50	55	5	10%	70	69	-1	-1%
	WB Total	776	791	15	2%	1,401	1,396	-5	0%
TOTAL ENTERING VOLUME		1,952	1,960	8	0%	2,427	2,400	-27	-1%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	81	61			
North Leg	Outbound	70	80			
North Leg	TOTAL	151	141	10%	10%	1,481
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	TOTAL	0	0	#DIV/0!	#DIV/0!	#DIV/0!
East Leg	Inbound	791	1,396			
East Leg	Outbound	1,140	980			
East Leg	TOTAL	1,931	2,376	8%	9%	25,659
West Leg	Inbound	1,088	943			
West Leg	Outbound	750	1,340			
West Leg	TOTAL	1,838	2,283	8%	9%	24,128
OVERALL TOTAL		3,920	4,800	#DIV/0!	#DIV/0!	#DIV/0!

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\Int-13_Ohio St. & Yorba Linda Bl..xls\Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Fairmont Bl. & Bastanchury Rd.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	168	212	44	26%	120	150	30	25%
	Through	177	186	9	5%	109	140	31	28%
	Right	40	41	1	3%	37	41	4	11%
	NB Total	385	439	54	14%	266	331	65	24%
SOUTH BOUND	Left	38	40	2	5%	30	29	-1	-3%
	Through	239	279	40	17%	86	89	3	3%
	Right	225	291	66	29%	120	132	12	10%
	SB Total	502	610	108	22%	236	250	14	6%
EAST BOUND	Left	97	97	0	0%	155	182	27	17%
	Through	346	339	-7	-2%	429	431	2	0%
	Right	180	194	14	8%	202	216	14	7%
	EB Total	623	630	7	1%	786	829	43	5%
WEST BOUND	Left	112	107	-5	-4%	46	43	-3	-7%
	Through	448	476	28	6%	367	362	-5	-1%
	Right	19	17	-2	-11%	35	36	1	3%
	WB Total	579	600	21	4%	448	441	-7	-2%
TOTAL ENTERING VOLUME		2,089	2,279	190	9%	1,736	1,851	115	7%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	610	250			
North Leg	Outbound	300	358			
North Leg	TOTAL	910	608	14%	9%	6,617
South Leg	Inbound	439	331			
South Leg	Outbound	580	348			
South Leg	TOTAL	1,019	679	14%	9%	7,397
East Leg	Inbound	600	441			
East Leg	Outbound	420	501			
East Leg	TOTAL	1,020	942	10%	9%	10,015
West Leg	Inbound	630	829			
West Leg	Outbound	979	644			
West Leg	TOTAL	1,609	1,473	9%	8%	17,437
OVERALL TOTAL		4,558	3,702	11%	9%	41,466

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-14_Fairmont Bl. & Bastanchury Rd..xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/30/22

LOCATION: Fairmont Bl. & Yorba Linda Bl.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	264	297	33	13%	171	239	68	40%
	Through	220	246	26	12%	10	27	17	170%
	Right	54	67	13	24%	47	94	47	100%
	NB Total	538	610	72	13%	228	360	132	58%
SOUTH BOUND	Left	105	115	10	10%	125	138	13	10%
	Through	222	281	59	27%	130	174	44	34%
	Right	286	284	-2	-1%	207	159	-48	-23%
	SB Total	613	680	67	11%	462	471	9	2%
EAST BOUND	Left	166	143	-23	-14%	214	275	61	29%
	Through	494	475	-19	-4%	984	928	-56	-6%
	Right	146	162	16	11%	196	225	29	15%
	EB Total	806	780	-26	-3%	1,394	1,428	34	2%
WEST BOUND	Left	100	132	32	32%	49	81	32	65%
	Through	743	772	29	4%	733	692	-41	-6%
	Right	93	96	3	3%	53	98	45	85%
	WB Total	936	1,000	64	7%	835	871	36	4%
TOTAL ENTERING VOLUME		2,893	3,070	177	6%	2,919	3,130	211	7%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	680	471			
North Leg	Outbound	485	400			
North Leg	TOTAL	1,165	871	12%	9%	9,706
South Leg	Inbound	610	360			
South Leg	Outbound	575	480			
South Leg	TOTAL	1,185	840	9%	6%	13,794
East Leg	Inbound	1,000	871			
East Leg	Outbound	657	1,160			
East Leg	TOTAL	1,657	2,031	7%	9%	22,221
West Leg	Inbound	780	1,428			
West Leg	Outbound	1,353	1,090			
West Leg	TOTAL	2,133	2,518	8%	10%	25,815
OVERALL TOTAL		6,140	6,260	9%	9%	71,536

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-15_Fairmont Bl. & Yorba Linda Bl.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Weir Canyon Rd. & SR-91 WB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,384	1,412	28	2%	1,344	1,390	46	3%
	Right	405	410	5	1%	340	341	1	0%
	NB Total	1,789	1,822	33	2%	1,684	1,731	47	3%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,186	1,172	-14	-1%	1,475	1,506	31	2%
	Right	325	310	-15	-5%	611	582	-29	-5%
	SB Total	1,511	1,482	-29	-2%	2,086	2,088	2	0%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	357	368	11	3%	523	622	99	19%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	534	568	34	6%	634	538	-96	-15%
	WB Total	891	936	45	5%	1,157	1,160	3	0%
TOTAL ENTERING VOLUME		4,191	4,240	49	1%	4,927	4,979	52	1%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,482	2,088			
North Leg	Outbound	1,980	1,928			
North Leg	TOTAL	3,462	4,016	8%	9%	42,458
South Leg	Inbound	1,822	1,731			
South Leg	Outbound	1,540	2,128			
South Leg	TOTAL	3,362	3,859	8%	10%	40,384
East Leg	Inbound	936	1,160			
East Leg	Outbound	410	341			
East Leg	TOTAL	1,346	1,501	8%	9%	16,844
West Leg	Inbound	0	0			
West Leg	Outbound	310	582			
West Leg	TOTAL	310	582	5%	9%	6,254
OVERALL TOTAL		8,480	9,958	8%	9%	105,939

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-17_Weir Canyon Rd. & SR-91 WB Ramps.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Weir Canyon Rd. & SR-91 EB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,081	1,161	80	7%	1,336	1,403	67	5%
	Right	478	440	-38	-8%	638	580	-58	-9%
	NB Total	1,559	1,601	42	3%	1,974	1,983	9	0%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	860	961	101	12%	1,717	1,948	231	13%
	Right	683	680	-3	0%	281	280	-1	0%
	SB Total	1,543	1,641	98	6%	1,998	2,228	230	12%
EAST BOUND	Left	708	629	-79	-11%	348	337	-11	-3%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	560	499	-61	-11%	688	562	-126	-18%
	EB Total	1,268	1,128	-140	-11%	1,036	899	-137	-13%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		4,370	4,370	0	0%	5,008	5,110	102	2%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,641	2,228			
North Leg	Outbound	1,790	1,740			
North Leg	TOTAL	3,431	3,968	9%	10%	40,262
South Leg	Inbound	1,601	1,983			
South Leg	Outbound	1,460	2,510			
South Leg	TOTAL	3,061	4,493	6%	9%	48,299
East Leg	Inbound	0	0			
East Leg	Outbound	440	580			
East Leg	TOTAL	440	580	7%	9%	6,159
West Leg	Inbound	1,128	899			
West Leg	Outbound	680	280			
West Leg	TOTAL	1,808	1,179	15%	10%	11,949
OVERALL TOTAL		8,740	10,220	8%	10%	106,669

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-18_Weir Canyon Rd. & SR-91 EB Ramps.xls]Output (3)

Project: Yorba Linda Housing Element/SP
 Scenario: Horizon Year (2045) With Project

Job #: 13763
 Analyst: MT
 Date: 3/31/22

LOCATION: Gypsum Canyon Rd. & La Palma Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	194	272	78	40%	72	279	207	288%
	Through	6	27	21	350%	4	34	30	750%
	Right	123	273	150	122%	64	576	512	800%
	NB Total	323	572	249	77%	140	889	749	535%
SOUTH BOUND	Left	7	1	-6	-86%	2	1	-1	-50%
	Through	13	39	26	200%	8	18	10	125%
	Right	17	1	-16	-94%	5	1	-4	-80%
	SB Total	37	41	4	11%	15	20	5	33%
EAST BOUND	Left	15	1	-14	-93%	26	3	-23	-88%
	Through	136	76	-60	-44%	443	467	24	5%
	Right	174	263	89	51%	866	871	5	1%
	EB Total	325	340	15	5%	1,335	1,341	6	0%
WEST BOUND	Left	339	749	410	121%	137	396	259	189%
	Through	283	217	-66	-23%	178	103	-75	-42%
	Right	7	2	-5	-71%	4	1	-3	-75%
	WB Total	629	968	339	54%	319	500	181	57%
TOTAL ENTERING VOLUME		1,314	1,921	607	46%	1,809	2,750	941	52%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	41	20			
North Leg	Outbound	30	38			
North Leg	TOTAL	71	58	#DIV/0!	#DIV/0!	-
South Leg	Inbound	572	889			
South Leg	Outbound	1,051	1,285			
South Leg	TOTAL	1,623	2,174	7%	9%	24,745
East Leg	Inbound	968	500			
East Leg	Outbound	350	1,044			
East Leg	TOTAL	1,318	1,544	7%	9%	17,956
West Leg	Inbound	340	1,341			
West Leg	Outbound	490	383			
West Leg	TOTAL	830	1,724	9%	19%	9,272
OVERALL TOTAL		3,842	5,500	7%	11%	51,973

\\EgnyteDrive\urbanxroads\Shared\UcJobs_13600-14000_13700\13763\02_LOS\PP\2045 WP\[Int-19_Gypsum Canyon Rd. & La Palma Av_Semi2.xls]Output

**APPENDIX 5.3: HORIZON YEAR (2045) WITHOUT PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.740
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	1	0	2	1	0	2

Volume Module:

Base Vol:	120	203	140	781	459	32	38	999	146	185	1008	519
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	203	140	781	459	32	38	999	146	185	1008	519
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	203	140	781	459	32	38	999	146	185	1008	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	203	140	781	459	32	38	999	146	185	1008	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	203	140	781	459	32	38	999	146	185	1008	519

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.62	0.38	2.00	3.00	1.00
Final Sat.:	3400	3400	1700	3400	3400	1700	1700	4450	650	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.04	0.06	0.08	0.23	0.14	0.02	0.02	0.22	0.22	0.05	0.20	0.31
Crit Moves:			****	****			****					****

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Prospect Av. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.942
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 127 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	2	1	0	2

Volume Module:

Base Vol:	44	104	9	71	90	139	161	1504	26	46	1622	998
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	104	9	71	90	139	161	1504	26	46	1622	998
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	104	9	71	90	139	161	1504	26	46	1622	998
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	104	9	71	90	139	161	1504	26	46	1622	998
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	104	9	71	90	139	161	1504	26	46	1622	998

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.39	0.61	1.00	2.95	0.05	1.00	2.00	1.00
Final Sat.:	1700	1565	135	1700	668	1032	1700	5013	87	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.03	0.07	0.07	0.04	0.13	0.13	0.09	0.30	0.30	0.03	0.48	0.59
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Imperial Hwy. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 78 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1	1	2	0	3	0	1	1

Volume Module:

Base Vol:	282	1325	4	245	1416	3	17	394	329	2	639	635
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	282	1325	4	245	1416	3	17	394	329	2	639	635
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	282	1325	4	245	1416	3	17	394	329	2	639	635
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	282	1325	4	245	1416	3	17	394	329	2	639	635
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	282	1325	4	245	1416	3	17	394	329	2	639	635

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.09	0.91	1.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	1700	1853	1547	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.08	0.26	0.00	0.07	0.28	0.00	0.01	0.21	0.21	0.00	0.19	0.37
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.496
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 1 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	0	1451	36	22	1622	4	3	1	1	47	3	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1451	36	22	1622	4	3	1	1	47	3	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1451	36	22	1622	4	3	1	1	47	3	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1451	36	22	1622	4	3	1	1	47	3	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1451	36	22	1622	4	3	1	1	47	3	79

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.93	0.07	1.00	2.99	0.01	0.60	0.20	0.20	0.36	0.02	0.62
Final Sat.:	0	4977	123	1700	5087	13	1020	340	340	619	40	1041

Capacity Analysis Module:

Vol/Sat:	0.00	0.29	0.29	0.01	0.32	0.32	0.00	0.00	0.00	0.03	0.08	0.08
Crit Moves:				****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.888
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 95 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	365	1031	221	343	1180	39	27	335	369	200	475	384
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	365	1031	221	343	1180	39	27	335	369	200	475	384
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	365	1031	221	343	1180	39	27	335	369	200	475	384
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	365	1031	221	343	1180	39	27	335	369	200	475	384
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	365	1031	221	343	1180	39	27	335	369	200	475	384
OvlAdjVol:												41

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.47	0.53	2.00	2.90	0.10	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4200	900	3400	4937	163	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.25	0.25	0.10	0.24	0.24	0.02	0.10	0.22	0.12	0.09	0.11
OvlAdjV/S:												0.01
Crit Moves:	****			****			****	****				

Intersection	
Intersection Delay, s/veh	173.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	
Traffic Vol, veh/h	187	112	53	47	112	71	50	318	45	82	726	208
Future Vol, veh/h	187	112	53	47	112	71	50	318	45	82	726	208
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	228	137	65	57	137	87	61	388	55	100	885	254
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	37.7	35.4	114.8	276.1
HCM LOS	E	E	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	68%	0%	61%	0%	100%	54%
Vol Right, %	0%	0%	100%	0%	32%	0%	39%	0%	0%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	318	45	187	165	47	183	82	484	450
LT Vol	50	0	0	187	0	47	0	82	0	0
Through Vol	0	318	0	0	112	0	112	0	484	242
RT Vol	0	0	45	0	53	0	71	0	0	208
Lane Flow Rate	61	388	55	228	201	57	223	100	590	549
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.194	1.178	0.156	0.73	0.604	0.192	0.7	0.295	1.656	1.49
Departure Headway (Hd)	12.525	12.001	11.268	12.706	11.962	13.194	12.398	11.199	10.671	10.329
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	288	306	320	287	304	274	295	323	348	357
Service Time	10.225	9.701	8.968	10.406	9.662	10.894	10.098	8.899	8.371	8.029
HCM Lane V/C Ratio	0.212	1.268	0.172	0.794	0.661	0.208	0.756	0.31	1.695	1.538
HCM Control Delay	18.2	144	16	43.3	31.3	19	39.6	18.5	333.4	261.4
HCM Lane LOS	C	F	C	E	D	C	E	C	F	F
HCM 95th-tile Q	0.7	15.3	0.5	5.2	3.7	0.7	4.8	1.2	33.9	28.2

