

Appendix C

Traffic Study

**CITY OF PORT HUENEME
PORT HUENEME, CALIFORNIA**

CIRCULATION ELEMENT UPDATE



June 3, 2021

ATE Project 20018

Prepared for:

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003



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June 3, 2021

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TRAFFIC STUDY FOR THE PORT HUENEME CIRCULATION ELEMENT UPDATE - CITY OF PORT HUENEME

Associated Transportation Engineers (ATE) is pleased to submit the following traffic study for the Port Hueneme Circulation Element Project. It's our understanding that the results of the study will be used by the Port of Hueneme.

We appreciate the opportunity to assist the Rincon Consultants with this Project.

Associated Transportation Engineers

By: Scott A. Schell
Vice President

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INTRODUCTION

The following traffic study provides information relative to existing and General Plan Buildout traffic volumes.

The purpose of the Circulation Element is to provide a safe, effective, transportation system for the City. State mandate for a Circulation Element states that the General Plan shall include:

A circulation element consisting of the general location for proposed major thoroughfares, transportation routes and other local public utilities and facilities all correlated with the land use element of the plan.

The "General Plan Guidelines" (Section 65302 of the California Government Code), published by the State of California, office of Planning and Research, suggest that policies and plan proposals of the Circulation Element should:

Coordinate the transportation and circulation system with planned land uses.

Promote the efficient transport of goods and the safe and effective movement of all segments of the population.

Make efficient use of existing transportation; and,

Protect environmental quality and promote the wise and equitable use of economic and natural resources.

The Circulation Element contains summary information on the existing and future conditions of the city's transportation system. Goals and policies have been created to ensure that all components of the circulation system will meet future needs of the City of Port Hueneme.

To meet the General Plan Circulation Element policy objectives, the Elements Plan section identifies the transportation improvements needed to provide adequate capacity for future land uses, it also addresses potential demand management strategies and mass transit services, In addition, the Circulation Plan establishes a hierarchy of transportation routes with specific development standards described for each category of roadway.

As part of the Southern California region, Port Hueneme is affected by regional plans and programs related directly to transportation. Examples of these are Southern California Association of Governments (SCAG) Regional Mobility Plan and Growth Management Plan, and the Air Quality Management Plan prepared by the Ventura County Air Pollution Control District (VCAPCD). These plans are intended to work in concert to reduce areawide traffic congestion and air pollutant levels. Planning strategies focus on reducing automobile and truck traffic on regional transportation network, as well as at local levels.

Port Hueneme has included in this General Plan relevant policies and programs which reflect and respond to SCAG's and VCAPCD's regional goals. Policies in the Circulation Element are aimed at reducing traffic congestion, while Conservation/Open Space/Environmental Resources Element programs are aimed at improving regional air quality. The policy with respect to transportation demand management (TDM) specifically address VCAPCD regulations regarding increased vehicle occupancy targets as means if reducing pollutants.

GOALS AND POLICIES

The City of Port Hueneme has adopted the following Goals and Polices to address the transportation and circulation needs of the General Plan.

GOAL 1: Provide a comprehensive transportation system for the movement of persons and goods with maximum safety efficiency and convience and with a minimum of delay and cost.

Policy 1-1 Reduce existing congestion at critical intersections including Channel Islands Boulevard and Ventura Road and Ventura Road and Bard Road.

Policy 1-2 The City will continue to work closely with the Navy and the Port District to ensure circulation system improvements.

GOAL 2: Provide a balanced roadway system which will provide adequate accessibility to existing and future land uses with minimum impact on residential neighborhoods.

Policy 2-1 Encourage the routing of through traffic to designated arterial streets and discourage through traffic in residential neighborhoods.

Policy 2-2 Monitor through traffic intrusion in residential neighborhoods and where necessary implement strategies to reduce through traffic impacts.

GOAL 3: Encourage the use of alternative transportation modes.

Policy 3-1 Promote the use of alternative forms of transportation to reduce congestion, traffic, noise and air quality impacts.

Policy 3-2 Coordinate with Gold Coast Transit to maximize the use of transit service in Port Hueneme.

Policy 3-3 When new circulation routes or street improvements are proposed, consider inclusion of bicycle lanes where feasible.

GOAL 4: Improvement of accessibility to the City from regional freeway and highway system

Policy 4-1 Explore the feasibility of access through the Naval CBC to connect Pleasant Valley Road with Victoria Avenue, especially with regard to harbor related traffic and in a manner, which will not jeopardize naval operations (Coastal Act/30210, 212-5);

Policy 4-2 Investigate opportunities for linkage with existing and proposed light rail/shuttle facilities within the local area,

Policy 4-3 Participate in development of regional Congestion Management Plan

Policy 4-4 Work with the Oxnard Harbor District, City of Oxnard, Ventura County and Caltrans to expedite completion of the Rice Avenue bypass to Port Hueneme Road for Port access (Coastal Act/30254, 30210-212-5)

Policy 4-5 To remove truck route designations for Channel Island Boulevard and Ventura Road after Rice Avenue bypass is completed.

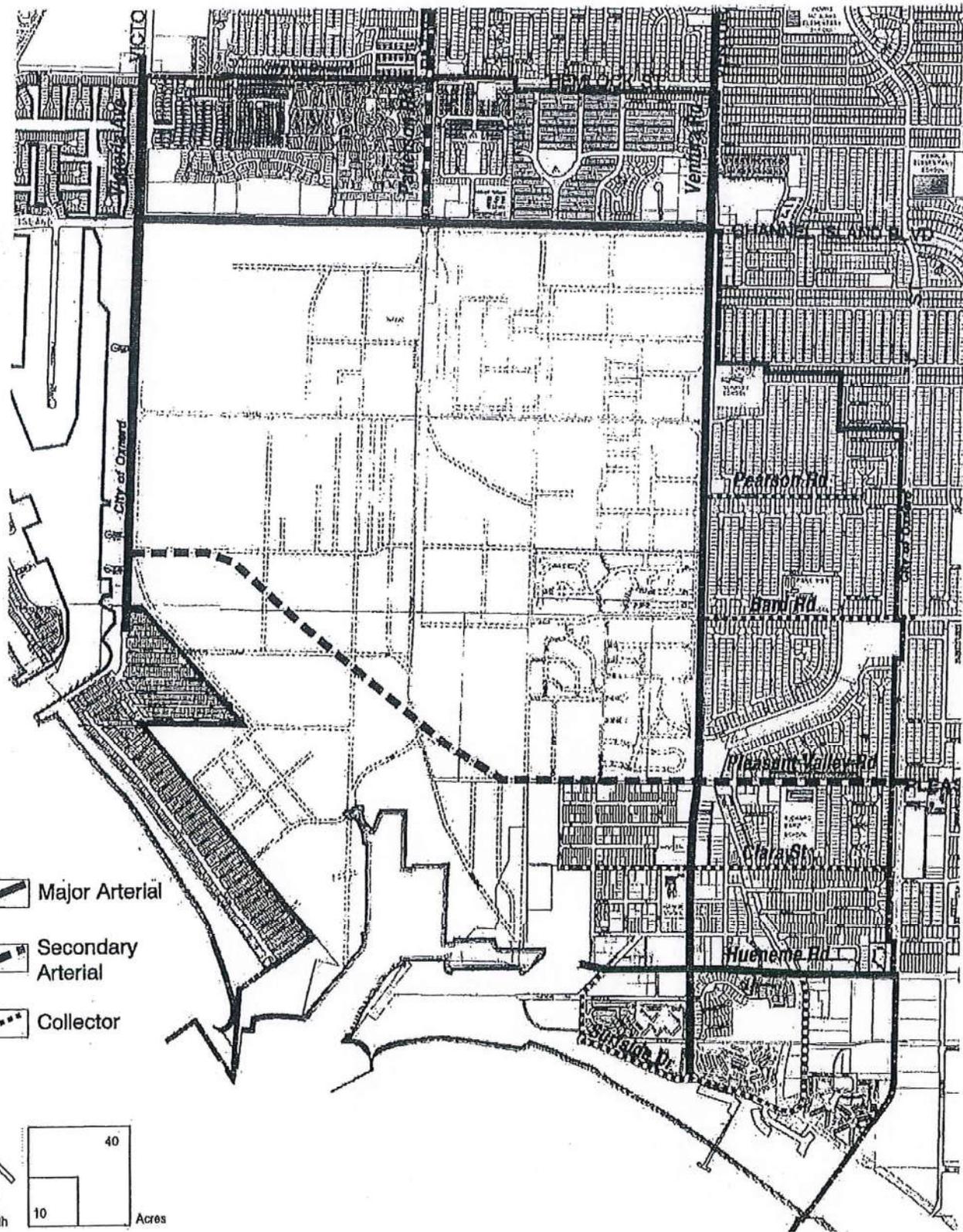
CIRCULATION SYSTEM

The City of Port Hueneme is served by a circulation system comprising of arterials and collector streets, which are illustrated on Figure 1. The roadway system in Port Hueneme is defined using a hierarchy of roadway types which differentiate the function of each roadway link. Referred to as "facility-type" categories, they include three classifications ranging from "Major Highways" with the highest capacity through "Local Street" with the lowest capacity. Figures 2 and 3 illustrate the facility type. A brief description of each facility type follows:

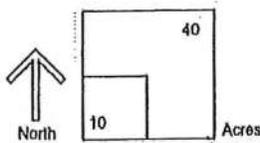
Major Highways – These are primary circulation facilities which distribute and collect freeway bound traffic, accommodate intra-city trips, as well as serve other medium distance movements. Port Hueneme Road, Ventura Road, and Channel Islands Boulevard are considered major highways.

Secondary Highways – These streets distribute and collect traffic which is generated in the area circumscribed by major highways. Pleasant Valley Road is the only secondary highway in the City, although on busy weekends and holidays, Surfside Drive may serve as a secondary highway for beach related traffic.

Local Streets – These streets provide local access and comprise the remainder of the streets within the City.



-  Major Arterial
-  Secondary Arterial
-  Collector



NOT TO SCALE

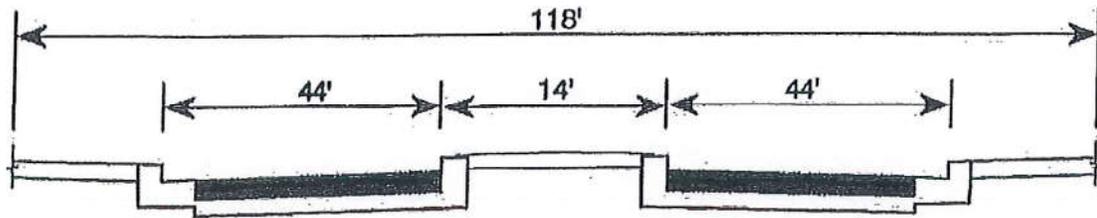


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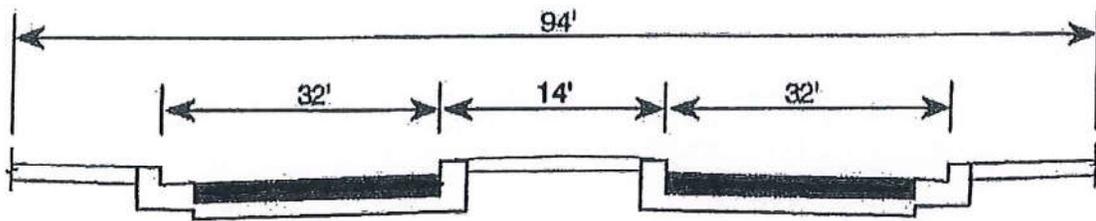
CIRCULATION SYSTEM

FIGURE 1

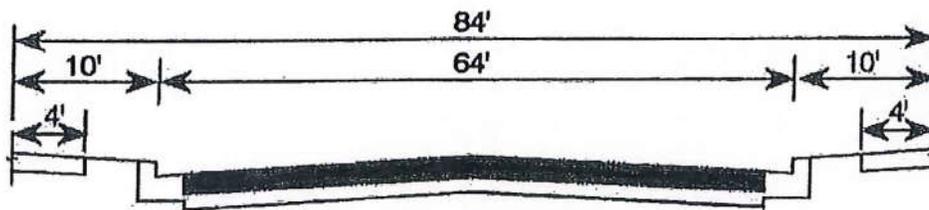
JH - ATE#20018



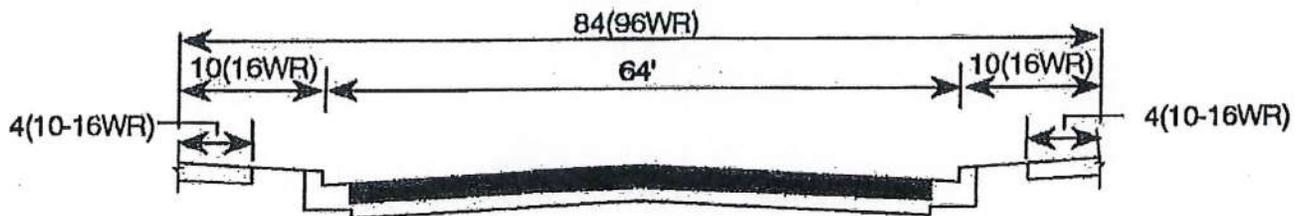
Primary Arterials



Secondary Arterials



Secondary Free Access



Major Commercial or Industrial Roads

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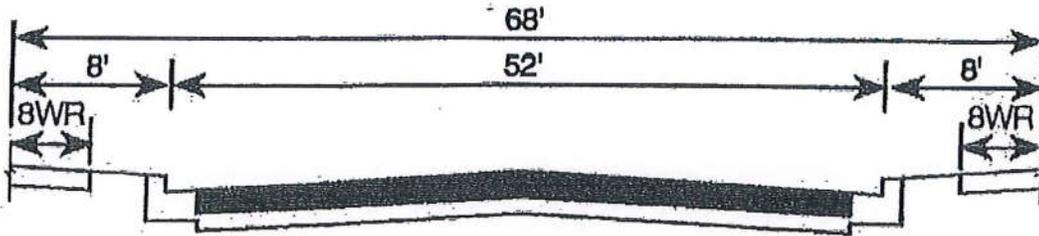