Intersection

Int Delay, s/veh	80.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	23	0	256	0	0	0	0	435	167	413	446	0
Future Vol, veh/h	23	0	256	0	0	0	0	435	167	413	446	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	0	394	0	0	0	0	669	257	635	686	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2291	-	343	-	0	0	929	0	0
Stage 1	1956	-	-	-	-	-	-	-	-
Stage 2	335	-	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 33	0	653	0	-	-	732	-	0
Stage 1	96	0	-	0	-	-	-	-	0
Stage 2	697	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 4	0	653	-	-	-	732	-	-
Mov Cap-2 Maneuver	~ 4	0	-	-	-	-	-	-	-
Stage 1	96	0	-	-	-	-	-	-	-
Stage 2	93	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/\$	450.5	0	15.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	4	653	732	-
HCM Lane V/C Ratio	-	-	8.846	0.603	0.868	-
HCM Control Delay (s)	-	-	\$ 5258.7	18.5	33.2	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	6.1	4.1	10.5	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
8: Kellog Dr. & SR 90 WB Ramps

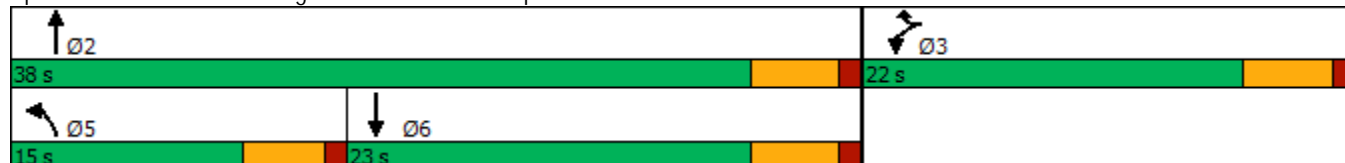


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	98	257	163	295	761
Future Volume (vph)	98	257	163	295	761
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	14.0	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 53.1
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated

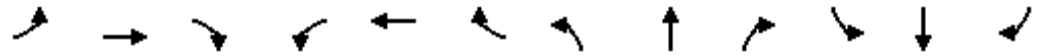
Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	98	0	257	163	295	0	0	761	107
Future Volume (veh/h)	0	0	0	98	0	257	163	295	0	0	761	107
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				131	0	71	217	393	0	0	1015	135
Peak Hour Factor				0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				339	0	302	270	2153	0	0	1132	150
Arrive On Green				0.19	0.00	0.19	0.15	0.61	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3235	417
Grp Volume(v), veh/h				131	0	71	217	393	0	0	574	576
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1782
Q Serve(g_s), s				3.2	0.0	1.9	5.8	2.4	0.0	0.0	15.0	15.0
Cycle Q Clear(g_c), s				3.2	0.0	1.9	5.8	2.4	0.0	0.0	15.0	15.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.23
Lane Grp Cap(c), veh/h				339	0	302	270	2153	0	0	641	642
V/C Ratio(X)				0.39	0.00	0.24	0.80	0.18	0.00	0.00	0.90	0.90
Avail Cap(c_a), veh/h				616	0	548	377	2386	0	0	651	653
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.4	0.0	16.9	20.1	4.3	0.0	0.0	14.8	14.9
Incr Delay (d2), s/veh				0.7	0.0	0.4	5.6	0.0	0.0	0.0	14.9	15.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	0.6	2.6	0.6	0.0	0.0	7.6	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.1	0.0	17.2	25.7	4.3	0.0	0.0	29.8	29.9
LnGrp LOS				B	A	B	C	A	A	A	C	C
Approach Vol, veh/h					202			610			1150	
Approach Delay, s/veh					17.8			11.9			29.8	
Approach LOS					B			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.8			12.1	22.7		14.4				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.4			7.8	17.0		5.2				
Green Ext Time (p_c), s		2.7			0.1	0.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.419
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	112	0	118	0	0	0	0	577	64	77	860	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	0	118	0	0	0	0	577	64	77	860	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	0	118	0	0	0	0	577	64	77	860	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	0	118	0	0	0	0	577	64	77	860	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	112	0	118	0	0	0	0	577	64	77	860	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3061	339	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.19	0.19	0.05	0.25	0.00
Crit Moves:	****						****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.605
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	129	54	186	108	127	65	30	506	143	240	895	105	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	129	54	186	108	127	65	30	506	143	240	895	105	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	129	54	186	108	127	65	30	506	143	240	895	105	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	129	54	186	108	127	65	30	506	143	240	895	105	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	129	54	186	108	127	65	30	506	143	240	895	105	
OvlAdjVol:							35						

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.56	0.44	1.00	1.79	0.21
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	2651	749	1700	3043	357

Capacity Analysis Module:

Vol/Sat:	0.08	0.03	0.11	0.06	0.07	0.04	0.02	0.19	0.19	0.14	0.29	0.29	
OvlAdjV/S:							0.02						
Crit Moves:	****			****			****			****			

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.324
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	42	315	2	0	521	39	19	1	58	0	1	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	315	2	0	521	39	19	1	58	0	1	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	315	2	0	521	39	19	1	58	0	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	315	2	0	521	39	19	1	58	0	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	315	2	0	521	39	19	1	58	0	1	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.86	0.14	0.95	0.05	1.00	0.00	1.00	0.00
Final Sat.:	1700	3379	21	1700	3163	237	1615	85	1700	0	1700	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.09	0.09	0.00	0.16	0.16	0.01	0.01	0.03	0.00	0.00	0.00
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.354
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	69	0	12	12	1086	0	0	742	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	12	12	1086	0	0	742	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	69	0	12	12	1086	0	0	742	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	69	0	12	12	1086	0	0	742	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	69	0	12	12	1086	0	0	742	49

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.81	0.19
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4784	316

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.21	0.00	0.00	0.16	0.16
Crit Moves:				****				****				

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Fairmont Bl. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	1	1	0	1	1

Volume Module:

Base Vol:	218	189	42	39	260	281	97	343	190	104	479	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	218	189	42	39	260	281	97	343	190	104	479	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	218	189	42	39	260	281	97	343	190	104	479	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	218	189	42	39	260	281	97	343	190	104	479	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	218	189	42	39	260	281	97	343	190	104	479	17

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.29	0.71	1.00	1.93	0.07
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	2188	1212	1700	3283	117

Capacity Analysis Module:

Vol/Sat:	0.13	0.06	0.02	0.02	0.08	0.17	0.06	0.16	0.16	0.06	0.15	0.15
Crit Moves:	****					****	****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.596
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	0	3	0	1	0	2

Volume Module:

Base Vol:	302	249	69	113	270	277	141	472	157	127	750	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	302	249	69	113	270	277	141	472	157	127	750	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	302	249	69	113	270	277	141	472	157	127	750	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	302	249	69	113	270	277	141	472	157	127	750	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	302	249	69	113	270	277	141	472	157	127	750	93
OvlAdjVol:						0			6			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.57	0.43	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.67	0.33
Final Sat.:	3400	2662	738	1700	1700	3400	1700	5100	1700	1700	4537	563

Capacity Analysis Module:

Vol/Sat:	0.09	0.09	0.09	0.07	0.16	0.08	0.08	0.09	0.09	0.07	0.17	0.17
OvlAdjV/S:						0.00			0.00			
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.638
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	2

Volume Module:

Base Vol:	280	1075	746	249	1160	232	108	0	225	271	0	184
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1075	746	249	1160	232	108	0	225	271	0	184
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	1075	0	249	1160	232	108	0	225	271	0	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1075	0	249	1160	232	108	0	225	271	0	184
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	1075	0	249	1160	232	108	0	225	271	0	184

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	2.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	3400	0	3400

Capacity Analysis Module:

Vol/Sat:	0.16	0.21	0.00	0.15	0.23	0.14	0.06	0.00	0.07	0.08	0.00	0.05
Crit Moves:	****			****			****	****		****	****	

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

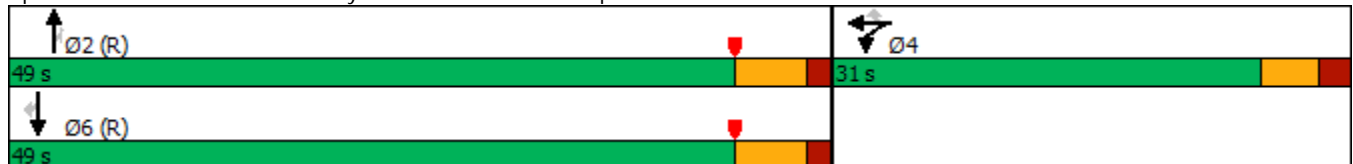


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	386	0	580	1521	410	1309	346
Future Volume (vph)	386	0	580	1521	410	1309	346
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

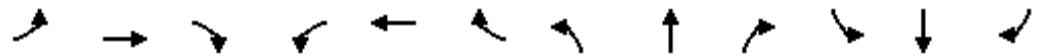
Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗		↑↑↑	↗		↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	386	0	580	0	1521	410	0	1309	346
Future Volume (veh/h)	0	0	0	386	0	580	0	1521	410	0	1309	346
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				280	0	787	0	1671	0	0	1438	0
Peak Hour Factor				0.92	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				515	0	917	0	2909	0	0	3196	0
Arrive On Green				0.29	0.00	0.29	0.00	1.00	0.00	0.00	0.57	0.00
Sat Flow, veh/h				1781	0	3170	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				280	0	787	0	1671	0	0	1438	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				10.6	0.0	18.8	0.0	0.0	0.0	0.0	11.9	0.0
Cycle Q Clear(g_c), s				10.6	0.0	18.8	0.0	0.0	0.0	0.0	11.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	917	0	2909	0	0	3196	0
V/C Ratio(X)				0.54	0.00	0.86	0.00	0.57		0.00	0.45	
Avail Cap(c_a), veh/h				568	0	1010	0	2909		0	3196	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.79	0.00	0.00	0.76	0.00
Uniform Delay (d), s/veh				24.0	0.0	26.9	0.0	0.0	0.0	0.0	10.0	0.0
Incr Delay (d2), s/veh				1.1	0.0	7.2	0.0	0.7	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.4	0.0	7.7	0.0	0.2	0.0	0.0	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.1	0.0	34.1	0.0	0.7	0.0	0.0	10.3	0.0
LnGrp LOS				C	A	C	A	A		A	B	
Approach Vol, veh/h					1067			1671	A		1438	A
Approach Delay, s/veh					31.7			0.7			10.3	
Approach LOS					C			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		51.4		28.6		51.4						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		20.8		13.9						
Green Ext Time (p_c), s		17.1		2.3		12.1						

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

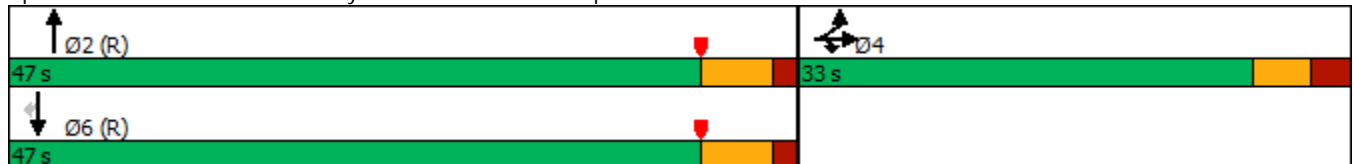


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	648	0	508	1283	420	982	713
Future Volume (vph)	648	0	508	1283	420	982	713
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 78.2 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

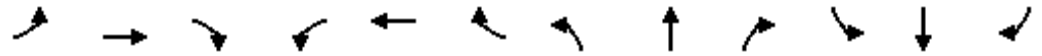
Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	648	0	508	0	0	0	0	1283	420	0	982	713
Future Volume (veh/h)	648	0	508	0	0	0	0	1283	420	0	982	713
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	807	0	235				0	1380	0	0	1056	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	989	0	440				0	2935		0	2935	
Arrive On Green	0.28	0.00	0.28				0.00	0.57	0.00	0.00	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	807	0	235				0	1380	0	0	1056	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	16.9	0.0	10.1				0.0	12.6	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.9	0.0	10.1				0.0	12.6	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	989	0	440				0	2935		0	2935	
V/C Ratio(X)	0.82	0.00	0.53				0.00	0.47		0.00	0.36	
Avail Cap(c_a), veh/h	1202	0	535				0	2935		0	2935	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.79	0.00
Uniform Delay (d), s/veh	27.0	0.0	24.5				0.0	9.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.0	0.0	1.2				0.0	0.5	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	3.8				0.0	4.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	25.7				0.0	10.5	0.0	0.0	0.3	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		1042						1380	A		1056	A
Approach Delay, s/veh		29.8						10.5			0.3	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		51.8		28.2				51.8				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		14.6		18.9				2.0				
Green Ext Time (p_c), s		17.9		3.3				16.7				

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	286	27	253	1	39	1	1	75	266	635	203	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	286	27	253	1	39	1	1	75	266	635	203	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	286	27	253	1	39	1	1	75	266	635	203	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	286	27	253	1	39	1	1	75	266	635	203	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	286	27	253	1	39	1	1	75	266	635	203	2
OvlAdjVol:	77											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.52	0.14	1.34	0.02	0.98	1.00	1.00	1.00	1.00	1.00	1.98	0.02
Final Sat.:	2577	243	2280	43	1658	1700	1700	1700	1700	1700	3367	33

Capacity Analysis Module:

Vol/Sat:	0.11	0.11	0.11	0.02	0.02	0.00	0.00	0.04	0.16	0.37	0.06	0.06	
OvlAdjV/S:											0.05		
Crit Moves:	****						****						****

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.926
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 115 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	2	0	1	0	2	0

Volume Module:

Base Vol:	233	438	97	825	339	27	46	1288	47	165	960	726
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	438	97	825	339	27	46	1288	47	165	960	726
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	438	97	825	339	27	46	1288	47	165	960	726
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	438	97	825	339	27	46	1288	47	165	960	726
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	438	97	825	339	27	46	1288	47	165	960	726

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.89	0.11	2.00	3.00	1.00
Final Sat.:	3400	3400	1700	3400	3400	1700	1700	4920	180	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.06	0.24	0.10	0.02	0.03	0.26	0.26	0.05	0.19	0.43
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.625
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 42 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 1 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	0	1435	67	117	1805	21	19	4	16	76	11	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1435	67	117	1805	21	19	4	16	76	11	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1435	67	117	1805	21	19	4	16	76	11	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1435	67	117	1805	21	19	4	16	76	11	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1435	67	117	1805	21	19	4	16	76	11	169

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	0.13	1.00	2.97	0.03	0.49	0.10	0.41	0.30	0.04	0.66
Final Sat.:	0	4873	227	1700	5041	59	828	174	697	505	73	1122

Capacity Analysis Module:

Vol/Sat:	0.00	0.29	0.29	0.07	0.36	0.36	0.01	0.02	0.02	0.04	0.15	0.15
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.848
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 79 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	354	1090	207	518	1121	71	100	515	353	167	566	460
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	354	1090	207	518	1121	71	100	515	353	167	566	460
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	354	1090	207	518	1121	71	100	515	353	167	566	460
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	354	1090	207	518	1121	71	100	515	353	167	566	460
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	354	1090	207	518	1121	71	100	515	353	167	566	460
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.52	0.48	2.00	2.82	0.18	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4286	814	3400	4796	304	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.25	0.25	0.15	0.23	0.23	0.06	0.15	0.21	0.10	0.11	0.14
OvlAdjV/S:	0.00											
Crit Moves:	****	****					****	****	****			

Intersection	
Intersection Delay, s/veh	110.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↑	↷	↶	↷	
Traffic Vol, veh/h	312	68	59	31	47	71	80	567	39	33	430	164
Future Vol, veh/h	312	68	59	31	47	71	80	567	39	33	430	164
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	322	70	61	32	48	73	82	585	40	34	443	169
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	47.3	19.3	237.7	38
HCM LOS	E	C	F	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	54%	0%	40%	0%	100%	47%
Vol Right, %	0%	0%	100%	0%	46%	0%	60%	0%	0%	53%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	567	39	312	127	31	118	33	287	307
LT Vol	80	0	0	312	0	31	0	33	0	0
Through Vol	0	567	0	0	68	0	47	0	287	143
RT Vol	0	0	39	0	59	0	71	0	0	164
Lane Flow Rate	82	585	40	322	131	32	122	34	296	317
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.231	1.55	0.098	0.888	0.332	0.099	0.346	0.092	0.757	0.778
Departure Headway (Hd)	10.064	9.543	8.814	10.957	10.109	12.387	11.427	10.787	10.261	9.869
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	355	380	405	335	357	291	316	334	355	371
Service Time	7.859	7.338	6.608	8.657	7.809	10.087	9.127	8.487	7.961	7.569
HCM Lane V/C Ratio	0.231	1.539	0.099	0.961	0.367	0.11	0.386	0.102	0.834	0.854
HCM Control Delay	15.9	284.5	12.6	59.3	17.8	16.4	20.1	14.6	38.8	39.8
HCM Lane LOS	C	F	B	F	C	C	C	B	E	E
HCM 95th-tile Q	0.9	32.4	0.3	8.4	1.4	0.3	1.5	0.3	6	6.4

Intersection												
Int Delay, s/veh	8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	94	1	155	0	0	0	0	430	90	241	248	0
Future Vol, veh/h	94	1	155	0	0	0	0	430	90	241	248	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	11	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	106	1	174	0	0	0	0	483	101	271	279	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1063	1416	141	-	0	0	595	0	0
Stage 1	821	821	-	-	-	-	-	-	-
Stage 2	242	595	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	218	136	881	0	-	-	977	-	0
Stage 1	393	387	-	0	-	-	-	-	0
Stage 2	776	491	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	158	0	880	-	-	-	977	-	-
Mov Cap-2 Maneuver	158	0	-	-	-	-	-	-	-
Stage 1	393	0	-	-	-	-	-	-	-
Stage 2	561	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.7	0	5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	158	880	977	-
HCM Lane V/C Ratio	-	-	0.668	0.198	0.277	-
HCM Control Delay (s)	-	-	64.6	10.1	10.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	3.8	0.7	1.1	-

Timings
8: Kellog Dr. & SR 90 WB Ramps

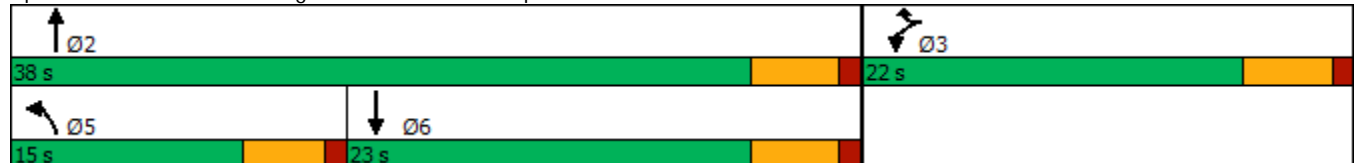


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations	↶	↷	↶	↑↑	↑↑
Traffic Volume (vph)	87	375	125	399	402
Future Volume (vph)	87	375	125	399	402
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	9.6	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 44.6
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

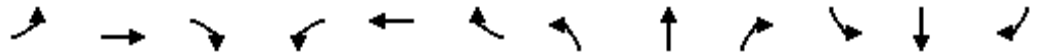
Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
 8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↗	↖	↕			↕	↗
Traffic Volume (veh/h)	0	0	0	87	0	375	125	399	0	0	402	46
Future Volume (veh/h)	0	0	0	87	0	375	125	399	0	0	402	46
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				95	0	208	136	434	0	0	437	43
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				449	0	399	178	1726	0	0	863	84
Arrive On Green				0.25	0.00	0.25	0.10	0.49	0.00	0.00	0.26	0.26
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3353	319
Grp Volume(v), veh/h				95	0	208	136	434	0	0	237	243
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1802
Q Serve(g_s), s				1.6	0.0	4.3	2.8	2.7	0.0	0.0	4.3	4.4
Cycle Q Clear(g_c), s				1.6	0.0	4.3	2.8	2.7	0.0	0.0	4.3	4.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				449	0	399	178	1726	0	0	471	477
V/C Ratio(X)				0.21	0.00	0.52	0.76	0.25	0.00	0.00	0.50	0.51
Avail Cap(c_a), veh/h				795	0	707	486	3078	0	0	839	851
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				11.3	0.0	12.3	16.7	5.7	0.0	0.0	11.9	11.9
Incr Delay (d2), s/veh				0.2	0.0	1.1	2.5	0.1	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	1.3	1.1	0.6	0.0	0.0	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				11.5	0.0	13.3	19.2	5.8	0.0	0.0	12.7	12.7
LnGrp LOS				B	A	B	B	A	A	A	B	B
Approach Vol, veh/h					303			570			480	
Approach Delay, s/veh					12.8			9.0			12.7	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		23.5			8.4	15.1		14.6				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.7			4.8	6.4		6.3				
Green Ext Time (p_c), s		3.1			0.1	2.2		0.7				

Intersection Summary

HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.394
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	26	0	31	0	0	0	0	843	58	24	633	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	0	31	0	0	0	0	843	58	24	633	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	0	31	0	0	0	0	843	58	24	633	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	0	31	0	0	0	0	843	58	24	633	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	0	31	0	0	0	0	843	58	24	633	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.87	0.13	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3181	219	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.26	0.27	0.01	0.19	0.00
Crit Moves:	****						****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.610
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	91	129	241	66	84	19	40	698	132	145	503	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	129	241	66	84	19	40	698	132	145	503	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	129	241	66	84	19	40	698	132	145	503	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	129	241	66	84	19	40	698	132	145	503	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	129	241	66	84	19	40	698	132	145	503	82
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.68	0.32	1.00	1.72	0.28
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	2859	541	1700	2923	477

Capacity Analysis Module:

Vol/Sat:	0.05	0.08	0.14	0.04	0.05	0.01	0.02	0.24	0.24	0.09	0.17	0.17
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.369
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	99	448	1	0	383	68	81	1	130	3	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	448	1	0	383	68	81	1	130	3	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	448	1	0	383	68	81	1	130	3	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	448	1	0	383	68	81	1	130	3	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	448	1	0	383	68	81	1	130	3	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.70	0.30	0.99	0.01	1.00	1.00	0.00	0.00
Final Sat.:	1700	3392	8	1700	2887	513	1679	21	1700	1700	0	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.13	0.13	0.00	0.13	0.13	0.05	0.05	0.08	0.00	0.00	0.00
Crit Moves:	****			****			****	****		****	****	

Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Lakeview Av. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.624
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	2	0	2	0	1	1	0	1	0	2	1	0	2

Volume Module:

Base Vol:	239	378	333	195	311	155	163	964	103	182	852	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	239	378	333	195	311	155	163	964	103	182	852	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	239	378	333	195	311	155	163	964	103	182	852	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	378	333	195	311	155	163	964	103	182	852	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	239	378	333	195	311	155	163	964	103	182	852	86
OvlAdjVol:	151											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.33	0.67	1.00	2.71	0.29	1.00	2.72	0.28
Final Sat.:	3400	3400	1700	3400	2269	1131	1700	4608	492	1700	4632	468

Capacity Analysis Module:

Vol/Sat:	0.07	0.11	0.20	0.06	0.14	0.14	0.10	0.21	0.21	0.11	0.18	0.18
OvlAdjV/S:	0.09											
Crit Moves:	****				****				****			

Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	50	0	11	8	930	0	0	1319	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	11	8	930	0	0	1319	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	11	8	930	0	0	1319	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	11	8	930	0	0	1319	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	11	8	930	0	0	1319	62

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.87	0.13
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4871	229

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.18	0.00	0.00	0.27	0.27
Crit Moves:				****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Fairmont Bl. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.482
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	1	1	0	1	1

Volume Module:

Base Vol:	149	139	42	30	90	130	172	426	212	44	361	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	139	42	30	90	130	172	426	212	44	361	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	139	42	30	90	130	172	426	212	44	361	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	139	42	30	90	130	172	426	212	44	361	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	139	42	30	90	130	172	426	212	44	361	35

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.34	0.66	1.00	1.82	0.18
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	2270	1130	1700	3099	301

Capacity Analysis Module:

Vol/Sat:	0.09	0.04	0.02	0.02	0.03	0.08	0.10	0.19	0.19	0.03	0.12	0.12
Crit Moves:	****					****	****				****	

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.574
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	0	3	0	1	0	2

Volume Module:

Base Vol:	238	26	97	140	176	156	252	924	222	82	686	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	238	26	97	140	176	156	252	924	222	82	686	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	26	97	140	176	156	252	924	222	82	686	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	26	97	140	176	156	252	924	222	82	686	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	26	97	140	176	156	252	924	222	82	686	92
OvlAdjVol:						0			103			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.65	0.35
Final Sat.:	3400	1700	1700	1700	1700	3400	1700	5100	1700	1700	4497	603

Capacity Analysis Module:

Vol/Sat:	0.07	0.02	0.06	0.08	0.10	0.05	0.15	0.18	0.13	0.05	0.15	0.15
OvlAdjV/S:						0.00			0.06			
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.905
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 103 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	2

Volume Module:

Base Vol:	129	1509	503	367	1261	271	189	0	411	586	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1509	503	367	1261	271	189	0	411	586	0	572
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1509	0	367	1261	271	189	0	411	586	0	572
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1509	0	367	1261	271	189	0	411	586	0	572
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1509	0	367	1261	271	189	0	411	586	0	572

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	2.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	3400	0	3400

Capacity Analysis Module:

Vol/Sat:	0.08	0.30	0.00	0.22	0.25	0.16	0.11	0.00	0.12	0.17	0.00	0.17
Crit Moves:	****			****			****			****		

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

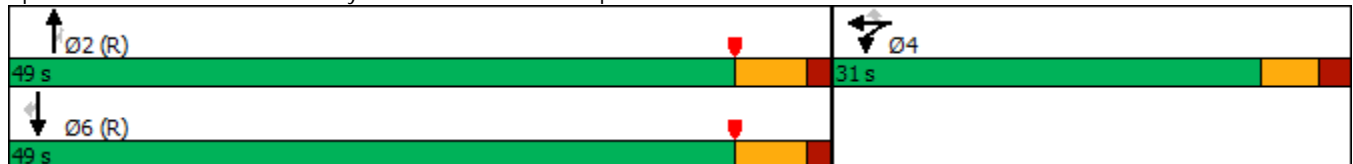


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	629	0	613	1529	343	1639	620
Future Volume (vph)	629	0	613	1529	343	1639	620
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 43.2 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