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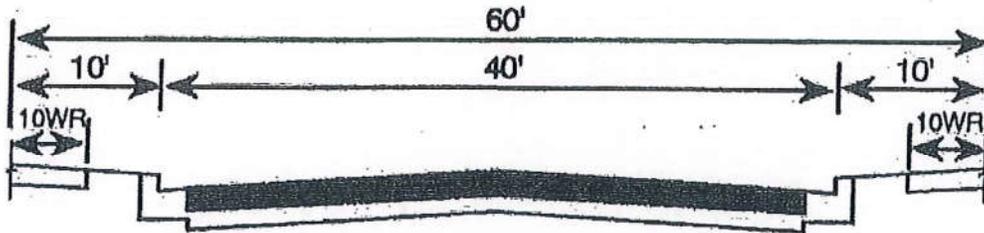
CIRCULATION SYSTEM TYPICAL CROSS SECTIONS

FIGURE 2

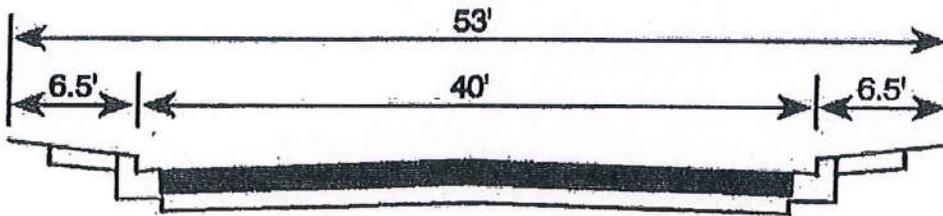
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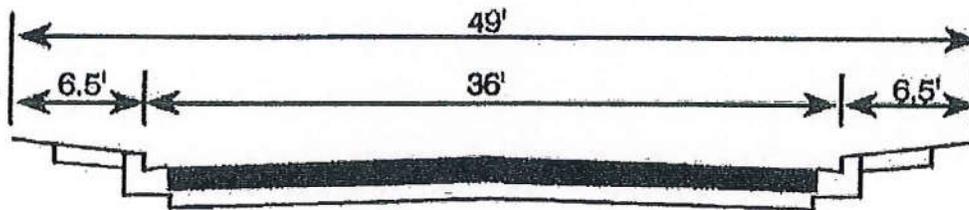
Commercial or Industrial Roads



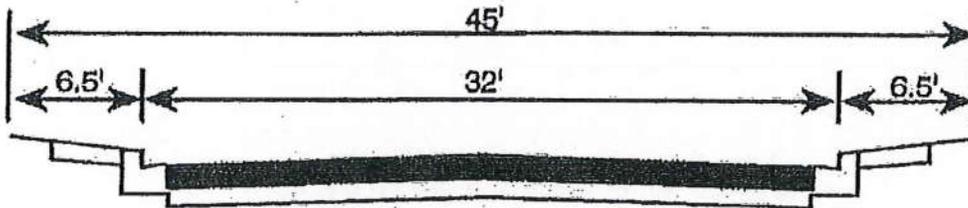
Minor Commercial or Industrial Roads



Collector Residential Road



Minor Residential Road



Residential Cul-de-Sac

NOT TO SCALE



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CIRCULATION SYSTEM TYPICAL CROSS SECTIONS

FIGURE 3

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The desirable goal for every roadway in the Circulation Element is that it carries the existing and future traffic volumes of traffic at the desired level of service. To achieve this requirement variation in design is expected depending on factors such as the capacity needs and the adjacent land uses. Such variations will involve on-street parking, sidewalks, pathways, bicycle lanes, bike paths, median landscaping.

The goals and policies of this Circulation Element emphasize the importance of developing a circulation system that is capable of serving both existing and future residents while preserving community values and character.

The City has developed a program of public improvements to adequately serve the anticipated future development, including the effects of the development outside the City. The City will coordinate with the City of Oxnard and other agencies to share cost of the improvements needed based on regional growth. Major improvements to the circulation system include:

Channel Islands Boulevard: Widen to 6-lanes from Victoria Avenue to Ventura Road.

Ventura Road: Widen to 3-lanes northbound from Pleasant Valley Road to Channel Islands Boulevard.

A comprehensive network of local roadways and public transit routes serves the transportation needs of Port Hueneme and surrounding jurisdictions. The following identifies circulation issues in Port Hueneme.

EXISTING CONDITIONS

Existing Street Network

The project site is served by a circulation system comprising of arterials and collector streets, which are illustrated on Figure 1. The major roadways serving the site are discussed in the following text.

Major Highways – These are primary circulation facilities which distribute and collect freeway bound traffic accommodate intra city trips as well as serve other medium distance movements. Port Hueneme Road, Ventura Road and Channel Islands Boulevard are considered major highways.

Secondary Highways – These streets distribute and collect traffic which is generated in the area circumscribed by major highways, Pleasant Valley Road is the only secondary highway in the City. Although on busy weekends and holidays Surfside Drive may serve as a secondary highway for beach related traffic

Local Streets – These streets provide local access and comprise the remainder of the streets in the City of Port Hueneme.

Victoria Avenue, a north-south arterial roadway that extends northerly from the Channel Islands Harbor area to the eastern portion of the City of Ventura. Victoria Avenue is a 6- to 8-lane arterial roadway north of U.S. Highway 101 and a 4-lane roadway south of U.S. Highway 101. Victoria Avenue has freeway interchanges at U.S. Highway 101 and State Route 126. In the study-area Victoria Avenue is signalized at Channel Islands Boulevard and Ventura Road.

Ventura Road is a 2- to 4-lane north-south roadway that extends north from Surfside Drive to Moss Landing Boulevard in the River Park development. Ventura Road serves residential, commercial and industrial uses in the cities of Port Hueneme and Oxnard. In the study-area Ventura Road is signalized at Channel Islands Boulevard and at Port Hueneme Road.



Saviers Road, a 2- to 4-lane roadway, extends from north Port Hueneme Road to Oxnard Boulevard. Saviers Road serves as the primary commercial and residential land uses in Oxnard, Port Hueneme, and the Ormond Beach area. In the study-area Saviers Road is signalized at Port Hueneme Road.

Channel Islands Boulevard is a 2- to 4-lane east-west divided arterial roadway that extends easterly from Harbor Boulevard to the Rice Avenue. Channel Islands Boulevard serves residential and commercial uses in the cities of Port Hueneme and Oxnard. In the study-area Channel Islands Boulevard is signalized at Victoria Avenue and Ventura Road.

Pleasant Valley Road is a 4-lane east-west arterial roadway that extends easterly from the Port of Hueneme to the City of Camarillo where it becomes Santa Rosa Road. Pleasant Valley Road serves industrial, residential, commercial, and agricultural uses in the cities of Port Hueneme, Oxnard, Camarillo, and Ventura County. In the study-area Pleasant Valley Road is signalized at Ventura Road.

Port Hueneme Road is a 4-lane east-west arterial roadway that extends easterly from the Port of Hueneme to Las Posas Road where it becomes Lewis Road. Port Hueneme Road serves industrial, residential, commercial, and agricultural uses in the cities of Port Hueneme and Oxnard and Ventura County. In the study-area Port Hueneme Road is signalized at Ventura Road, Saviers Road and at Rice Avenue.

Existing Volumes and Intersection Levels of Service

Levels of Service (LOS) is an indicator of the operating conditions on a roadway or intersection and is defined in categories ranging from A through F. LOS A and LOS B represent primarily free-flow operations, LOS C represents stable conditions, LOS D nears unstable operations with restrictions on maneuverability within traffic streams, LOS E represents unstable operations with maneuverability very limited, and LOS F represents breakdown or forced flow conditions. In the City of Port Hueneme LOS C is the acceptable operating standard for intersection operations.

Due to the closures of businesses and schools related to the COVID19 pandemic, AM and PM peak hour turning movement volumes for the study-area intersections were developed from traffic counts collected by ATE in June of 2016. The Year 2016 count data was factored to Year 2020 conditions assuming a 1 percent annual growth factor for 4 years.

Roadway Segments

The following section reviews average daily traffic (ADT) volumes and roadway operations in the study-area. Year 2020 ADT volumes for the roadway segments in the vicinity of the were obtained from data collected by ATE. Table 1 lists the Year 2020 ADT and levels of service for study-area roadways.

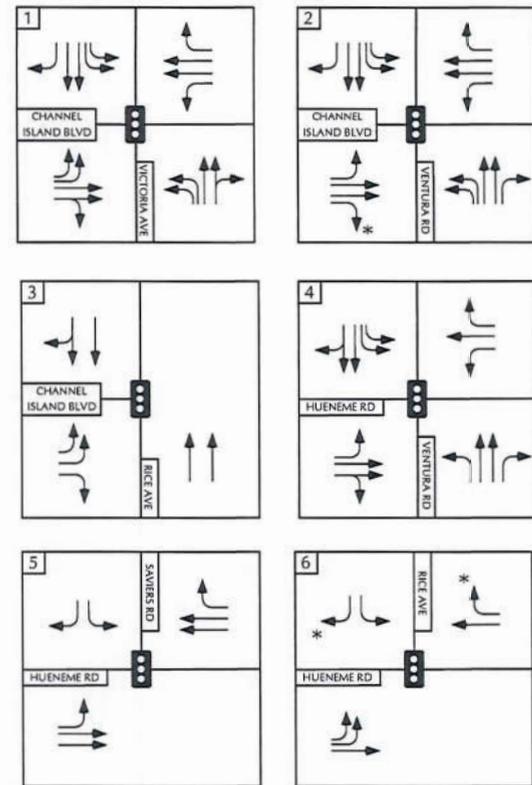
**Table 1
Year 2020 Roadway Operations**

Roadway Segment	Geometry	Capacity	ADT	LOS
Channel Island Boulevard east of Patterson Road	4-Lanes	58,000	24,900	B
Channel Island Boulevard west of Patterson Road	4-Lanes	58,000	30,800	C
Ventura Road south of Channel Island Boulevard	4-Lanes	58,000	33,500	C
Ventura Road north of Huemene Road	4-Lanes	58,000	13,300	A
Huemene Road east of Ventura Road	4-Lanes	58,000	11,400	A

The data presented in Table 1 indicate that the study-area roadway segments currently operate in the LOS B - C range based on Ventura County roadway design capacities presented in Figure 4.2.2 in the Technical Appendix.

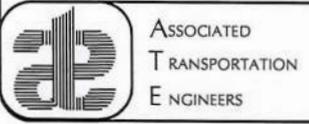
Intersections

Figure 4 illustrates the study-area intersections, the existing traffic controls, and the intersection geometries. Existing AM and PM peak hour period traffic volumes at the study-area intersections are illustrated on Figure 5. The intersection traffic counts collected for this study and are included in the Technical Appendix.



LEGEND

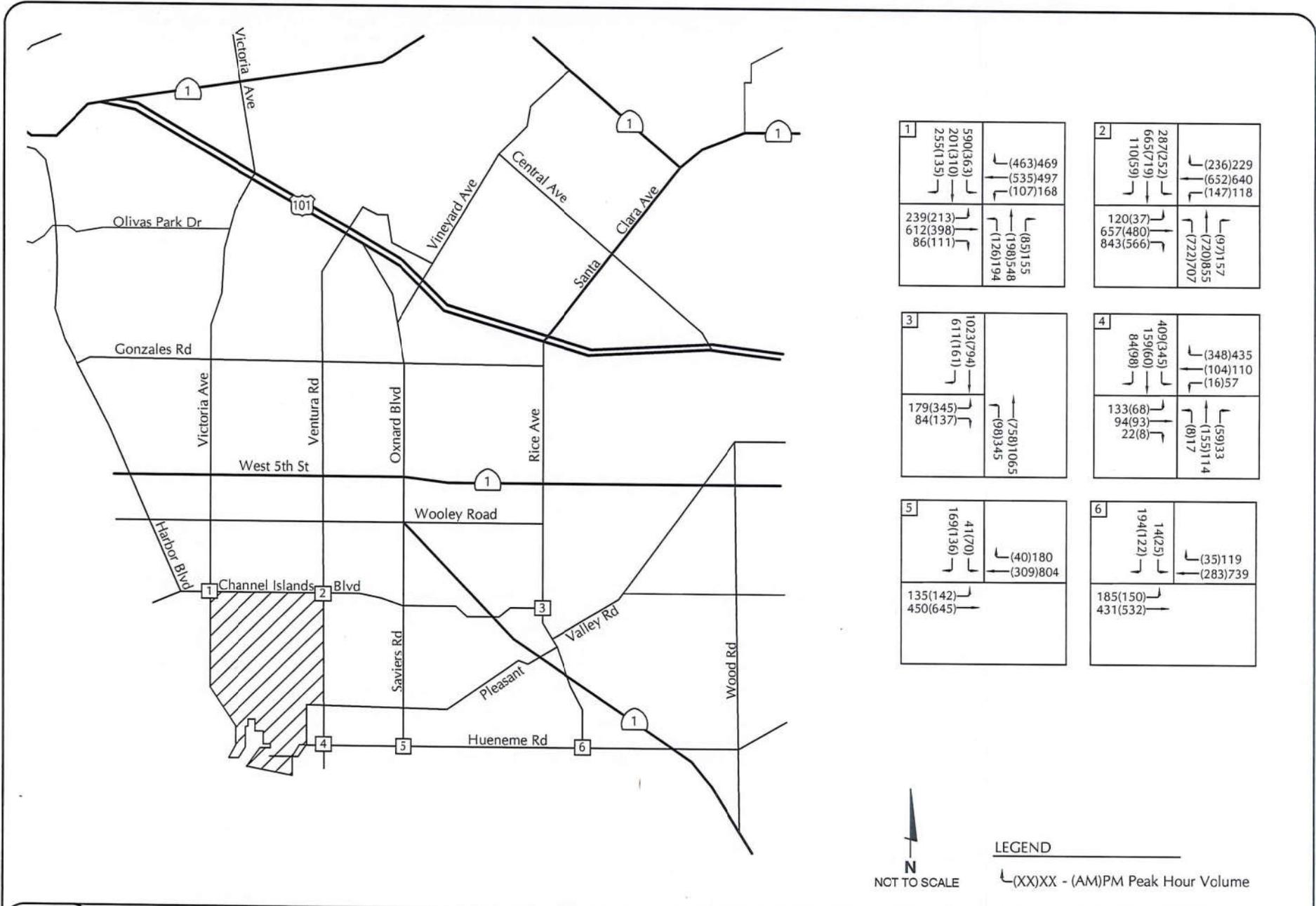
- Signalized Intersection
- Lane Geometry
- Free Flow



EXISTING INTERSECTION GEOMETRY AND TRAFFIC CONTROLS

FIGURE 4

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YEAR 2020 TRAFFIC VOLUMES

FIGURE 5

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Year 2020 levels of service were calculated for the study-area intersections using the Intersection Capacity Utilization (ICU) methodology for signalized intersections as required by the City of Port Hueneme. Worksheets illustrating the level of service calculations are contained in the Technical Appendix for reference. Table 1 lists the level of service for the study-area intersections during the AM and PM peak hour periods.