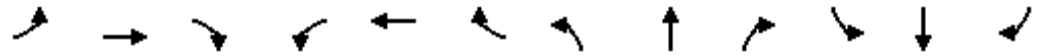
Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗		↑↑↑	↗		↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	629	0	613	0	1529	343	0	1639	620
Future Volume (veh/h)	0	0	0	629	0	613	0	1529	343	0	1639	620
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				885	0	430	0	1609	0	0	1813	0
Peak Hour Factor				0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1089	0	484	0	2825		0	3104	
Arrive On Green				0.31	0.00	0.31	0.00	1.00	0.00	0.00	0.55	0.00
Sat Flow, veh/h				3563	0	1585	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				885	0	430	0	1609	0	0	1813	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				18.4	0.0	20.7	0.0	0.0	0.0	0.0	17.1	0.0
Cycle Q Clear(g_c), s				18.4	0.0	20.7	0.0	0.0	0.0	0.0	17.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1089	0	484	0	2825		0	3104	
V/C Ratio(X)				0.81	0.00	0.89	0.00	0.57		0.00	0.58	
Avail Cap(c_a), veh/h				1136	0	505	0	2825		0	3104	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.80	0.00	0.00	0.56	0.00
Uniform Delay (d), s/veh				25.7	0.0	26.5	0.0	0.0	0.0	0.0	11.8	0.0
Incr Delay (d2), s/veh				4.6	0.0	17.1	0.0	0.7	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.1	0.0	9.7	0.0	0.2	0.0	0.0	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.3	0.0	43.6	0.0	0.7	0.0	0.0	12.3	0.0
LnGrp LOS				C	A	D	A	A		A	B	
Approach Vol, veh/h					1315			1609	A		1813	A
Approach Delay, s/veh					34.6			0.7			12.3	
Approach LOS					C			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.1		29.9		50.1						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		22.7		19.1						
Green Ext Time (p_c), s		16.1		1.8		14.5						

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

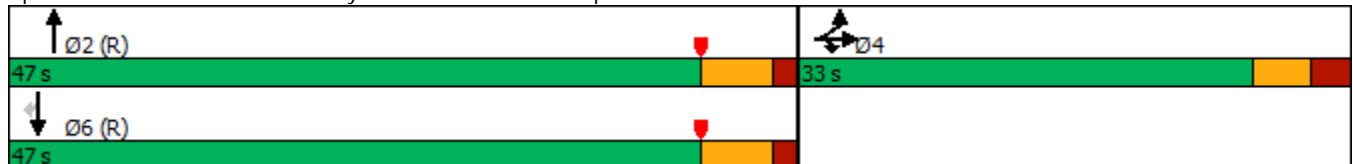


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	333	0	580	1539	572	1982	286
Future Volume (vph)	333	0	580	1539	572	1982	286
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 41.2 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	333	0	580	0	0	0	0	1539	572	0	1982	286
Future Volume (veh/h)	333	0	580	0	0	0	0	1539	572	0	1982	286
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	231	0	658				0	1603	0	0	2065	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	461	0	821				0	3030		0	3030	
Arrive On Green	0.26	0.00	0.26				0.00	0.59	0.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	231	0	658				0	1603	0	0	2065	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	8.8	0.0	15.5				0.0	14.9	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	15.5				0.0	14.9	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	461	0	821				0	3030		0	3030	
V/C Ratio(X)	0.50	0.00	0.80				0.00	0.53		0.00	0.68	
Avail Cap(c_a), veh/h	601	0	1070				0	3030		0	3030	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.59	0.00
Uniform Delay (d), s/veh	25.2	0.0	27.7				0.0	9.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	3.7				0.0	0.7	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	6.1				0.0	4.6	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	31.4				0.0	10.3	0.0	0.0	0.7	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		889						1603	A		2065	A
Approach Delay, s/veh		30.0						10.3			0.7	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		53.3		26.7				53.3				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		16.9		17.5				2.0				
Green Ext Time (p_c), s		18.9		3.2				33.5				

Intersection Summary

HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

 Yorba Linda Housing Element / SP (JN 13763)
 2045 Without Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.861
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 84 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	283	34	471	1	19	1	3	423	915	359	100	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	283	34	471	1	19	1	3	423	915	359	100	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	283	34	471	1	19	1	3	423	915	359	100	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	34	471	1	19	1	3	423	915	359	100	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	283	34	471	1	19	1	3	423	915	359	100	1
OvlAdjVol:									652			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.08	0.13	1.79	0.05	0.95	1.00	1.00	1.00	1.00	1.00	1.98	0.02
Final Sat.:	1832	220	3048	85	1615	1700	1700	1700	1700	1700	3366	34

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.15	0.01	0.01	0.00	0.00	0.25	0.54	0.21	0.03	0.03
OvlAdjV/S:									0.38			
Crit Moves:	****			****			****			****		

**APPENDIX 5.4: HORIZON YEAR (2045) WITH PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.768
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	2	0	1	0	2	0

Volume Module:

Base Vol:	128	233	154	768	470	31	39	989	150	199	1011	558
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	233	154	768	470	31	39	989	150	199	1011	558
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	233	154	768	470	31	39	989	150	199	1011	558
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	233	154	768	470	31	39	989	150	199	1011	558
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	233	154	768	470	31	39	989	150	199	1011	558

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.60	0.40	2.00	3.00	1.00
Final Sat.:	3400	3400	1700	3400	3400	1700	1700	4428	672	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.04	0.07	0.09	0.23	0.14	0.02	0.02	0.22	0.22	0.06	0.20	0.33
Crit Moves:			****	****			****					****

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Prospect Av. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.964
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 147 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	2	1	0	2

Volume Module:

Base Vol:	45	107	9	73	92	143	165	1543	27	47	1665	1024
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	107	9	73	92	143	165	1543	27	47	1665	1024
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	107	9	73	92	143	165	1543	27	47	1665	1024
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	107	9	73	92	143	165	1543	27	47	1665	1024
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	107	9	73	92	143	165	1543	27	47	1665	1024

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.39	0.61	1.00	2.95	0.05	1.00	2.00	1.00
Final Sat.:	1700	1568	132	1700	666	1034	1700	5012	88	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.03	0.07	0.07	0.04	0.14	0.14	0.10	0.31	0.31	0.03	0.49	0.60
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.507
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 68 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 1 0	0	0	1! 0 0	0	0	1! 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol:	0	1489	37	22	1665	4	3	1	1	48	3	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1489	37	22	1665	4	3	1	1	48	3	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1489	37	22	1665	4	3	1	1	48	3	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1489	37	22	1665	4	3	1	1	48	3	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1489	37	22	1665	4	3	1	1	48	3	81

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.93	0.07	1.00	2.99	0.01	0.60	0.20	0.20	0.36	0.02	0.62
Final Sat.:	0	4976	124	1700	5088	12	1020	340	340	618	39	1043

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.30	0.01	0.33	0.33	0.00	0.00	0.00	0.03	0.08	0.08
Crit Moves:				****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.903
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 102 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	365	1015	217	337	1187	39	27	340	384	208	490	391
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	365	1015	217	337	1187	39	27	340	384	208	490	391
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	365	1015	217	337	1187	39	27	340	384	208	490	391
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	365	1015	217	337	1187	39	27	340	384	208	490	391
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	365	1015	217	337	1187	39	27	340	384	208	490	391
OvlAdjVol:												54

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.47	0.53	2.00	2.90	0.10	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4202	898	3400	4938	162	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.24	0.24	0.10	0.24	0.24	0.02	0.10	0.23	0.12	0.10	0.12	
OvlAdjV/S:												0.02	
Crit Moves:	****						****			****	****		

Intersection	
Intersection Delay, s/veh	195.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↶		↵	↶		↵	↑	↶	↵	↶↷	
Traffic Vol, veh/h	201	122	68	48	111	61	58	318	45	73	761	214
Future Vol, veh/h	201	122	68	48	111	61	58	318	45	73	761	214
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	245	149	83	59	135	74	71	388	55	89	928	261
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	43.8	33.7	116.6	317.6
HCM LOS	E	D	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	64%	0%	65%	0%	100%	54%
Vol Right, %	0%	0%	100%	0%	36%	0%	35%	0%	0%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	318	45	201	190	48	172	73	507	468
LT Vol	58	0	0	201	0	48	0	73	0	0
Through Vol	0	318	0	0	122	0	111	0	507	254
RT Vol	0	0	45	0	68	0	61	0	0	214
Lane Flow Rate	71	388	55	245	232	59	210	89	619	570
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.227	1.189	0.158	0.782	0.691	0.199	0.67	0.266	1.761	1.573
Departure Headway (Hd)	12.703	12.18	11.449	12.766	11.997	13.418	12.648	11.363	10.835	10.496
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	284	302	315	287	304	269	287	318	340	354
Service Time	10.403	9.88	9.149	10.466	9.697	11.118	10.348	9.063	8.535	8.196
HCM Lane V/C Ratio	0.25	1.285	0.175	0.854	0.763	0.219	0.732	0.28	1.821	1.61
HCM Control Delay	19.1	148.6	16.3	49.5	37.7	19.4	37.7	18.1	379.5	297.2
HCM Lane LOS	C	F	C	E	E	C	E	C	F	F
HCM 95th-tile Q	0.9	15.5	0.6	6	4.8	0.7	4.4	1	37.5	31.1

Intersection

Int Delay, s/veh	358.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	26	0	263	0	0	0	0	445	158	459	489	0
Future Vol, veh/h	26	0	263	0	0	0	0	445	158	459	489	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	0	405	0	0	0	0	685	243	706	752	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2507	-	376	-	0	0	931	0	0
Stage 1	2164	-	-	-	-	-	-	-	-
Stage 2	343	-	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 23	0	622	0	-	-	731	-	0
Stage 1	74	0	-	0	-	-	-	-	0
Stage 2	690	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 1	0	622	-	-	-	731	-	-
Mov Cap-2 Maneuver	~ 1	0	-	-	-	-	-	-	-
Stage 1	74	0	-	-	-	-	-	-	-
Stage 2	~ 23	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, \$	2204.1	0	23.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	1	622	731	-
HCM Lane V/C Ratio	-	-	40	0.651	0.966	-
HCM Control Delay (s)	-	-	\$ 24288	20.9	49.2	-
HCM Lane LOS	-	-	F	C	E	-
HCM 95th %tile Q(veh)	-	-	7	4.8	14.8	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
8: Kellog Dr. & SR 90 WB Ramps

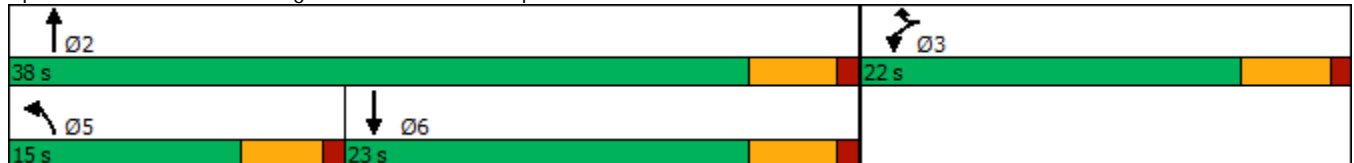


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations	↶	↷	↶	↑↑	↑↓
Traffic Volume (vph)	98	263	159	312	850
Future Volume (vph)	98	263	159	312	850
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	14.0	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 53
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated

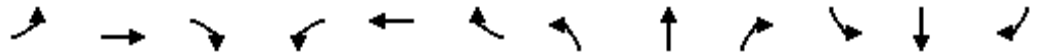
Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↗	↖	↕			↕	↗
Traffic Volume (veh/h)	0	0	0	98	0	263	159	312	0	0	850	113
Future Volume (veh/h)	0	0	0	98	0	263	159	312	0	0	850	113
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				131	0	79	212	416	0	0	1133	143
Peak Hour Factor				0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				340	0	303	265	2155	0	0	1153	145
Arrive On Green				0.19	0.00	0.19	0.15	0.61	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3258	398
Grp Volume(v), veh/h				131	0	79	212	416	0	0	635	641
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1786
Q Serve(g_s), s				3.2	0.0	2.1	5.7	2.6	0.0	0.0	17.4	17.6
Cycle Q Clear(g_c), s				3.2	0.0	2.1	5.7	2.6	0.0	0.0	17.4	17.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				340	0	303	265	2155	0	0	648	651
V/C Ratio(X)				0.38	0.00	0.26	0.80	0.19	0.00	0.00	0.98	0.98
Avail Cap(c_a), veh/h				613	0	546	375	2375	0	0	648	651
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.4	0.0	17.0	20.3	4.3	0.0	0.0	15.5	15.6
Incr Delay (d2), s/veh				0.7	0.0	0.5	5.2	0.0	0.0	0.0	30.3	31.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	0.7	2.5	0.6	0.0	0.0	11.2	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.1	0.0	17.5	25.5	4.4	0.0	0.0	45.9	46.9
LnGrp LOS				B	A	B	C	A	A	A	D	D
Approach Vol, veh/h					210			628			1276	
Approach Delay, s/veh					17.9			11.5			46.4	
Approach LOS					B			B			D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.9			11.9	23.0		14.4				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.6			7.7	19.6		5.2				
Green Ext Time (p_c), s		2.9			0.1	0.0		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				33.2								
HCM 6th LOS				C								

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.427
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	115	0	121	0	0	0	0	592	65	79	882	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	0	121	0	0	0	0	592	65	79	882	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	0	121	0	0	0	0	592	65	79	882	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	0	121	0	0	0	0	592	65	79	882	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	0	121	0	0	0	0	592	65	79	882	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3064	336	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.19	0.19	0.05	0.26	0.00
Crit Moves:	****						****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.615
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	140	56	184	102	131	67	33	524	162	246	913	102	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	140	56	184	102	131	67	33	524	162	246	913	102	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	140	56	184	102	131	67	33	524	162	246	913	102	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	140	56	184	102	131	67	33	524	162	246	913	102	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	140	56	184	102	131	67	33	524	162	246	913	102	
OvlAdjVol:							34						

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.53	0.47	1.00	1.80	0.20
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	2597	803	1700	3058	342

Capacity Analysis Module:

Vol/Sat:	0.08	0.03	0.11	0.06	0.08	0.04	0.02	0.20	0.20	0.14	0.30	0.30	
OvlAdjV/S:							0.02						
Crit Moves:	****			****			****			****			

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.330
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	43	324	2	0	535	40	19	1	60	0	1	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	324	2	0	535	40	19	1	60	0	1	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	324	2	0	535	40	19	1	60	0	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	324	2	0	535	40	19	1	60	0	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	324	2	0	535	40	19	1	60	0	1	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.86	0.14	0.95	0.05	1.00	0.00	1.00	0.00
Final Sat.:	1700	3379	21	1700	3163	237	1615	85	1700	0	1700	0

Capacity Analysis Module:

Vol/Sat:	0.03	0.10	0.10	0.00	0.17	0.17	0.01	0.01	0.04	0.00	0.00	0.00
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Lakeview Av. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.730
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	0	1	0	2	1	0

Volume Module:

Base Vol:	139	217	211	95	419	105	157	654	270	431	816	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	217	211	95	419	105	157	654	270	431	816	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	217	211	95	419	105	157	654	270	431	816	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	217	211	95	419	105	157	654	270	431	816	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	217	211	95	419	105	157	654	270	431	816	97
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.60	0.40	1.00	2.12	0.88	1.00	2.68	0.32
Final Sat.:	3400	3400	1700	3400	2719	681	1700	3610	1490	1700	4558	542

Capacity Analysis Module:

Vol/Sat:	0.04	0.06	0.12	0.03	0.15	0.15	0.09	0.18	0.18	0.25	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.350
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	67	0	14	15	1073	0	0	736	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	67	0	14	15	1073	0	0	736	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	67	0	14	15	1073	0	0	736	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	67	0	14	15	1073	0	0	736	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	67	0	14	15	1073	0	0	736	55

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.79	0.21
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4745	355

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.21	0.00	0.00	0.16	0.16
Crit Moves:				****				****				

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.607
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	0	3	0	1	0	2

Volume Module:

Base Vol:	297	246	67	115	281	284	143	475	162	132	772	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	297	246	67	115	281	284	143	475	162	132	772	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	297	246	67	115	281	284	143	475	162	132	772	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	297	246	67	115	281	284	143	475	162	132	772	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	297	246	67	115	281	284	143	475	162	132	772	96
OvlAdjVol:						0			13			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.57	0.43	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.67	0.33
Final Sat.:	3400	2672	728	1700	1700	3400	1700	5100	1700	1700	4536	564

Capacity Analysis Module:

Vol/Sat:	0.09	0.09	0.09	0.07	0.17	0.08	0.08	0.09	0.10	0.08	0.17	0.17
OvlAdjV/S:						0.00			0.01			
Crit Moves:	****			****			****			****		

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

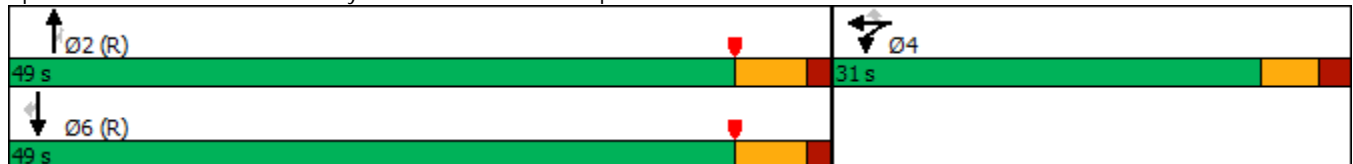


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	368	0	620	1535	410	1340	358
Future Volume (vph)	368	0	620	1535	410	1340	358
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗		↑↑↑	↗		↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	368	0	620	0	1535	410	0	1340	358
Future Volume (veh/h)	0	0	0	368	0	620	0	1535	410	0	1340	358
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				267	0	824	0	1687	0	0	1473	0
Peak Hour Factor				0.92	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				529	0	941	0	2869	0	0	3153	0
Arrive On Green				0.30	0.00	0.30	0.00	1.00	0.00	0.00	0.56	0.00
Sat Flow, veh/h				1781	0	3170	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				267	0	824	0	1687	0	0	1473	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				9.9	0.0	19.8	0.0	0.0	0.0	0.0	12.5	0.0
Cycle Q Clear(g_c), s				9.9	0.0	19.8	0.0	0.0	0.0	0.0	12.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				529	0	941	0	2869	0	0	3153	0
V/C Ratio(X)				0.50	0.00	0.88	0.00	0.59		0.00	0.47	
Avail Cap(c_a), veh/h				568	0	1010	0	2869		0	3153	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.79	0.00	0.00	0.74	0.00
Uniform Delay (d), s/veh				23.3	0.0	26.7	0.0	0.0	0.0	0.0	10.4	0.0
Incr Delay (d2), s/veh				0.9	0.0	8.5	0.0	0.7	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	8.2	0.0	0.2	0.0	0.0	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.2	0.0	35.2	0.0	0.7	0.0	0.0	10.8	0.0
LnGrp LOS				C	A	D	A	A		A	B	
Approach Vol, veh/h					1091			1687	A		1473	A
Approach Delay, s/veh					32.5			0.7			10.8	
Approach LOS					C			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.8		29.2		50.8						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		21.8		14.5						
Green Ext Time (p_c), s		17.3		2.0		12.4						

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

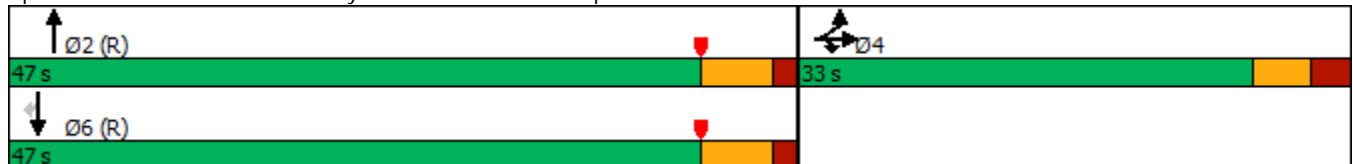


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	651	0	499	1295	440	1001	707
Future Volume (vph)	651	0	499	1295	440	1001	707
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 78.2 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	651	0	499	0	0	0	0	1295	440	0	1001	707
Future Volume (veh/h)	651	0	499	0	0	0	0	1295	440	0	1001	707
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	807	0	229				0	1392	0	0	1076	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	989	0	440				0	2936		0	2936	
Arrive On Green	0.28	0.00	0.28				0.00	0.58	0.00	0.00	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	807	0	229				0	1392	0	0	1076	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	16.9	0.0	9.8				0.0	12.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.9	0.0	9.8				0.0	12.7	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	989	0	440				0	2936		0	2936	
V/C Ratio(X)	0.82	0.00	0.52				0.00	0.47		0.00	0.37	
Avail Cap(c_a), veh/h	1202	0	535				0	2936		0	2936	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.78	0.00
Uniform Delay (d), s/veh	27.0	0.0	24.4				0.0	9.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.0	0.0	1.2				0.0	0.6	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	3.7				0.0	4.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	25.6				0.0	10.5	0.0	0.0	0.3	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		1036						1392	A		1076	A
Approach Delay, s/veh		29.8						10.5			0.3	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		51.8		28.2				51.8				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		14.7		18.9				2.0				
Green Ext Time (p_c), s		17.9		3.3				17.1				

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.721
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	272	27	273	1	39	1	1	76	263	749	217	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	272	27	273	1	39	1	1	76	263	749	217	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	272	27	273	1	39	1	1	76	263	749	217	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	27	273	1	39	1	1	76	263	749	217	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	272	27	273	1	39	1	1	76	263	749	217	2
OvlAdjVol:									72			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.43	0.14	1.43	0.02	0.98	1.00	1.00	1.00	1.00	1.00	1.98	0.02
Final Sat.:	2425	241	2434	43	1658	1700	1700	1700	1700	1700	3369	31

Capacity Analysis Module:

Vol/Sat:	0.11	0.11	0.11	0.02	0.02	0.00	0.00	0.04	0.15	0.44	0.06	0.06
OvlAdjV/S:									0.04			
Crit Moves:			****			****			****			****

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.947
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 131 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	1	0	2	1	0	2

Volume Module:

Base Vol:	238	444	109	902	345	26	42	1299	44	171	966	725
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	238	444	109	902	345	26	42	1299	44	171	966	725
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	444	109	902	345	26	42	1299	44	171	966	725
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	444	109	902	345	26	42	1299	44	171	966	725
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	444	109	902	345	26	42	1299	44	171	966	725

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.90	0.10	2.00	3.00	1.00
Final Sat.:	3400	3400	1700	3400	3400	1700	1700	4933	167	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.06	0.27	0.10	0.02	0.02	0.26	0.26	0.05	0.19	0.43
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Prospect Av. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	2	1	0	2

Volume Module:

Base Vol:	50	119	12	81	111	156	117	2141	117	22	1795	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	119	12	81	111	156	117	2141	117	22	1795	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	119	12	81	111	156	117	2141	117	22	1795	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	119	12	81	111	156	117	2141	117	22	1795	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	119	12	81	111	156	117	2141	117	22	1795	80

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.42	0.58	1.00	2.84	0.16	1.00	2.87	0.13
Final Sat.:	1700	1544	156	1700	707	993	1700	4836	264	1700	4882	218

Capacity Analysis Module:

Vol/Sat:	0.03	0.08	0.08	0.05	0.16	0.16	0.07	0.44	0.44	0.01	0.37	0.37
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Imperial Hwy. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.827
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1	1	2	0	3	0	1	1

Volume Module:

Base Vol:	287	1327	17	630	1477	3	19	553	383	10	350	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	287	1327	17	630	1477	3	19	553	383	10	350	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	287	1327	17	630	1477	3	19	553	383	10	350	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	1327	17	630	1477	3	19	553	383	10	350	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	1327	17	630	1477	3	19	553	383	10	350	405

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.18	0.82	1.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	1700	2009	1391	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.08	0.26	0.01	0.19	0.29	0.00	0.01	0.28	0.28	0.01	0.10	0.24
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Imperial Hwy. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 1 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	0	1472	69	120	1852	21	20	4	17	78	11	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1472	69	120	1852	21	20	4	17	78	11	173
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1472	69	120	1852	21	20	4	17	78	11	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1472	69	120	1852	21	20	4	17	78	11	173
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1472	69	120	1852	21	20	4	17	78	11	173

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	0.13	1.00	2.97	0.03	0.49	0.10	0.41	0.30	0.04	0.66
Final Sat.:	0	4872	228	1700	5043	57	829	166	705	506	71	1123

Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.30	0.07	0.37	0.37	0.01	0.02	0.02	0.05	0.15	0.15
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.850
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 80 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	361	1103	214	525	1110	71	100	530	355	165	568	457
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	361	1103	214	525	1110	71	100	530	355	165	568	457
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	361	1103	214	525	1110	71	100	530	355	165	568	457
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	361	1103	214	525	1110	71	100	530	355	165	568	457
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	361	1103	214	525	1110	71	100	530	355	165	568	457
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.51	0.49	2.00	2.82	0.18	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4271	829	3400	4793	307	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.26	0.26	0.15	0.23	0.23	0.06	0.16	0.21	0.10	0.11	0.13		
OvlAdjV/S:	0.00													
Crit Moves:	****						****						****	****

Intersection

Intersection Delay, s/veh	137.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵↵	
Traffic Vol, veh/h	340	66	71	32	51	67	96	593	36	29	457	182
Future Vol, veh/h	340	66	71	32	51	67	96	593	36	29	457	182
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	351	68	73	33	53	69	99	611	37	30	471	188
Number of Lanes	1	1	0	1	1	0	1	1	1	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	64.7	20.7	290.7	50
HCM LOS	F	C	F	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	48%	0%	43%	0%	100%	46%
Vol Right, %	0%	0%	100%	0%	52%	0%	57%	0%	0%	54%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	593	36	340	137	32	118	29	305	334
LT Vol	96	0	0	340	0	32	0	29	0	0
Through Vol	0	593	0	0	66	0	51	0	305	152
RT Vol	0	0	36	0	71	0	67	0	0	182
Lane Flow Rate	99	611	37	351	141	33	122	30	314	345
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.29	1.703	0.096	0.989	0.365	0.107	0.364	0.083	0.827	0.871
Departure Headway (Hd)	10.554	10.031	9.299	11.421	10.531	13.053	12.114	11.298	10.77	10.368
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	342	367	387	319	345	276	299	319	339	352
Service Time	8.264	7.741	7.009	9.121	8.231	10.753	9.814	8.998	8.47	8.068
HCM Lane V/C Ratio	0.289	1.665	0.096	1.1	0.409	0.12	0.408	0.094	0.926	0.98
HCM Control Delay	17.5	351.8	13	83	19.2	17.3	21.6	15	48.9	54.1
HCM Lane LOS	C	F	B	F	C	C	C	B	E	F
HCM 95th-tile Q	1.2	37.6	0.3	10.6	1.6	0.4	1.6	0.3	7.2	8.2

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗					↕		↖	↗	
Traffic Vol, veh/h	92	1	159	0	0	0	0	458	97	242	261	0
Future Vol, veh/h	92	1	159	0	0	0	0	458	97	242	261	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	11	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	360	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	1	179	0	0	0	0	515	109	272	293	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1095	1472	148	-	0	0	635	0	0
Stage 1	837	837	-	-	-	-	-	-	-
Stage 2	258	635	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	208	126	872	0	-	-	944	-	0
Stage 1	385	380	-	0	-	-	-	-	0
Stage 2	761	471	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	148	0	871	-	-	-	944	-	-
Mov Cap-2 Maneuver	148	0	-	-	-	-	-	-	-
Stage 1	385	0	-	-	-	-	-	-	-
Stage 2	542	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.9	0	5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	148	871	944	-
HCM Lane V/C Ratio	-	-	0.698	0.205	0.288	-
HCM Control Delay (s)	-	-	72.1	10.2	10.3	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	4	0.8	1.2	-

Timings
8: Kellog Dr. & SR 90 WB Ramps

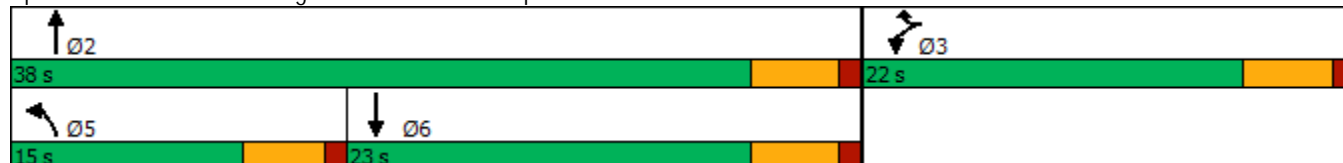


Lane Group	WBL	WBR	NBL	NBT	SBT
Lane Configurations	↶	↶	↶	↕	↕
Traffic Volume (vph)	90	389	130	420	413
Future Volume (vph)	90	389	130	420	413
Turn Type	Prot	Prot	Prot	NA	NA
Protected Phases	3	3	5	2	6
Permitted Phases					
Detector Phase	3	3	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.0	22.0	9.6	23.0	23.0
Total Split (s)	22.0	22.0	15.0	38.0	23.0
Total Split (%)	36.7%	36.7%	25.0%	63.3%	38.3%
Yellow Time (s)	4.0	4.0	3.6	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.6	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 45.2
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Kellog Dr. & SR 90 WB Ramps