**Table 2
Year 2020 Intersection Peak Hour Levels of Service**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
Victoria Avenue/Channel Islands Boulevard	Signal	0.53	A	0.77	C
Ventura Road/Channel Islands Boulevard	Signal	0.69	B	0.52	A
Rice Avenue/Channel Islands Boulevard	Signal	0.47	A	0.78	C
Ventura Road/Port Hueneme Road	Signal	0.42	A	0.52	A
Saviers Road/Port Hueneme Road	Signal	0.49	A	0.44	A
Rice Avenue/Port Hueneme Road	Signal	0.35	A	0.53	A

The study-area intersections operate at LOS C or better during the AM and PM peak hour periods. There are no existing deficiencies. There is reserve capacity at the study-area intersections.

IMPACT THRESHOLD CRITERIA

City of Port Hueneme

The City of Port Hueneme has established LOS C as the threshold of significance for determining project impacts at intersections. If the addition of project traffic increases the ICU by 0.02 or more at an intersection operating at LOS C or worse, it should be mitigated to the ICU level identified without the project traffic.

GENERAL PLAN BUILDOUT

General Plan Buildout (Year 2045) traffic volumes were developed for the study-area based on City of Oxnard Traffic Model (OTM) and the proposed housing growth in the City of Port Hueneme. The OTM is a sub-area derivation of the Ventura Countywide Traffic Model. The OTM traffic forecasting model overlaps the City of Port Hueneme and includes study-area intersections within the City. The OTM assumes General Plan Buildout land uses in Oxnard, as well as the City of Port Hueneme to forecast future traffic volumes. In the City of Port Hueneme, a total of 518 additional "Moderate" or "Lower Income" housing units are planned. The majority of housing proposed is infill or redevelopment of existing commercial land uses. In addition to the additional housing units, 62,727 square-feet of new light industrial space is also proposed. Trip generation for the housing and light industrial space

was developed based on rates published in the Institute of Transportation Engineers, Trip Generation, 10th Edition.

**Table 3
Trip Generation**

Land Use	Size	ADT		AM Peak Hour		PM Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Multi-Family Housing	518 Units	5.44	2,818	0.36	186	0.44	228
Light Industrial	62,727 Square Feet	4.96	311	0.70	44	0.63	40
Total Trip Generation:			3,129		230		268

As shown in Table 3 the proposed housing units and light industrial space would generate 3,129 average daily trips, 230 AM peak hour trips and 268 PM peak hour trips. The AM and PM peak hour traffic volumes were distributed and assigned to the study-area roadways and intersections based on the existing traffic pattern and general knowledge of the residential, employment, commercial development in the City of Port Huemene and the adjacent City of Oxnard. General Plan Buildout (Year 2045) AM and PM peak hour period traffic volumes at the study-area intersections are illustrated on Figure 6.

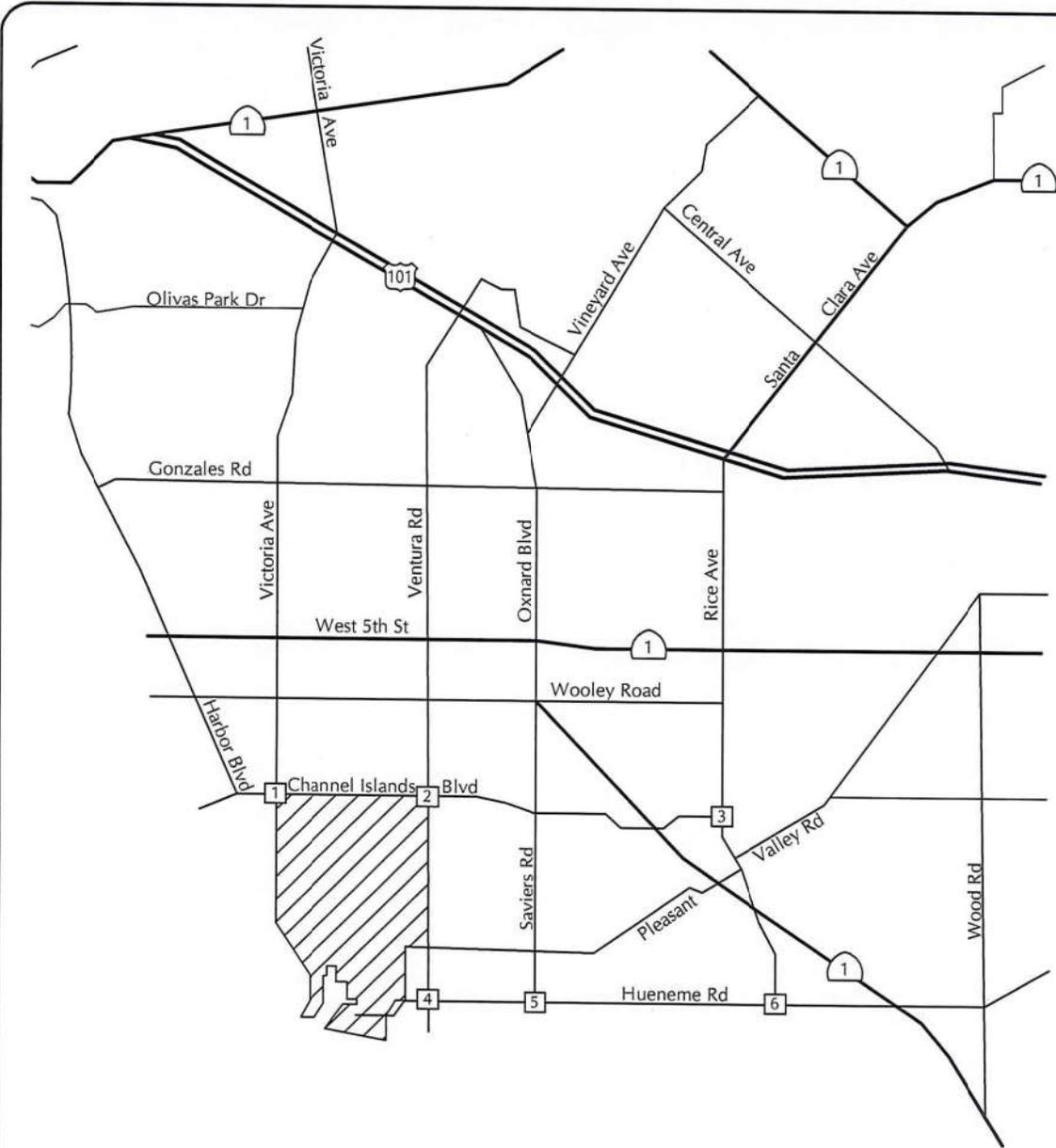
Roadway Segments

The following section reviews average daily traffic (ADT) volumes and roadway operations in the study-area. General Plan Buildout (Year 2045) ADT volumes for the roadway segments were obtained from the OTM forecast and trips generated by the proposed housing units and light industrial space. Planned roadway improvements are assumed to be in place. Table 4 lists the General Plan Buildout (Year 2045) ADT and levels of service for study-area roadways.

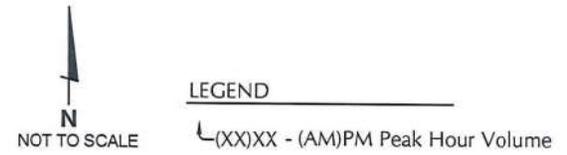
**Table 4
General Plan Buildout (Year 2045) Roadway Operations**

Roadway Segment	Geometry	Capacity	ADT	LOS
Channel Island Boulevard east of Patterson Road	6-Lanes	87,000	31,900	B
Channel Island Boulevard west of Patterson Road	6-Lanes	87,000	39,800	B
Ventura Road south of Channel Island Boulevard	6-Lanes	87,000	41,500	B
Ventura Road north of Huemene Road	4-Lanes	58,000	27,100	B
Huemene Road east of Ventura Road	4-Lanes	58,000	23,800	B

The data presented in Table 4 indicate that the study-area roadway segments would operate in the LOS B range with General Plan Buildout (Year 2045) based on the roadway design capacities.

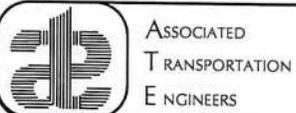


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GENERAL PLAN BUILDOUT (YEAR 2045) TRAFFIC VOLUMES

FIGURE 6



Intersection Operations

General Plan Buildout levels of service were calculated for the study-area intersections using the Intersection Capacity Utilization (ICU) methodology for signalized intersections as required by the City of Port Hueneme. Planned roadway improvements are assumed to be in place. Worksheets illustrating the level of service calculations are contained in the Technical Appendix for reference. Table 5 lists the level of service for the study-area intersections during the AM and PM peak hour periods.

**Table 5
General Plan Buildout (Year 2045) Peak Hour Levels of Service**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
Victoria Avenue/Channel Islands Boulevard	Signal	0.44	A	0.64	B
Ventura Road/Channel Islands Boulevard	Signal	0.57	A	0.77	C
Rice Avenue/Channel Islands Boulevard	Signal	0.79	C	0.53	A
Ventura Road/Port Hueneme Road	Signal	0.64	B	0.76	C
Saviors Road/Port Hueneme Road	Signal	0.42	A	0.53	A
Rice Avenue/Port Hueneme Road	Signal	0.52	A	0.78	C

The study-area intersections are forecast to operate at LOS C or better during the AM and PM peak hour periods with planned roadway improvements and General Plan Buildout (Year 2045).

VEHICLE MILES TRAVELED

Adopted in 2013 Senate Bill (SB) 743 changes how transportation impacts are evaluated under CEQA. As specified under SB 743 and implemented under Section 15064.3 of the State CEQA Guidelines, Vehicle Miles Traveled (VMT) is the required metric to be used for identifying CEQA impacts and mitigation. The Governor's Office of Research and Planning (OPR) published a Technical Advisory on Evaluating Transportation Impacts including guidance for VMT analysis.

VMT was chosen as the metric to better integrate land use and multimodal transportation choices to encourage alternative transportation, promote greater efficiency and reduce Green House Gas (GHG) emissions. Technical guidance on analyzing the transportation impacts under CEQA provides recommendations regarding the assessment of VMT, thresholds of significance and mitigation measures. The OPR offered generalized recommendation of 15 percent reduction below existing VMT thresholds for CEQA significance. For VMT analysis, the OPR recommends using a trip-based assessment of VMT that captures the full extent of the vehicle trip length – even the portion that extends beyond the jurisdictional boundary. SB 743 also amended the State congestion management program statutes lifting the sunset

clause for the designation of infill opportunity zones where the CMP LOS standards would no longer apply.

The Ventura County Transportation Commission (VCTC) maintains the regional traffic model and provides VMT data for the member jurisdictions including the City of Port Hueneme. For the purpose of evaluating General Plan Buildout, VCTC provided VMT data, for the Year 2040 which relies on the SB743 method. ATE utilized population and housing data for Year 2045 to develop the Year 2045 VMT. As shown in Table 6, General Plan Buildout land uses will result in no change in the VMT per capita for the City of Port Hueneme.

**Table 6
Vehicle Miles Traveled**

Year	Population	Vehicles Miles Traveled	VMT per Capita
2040	23,980	630,746	16.09
2045	25,242	659,735	16.09

Screening Thresholds for Residential Projects

The City of Port Hueneme has not adopted a formal methodology or impact threshold for VMT. The OPR generalized recommendation is a 15% reduction below the existing VMT as a threshold for CEQA significance. Because the City of Port Hueneme is in the sphere of influence of the City of Oxnard, the City should coordinate with the City of Oxnard and VCTC to develop and adopt a formal methodology and impact thresholds for evaluating VMT. This would provide a uniformity in meetings goals for VMT reduction since the two cities share several regional roadways.

CEQA guidelines state that lead agencies generally should assume that constructing affordable housing in infill locations improves the jobs housing match in turn shortening commutes and will have a less than significant impact on VMT. Also, redevelopment projects tend to not increase the VMT since not all of the trips can be considered new trips.

Also, development proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor (fixed route service with 15-minute head ways or shorter) will have a less than significant impact on VMT.

The majority of housing proposed is affordable or redevelopment of existing commercial or industrial property in Port Hueneme which generates lower VMT than market-rate housing. Though not high-quality transit, the proposed housing is located within ½ mile of Gold Coast Transit routes. Bus stops with benches are provided along the routes.

Transportation Demand Management

The City of Port Hueneme does not have a formalized Transportation Demand Management (TDM) requirement. VMT will result in the need for businesses to reduce Single Occupant Vehicle (SOV) commute trips. TDM measures that reduce commute trips have been utilized successfully by others in California. In order to facilitate trip reductions, the availability of alternative modes such of transportation is necessary. Transit and bicycle, pedestrian facilities are available in the City of Port Hueneme.

Transit Service Gold Coast Transit (GCT) is the transit provider in the City of Port Hueneme. Four fixed routes (Route 1A, Route 1B, Route 3 and Route 21) operate in the City. Bus service is provided along the major corridors including Channel Islands Boulevard, Pleasant Valley Road, Ventura Road, Bard Road, Port Hueneme Road and Surfside Drive. Bus shelters are provided by GCT for riders waiting at stops. Bike racks are provided on every fixed route which allows the bicyclist to interface with the transit system.



Pedestrian and Bicycle Facilities

The City of Port Hueneme provides pedestrian facilities within and between residential neighborhoods, also in commercial areas and the area of the Port. Sidewalks and crosswalks are provided along all major roadway corridors and transit routes in the City. In addition to being a recreational activity, biking is an alternative to automobile transportation. Bicycle facilities are provided in Port Huemene. The following described the three classes of bikeway facilities.

- **Bike Path (Class I).** Class I bike paths are separated from roadways and automobile cross traffic is minimized. Bike paths can serve as both recreational opportunities and commuter routes. Bike paths are usually shared with pedestrians.
- **Bike Lane (Class II).** Class II bike lanes is a lane ion a roadway that is reserved for bicycles. The lane is signed and painted with pavement lines and markings. Bike lanes are one-way with a directional lane on each side of the roadway.

- **Bike Route (Class III).** The Class III bike route share existing roadways with automobiles. There is no separate lane for bikes, Bike routes are established by placing signs that direct bicyclist and warn drivers of the presence of bicyclist.



The City of Port Hueneme provides pedestrian and bicycle facilities. The Bubbling Springs Recreation Corridor is the City's primary pedestrian/bicycle path. The Class I pedestrian/bike path travels from Bard Road to Surfside Drive at beach. Recreational facilities are also provided along the beach front area. Figure 7 illustrates the bike routes in the City of Port Hueneme.

In addition to the Class I pedestrian/bike path, Class II bike lanes are provided along the major roadway corridors in the City such as Channel Islands Boulevard, Ventura Road, Pleasant Valley Road, Port Hueneme Road, Bard Road and Surfside Drive. The Class II bike lanes provide a link to the bike facilities in the adjacent City of Oxnard providing continuity through the region.





ASSOCIATED
TRANSPORTATION
ENGINEERS

PORT HUENEME BIKE ROUTES

FIGURE 7

JH - ATE#20018

Rail Service



A single line railroad serves the Port Hueneme Harbor and is maintained by the Ventura County Railroad (VCRR). At this time the rail line is not active. However, future use of the rail line could potentially reduce the number of Port related truck trips through the City of Port Hueneme.

PORT OF HUENEME

The Port of Hueneme is a major employer and significant trip generator in the City. Historically the Port averages more than 200 daily truck trips. Increased vessel throughput at the Port may result in significant impacts on area roadways and intersections, as trucks transport cargo to and from the Port for shipment on vessels. Truck traffic generated by the Port originates or is destined for Northern California or Southern California via U.S. Highway 101. Trucks use two primary routes through the City of Port Hueneme to access U.S. Highway 101.

- Truck Route 1: Trucks travel to/from U.S. Highway 101 via Port Huemene Road and Rice Avenue.
- Truck Route 2: Trucks travel to/from U.S. Highway 101 via Pleasant Valley Road and Rice.

Additional truck routes via Victoria Avenue and Ventura Road to U.S. Highway 101 were identified in the Cities of Port Hueneme/Oxnard Truck Traffic Study prepared by the Southern California Associations of Government. Figure 8 illustrates the primary truck routes. The Port of Hueneme is aware of truck traffic in residential neighborhoods and attempts to minimize the impact.



PORT HUENEME TRUCK ROUTES

FIGURE 8

JH - ATE#20018



ASSOCIATED
TRANSPORTATION
ENGINEERS

In addition to Port truck traffic and Port employee traffic, several auto manufactures import vehicles through the Port. Some imported vehicles are stored on the Port when space is available. Other imported vehicles shipped to the Port are driven along Huemene Road to new vehicle processing facilities and off-site temporary storage facilities. Once processed vehicles are transported by truck or rail to automotive dealerships. Some vehicles are driven back to the Port to be trucked or railed to automotive dealerships.



REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, Principal Planner
Darryl F. Nelson, Senior Transportation Planner
Jiho Ha, Transportation Engineer

Persons Contacted

Andrew Hiatt, Rincon Consultants, Inc.
Katherine Green, Rincon Consultants, Inc.
Andrew Kent, Ventura County Transportation Commission

References

Highway Capacity Manual, National Research Council, 2010.
Port of Hueneme Access Study, Wilbur Smith Associates, December of 2000.
Cities of Port Hueneme/Oxnard Truck Traffic Study, IBI Group, June of 2008.

TECHNICAL APPENDIX

CONTENTS

INTERSECTION TRAFFIC COUNT DATA

INTERSECTION LEVEL OF SERVICE CRITERIA/DEFINITIONS

VENTURA COUNTY ROADWAY DESIGN CAPACITIES

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Victoria Avenue/Channel Islands Boulevard

Reference 2 - Ventura Road/Channel Islands Boulevard

Reference 3 - Hueneme Road/Ventura Road

Reference 4 - Hueneme Road/Saviers Road

Reference 5 - Hueneme Road/Rice Avenue

Reference 6 - Rice Avenue/Channel Islands Boulevard

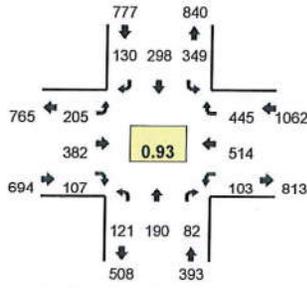
INTERSECTION TRAFFIC COUNT DATA

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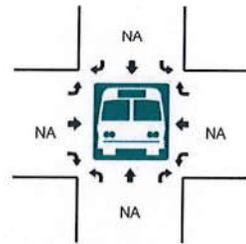
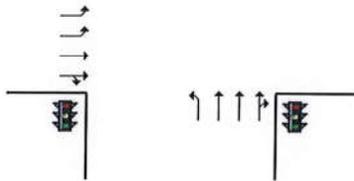
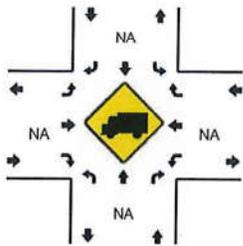
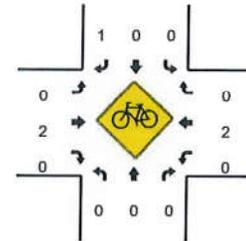
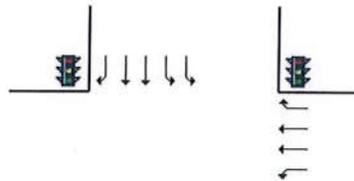
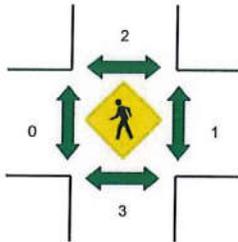
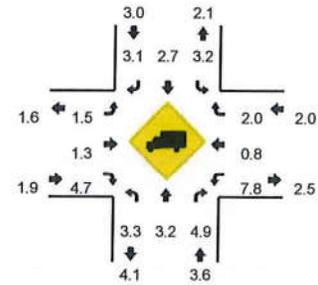
Method for determining peak hour: Total Entering Volume

LOCATION: Victoria Ave -- Channel Islands Blvd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825121
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:30 AM -- 8:30 AM
 Peak 15-Min: 7:30 AM -- 7:45 AM



15-Min Count Period Beginning At	Victoria Ave (Northbound)				Victoria Ave (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	13	29	21	0	65	88	16	0	25	77	19	0	10	100	65	0	528	
6:45 AM	12	42	21	0	80	93	23	0	13	70	25	0	20	105	93	0	597	
7:00 AM	5	34	27	0	79	80	15	0	16	70	14	0	19	85	65	0	509	
7:15 AM	22	42	19	0	67	89	6	0	18	109	23	0	13	103	99	0	610	2244
7:30 AM	27	66	24	0	121	79	32	0	42	83	24	0	21	132	136	0	787	2503
7:45 AM	40	37	24	0	89	75	24	0	47	109	28	0	18	166	115	0	772	2678
8:00 AM	24	50	16	0	62	88	46	0	56	94	22	0	32	86	93	0	669	2838
8:15 AM	30	37	18	0	77	56	28	0	60	96	33	0	32	130	101	0	698	2926
8:30 AM	20	40	24	0	61	81	31	0	35	83	7	0	32	73	88	1	576	2715
8:45 AM	22	48	22	0	82	79	25	0	46	68	28	0	24	78	74	1	597	2540
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	108	264	96	0	484	316	128	0	168	332	96	0	84	528	544	0	3148	
Heavy Trucks	8	8	8		12	12	8		4	0	4		0	0	4		68	
Pedestrians		0				4				0				0			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

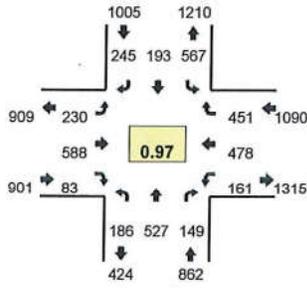
Comments:

Type of peak hour being reported: Intersection Peak

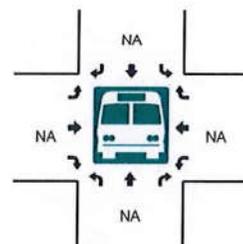
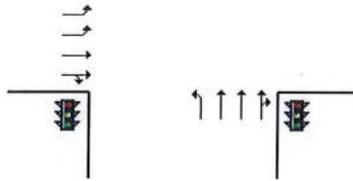
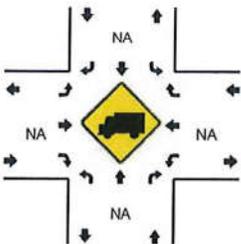
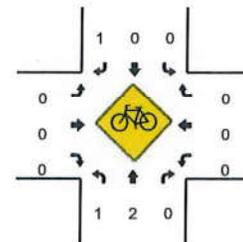
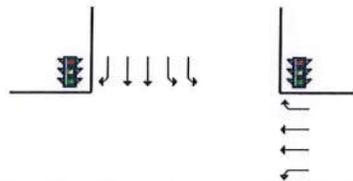
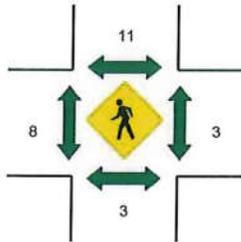
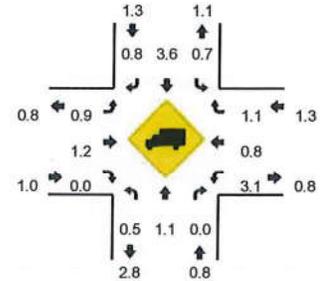
Method for determining peak hour: Total Entering Volume

LOCATION: Victoria Ave -- Channel Islands Blvd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825122
 DATE: Thu, Jun 09 2016



Peak-Hour: 4:30 PM -- 5:30 PM
 Peak 15-Min: 5:15 PM -- 5:30 PM



15-Min Count Period	Victoria Ave (Northbound)				Victoria Ave (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right		
3:00 PM	56	112	35	0	105	35	45	0	39	94	19	0	26	96	92	3	757	
3:15 PM	54	93	27	0	125	39	46	0	44	111	16	1	47	89	94	2	788	
3:30 PM	50	126	29	0	106	43	54	0	50	110	21	0	43	93	109	2	836	
3:45 PM	36	94	30	0	126	48	41	0	54	148	24	2	29	147	103	5	887	3268
4:00 PM	52	135	42	0	137	41	57	0	42	128	21	0	33	91	93	1	873	3384
4:15 PM	60	130	38	0	117	44	29	0	42	153	14	0	39	115	113	3	897	3493
4:30 PM	56	173	48	0	150	43	51	0	56	113	13	0	36	115	111	2	967	3624
4:45 PM	46	117	31	0	118	55	59	1	58	163	19	0	41	138	131	2	979	3716
5:00 PM	48	130	40	0	140	51	64	0	61	127	23	0	35	93	103	5	920	3763
5:15 PM	36	107	30	0	157	44	71	1	55	185	28	0	36	132	106	4	992	3858
5:30 PM	39	101	22	0	148	48	39	0	49	134	19	0	32	89	113	5	838	3729
5:45 PM	28	64	21	0	148	38	63	0	56	166	20	0	39	123	98	3	867	3617