HCM 6th Signalized Intersection Summary
8: Kellog Dr. & SR 90 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	90	0	389	130	420	0	0	413	45
Future Volume (veh/h)	0	0	0	90	0	389	130	420	0	0	413	45
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				98	0	223	141	457	0	0	449	42
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				450	0	400	182	1728	0	0	864	80
Arrive On Green				0.25	0.00	0.25	0.10	0.49	0.00	0.00	0.26	0.26
Sat Flow, veh/h				1781	0	1585	1781	3647	0	0	3370	305
Grp Volume(v), veh/h				98	0	223	141	457	0	0	243	248
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1805
Q Serve(g_s), s				1.7	0.0	4.7	3.0	2.9	0.0	0.0	4.5	4.5
Cycle Q Clear(g_c), s				1.7	0.0	4.7	3.0	2.9	0.0	0.0	4.5	4.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.17
Lane Grp Cap(c), veh/h				450	0	400	182	1728	0	0	469	476
V/C Ratio(X)				0.22	0.00	0.56	0.77	0.26	0.00	0.00	0.52	0.52
Avail Cap(c_a), veh/h				791	0	704	484	3064	0	0	836	849
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				11.3	0.0	12.4	16.8	5.8	0.0	0.0	12.0	12.0
Incr Delay (d2), s/veh				0.2	0.0	1.2	2.7	0.1	0.0	0.0	0.9	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	1.4	1.2	0.7	0.0	0.0	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				11.6	0.0	13.7	19.4	5.9	0.0	0.0	12.9	12.9
LnGrp LOS				B	A	B	B	A	A	A	B	B
Approach Vol, veh/h					321			598			491	
Approach Delay, s/veh					13.0			9.1			12.9	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		23.6			8.5	15.1		14.7				
Change Period (Y+Rc), s		5.0			4.6	5.0		5.0				
Max Green Setting (Gmax), s		33.0			10.4	18.0		17.0				
Max Q Clear Time (g_c+I1), s		4.9			5.0	6.5		6.7				
Green Ext Time (p_c), s		3.2			0.1	2.3		0.8				

Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Plumosa Dr. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.402
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	0	0	0	0	1	1	0	2

Volume Module:

Base Vol:	27	0	32	0	0	0	0	866	60	24	650	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	0	32	0	0	0	0	866	60	24	650	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	0	32	0	0	0	0	866	60	24	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	0	32	0	0	0	0	866	60	24	650	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	0	32	0	0	0	0	866	60	24	650	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.87	0.13	1.00	2.00	0.00
Final Sat.:	1700	0	1700	0	0	0	0	3180	220	1700	3400	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.27	0.27	0.01	0.19	0.00
Crit Moves:	****						****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Lakeview Av. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.618
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	108	133	243	62	88	21	42	715	151	142	521	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	133	243	62	88	21	42	715	151	142	521	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	133	243	62	88	21	42	715	151	142	521	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	133	243	62	88	21	42	715	151	142	521	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	133	243	62	88	21	42	715	151	142	521	75
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.65	0.35	1.00	1.75	0.25
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	2807	593	1700	2972	428

Capacity Analysis Module:

Vol/Sat:	0.06	0.08	0.14	0.04	0.05	0.01	0.02	0.25	0.25	0.08	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Lakeview Av. & Lemon Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.376
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	101	460	1	0	393	70	83	1	133	3	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	460	1	0	393	70	83	1	133	3	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	460	1	0	393	70	83	1	133	3	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	460	1	0	393	70	83	1	133	3	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	460	1	0	393	70	83	1	133	3	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.70	0.30	0.99	0.01	1.00	1.00	0.00	0.00
Final Sat.:	1700	3393	7	1700	2886	514	1680	20	1700	1700	0	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.14	0.14	0.00	0.14	0.14	0.05	0.05	0.08	0.00	0.00	0.00
Crit Moves:	****			****			****	****				

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Lakeview Av. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.637
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	0	1	0	2	1	0

Volume Module:

Base Vol:	238	423	339	202	330	157	180	973	107	191	852	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	238	423	339	202	330	157	180	973	107	191	852	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	423	339	202	330	157	180	973	107	191	852	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	423	339	202	330	157	180	973	107	191	852	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	423	339	202	330	157	180	973	107	191	852	97
OvlAdjVol:	148											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.36	0.64	1.00	2.70	0.30	1.00	2.69	0.31
Final Sat.:	3400	3400	1700	3400	2304	1096	1700	4595	505	1700	4579	521

Capacity Analysis Module:

Vol/Sat:	0.07	0.12	0.20	0.06	0.14	0.14	0.11	0.21	0.21	0.11	0.19	0.19
OvlAdjV/S:	0.09											
Crit Moves:	****			****			****			****		

Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Ohio St. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.408
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	1	0	1	0	2	1	0	0

Volume Module:

Base Vol:	0	0	0	48	0	13	11	932	0	0	1327	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	48	0	13	11	932	0	0	1327	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	48	0	13	11	932	0	0	1327	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	48	0	13	11	932	0	0	1327	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	48	0	13	11	932	0	0	1327	69

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.85	0.15
Final Sat.:	0	1700	0	1700	0	1700	1700	5100	0	0	4848	252

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.18	0.00	0.00	0.27	0.27
Crit Moves:				****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Fairmont Bl. & Bastanchury Rd.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.490
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	1	1	0	1	1

Volume Module:

Base Vol:	150	140	41	29	89	132	182	431	216	43	362	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	140	41	29	89	132	182	431	216	43	362	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	140	41	29	89	132	182	431	216	43	362	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	140	41	29	89	132	182	431	216	43	362	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	140	41	29	89	132	182	431	216	43	362	36

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.82	0.18
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	2265	1135	1700	3092	308

Capacity Analysis Module:

Vol/Sat:	0.09	0.04	0.02	0.02	0.03	0.08	0.11	0.19	0.19	0.03	0.12	0.12
Crit Moves:	****					****	****				****	

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Fairmont Bl. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.589
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	0	3	0	1	0	2

Volume Module:

Base Vol:	239	27	94	138	174	159	275	928	225	81	692	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	239	27	94	138	174	159	275	928	225	81	692	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	239	27	94	138	174	159	275	928	225	81	692	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	27	94	138	174	159	275	928	225	81	692	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	239	27	94	138	174	159	275	928	225	81	692	98
OvlAdjVol:						0			106			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	1.00	3.00	1.00	1.00	2.63	0.37
Final Sat.:	3400	1700	1700	1700	1700	3400	1700	5100	1700	1700	4467	633

Capacity Analysis Module:

Vol/Sat:	0.07	0.02	0.06	0.08	0.10	0.05	0.16	0.18	0.13	0.05	0.15	0.15
OvlAdjV/S:						0.00			0.06			
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.926
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 115 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	2

Volume Module:

Base Vol:	132	1549	517	377	1294	278	194	0	422	601	0	587
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	1549	517	377	1294	278	194	0	422	601	0	587
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	1549	0	377	1294	278	194	0	422	601	0	587
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	1549	0	377	1294	278	194	0	422	601	0	587
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	1549	0	377	1294	278	194	0	422	601	0	587

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	2.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	3400	0	3400

Capacity Analysis Module:

Vol/Sat:	0.08	0.30	0.00	0.22	0.25	0.16	0.11	0.00	0.12	0.18	0.00	0.17
Crit Moves:	****			****			****			****		

Timings
17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

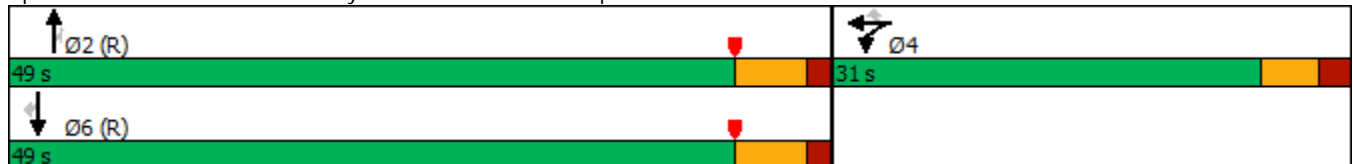


Lane Group	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	622	0	616	1582	341	1669	649
Future Volume (vph)	622	0	616	1582	341	1669	649
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4		2		6	
Permitted Phases			4		2		6
Detector Phase	4	4	4	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.5	10.5	10.5	23.8	23.8	20.8	20.8
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	4.3	4.3	4.3	4.3
All-Red Time (s)	2.0	2.0	2.0	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 43.2 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 17: Weir Canyon Rd & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary
 17: Weir Canyon Rd & SR-91 WB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↔	↱		↑↑↑	↱		↑↑↑	↱
Traffic Volume (veh/h)	0	0	0	622	0	616	0	1582	341	0	1669	649
Future Volume (veh/h)	0	0	0	622	0	616	0	1582	341	0	1669	649
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				878	0	432	0	1665	0	0	1866	0
Peak Hour Factor				0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1091	0	485	0	2822	0	0	3101	0
Arrive On Green				0.31	0.00	0.31	0.00	1.00	0.00	0.00	0.55	0.00
Sat Flow, veh/h				3563	0	1585	0	5274	1585	0	5611	1585
Grp Volume(v), veh/h				878	0	432	0	1665	0	0	1866	0
Grp Sat Flow(s),veh/h/ln				1781	0	1585	0	1702	1585	0	1870	1585
Q Serve(g_s), s				18.2	0.0	20.8	0.0	0.0	0.0	0.0	17.8	0.0
Cycle Q Clear(g_c), s				18.2	0.0	20.8	0.0	0.0	0.0	0.0	17.8	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1091	0	485	0	2822	0	0	3101	0
V/C Ratio(X)				0.81	0.00	0.89	0.00	0.59		0.00	0.60	
Avail Cap(c_a), veh/h				1136	0	505	0	2822	0	0	3101	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	0.78	0.00	0.00	0.53	0.00
Uniform Delay (d), s/veh				25.6	0.0	26.5	0.0	0.0	0.0	0.0	12.0	0.0
Incr Delay (d2), s/veh				4.3	0.0	17.5	0.0	0.7	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.0	0.0	9.8	0.0	0.2	0.0	0.0	6.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.9	0.0	43.9	0.0	0.7	0.0	0.0	12.5	0.0
LnGrp LOS				C	A	D	A	A		A	B	
Approach Vol, veh/h					1310			1665	A		1866	A
Approach Delay, s/veh					34.5			0.7			12.5	
Approach LOS					C			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.0		30.0		50.0						
Change Period (Y+Rc), s		5.8		5.5		5.8						
Max Green Setting (Gmax), s		43.2		25.5		43.2						
Max Q Clear Time (g_c+I1), s		2.0		22.8		19.8						
Green Ext Time (p_c), s		17.0		1.7		14.7						

Intersection Summary

HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Timings
18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022

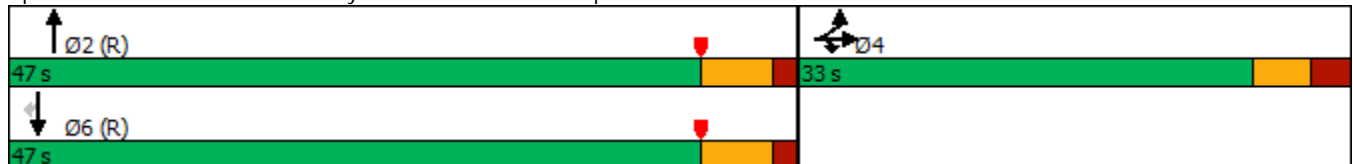


Lane Group	EBL	EBT	EBR	NBT	NBR	SBT	SBR
Lane Configurations	↖	↔	↗	↑↑↑	↗	↑↑↑	↗
Traffic Volume (vph)	371	0	562	1552	580	2001	290
Future Volume (vph)	371	0	562	1552	580	2001	290
Turn Type	Split	NA	Prot	NA	Free	NA	Perm
Protected Phases	4	4	4	2		6	
Permitted Phases					Free		6
Detector Phase	4	4	4	2		6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	15.0		15.0	15.0
Minimum Split (s)	11.0	11.0	11.0	20.8		27.8	27.8
Total Split (s)	33.0	33.0	33.0	47.0		47.0	47.0
Total Split (%)	41.3%	41.3%	41.3%	58.8%		58.8%	58.8%
Yellow Time (s)	3.5	3.5	3.5	4.3		4.3	4.3
All-Red Time (s)	2.5	2.5	2.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	5.8		5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	C-Min		C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 41.2 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

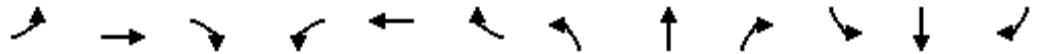
Splits and Phases: 18: Weir Canyon Rd & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary
 18: Weir Canyon Rd & SR-91 EB Ramps

Yorba Linda Element and SP (JN 13763)