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	144	428	120	0	628	176	284	4	220	740	112	0	144	528	424	16	3968
Heavy Trucks	4	0	0	0	8	0	0	0	0	24	0	0	4	0	8	0	48
Pedestrians	0	0	0	0	0	12	0	0	0	12	0	0	0	0	0	0	24
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

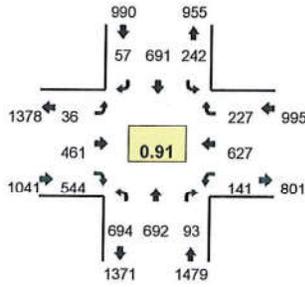
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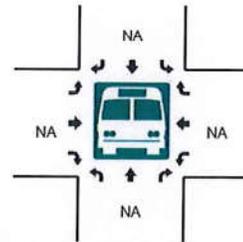
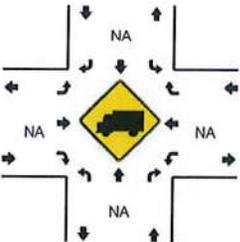
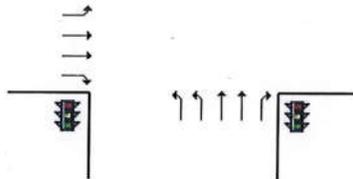
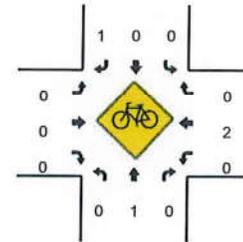
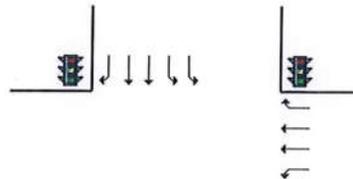
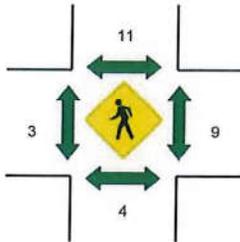
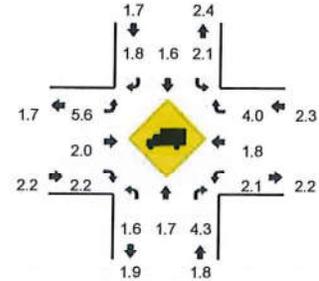
Method for determining peak hour: Total Entering Volume

LOCATION: Ventura Rd -- Channel Islands Blvd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825119
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:15 AM -- 8:15 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM



15-Min Count Period	Ventura Rd (Northbound)				Ventura Rd (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right		
6:30 AM	139	114	8	0	28	135	19	0	3	52	75	0	30	113	28	2	746	
6:45 AM	146	101	13	0	46	162	17	0	7	58	97	1	44	121	34	3	850	
7:00 AM	145	135	12	0	46	154	24	0	7	75	92	0	18	93	30	3	834	
7:15 AM	174	159	15	0	41	148	10	0	11	98	136	0	34	119	38	2	985	3415
7:30 AM	167	168	28	0	69	202	18	0	6	126	147	0	33	167	70	2	1203	3872
7:45 AM	186	184	29	0	67	190	15	0	8	124	159	0	41	174	53	1	1231	4253
8:00 AM	167	181	21	0	65	151	14	0	11	113	102	0	28	167	66	0	1086	4505
8:15 AM	179	154	19	1	55	123	11	0	12	103	101	1	25	123	50	6	963	4483
8:30 AM	118	127	19	0	48	116	18	1	15	85	105	0	22	114	35	1	824	4104
8:45 AM	128	147	17	0	51	109	27	0	11	70	107	0	22	109	40	4	842	3715
Peak 15-Min Flowrates																		Total
All Vehicles	744	736	116	0	268	760	60	0	32	496	636	0	164	696	212	4	4924	
Heavy Trucks	20	16	4		8	4	0		8	8	16		8	12	12		116	
Pedestrians		0				12				0				4			16	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

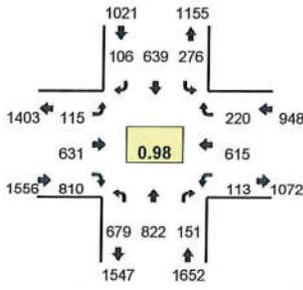
Comments:

Type of peak hour being reported: Intersection Peak

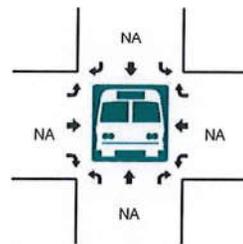
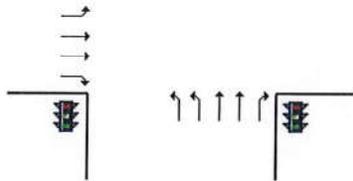
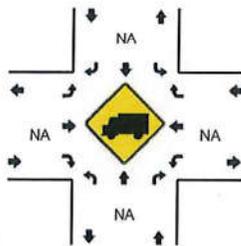
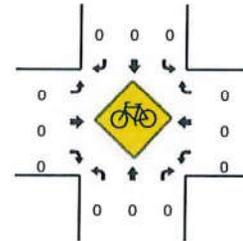
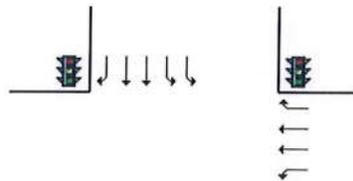
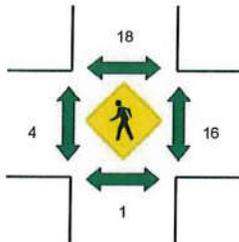
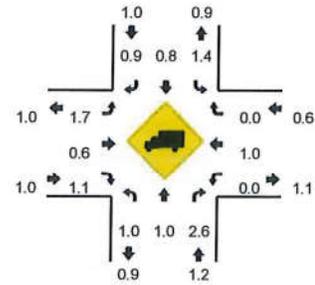
Method for determining peak hour: Total Entering Volume

LOCATION: Ventura Rd -- Channel Islands Blvd
CITY/STATE: Oxnard, CA

QC JOB #: 13825120
DATE: Thu, Jun 09 2016



Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:00 PM -- 5:15 PM



15-Min Count Period Beginning At	Ventura Rd (Northbound)				Ventura Rd (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	103	157	44	1	64	161	22	0	33	130	153	1	14	130	49	0	1062	
3:15 PM	165	172	32	0	63	132	23	1	32	130	171	0	25	127	43	7	1123	
3:30 PM	143	160	37	0	73	147	25	0	18	107	138	0	27	155	53	5	1088	
3:45 PM	169	214	29	0	60	135	15	0	34	139	204	1	18	131	53	4	1206	4479
4:00 PM	124	192	36	0	57	152	28	0	33	131	190	0	20	136	55	4	1158	4575
4:15 PM	182	194	48	0	56	145	28	0	37	150	193	1	35	142	48	3	1262	4714
4:30 PM	169	212	41	0	65	172	22	0	37	162	162	1	17	155	57	5	1277	4903
4:45 PM	182	217	42	0	62	164	32	0	21	144	187	0	19	157	54	0	1281	4978
5:00 PM	159	198	33	0	87	162	31	1	19	156	224	0	27	165	46	6	1314	5134
5:15 PM	169	195	35	0	61	141	21	0	35	169	237	2	35	138	63	4	1305	5177
5:30 PM	142	189	30	0	80	193	24	0	20	162	208	0	27	128	47	3	1253	5153
5:45 PM	175	219	31	0	75	178	23	0	24	147	213	1	23	136	43	3	1291	5163
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	636	792	132	0	348	648	124	4	76	624	896	0	108	660	184	24	5256	
Heavy Trucks	0	12	4		8	12	0		4	4	0		0	4	0		48	
Pedestrians		0				16				0				16			32	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

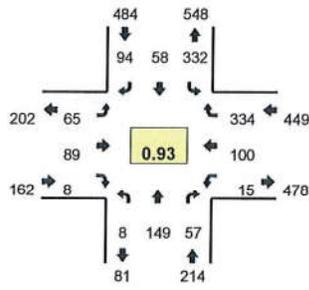
Comments:

Type of peak hour being reported: Intersection Peak

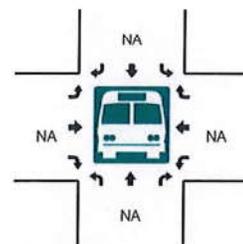
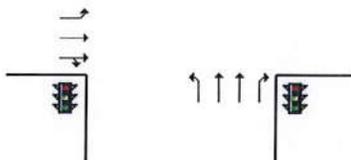
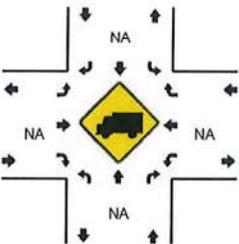
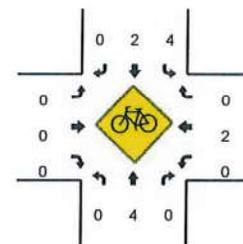
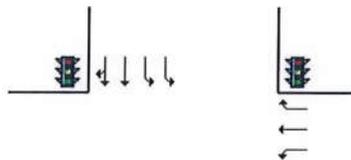
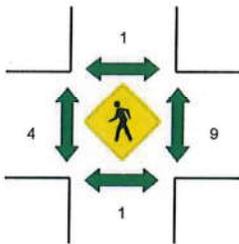
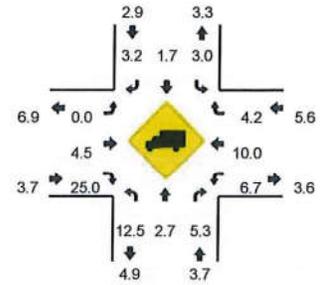
Method for determining peak hour: Total Entering Volume

LOCATION: Ventura Rd -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825117
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:00 AM -- 8:00 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM



15-Min Count Period Beginning At	Ventura Rd (Northbound)				Ventura Rd (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	1	22	6	0	61	9	15	0	13	10	0	0	0	19	61	0	217	
6:45 AM	2	19	11	0	71	18	49	0	10	6	0	0	7	31	72	0	296	
7:00 AM	2	34	11	0	72	20	47	0	10	8	2	0	3	33	74	0	316	
7:15 AM	4	36	13	0	70	14	17	0	16	32	2	0	4	15	75	0	298	1127
7:30 AM	1	41	18	0	99	11	13	0	23	27	0	0	3	24	82	0	342	1252
7:45 AM	1	38	15	0	91	13	17	0	16	22	4	0	5	28	103	0	353	1309
8:00 AM	1	22	12	0	73	22	16	0	17	47	0	0	7	22	60	0	299	1292
8:15 AM	3	28	10	0	72	22	9	0	12	52	2	0	4	22	66	0	302	1296
8:30 AM	3	19	6	0	50	10	9	0	17	39	2	0	7	16	70	0	248	1202
8:45 AM	2	17	8	0	79	11	16	0	11	22	3	0	3	16	63	1	252	1101
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	152	60	0	364	52	68	0	64	88	16	0	20	112	412	0	1412	
Heavy Trucks	0	8	8		16	0	8		0	4	4		4	4	4		60	
Pedestrians		0				0				12				16			28	
Bicycles	0	3	0		4	1	0		0	0	0		0	1	0		9	
Railroad																		
Stopped Buses																		

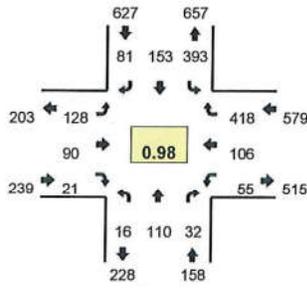
Comments:

Type of peak hour being reported: Intersection Peak

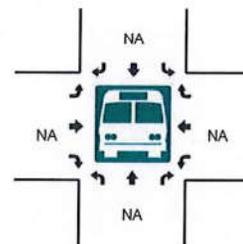
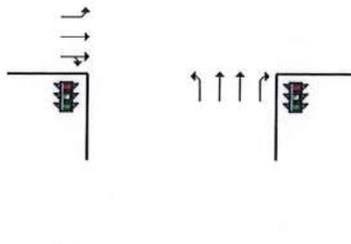
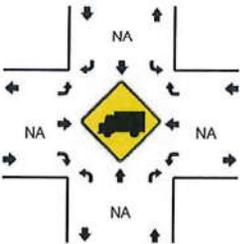
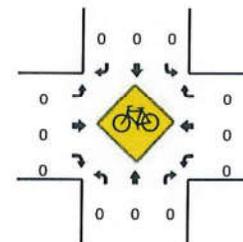
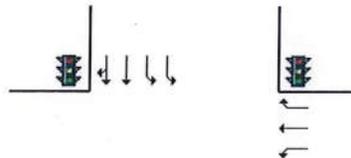
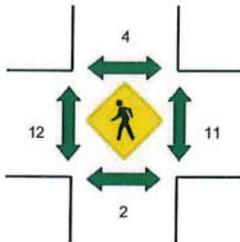
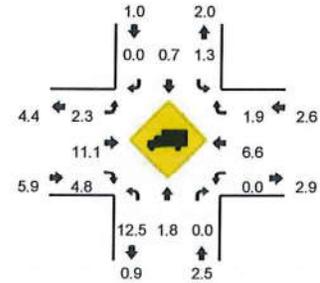
Method for determining peak hour: Total Entering Volume

LOCATION: Ventura Rd -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825118
 DATE: Thu, Jun 09 2016