04/12/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	371	0	562	0	0	0	0	1552	580	0	2001	290
Future Volume (veh/h)	371	0	562	0	0	0	0	1552	580	0	2001	290
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	566	0	322				0	1617	0	0	2084	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	905	0	403				0	3056		0	3056	
Arrive On Green	0.25	0.00	0.25				0.00	0.60	0.00	0.00	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	5274	1585	0	5274	1585
Grp Volume(v), veh/h	566	0	322				0	1617	0	0	2084	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	0	1702	1585
Q Serve(g_s), s	11.3	0.0	15.2				0.0	14.9	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.3	0.0	15.2				0.0	14.9	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	905	0	403				0	3056		0	3056	
V/C Ratio(X)	0.63	0.00	0.80				0.00	0.53		0.00	0.68	
Avail Cap(c_a), veh/h	1202	0	535				0	3056		0	3056	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	0.57	0.00
Uniform Delay (d), s/veh	26.5	0.0	27.9				0.0	9.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	6.8				0.0	0.7	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	6.3				0.0	4.6	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	34.8				0.0	10.1	0.0	0.0	0.7	0.0
LnGrp LOS	C	A	C				A	B		A	A	
Approach Vol, veh/h		888						1617	A		2084	A
Approach Delay, s/veh		30.0						10.1			0.7	
Approach LOS		C						B			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		53.7		26.3				53.7				
Change Period (Y+Rc), s		5.8		6.0				5.8				
Max Green Setting (Gmax), s		41.2		27.0				41.2				
Max Q Clear Time (g_c+I1), s		16.9		17.2				2.0				
Green Ext Time (p_c), s		19.0		3.1				33.7				

Intersection Summary

HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Gypsum Canyon Rd. & La Palma Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.856
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 82 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	279	34	576	1	18	1	3	467	871	396	103	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	279	34	576	1	18	1	3	467	871	396	103	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	279	34	576	1	18	1	3	467	871	396	103	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	279	34	576	1	18	1	3	467	871	396	103	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	279	34	576	1	18	1	3	467	871	396	103	1
OvlAdjVol:									566			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.11	1.89	0.05	0.95	1.00	1.00	1.00	1.00	1.00	1.98	0.02
Final Sat.:	1700	190	3210	89	1611	1700	1700	1700	1700	1700	3367	33

Capacity Analysis Module:

Vol/Sat:	0.16	0.18	0.18	0.01	0.01	0.00	0.00	0.27	0.51	0.23	0.03	0.03
OvlAdjV/S:									0.33			
Crit Moves:			****	****					****	****		

**APPENDIX 5.5: HORIZON YEAR (2045) WITH PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH
IMPROVEMENTS**

This Page Intentionally Left Blank

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.655
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	0	1	0	2	0	2

Volume Module:

Base Vol:	128	233	154	768	470	31	39	989	150	199	1011	558
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	233	154	768	470	31	39	989	150	199	1011	558
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	233	154	768	470	31	39	989	150	199	1011	558
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	233	154	768	470	31	39	989	150	199	1011	558
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	233	154	768	470	31	39	989	150	199	1011	558

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.48	1.52	1.00	1.00	2.60	0.40	2.00	2.58	1.42
Final Sat.:	3400	3400	1700	4218	2582	1700	1700	4428	672	3400	4382	2418

Capacity Analysis Module:

Vol/Sat:	0.04	0.07	0.09	0.18	0.18	0.02	0.02	0.22	0.22	0.06	0.23	0.23
Crit Moves:			****	****				****		****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.884
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 92 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	365	1015	217	337	1187	39	27	340	384	208	490	391
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	365	1015	217	337	1187	39	27	340	384	208	490	391
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	365	1015	217	337	1187	39	27	340	384	208	490	391
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	365	1015	217	337	1187	39	27	340	384	208	490	391
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	365	1015	217	337	1187	39	27	340	384	208	490	391
OvlAdjVol:												54

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.47	0.53	2.00	2.90	0.10	1.00	2.00	1.00	1.19	2.81	2.00
Final Sat.:	1700	4202	898	3400	4938	162	1700	3400	1700	2026	4774	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.24	0.24	0.10	0.24	0.24	0.02	0.10	0.23	0.10	0.10	0.12
OvlAdjV/S:												0.02
Crit Moves:	****			****			****	****				

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Lakeview Av. & Buena Vista Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.640
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	0	1	0	0

Volume Module:

Base Vol:	58	318	45	73	761	214	201	122	68	48	111	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	318	45	73	761	214	201	122	68	48	111	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	318	45	73	761	214	201	122	68	48	111	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	318	45	73	761	214	201	122	68	48	111	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	318	45	73	761	214	201	122	68	48	111	61

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.56	0.44	1.00	0.64	0.36	1.00	0.65	0.35
Final Sat.:	1700	1700	1700	1700	2654	746	1700	1092	608	1700	1097	603

Capacity Analysis Module:

Vol/Sat:	0.03	0.19	0.03	0.04	0.29	0.29	0.12	0.11	0.11	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Kellogg Dr. & Imperial Highway EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.702
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 50 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	1	0	2	0	0	1	0	0	0

Volume Module:

Base Vol:	0	445	158	459	489	0	26	0	263	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	445	158	459	489	0	26	0	263	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	445	158	459	489	0	26	0	263	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	445	158	459	489	0	26	0	263	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	445	158	459	489	0	26	0	263	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2509	891	1700	3400	0	1700	0	1700	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.27	0.14	0.00	0.02	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****			****			****			****		

Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 AM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.625
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	3

Volume Module:

Base Vol:	288	1103	765	255	1190	238	111	0	230	278	0	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	288	1103	765	255	1190	238	111	0	230	278	0	189
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	288	1103	0	255	1190	238	111	0	230	278	0	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	288	1103	0	255	1190	238	111	0	230	278	0	189
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	288	1103	0	255	1190	238	111	0	230	278	0	189
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	3.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	5100	0	3400

Capacity Analysis Module:

Vol/Sat:	0.17	0.22	0.00	0.15	0.23	0.14	0.07	0.00	0.07	0.05	0.00	0.06
OvlAdjV/S:	0.00											
Crit Moves:	****						****			****	****	

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Rose Dr. & Imperial Hwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.728
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	0	1	0	2	0	2

Volume Module:

Base Vol:	238	444	109	902	345	26	42	1299	44	171	966	725
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	238	444	109	902	345	26	42	1299	44	171	966	725
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	444	109	902	345	26	42	1299	44	171	966	725
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	444	109	902	345	26	42	1299	44	171	966	725
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	444	109	902	345	26	42	1299	44	171	966	725

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.89	1.11	1.00	1.00	2.90	0.10	2.00	2.29	1.71
Final Sat.:	3400	3400	1700	4919	1881	1700	1700	4933	167	3400	3885	2915

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.06	0.18	0.18	0.02	0.02	0.26	0.26	0.05	0.25	0.25
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Imperial Hwy. & Yorba Linda Bl.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.864
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	0	2	0	2	1	0	2

Volume Module:

Base Vol:	361	1103	214	525	1110	71	100	530	355	165	568	457
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	361	1103	214	525	1110	71	100	530	355	165	568	457
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	361	1103	214	525	1110	71	100	530	355	165	568	457
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	361	1103	214	525	1110	71	100	530	355	165	568	457
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	361	1103	214	525	1110	71	100	530	355	165	568	457
OvlAdjVol:												0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.51	0.49	2.00	2.82	0.18	1.00	2.00	1.00	1.00	3.00	2.00
Final Sat.:	1700	4271	829	3400	4793	307	1700	3400	1700	1700	5100	3400

Capacity Analysis Module:

Vol/Sat:	0.21	0.26	0.26	0.15	0.23	0.23	0.06	0.16	0.21	0.10	0.11	0.13
OvlAdjV/S:												0.00
Crit Moves:	****				****				****		****	

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Lakeview Av. & Buena Vista Av.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.735
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	96	593	36	29	457	182	340	66	71	32	51	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	593	36	29	457	182	340	66	71	32	51	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	593	36	29	457	182	340	66	71	32	51	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	593	36	29	457	182	340	66	71	32	51	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	593	36	29	457	182	340	66	71	32	51	67

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.43	0.57	1.00	0.48	0.52	1.00	0.43	0.57
Final Sat.:	1700	1700	1700	1700	2432	968	1700	819	881	1700	735	965

Capacity Analysis Module:

Vol/Sat:	0.06	0.35	0.02	0.02	0.19	0.19	0.20	0.08	0.08	0.02	0.07	0.07
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Kellogg Dr. & Imperial Highway EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.499
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	1	0	2	0	0	1	0	0	0

Volume Module:

Base Vol:	0	458	97	242	261	0	92	0	159	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	458	97	242	261	0	92	0	159	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	458	97	242	261	0	92	0	159	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	458	97	242	261	0	92	0	159	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	458	97	242	261	0	92	0	159	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2806	594	1700	3400	0	1700	0	1700	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.14	0.08	0.00	0.05	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****			****			****			****		

 Yorba Linda Housing Element / SP (JN 13763)
 2045 With Project
 PM Peak Hour WITH IMPROVEMENT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Yorba Linda Bl. & Savi Ranch Pkwy.

Cycle (sec): 100 Critical Vol./Cap.(X): 0.867
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 86 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	3	0	1	1	1	0	0	0	2	3

Volume Module:

Base Vol:	132	1549	517	377	1294	278	194	0	422	601	0	587
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	1549	517	377	1294	278	194	0	422	601	0	587
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	1549	0	377	1294	278	194	0	422	601	0	587
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	1549	0	377	1294	278	194	0	422	601	0	587
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	1549	0	377	1294	278	194	0	422	601	0	587
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	2.00	3.00	0.00	2.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	0	3400	5100	0	3400

Capacity Analysis Module:

Vol/Sat:	0.08	0.30	0.00	0.22	0.25	0.16	0.11	0.00	0.12	0.12	0.00	0.17
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****		****	****		



Appendix H Vehicle Miles Traveled Analysis

May 23, 2022

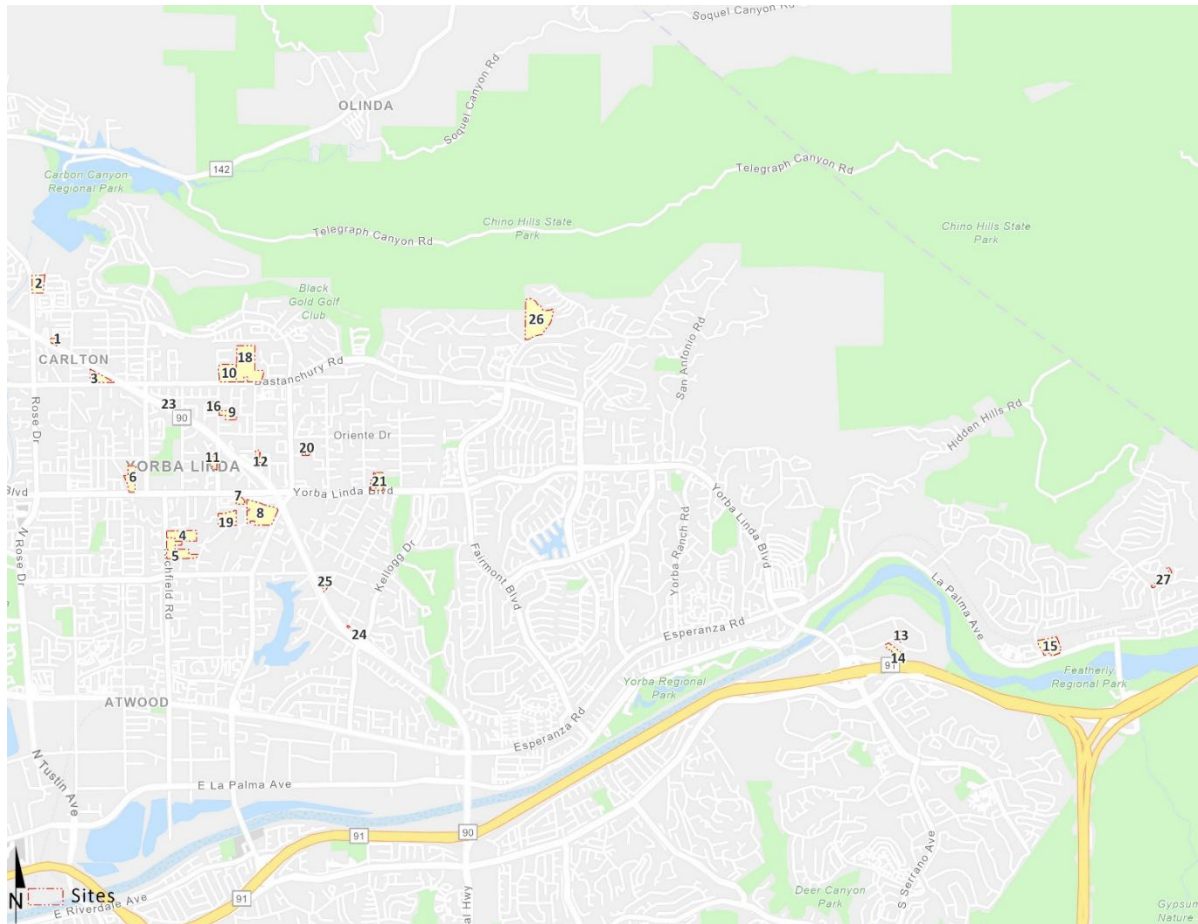
Ms. Nicole Morse
T&B Planning Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

YORBA LINDA YORBA LINDA 2021-2029 HOUSING ELEMENT IMPLEMENTATION PROGRAMS VEHICLE MILES TRAVELED (VMT) ANALYSIS

Ms. Nicole Morse,

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Analysis for the Yorba Linda Yorba Linda 2021-2029 Housing Element Implementation Programs development (**Project**) located in the City of Yorba Linda as seen in Exhibit 1.

EXHIBIT 1: HOUSING ELEMENT SITE LOCATION MAP



SUMMARY OF FINDINGS

The Project's VMT analysis findings for project generated VMT per service population was found to not exceed the City's threshold. In addition, the Project's cumulative effect to citywide VMT per service population was found also to decrease with the inclusion of the proposed housing element changes as compared to without changes. The Project's impact on VMT is presumed to be less than significant.

The City of Yorba Linda's VMT threshold is consistent with the City of Yorba Linda's general plan build out. The results of the project generated VMT per service population not exceeding the adopted City thresholds, shows additional growth capacity for the City of Yorba Linda through year 2045. Consistent with Senate Bill 743, the Project's VMT less than significant findings proves that the Project is incentivized by the development of higher density residential to service the job base in Yorba Linda and Orange County. Thus, reducing commute VMT and employee travel distances. There is an unmet need for housing and providing new housing opportunities allows people to reside closer to their jobs, this is evidenced further by the results of this VMT analysis. The VMT analysis results consistent with Southern California Association of Governments (SCAG) Current Context Demographics and Growth Forecasts (1), for City of Yorba Linda's employment growth in the City exceeds population growth as shown in Table 1.

TABLE 1: SCAG GROWTH FORECAST FOR THE CITY OF YORBA LINDA

City of Yorba Linda ¹	2016	2045	Increase
Population	67,800	70,600	4.13%
Employment	17,400	19,300	10.92%

PROJECT OVERVIEW

The Yorba Linda 2021 – 2029 Draft Housing Element traffic study analyzed and identified potential traffic-related deficiencies resulting from the rezoning and revised General Plan land use development assumptions necessary to address the City of Yorba Linda's regional housing needs assessment (RHNA) allocation. The Housing Element proposes a rezoning program of 27 vacant or underutilized sites for multi-family residential use at densities of 10 to 35 units to the acre. The Yorba Linda 2021 – 2029 Draft Housing Element will revise the General Plan land use and development intensities for the 27 sites to accommodate approximately 2,100 additional dwelling units for a net total of 2,410 dwelling units (including the existing zoning). Housing Element sites summarized on Table 2.

¹ SCAG Demographics and Growth Forecast; Page 38

TABLE 2: SUMMARY OF HOUSING ELEMENT SITES

#	HE Site ID	Site	Current Zoning	Proposed Zoning	Acres	Total Net Unit Potential
1	S1-021	W. of 16951 Imperial Highway	CG	Commercial Mixed Use Overlay	1.76	62
2	S1-200	SEC Rose Dr. & Blake Rd.	RE	RM-20 w/ Affordable Overlay	5.94	208
3	S2-008	17151 Bastanchury Rd.	RE	Congregational Land Overlay	4.92	60
4	S3-012	5320 Richfield Rd.	RU	Congregational Land Overlay	9.48	55
5	S3-207	5300-5392 Richfield Rd.	RU	RM-20 w/ Affordable Overlay	9.7	340
6	S2-013	4861 Liverpool St.	RU	Congregational Land Overlay	6.2	40
7	S3-074	18132 Yorba Linda Bl.	CG	RM-20 w/ Affordable Overlay	0.42	15
8	S3-024	Friends Church Overflow Parking	RE	Congregational Land Overlay	17.45	48
9	S3-033	4382 Eureka Av.	RS	Congregational Land Overlay	3.88	30
10	S3-210	18111 Bastanchury Rd.	PD-26	Congregational Land Overlay	9.23	105
11	S3-082	4791 & 4811 Eureka Av.	CG	RM-20 w/ Affordable Overlay	1.75	61
12	S4-075	4742 Plumosa Dr.	CG	RM-20 w/ Affordable Overlay	1.62	57
13	S6-015	22722 Old Canal Rd.	PD	Affordable Housing Overlay	2.56	89
14	S6-020	22711 Oak Crest Circle	PD	RM-20 w/ Affordable Housing Overlay	10.35	143
15	S7-001	Bryant Ranch Shopping Center	CG	Commercial Mixed Use Overlay	9.15	320
16	S3-034	4341 Eureka Av.	RS	RM	2.19	22
18	S3-203	18101-18251 Bastanchury Rd.	PD	PD	22.83	228
19	S3-205A	5225 & 5227 Highland Av.	RE	RM	7.08	71
20	S4-200	18597-18602 Altrudy Ln.	RS	RM-20	2	40
21	S4-204A	19045 Yorba Linda Bl.	RE	Congregational Land Overlay	1.85	17
	S4-204B	19081-19111 Yorba Linda Bl.	RE	RM-20	3.9	78
23	S3-211	17651 Imperial Highway	RS	RM	2.32	23
24	S4-053	SWC of Kellogg Dr. & Grandview Av.	RE	RM	0.98	10
25	S4-060	5541 S. Ohio St.	RE	RM	0.96	10
	S4-201	5531 S. Ohio St.	RE	RM	1.82	18
26	S5-008	Fairmont Bl.	PD	RM	23.01	230
27	S7-005	NEC of Camino del Bryant & Meadowland	RU	RM	3.06	30
TOTAL					166.41	2,410

The VMT analysis will evaluate the proposed development intensities expected for the 27 sites and assess the potential VMT impacts that may result from the implementation of the rezoning and changes to land use.

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a [Technical Advisory on Evaluating Transportation Impacts in CEQA](#) (December of 2018) (**Technical Advisory**) (1). Based on OPR's Technical Advisory, the City of Yorba Linda has adopted their own [City of Yorba Linda Traffic Impact Analysis \(TIA\) Guidelines](#) (May 2020) (**City Guidelines**) (2), which documents the City's VMT analysis methodology and approved impact thresholds. This VMT analysis has been developed based on the adopted City Guidelines.

VMT ANALYSIS

VMT MODELING

City Guidelines identify Orange County Transportation Analysis Model (OCTAM) version 5.0 as the appropriate tool for conducting VMT analysis for land use projects in the City of Yorba Linda. OCTAM is a useful tool to estimate VMT as it considers interactions between different land uses based on socio-economic data such as population, households and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. OCTAM is also consistent with the model used to develop the City's VMT impact thresholds listed by the City Guidelines. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from OCTAM.

VMT METRIC AND SIGNIFICANCE THRESHOLD

As stated in City Guidelines, the appropriate VMT metric for land uses projects for the purposes of VMT Analysis is VMT per service population. The City Guidelines identifies that a Project would result in a significant project generated VMT impact if the following condition is met:

1. The baseline project generated VMT per service population exceeds the City of Yorba Linda General Plan Buildout VMT per service population, or
2. The cumulative project generated VMT per service population exceeds City of Yorba Linda General Plan Buildout VMT per service population

North Orange County Cities VMT screening tool (NOCC+ Tool) provides published VMT values for its member agencies. For the City of Yorba Linda, the General Plan Buildout VMT per service population is 35.1.

PROJECT LAND USE CONVERSION

In order to evaluate Project VMT, standard land use information must first be converted into a OCTAM compatible dataset. The OCTAM model utilizes socio-economic data (SED) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. Project land use information such as dwelling units must first be converted to SED for input into OCTAM. Adjustments in SED have been made to the appropriate TAZs within the OCTAM model to reflect the Project's proposed land uses (i.e., residential). Table 3 summarizes the population estimates for the Project. It should be noted that the population estimates are consistent with the population density factors identified in the [California Department of Finance, Table 2: E-5](#) (January 2021).

TABLE 3: POPULATION ESTIMATES

Land Use	Quantity (DU)	Population Density Factor	Estimated Population
Residential	2,410	2.94 Persons per Household	7,085

In Table 4 presents the proposed population changes by TAZ within OCTAM. The TAZs represented below are all within the City of Yorba Linda's city boundary.

TABLE 4: POPULATION CHANGES BY TAZ

TAZ	Population Added
57	676.2
167	979.02
168	793.8
172	176.4
175	279.3
178	117.6
179	388.08
180	179.34
181	88.2
182	117.6
187	1555.26
197	682.08
198	940.8
253	111.72

BASELINE AND CUMULATIVE “PLUS PROJECT” CONDITIONS VMT CALCULATION

The values as calculated previously for the Project land use conversion are inputted into the OCTAM model for each of the Project’s TAZs and the OCTAM model was ran inclusive of the Project’s SED changes. Table 5 identifies the VMT per SP of the combined TAZs of the Project in the base year (2016) plus project and cumulative year (2045) plus project conditions.

TABLE 5: “PLUS PROJECT” VMT PER SERVICE POPULATION

	Base Year	Cumulative Year
Service Population	43,525	46,374
VMT	1,448,926	1,564,641
VMT / SP	33.29	33.74

PROJECT’S COMPARISON TO SIGNIFICANCE THRESHOLD

Table 6 shows the comparison between Project’s baseline and cumulative VMT per service population to the City’s impact threshold. As noted previously, the City of Yorba Linda has identified a VMT per service population significance threshold of 35.1. As shown below, the Project would not exceed the City’s VMT per employee impact threshold for baseline and cumulative conditions by 5.16% - 3.87%, respectively. The Project’s VMT impact is therefore considered less than significant.

TABLE 6: “WITH PROJECT” COMPARISON TO CITY THRESHOLD

	Base Year	Cumulative Year
Impact Threshold	35.1	35.1
With Project VMT / SP	33.29	33.74
Percent Change	-5.16%	-3.87%
Potentially Significant?	No	No

PROJECT’S CUMULATIVE EFFECT ON VMT

Consistent with City Guidelines, in addition to evaluating the project VMT per service population (SP) (i.e., Population and Employees), the analysis must also evaluate the cumulative effects of the project on VMT. To complete this cumulative analysis, the analysis must compare the citywide VMT per SP “with project” with “no project” VMT per SP. This analysis is performed using the boundary method, which includes all vehicle trips with one or both trip-ends within a specific geographic area of interest the City of Yorba Linda boundary. Once the areawide VMT value is calculated, it is then normalized by dividing by the number of population and employees in the City of Yorba Linda (based on the OCTAM model). Baseline and Cumulative link-level boundary VMT per service population (City) is calculated for both “No Project” and “With Project” conditions. If an increase occurs for the With Project condition as compared to No Project condition, then the impact is considered significant. As shown in Table 7, citywide VMT per SP was found to decrease under cumulative conditions and would also have a less than significant impact.

TABLE 7: CITYWIDE VMT PER SERVICE POPULATION

	Base Year No Project	Base Year With Project	Cumulative Year No Project	Cumulative Year With Project
Service Population	91,267	98,352	97,814	104,899
VMT	1,446,176	1,495,953	1,673,239	1,703,753
VMT/SP	15.85	15.21	17.11	16.24
Change in VMT		-0.64		-0.86

If you have any questions, please contact me directly at aso@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.



Alexander So
Senior Associate

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Yorba Linda.** *City of Yorba Linda Traffic Impact Analysis (TIA) Guidelines.* May 2020.



**SHERIFF-CORONER DEPARTMENT
COUNTY OF ORANGE
CALIFORNIA**

YORBA LINDA POLICE SERVICES



**JOSES WALEHWA
CHIEF OF POLICE
SERVICES**

To: City of Yorba Linda Traffic Commission

From: Deputy Fernando Lopez

Date: June 3, 2022

Subject: May 2022 Collisions Reported

Listed below are the traffic collisions that occurred in the City of Yorba Linda in May 2022 where a report was taken.

Injury Collision: 5

Fatal: 0

Non-Injury: 6

DR#	Incident Date	Location	Injury	PCF	Property Damage
22-017422	05/26/2022 17:04	BASTANCHURY RD // ROSE DR	NO	TBD	NO
22-017310	05/26/2022 00:03	17761 VIA ROMA	NO	NONE	NO
22-016876	05/22/2022 16:51	17581 YORBA LINDA BLVD	YES	TBD	NO
22-016670	05/20/2022 18:37	PROSPECT AV // BASTANCHURY RD	NO	TBD	NO
22-016387	05/18/2022 16:57	IMPERIAL HWY // LEMON DR	YES	TBD	NO
22-016241	05/17/2022 13:50	4757 VALLEY VIEW AV	YES	TBD	5' OF AWNING
22-016120	05/16/2022 16:46	BUENA VISTA AV // RICHFIELD RD	YES	TBD	NO
22-015835	05/13/2022 17:49	LAKEVIEW AV // BUENA VISTA AV	NO	TBD	NO
22-014856	05/05/2022 18:02	22322 OLD CANAL RD	NO	TBD	NO
22-014842	05/05/2022 16:31	LA PALMA AV // VIA LOMAS D YORBA E	YES	UNSAFE SPEED	NO
22-014813	05/05/2022 13:20	22633 SAVI RANCH PKWY	NO	TBD	NO



**SHERIFF-CORONER DEPARTMENT
COUNTY OF ORANGE
CALIFORNIA**

YORBA LINDA POLICE SERVICES



**JOSES WALEHWA
CHIEF OF POLICE
SERVICES**

To: City of Yorba Linda Traffic Commission
From: Deputy Fernando Lopez
Date: June 4, 2022
Subject: May 2022 Non-Reported traffic incidents

Listed below are the traffic incidents that occurred in the City of Yorba Linda where a report was not taken. Whether a report was not warranted or the parties involved exchanged information. Listed are the call numbers and the location of occurrences.

Total: 19

Call #	Date / Time	Location
220523-0617	05/23/2022 15:51	20994 YORBA LINDA BLVD
220523-0392	05/23/2022 11:44	VALLEY VIEW AV // YORBA LINDA BLVD
220523-0132	05/23/2022 07:17	IMPERIAL HWY // KELLOGG DR
220521-0066	05/21/2022 02:34	20025 BAYWOOD CT
220520-0451	05/20/2022 13:01	20535 YORBA LINDA BLVD
220519-0785	05/19/2022 12:38	IMPERIAL HWY // EUREKA AV
220519-0400	05/16/2022 14:55	YORBA LINDA BLVD // LAKEVIEW AV
220516-0592	05/16/2022 11:00	4444 PLUMOSA DR
220516-0329	05/15/2022 18:58	YORBA LINDA BLVD // AVD ADOBE
220515-0557	05/15/2022 02:24	18503 YORBA LIN.DA BLVD
220515-0056	05/14/2022 19:56	5600 OHIO ST
220514-0554	05/14/2022 14:24	IMPERIAL HWY // LEMON DR
220514-0365	05/14/2022 12:33	22633 SAVI RANCH PKWY
220514-0296	05/11/2022 21:54	PROSPECT AV // YORBA LINDA BLVD
220511-0805	05/10/2022 18:44	PAS DL PRADO // ESPERANZA RD

20994 Yorba Linda Blvd, Yorba Linda, CA 92887 (714) 779-7098

Integrity without compromise, Service above self, Professionalism in the performance of duty.
Vigilance in protecting our community

220503-0446	05/03/2022 12:05	BASTANCHURY RD // IMPERIAL HWY
220502-0434	05/02/2022 11:42	20994 YORBA LINDA BLVD