Peak-Hour: 4:30 PM -- 5:30 PM
 Peak 15-Min: 4:30 PM -- 4:45 PM



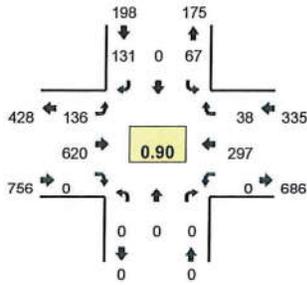
15-Min Count Period Beginning At	Ventura Rd (Northbound)				Ventura Rd (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	1	28	11	0	71	30	3	0	12	14	4	0	7	13	51	1	246	
3:15 PM	2	17	3	0	70	31	15	0	16	39	2	0	9	20	84	0	308	
3:30 PM	3	25	4	0	90	26	13	0	16	23	4	0	10	15	95	1	325	
3:45 PM	1	32	6	0	86	41	15	0	15	19	2	0	11	14	78	0	320	1199
4:00 PM	4	23	11	0	105	33	15	0	13	19	3	0	9	17	103	0	355	1308
4:15 PM	4	23	7	0	115	41	18	0	27	12	6	0	3	27	89	0	372	1372
4:30 PM	1	25	9	0	114	36	19	0	28	26	3	0	5	25	118	0	409	1456
4:45 PM	3	25	4	0	96	33	30	0	26	22	4	0	10	33	112	1	399	1535
5:00 PM	5	33	11	0	82	39	17	1	31	28	3	0	17	31	99	0	397	1577
5:15 PM	7	27	8	0	100	45	15	0	43	14	11	0	22	17	89	0	398	1603
5:30 PM	5	25	5	0	83	36	16	0	51	31	5	0	22	18	81	1	379	1573
5:45 PM	2	26	6	0	81	48	7	0	35	23	5	0	14	27	87	0	361	1535

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	100	36	0	456	144	76	0	112	104	12	0	20	100	472	0	1636
Heavy Trucks	4	0	0		8	0	0		4	28	0		0	4	20		68
Pedestrians		4				4				8				4			20
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

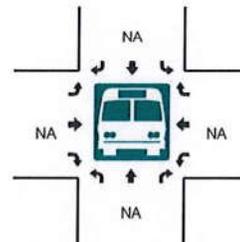
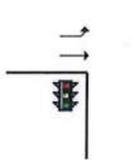
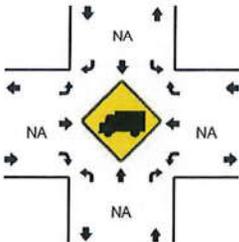
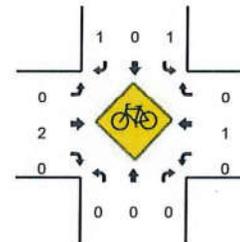
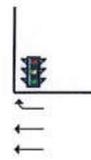
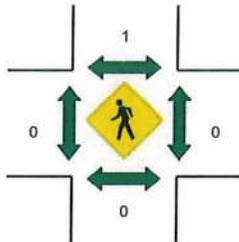
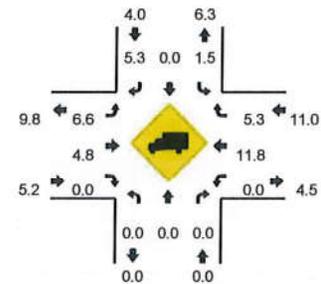
Comments:

LOCATION: Saviers Rd -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825115
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:30 AM -- 8:30 AM
 Peak 15-Min: 7:30 AM -- 7:45 AM



15-Min Count Period Beginning At	Saviers Rd (Northbound)				Saviers Rd (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	37	0	16	1	12	99	0	0	0	59	6	0	230	
6:45 AM	0	0	0	0	45	0	37	0	13	121	0	0	0	80	7	0	303	
7:00 AM	0	0	0	0	8	0	24	0	20	123	0	0	0	75	4	0	254	
7:15 AM	0	0	0	0	16	0	37	0	23	120	0	0	0	77	9	0	282	1069
7:30 AM	0	0	0	0	23	0	33	0	41	179	0	0	0	72	11	0	359	1198
7:45 AM	0	0	0	0	14	0	46	0	35	164	0	0	0	81	5	0	345	1240
8:00 AM	0	0	0	0	15	0	34	0	37	130	0	0	0	69	12	0	297	1283
8:15 AM	0	0	0	0	14	0	18	1	23	147	0	0	0	75	10	0	288	1289
8:30 AM	0	0	0	0	12	0	28	0	14	93	0	0	0	82	7	0	236	1166
8:45 AM	0	0	0	0	14	0	22	0	15	113	0	0	0	61	7	0	232	1053

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	92	0	132	0	164	716	0	0	0	288	44	0	1436
Heavy Trucks	0	0	0	0	0	0	12	0	8	32	0	0	0	36	4	0	92
Pedestrians																	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Railroad																	0
Stopped Buses																	0

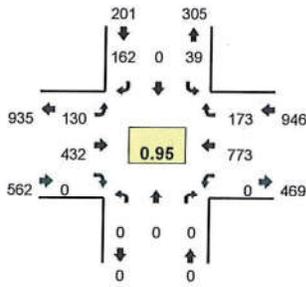
Comments:

Type of peak hour being reported: Intersection Peak

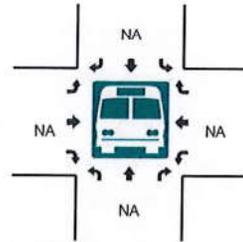
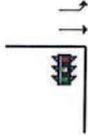
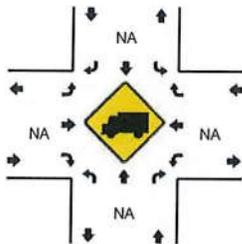
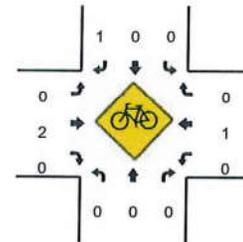
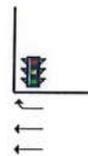
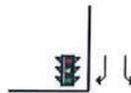
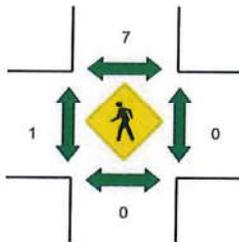
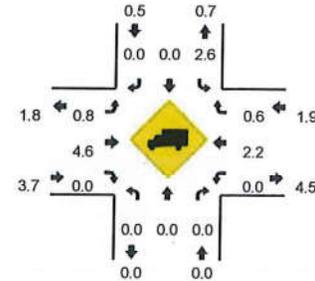
Method for determining peak hour: Total Entering Volume

LOCATION: Saviers Rd -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825116
 DATE: Thu, Jun 09 2016



Peak-Hour: 4:30 PM -- 5:30 PM
 Peak 15-Min: 5:00 PM -- 5:15 PM



15-Min Count Period Beginning At	Saviers Rd (Northbound)				Saviers Rd (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	15	0	26	0	35	82	0	0	0	70	22	0	250	
3:15 PM	0	0	0	0	16	0	52	2	28	97	0	0	0	108	36	0	339	
3:30 PM	0	0	0	0	13	0	31	1	44	96	0	0	0	168	65	0	418	
3:45 PM	0	0	0	0	13	0	41	0	25	127	0	0	0	148	38	0	392	1399
4:00 PM	0	0	0	0	13	0	47	0	59	126	0	0	0	141	35	0	421	1570
4:15 PM	0	0	0	0	7	0	37	1	32	126	0	0	0	151	37	0	391	1622
4:30 PM	0	0	0	0	12	0	35	0	44	127	0	0	0	165	53	0	436	1640
4:45 PM	0	0	0	0	9	0	47	1	28	107	0	0	0	174	43	0	409	1657
5:00 PM	0	0	0	0	9	0	46	1	35	93	0	0	0	225	43	0	452	1688
5:15 PM	0	0	0	0	7	0	34	0	23	105	0	0	0	209	34	0	412	1709
5:30 PM	0	0	0	0	7	0	39	0	33	93	0	0	0	157	33	1	363	1636
5:45 PM	0	0	0	0	10	0	44	0	43	82	0	0	0	188	37	0	404	1631

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	36	0	184	4	140	372	0	0	0	900	172	0	1808
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	16	0	0	20
Pedestrians	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Bicycles	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

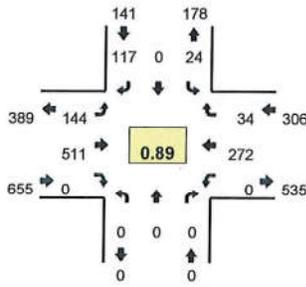
Comments:

Type of peak hour being reported: Intersection Peak

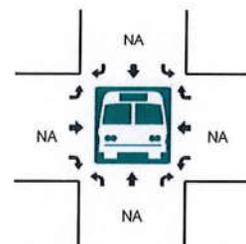
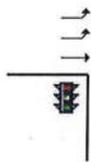
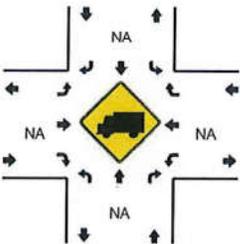
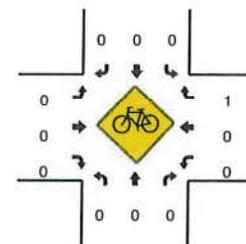
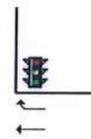
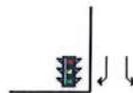
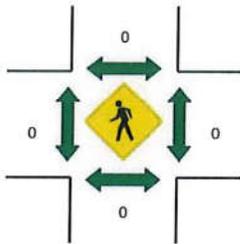
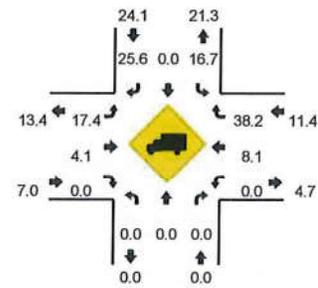
Method for determining peak hour: Total Entering Volume

LOCATION: Rice Ave -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825113
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:15 AM -- 8:15 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM



15-Min Count Period Beginning At	Rice Ave (Northbound)				Rice Ave (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	9	0	43	0	23	92	0	0	0	75	5	0	247	
6:45 AM	0	0	0	0	8	0	35	0	32	105	0	0	0	59	14	0	253	
7:00 AM	0	0	0	0	4	0	21	0	17	97	0	0	0	68	3	0	210	
7:15 AM	0	0	0	0	3	0	24	0	22	107	0	0	0	87	11	0	254	964
7:30 AM	0	0	0	0	6	0	27	0	50	144	0	0	0	54	12	0	293	1010
7:45 AM	0	0	0	0	5	0	37	0	42	149	0	0	0	70	8	0	311	1088
8:00 AM	0	0	0	0	10	0	29	0	30	111	0	0	0	61	3	0	244	1102
8:15 AM	0	0	0	0	5	0	19	0	30	90	0	0	0	61	6	0	211	1059
8:30 AM	0	0	0	0	8	0	25	0	22	78	0	0	0	79	6	0	218	984
8:45 AM	0	0	0	0	7	0	22	0	27	80	0	0	0	47	8	0	191	864

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	148	0	168	596	0	0	0	280	32	0	1244
Heavy Trucks	0	0	0	0	0	0	28	0	24	32	0	0	0	20	20	0	124
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	0
Stopped Buses																	0

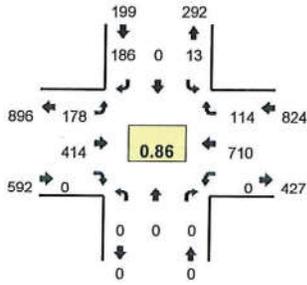
Comments:

Type of peak hour being reported: Intersection Peak

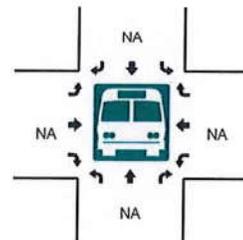
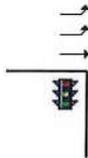
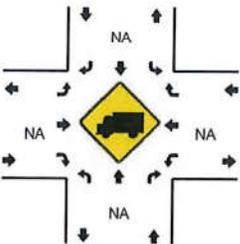
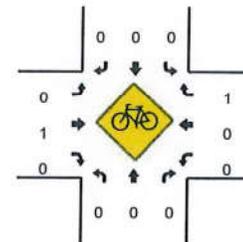
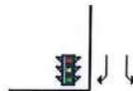
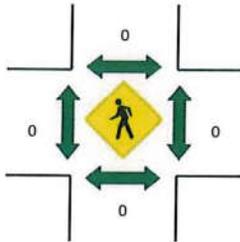
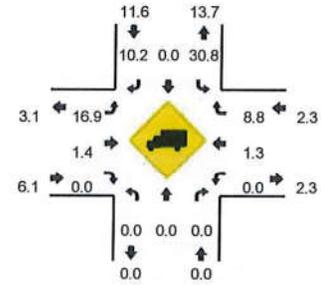
Method for determining peak hour: Total Entering Volume

LOCATION: Rice Ave -- Hueneme Rd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825114
 DATE: Thu, Jun 09 2016



Peak-Hour: 4:30 PM -- 5:30 PM
 Peak 15-Min: 4:30 PM -- 4:45 PM



15-Min Count Period Beginning At	Rice Ave (Northbound)				Rice Ave (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	4	0	25	0	30	72	0	0	0	75	15	0	221	
3:15 PM	0	0	0	0	3	0	41	0	31	74	0	0	0	106	11	0	266	
3:30 PM	0	0	0	0	5	0	30	0	65	99	0	0	0	124	24	0	347	
3:45 PM	0	0	0	0	6	0	26	0	36	83	0	0	0	155	31	0	337	1171
4:00 PM	0	0	0	0	5	0	31	0	37	122	0	0	0	149	34	0	378	1328
4:15 PM	0	0	0	0	6	0	34	0	26	100	0	0	0	146	29	0	341	1403
4:30 PM	0	0	0	0	5	0	33	0	76	125	0	0	0	187	43	0	469	1525
4:45 PM	0	0	0	0	4	0	54	0	33	102	0	0	0	163	24	0	380	1568
5:00 PM	0	0	0	0	1	0	45	0	47	98	0	0	0	158	32	0	381	1571
5:15 PM	0	0	0	0	3	0	54	0	22	89	0	0	0	202	15	0	385	1615
5:30 PM	0	0	0	0	3	0	55	0	21	69	0	0	0	196	21	0	365	1511
5:45 PM	0	0	0	0	1	0	32	0	17	77	0	0	0	147	9	0	283	1414

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	132	0	304	500	0	0	0	748	172	0	1876
Heavy Trucks	0	0	0	0	8	0	20	0	32	8	0	0	0	20	12	0	100
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

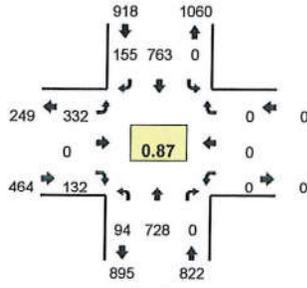
Comments:

Type of peak hour being reported: Intersection Peak

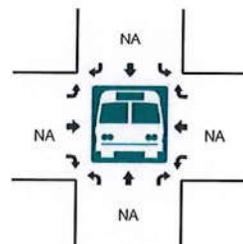
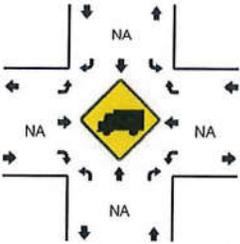
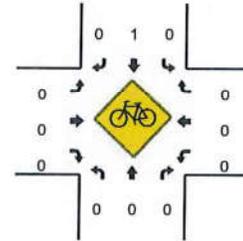
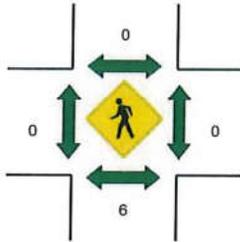
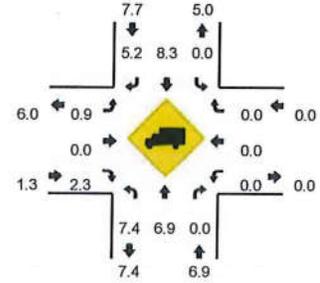
Method for determining peak hour: Total Entering Volume

LOCATION: Rice Ave -- Channel Islands Blvd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825111
 DATE: Thu, Jun 09 2016



Peak-Hour: 7:30 AM -- 8:30 AM
 Peak 15-Min: 7:30 AM -- 7:45 AM



15-Min Count Period Beginning At	Rice Ave (Northbound)				Rice Ave (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	18	145	0	0	0	198	21	0	114	0	38	0	0	0	0	0	534	
6:45 AM	18	170	0	0	0	236	29	0	108	0	27	0	0	0	0	0	588	
7:00 AM	13	112	0	0	0	211	40	0	80	0	27	0	0	0	0	0	483	
7:15 AM	13	139	0	0	0	152	41	0	76	0	25	0	0	0	0	0	446	2051
7:30 AM	19	225	0	0	0	201	48	0	104	0	36	0	0	0	0	0	633	2150
7:45 AM	28	198	0	0	0	234	36	0	100	0	37	0	0	0	0	0	633	2195
8:00 AM	23	147	0	0	0	154	36	0	63	0	30	0	0	0	0	0	453	2165
8:15 AM	24	158	0	0	0	174	35	0	65	0	29	0	0	0	0	0	485	2204
8:30 AM	19	133	0	0	0	153	45	0	49	0	15	0	0	0	0	0	414	1985
8:45 AM	17	129	0	0	0	153	40	0	48	0	14	0	0	0	0	0	401	1753

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	76	900	0	0	0	804	192	0	416	0	144	0	0	0	0	0	2532
Heavy Trucks	0	56	0	0	0	88	0	0	4	0	0	0	0	0	0	0	148
Pedestrians		0				0					0						0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

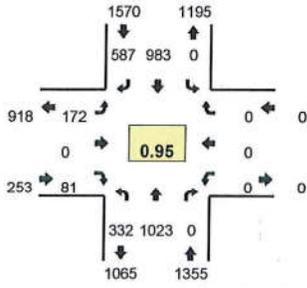
Comments:

Type of peak hour being reported: Intersection Peak

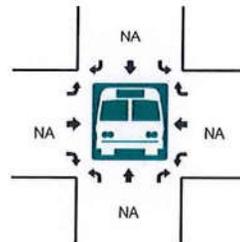
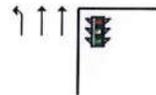
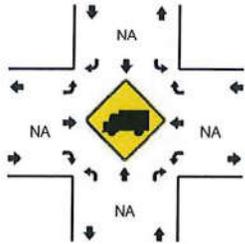
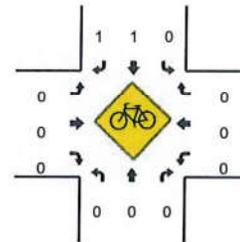
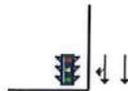
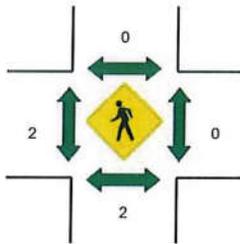
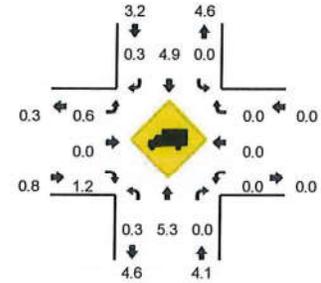
Method for determining peak hour: Total Entering Volume

LOCATION: Rice Ave -- Channel Islands Blvd
 CITY/STATE: Oxnard, CA

QC JOB #: 13825112
 DATE: Thu, Jun 09 2016



Peak-Hour: 4:45 PM -- 5:45 PM
 Peak 15-Min: 4:45 PM -- 5:00 PM



15-Min Count Period Beginning At	Rice Ave (Northbound)				Rice Ave (Southbound)				Channel Islands Blvd (Eastbound)				Channel Islands Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	51	221	0	0	0	145	87	0	47	0	17	0	0	0	0	0	568	
3:15 PM	52	197	0	0	0	175	86	0	43	0	28	0	0	0	0	0	581	
3:30 PM	49	277	0	0	0	162	104	0	38	0	26	0	0	0	0	0	656	
3:45 PM	50	306	0	1	0	179	111	0	32	0	13	0	0	0	0	0	692	2497
4:00 PM	66	271	0	1	0	198	126	0	37	0	18	0	0	0	0	0	717	2646
4:15 PM	87	291	0	0	0	178	107	0	37	0	23	0	0	0	0	0	723	2788
4:30 PM	92	326	0	0	0	171	128	0	37	0	11	0	0	0	0	0	765	2897
4:45 PM	68	256	0	1	0	269	174	0	48	0	19	0	0	0	0	0	835	3040
5:00 PM	105	262	0	0	0	202	128	0	40	0	17	0	0	0	0	0	754	3077
5:15 PM	74	248	0	0	0	259	161	0	46	0	22	0	0	0	0	0	810	3164
5:30 PM	84	257	0	0	0	253	124	0	38	0	23	0	0	0	0	0	779	3178
5:45 PM	80	237	0	0	0	197	128	0	29	0	10	0	0	0	0	0	681	3024
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	272	1024	0	4	0	1076	696	0	192	0	76	0	0	0	0	0	3340	
Heavy Trucks	0	76	0	0	0	60	0	0	4	0	4	0	0	0	0	0	144	
Pedestrians		4				0				8				0			12	
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1	
Railroad																		
Stopped Buses																		

Comments:

INTERSECTION LEVEL OF SERVICE CRITERIA/DEFINITIONS

DISCUSSION OF INTERSECTION CAPACITY UTILIZATION (ICU)

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. The technique used to compare the volumes and capacity of an intersection is known as Intersection Capacity Utilization (ICU). ICU or volume-to-capacity ratio, usually expressed as a percentage, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used.

The ICU calculation assumes that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient time to satisfy its demand, and excess time exists on other movements. This is an operational problem which should be addressed.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Data collected by Kunzman Associates indicates a typical lane, whether a through-lane or a left-turn lane, has a capacity of approximately 1,700 vehicles per hour, with nearly all locations showing a capacity greater than 1,600 vehicles per hour per lane. This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. For this study, a capacity of 1,600 vehicles per hour per lane will be assumed for left-turn, through, and right-turn lanes as per City policy.

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for less than 10 percent of a cycle, and a penalty of up to five percent is reasonable. On the other hand, during peak hour traffic operation, the yellow times are nearly completely used. In this study, no penalty will be applied for the yellow because the capacities have been assumed to be only 1,600 vehicles per hour per lane when in general they are 1,700-1,800 vehicles per hour per lane.

The ICU technique is an ideal tool to quantify existing as well as future intersection operations. The impact of adding a lane can be quickly determined by examining the effect the lane has on the intersection capacity utilization.

Source: Oxnard Airport Business Park Traffic Study, Kunzman Assoc., City of Oxnard, 1985.

Signalized Intersection Level of Service Definitions

LOS	Delay ^a	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

^a Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM¹ uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

¹ Highway Capacity Manual, National Research Board, 2000



VENTURA COUNTY ROADWAY DESIGN CAPACITIES

FIGURE 4.2.2

AVERAGE DAILY TRAFFIC (ADT) LEVEL OF SERVICE (LOS) THRESHOLDS COUNTY ROADS AND CONVENTIONAL STATE HIGHWAYS					
LOS	CLASS I			CLASS II	CLASS III
	2 LANES	4 LANES	6 LANES	2 LANES	2 LANES
A	2,400	19,000	29,000	1,500	350
B	5,600	28,000	42,000	3,900	2,000
C	10,000	38,000	57,000	7,000	3,300
D	16,000	47,000	70,000	11,000	5,900
E	27,000	58,000	87,000	21,000	16,000

ADT/LOS THRESHOLDS FREEWAYS				
LOS	4 LANES	6 LANES	8 LANES	10 LANES
A	31,000	46,000	62,000	77,000
B	48,000	71,000	95,000	119,000
C	68,000	102,000	136,000	169,000
D	82,000	123,000	164,000	205,000
E	88,000	132,000	176,000	220,000

SOURCE: VENTURA COUNTY PUBLIC WORKS AGENCY 9/94

INTERSECTION LOS CALCULATION WORKSHEETS

- Reference 1 - Victoria Avenue/Chanel Islands Boulevard**
- Reference 2 - Ventura Road/Channel Islands Boulevard**
- Reference 3 - Hueneme Road/Ventura Road**
- Reference 4 - Hueneme Road/Saviers Road**
- Reference 5 - Hueneme Road/Rice Avenue**
- Reference 6 - Rice Avenue/Channel Islands Boulevard**

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VICTORIA AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #01AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	126	109	85	363	310	135	213	398	111	107	535	463

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	TT	TR	LL	TT	TR	LL	TT	TR	LL	TT	TR

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		126			0.039				
NBT	2	3200		109			0.061 *				
NBR	0	0		85			-				
SBL	2	3200		363			0.113 *				
SBT	2	3200		310			0.097				
SBR	1	1600		135			0.084				
EBL	2	3200		213			0.067 *				
EBT	2	3200		398			0.159				
EBR	0	0		111			-				
WBL	1	1600		107			0.067				
WBT	2	3200		535			0.167				
WBR	1	1600		463			0.289 *				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.53 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VICTORIA AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #01PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	194	548	155	590	201	253	239	612	86	168	497	469

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	TT	TR	LL	TT	TR	LL	TT	TR	LL	TT	TR

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		194			0.061				
NBT	2	3200		548			0.220 *				
NBR	0	0		155			-				
SBL	2	3200		590			0.184 *				
SBT	2	3200		201			0.063				
SBR	1	1600		253			0.158				
EBL	2	3200		239			0.075 *				
EBT	2	3200		612			0.218				
EBR	0	0		86			-				
WBL	1	1600		168			0.105				
WBT	2	3200		497			0.155				
WBR	1	1600		469			0.293 *				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.77 C			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VICTORIA AVENUE
 EW STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #01AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	170	450	160	315	470	290	230	435	160	140	270	215

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	TT	TR	LL	TT	TR	LL	TT	TR	LL	TT	TR

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS							
			1	2	3	1	2	3					
NBL	2	3200		170			0.053						
NBT	3	4800		450			0.127 *						
NBR	0	0		160			-						
SBL	2	3200		315			0.098 *						
SBT	3	4800		470			0.158						
SBR	0	0		290			-						
EBL	2	3200		230			0.072						
EBT	3	4800		435			0.124 *						
EBR	0	0		160			-						
WBL	1	1600		140			0.088 *						
WBT	3	4800		270			0.101						
WBR	0	0		215			-						
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.44 A					

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VICTORIA AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #01PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	180	720	120	385	780	270	470	300	150	180	575	390

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND LL TT TR			SOUTH BOUND LL TT TR			EAST BOUND L TT TR			WEST BOUND L TT TR		

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS								
			1	2	3	1	2	3						
NBL	2	3200		180			0.056							
NBT	3	4800		720			0.175 *							
NBR	0	0		120			-							
SBL	2	3200		385			0.120 *							
SBT	3	4800		780			0.219							
SBR	0	0		270			-							
EBL	2	3200		470			0.147 *							
EBT	3	4800		300			0.094							
EBR	0	0		150			-							
WBL	1	1600		180			0.113							
WBT	3	4800		575			0.201 *							
WBR	0	0		390			-							
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.64 B						

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VENTURA ROAD
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #02AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	722	720	97	252	719	59	37	480	566	147	652	236

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	TT	R	LL	TT	R	L	TT	R	L	TT	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		722			0.226 *				
NBT	2	3200		720			0.225				
NBR	1	1600		97			0.061				
SBL	2	3200		252			0.079				
SBT	2	3200		719			0.225 *				
SBR	1	1600		59			0.037				
EBL	1	1600		37			0.023				
EBT	2	3200		480			0.150 *				
EBR	1	1600		566			0.354				
WBL	1	1600		147			0.092 *				
WBT	2	3200		652			0.204				
WBR	1	1600		236			0.148				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.69 B			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VENTURA ROAD
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #02PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	707	855	157	287	665	110	120	657	843	118	640	229

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	TT	R	LL	TT	R	LL	TT	R	LL	TT	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		707			0.221 *				
NBT	2	3200		855			0.267				
NBR	1	1600		157			0.098				
SBL	2	3200		287			0.090				
SBT	2	3200		665			0.208 *				
SBR	1	1600		110			0.069				
EBL	1	1600		120			0.075				
EBT	2	3200		657			0.205 *				
EBR	1	1600		843			0.527				
WBL	1	1600		118			0.074 *				
WBT	2	3200		640			0.200				
WBR	1	1600		229			0.143				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.71 C			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VENTURA ROAD
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #02AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	625	875	140	70	605	70	130	655	835	180	895	130

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND LL TTT R	SOUTH BOUND LL TTT R	EAST BOUND .L TT TR	WEST BOUND L TTT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		625			0.195 *				
NBT	3	4800		875			0.182				
NBR	1	1600		140			0.088				
SBL	2	3200		70			0.022				
SBT	3	4800		605			0.126 *				
SBR	1	1600		70			0.044				
EBL	2	3200		130			0.041				
EBT	3	4800		655			0.136 *				
EBR	1	1600		835			0.522				
WBL	1	1600		180			0.113 *				
WBT	3	4800		895			0.186				
WBR	1	1600		130			0.081				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.57 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VENTURA ROAD
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #02PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	905	1110	290	180	925	210	190	855	775	180	985	60

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND LL TTT R	SOUTH BOUND LL TIT R	EAST BOUND L TIT R	WEST BOUND L TTT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	2	3200		905			0.283 *				
NBT	3	4800		1110			0.231				
NBR	1	1600		290			0.181				
SBL	2	3200		180			0.056				
SBT	3	4800		925			0.193 *				
SBR	1	1600		210			0.131				
EBL	2	3200		190			0.059				
EBT	3	4800		855			0.178 *				
EBR	1	1600		775			0.484				
WBL	1	1600		180			0.113 *				
WBT	3	4800		985			0.205				
WBR	1	1600		60			0.038				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.77 C			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VENTURA ROAD
 EW STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #03AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	8	155	59	345	60	98	68	93	8	16	104	348

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	LL	TTR		L	T	R	L	T	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	1	1600		8			0.005				
NBT	2	3200		155			0.048 *				
NBR	1	1600		59			0.037				
SBL	2	3200		345			0.108 *				
SBT	2	3200		60			0.049				
SBR	0	0		98			-				
EBL	1	1600		68			0.043 *				
EBT	2	3200		93			0.032				
EBR	0	0		8			-				
WBL	1	1600		16			0.010				
WBT	1	1600		104			0.065				
WBR	1	1600		348			0.218 *				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.42 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VENTURA ROAD
 EW STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #03PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	17	114	33	409	159	84	133	94	22	57	110	435

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	LL	T	TR	L	T	TR	L	T	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	1	1600		17			0.011				
NBT	2	3200		114			0.036 *				
NBR	1	1600		33			0.021				
SBL	2	3200		409			0.128 *				
SBT	2	3200		159			0.076				
SBR	0	0		84			-				
EBL	1	1600		133			0.083 *				
EBT	2	3200		94			0.036				
EBR	0	0		22			-				
WBL	1	1600		57			0.036				
WBT	1	1600		110			0.069				
WBR	1	1600		435			0.272 *				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.52 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: VENTURA ROAD
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #03AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	20	230	40	705	120	180	240	230	20	110	190	545

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	LL	T	TR	L	T	TR	L	T	TR

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS							
			1	2	3	1	2	3					
NBL	1	1600		20			0.013						
NBT	2	3200		230			0.072 *						
NBR	1	1600		40			0.025						
SBL	2	3200		705			0.220 *						
SBT	2	3200		120			0.094						
SBR	0	0		180			-						
EBL	1	1600		240			0.150 *						
EBT	2	3200		230			0.078						
EBR	0	0		20			-						
WBL	1	1600		110			0.069						
WBT	2	3200		190			0.196 *						
WBR	0	0		436			-						
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.64 B					

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: VENTURA ROAD
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #03PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	20	390	40	785	190	180	160	180	30	210	240	875

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS						
			1	2	3	1	2	3				
NBL	1	1600		20			0.013					
NBT	2	3200		390			0.122 *					
NBR	1	1600		40			0.025					
SBL	2	3200		785			0.245 *					
SBT	2	3200		190			0.116					
SBR	0	0		180			-					
EBL	1	1600		160			0.100 *					
EBT	2	3200		180			0.066					
EBR	0	0		30			-					
WBL	1	1600		210			0.131					
WBT	2	3200		240			0.294 *					
WBR	0	0		700			-					
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.76				
								C				

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: SAVIERS ROAD
 EW STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #04AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	0	0	0	70	0	136	142	645	0	0	309	40

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	T	L	R	L	T	T	R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS			
			1	2	3	1	2	3	
NBL	0	0		0					
NBT	0	0		0					
NBR	0	0		0					
SBL	1	1600		70		0.044			
SBT	0	0		0		-			
SBR	1	1600		136		0.085 *	*		
EBL	1	1600		142		0.089			
EBT	1	1600		645		0.403 *	*		
EBR	0	0		0		-			
WBL	0	0		0		-			
WBT	2	3200		309		0.097			
WBR	1	1600		40		0.025			
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:							0.49 A		

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: SAVIERS ROAD
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #04PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	0	0	0	41	0	169	135	450	0	0	804	180

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T R	L R	L T	T T R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	0	0		0			-	-			
NBT	0	0		0			-	-			
NBR	0	0		0			-	-			
SBL	1	1600		41			0.026				
SBT	0	0		0			-				
SBR	1	1600		169			0.106 *				
EBL	1	1600		135			0.084 *				
EBT	1	1600		450			0.281				
EBR	0	0		0			-				
WBL	0	0		0			-				
WBT	2	3200		804			0.251 *				
WBR	1	1600		180			0.113				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.44 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: SAVIERS ROAD
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #04AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	0	0	0	60	0	160	120	1020	0	0	725	250

GEOMETRICS

GENERAL PALN GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T R	L R	L TT	TT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS			
			1	2	3	1	2	3	
NBL	0	0		0					
NBT	0	0		0					
NBR	0	0		0					
SBL	1	1600		60		0.038			
SBT	0	0		0		-			
SBR	1	1600		160		0.100 *		*	
EBL	1	1600		120		0.075			
EBT	2	3200		1020		0.319 *		*	
EBR	0	0		0		-			
WBL	0	0		0		-			
WBT	2	3200		725		0.227			
WBR	1	1600		250		0.156			
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:							0.42 A		

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: SAVIERS ROAD
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #04PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	0	0	0	150	0	180	180	825	0	0	960	290

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		L R	L TT	TT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	0	0		0			-	-			
NBT	0	0		0			-	-			
NBR	0	0		0			-	-			
SBL	1	1600		150			0.094				
SBT	0	0		0			-				
SBR	1	1600		180			0.113 *				
EBL	1	1600		180			0.113 *				
EBT	2	3200		825			0.258				
EBR	0	0		0			-				
WBL	0	0		0			-				
WBT	2	3200		960			0.300 *				
WBR	1	1600		290			0.181				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.53 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: RICE AVENUE
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #5AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	0	0	0	25	0	122	150	532	0	0	283	35

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T R	L R	LL T	T R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS			
			1	2	3	1	2	3	
NBL	0	0	0			-			
NBT	0	0	0			-			
NBR	0	0	0			-			
SBL	1	1600	25			0.016 *			
SBT	0	0	0			-			
SBR	1	1600	122			0.076			
EBL	2	3200	150			0.047			
EBT	1	1600	532			0.333 *			
EBR	0	0	0			-			
WBL	0	0	0			-			
WBT	1	1600	283			0.177			
WBR	1	1600	35			0.022			
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:						0.35 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: RICE AVENUE
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #5PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	0	0	0	14	0	194	185	431	0	0	739	119

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T R	L R	LL T	T R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	0	0		0			-	-			
NBT	0	0		0			-	-			
NBR	0	0		0			-	-			
SBL	1	1600		14			0.009 *				
SBT	0	0		0			-				
SBR	1	1600		194			0.121				
EBL	2	3200		185			0.058 *				
EBT	1	1600		431			0.269				
EBR	0	0		0			-				
WBL	0	0		0			-				
WBT	1	1600		739			0.462 *				
WBR	1	1600		119			0.074				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.53 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: RICE AVENUE
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #5AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	0	0	0	30	0	160	860	740	0	0	485	50

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		L R	LL TT	TT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS			
			1	2	3	1	2	3	
NBL	0	0		0					
NBT	0	0		0					
NBR	0	0		0					
SBL	1	1600		30		0.019			
SBT	0	0		0		-			
SBR	1	1600		160		0.100 *			
EBL	2	3200		860		0.269 *			
EBT	2	3200		740		0.231			
EBR	0	0		0		-			
WBL	0	0		0		-			
WBT	2	3200		485		0.152 *			
WBR	1	1600		50		0.031			
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:							0.52 A		

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: RICE AVENUE
 E/W STREET: PORT HUENEME ROAD
 CONTROL TYPE: SIGNAL

REFERENCE #5PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	0	0	0	20	0	520	340	625	0	0	1105	140

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		L R	LL TT	TT R

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS						
			1	2	3	1	2	3				
NBL	0	0	0				-	-				
NBT	0	0	0				-	-				
NBR	0	0	0				-	-				
SBL	1	1600	20				0.013					
SBT	0	0	0				-					
SBR	1	1600	520				0.325 *					
EBL	2	3200	340				0.106 *					
EBT	2	3200	625				0.195					
EBR	0	0	0				-					
WBL	0	0	0				-					
WBT	2	3200	1105				0.345 *					
WBR	1	1600	140				0.088					
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.78 C				

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: RICE AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #6AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	98	758	0	0	794	161	345	0	137	0	0	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND L TT	SOUTH BOUND T TR	EAST BOUND LL R	WEST BOUND

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	1	1600		98			0.061 *				
NBT	2	3200		758			0.237				
NBR	0	0		0			-				
SBL	0	0		0			-				
SBT	2	3200		794			0.298 *				
SBR	0	0		161			-				
EBL	2	3200		345			0.108 *				
EBT	0	0		0			-				
EBR	1	1600		137			0.086				
WBL	0	0		0			-				
WBT	0	0		0			-				
WBR	0	0		0			-				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.47 A			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: RICE AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #6PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) EXISTING	345	1065	0	0	1023	611	179	0	84	0	0	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND L TT	SOUTH BOUND T TR	EAST BOUND LL R	WEST BOUND

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	1	1600		345			0.216 *				
NBT	2	3200		1065			0.333				
NBR	0	0		0			-				
SBL	0	0		0			-				
SBT	2	3200		1023			0.511 *				
SBR	0	0		611			-				
EBL	2	3200		179			0.056 *				
EBT	0	0		0			-				
EBR	1	1600		84			0.053				
WBL	0	0		0			-				
WBT	0	0		0			-				
WBR	0	0		0			-				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.78 C			

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: AM
 N/S STREET: RICE AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #6AM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	90	1260	0	0	2170	625	895	0	100	0	0	0

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND L TTT	SOUTH BOUND TTT R	EAST BOUND LL R	WEST BOUND

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS						
			1	2	3	1	2	3				
NBL	1	1600		90			0.056 *					
NBT	3	4800		1260			0.263					
NBR	0	0		0			-					
SBL	0	0		0			-					
SBT	3	4800		2170			0.452 *					
SBR	1	1600		625			0.391					
EBL	2	3200		895			0.280 *					
EBT	0	0		0			-					
EBR	1	1600		100			0.063					
WBL	0	0		0			-					
WBT	0	0		0			-					
WBR	0	0		0			-					
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.79 C				

NOTES:

PROJECT: PORT HUENEME GENERAL PLAN UPDATE
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: 06/09/16
 TIME PERIOD: PM
 N/S STREET: RICE AVENUE
 E/W STREET: CHANNEL ISLANDS BOULEVARD
 CONTROL TYPE: SIGNAL

REFERENCE #6PM

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(B) GENERAL PLAN BUILDOUT	210	1050	0	0	1280	910	405	0	90	0	0	0

GEOMETRICS

GENERAL PLAN GEOMETRICS	NORTH BOUND L TTT	SOUTH BOUND TTT R	EAST BOUND LL R	WEST BOUND

TRAFFIC SCENARIOS

SCENARIO 2: EXISTING (B)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES			SCENARIO V/C RATIOS					
			1	2	3	1	2	3			
NBL	1	1600		210			0.131 *				
NBT	3	4800		1050			0.219				
NBR	0	0		0			-				
SBL	0	0		0			-				
SBT	3	4800		1280			0.267 *				
SBR	1	1600		910			0.569				
EBL	2	3200		405			0.127 *				
EBT	0	0		0			-				
EBR	1	1600		90			0.056				
WBL	0	0		0			-				
WBT	0	0		0			-				
WBR	0	0		0			-				
INTERSECTION CAPACITY UTILIZATION: LEVEL OF SERVICE:								0.53 A			

NOTES: