

3600 Wilshire Boulevard Project Draft Transportation Analysis

Prepared by

FEHR & PEERS

600 Wilshire Blvd., Suite 1050
Los Angeles, CA 90017
213.261.3050



January 2017

TABLE OF CONTENTS

1. INTRODUCTION	1
Project Description	1
Study Scope	1
Organization of Report.....	5
2. EXISTING CONDITIONS	6
Study Area	6
Existing Street System.....	6
Existing Public Transit Service.....	8
Existing Bicycle and Pedestrian Facilities.....	8
Existing Traffic Volumes and Level of Service	12
3. TRAFFIC PROJECTIONS	17
Project Traffic.....	17
Existing plus Project Traffic Conditions.....	21
Future Year 2023 Traffic Conditions.....	21
Future plus Project Traffic Projections.....	25
4. INTERSECTION TRAFFIC IMPACT ANALYSIS	26
Criteria for Determination of Significant Traffic Impact	26
Existing plus Project Impact Analysis.....	26
Future plus Project Impact Analysis	28
Mitigation Measures.....	30
5. NEIGHBORHOOD TRAFFIC IMPACT ANALYSIS.....	36
6. SITE ACCESS.....	39
7. PARKING	40
8. CONSTRUCTION PERIOD IMPACT ANALYSIS	42
Construction Traffic.....	43
Construction Impact Assessment	45
Construction Mitigation Measures	51
9. SUMMARY AND CONCLUSIONS	53

APPENDICES

Appendix A: LADOT MOU

Appendix B: Lane Configurations and Traffic Volumes

Appendix C: Count Sheets

Appendix D: LOS Analysis Sheets

Appendix E: Main Street Analysis

Appendix F: Signal Warrant

Appendix G: TDM+ Analysis

Appendix H: Parking Utilization Counts

LIST OF FIGURES

Figure 1 – Location of Proposed Project and Study Intersections.....	2
Figure 2 – Site Plan	3
Figure 3 – Existing Transit	9
Figure 4 – Existing Bicycle Facilities.....	11
Figure 5 – Trip Distribution.....	20
Figure 6 – Related Projects	24

LIST OF TABLES

Table 1 – Existing Transit Service	10
Table 2A – Level of Service Definitions for Signalized Intersections.....	13
Table 2B – Level of Service Definitions for Stop-Controlled Intersections.....	14
Table 3 – Existing Conditions Intersection Levels of Service.....	16
Table 4 – 3600 Wilshire Project Trip Generation.....	19
Table 5 – Related Projects Trip Generation Estimates	22
Table 6 – Existing plus Project Intersection Levels of Service and Impact Analysis	27
Table 7 – Future Intersection Levels of Service and Impact Analysis.....	29
Table 8 – Peak Hour Signal Warrant	31
Table 9 – TDM Mitigation Trip Generation	34
Table 10 – Intersection Mitigations.....	35
Table 11 – Neighborhood Street Impact Analysis – Existing Daily Volume Analysis	37
Table 12 – Neighborhood Street Impact Analysis – Future Daily Volume Analysis.....	38
Table 13 – Driveway Service and Impact Analysis	39
Table 14A – Vehicle Parking Spaces Required by city Code – Residential Units as Apartments.....	41
Table 14B – Bicycle Parking Spaces Required by City Code.....	41
Table 14C – Potential Reduction in Vehicle Spaces Due to Bicycle Spaces	41
Table 15 – Construction Impact Significance Factors	46
Table 16 – Construction Period Trip Generation – Phase I.....	48
Table 17 – Construction Period Trip Generation – Phase II.....	49
Table 18 – Construction Period Trip Generation – Phase III.....	50



1. INTRODUCTION

This report documents the assumptions, methodologies, and findings of a study conducted by Fehr & Peers to evaluate the potential traffic impacts of the proposed 3600 Wilshire Project, located at 3600 Wilshire Boulevard, south of Wilshire Boulevard, west of Kingsley Drive and east of Harvard Boulevard in the City of Los Angeles. This study was conducted as part of an environmental document being prepared for the proposed Project.

PROJECT DESCRIPTION

The proposed Project is on Wilshire Boulevard between Harvard Boulevard and Kingsley Drive. The adjacent land uses include a church to the north, apartments to the south, parking, retail, and a university to the east, and parking, retail, and offices to the west. Figure 1 illustrates the location of the proposed Project in relation to the surrounding street system. Regional access to the project site is provided by the Santa Monica Freeway, Interstate 10 (I-10) with access ramps approximately 1.65 miles to the south and the Hollywood Freeway (United States 101 [US-101]) with access ramps approximately two miles to the north. The Project is located two blocks west of the Metro Purple Line Wilshire/Normandie Station.

The project site is currently a privately-owned parking lot with an office building that will remain on the site. The existing office has 385,520 square feet of commercial space, including office, retail, restaurants, and a bank.

The Project as analyzed in this study involves the construction of 760 condominium units and 6,359 square feet of retail space. The Project will demolish the existing parking structure and build six levels of parking, two levels underground and four levels aboveground. The parking structure will replace the parking for the existing office building and provide new parking for the new Project uses.

Inbound and outbound vehicular access will be provided by two 2-way driveways on Harvard Boulevard and two 2-way driveways on Kingsley Drive. Residents will utilize the southern driveways on both Harvard Boulevard and Kingsley Drive and commercial users will utilize the northern driveways. The loading areas for the commercial uses will be located off Harvard Boulevard and the residential loading area will be located off Kingsley Drive. A site plan of the project site is presented in Figure 2.

STUDY SCOPE

The scope of work for this study was determined in consultation with the Los Angeles Department of Transportation (LADOT). The base assumptions and technical methodologies were discussed with LADOT as part of the study approach and agreed to in a memorandum of understanding dated September 2016. The MOU is included in Appendix A to this document.





Figure 1
Project Study Locations

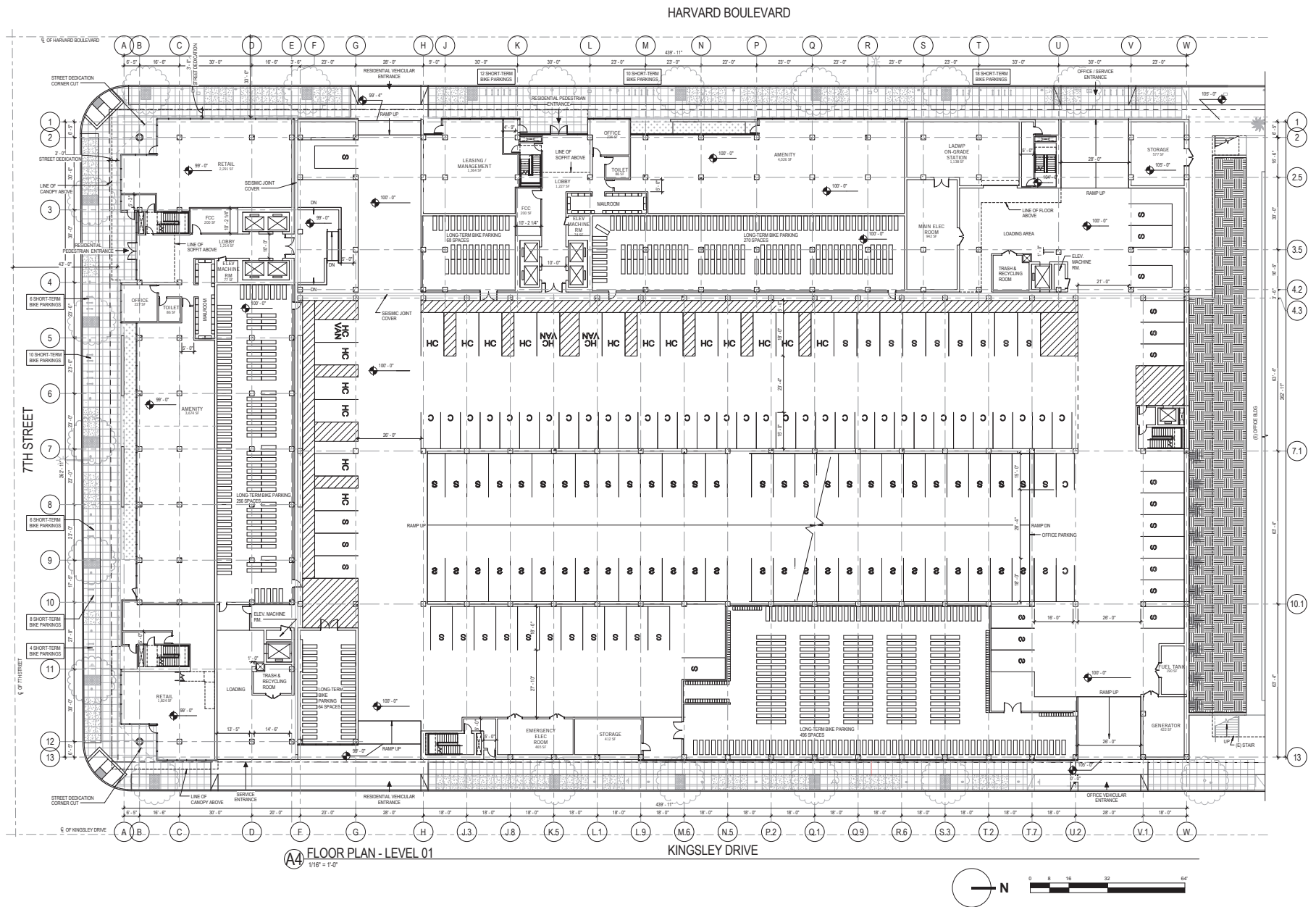


Figure 1B
Site Plan



TRAFFIC SCENARIOS

The study assumes that the Project would be completed by year 2023 and is directed at analyzing the potential Project-generated traffic impacts on local street system under both existing and future year traffic conditions. The following traffic scenarios have been developed and analyzed as part of this study:

- Existing Conditions – The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes a description of the transportation system serving the project site, existing traffic volumes, and an assessment of the operating conditions at the study analysis locations described below.
- Existing plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of Project-generated traffic. The impacts of the proposed Project on existing traffic operating conditions were then identified.
- Future Base (Year 2023) Conditions – Future traffic projections without the proposed Project were developed for the year 2023. The objective of this analysis was to project future traffic growth and operating conditions that could be expected to result from regional growth, related projects, and transportation network changes in the vicinity of the project site by the year 2023.
- Future (Year 2023) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the proposed Project on future traffic operating conditions were then identified.

STUDY LOCATIONS

Seventeen signalized intersections, two stop-controlled intersections, and two local street segments were selected for analysis in consultation with LADOT.

Signalized Intersections

The following 17 signalized intersections, illustrated in Figure 1, were identified in conjunction with LADOT to be analyzed as part of the scope of work for this Project:

1. Western Avenue & Wilshire Boulevard
2. Western Avenue & 8th Street
3. Harvard Boulevard & 6th Street
4. Harvard Boulevard & Wilshire Boulevard
5. Harvard Boulevard & 8th Street
6. Kingsley Drive & 6th Street
7. Kingsley Drive & Wilshire Boulevard
8. Normandie Avenue & 3rd Street
9. Normandie Avenue & 6th Street
10. Normandie Avenue & Wilshire Boulevard
11. Irolo Street & 7th Street



12. Irolo Street & 8th Street
13. Irolo Street & Olympic Boulevard
14. Vermont Avenue & Wilshire Boulevard
15. Vermont Avenue & 8th Street
16. Vermont Avenue & 6th Street
17. Virgil Avenue & Wilshire Boulevard

Unsignalized Analysis

The following two stop-controlled intersections, illustrated in Figure 1, were identified in conjunction with LADOT to be considered for signal warrant analyses:

- A. Harvard Boulevard & 7th Street
- B. Kingsley Drive & 7th Street

Segment Analysis

The following two segments, illustrated in Figure 1, were identified in conjunction with LADOT to be analyzed as part of the scope of work for this Project:

- Segment A. Harvard Boulevard south of 7th Street
Segment B. Kingsley Drive south of 7th Street

Freeway Analysis

The *Congestion Management Program for Los Angeles County* (CMP) (Metro, 2010) requires that all CMP mainline freeway monitoring locations where a proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours be analyzed. The proposed Project is not expected to add 150 or more vehicle trips during the AM or PM peak hours on nearby freeways (see Chapter 5). Therefore, no analysis of freeway segments is required for CMP purposes.

In addition, *Agreement Between City of Los Angeles and Caltrans District 7 on Freeway Impact Analysis Procedures* (October 2013, as amended in December 2015), sets forth criteria for when a freeway impact analysis should be conducted. LADOT determined as part of the traffic study memorandum of understanding for this Project that the Project would not meet the criteria requiring a freeway impact analysis (see Appendix A). Accordingly, no further analysis under the City's amended agreement with Caltrans was required.

ORGANIZATION OF REPORT

This report is divided into nine chapters, including this introduction. Chapter 2 describes the existing conditions including an inventory of the streets, highways, and transit service in the study area, a summary of existing traffic volumes, and an assessment of existing operating conditions. The methodologies used to develop traffic forecasts for the Existing, Existing plus Project, Future Base, and Future plus Project scenarios and the forecasts themselves are included in Chapter 3. Chapter 4 presents an assessment of potential intersection traffic impacts of the proposed Project under both existing and future conditions. The results of the neighborhood impact analysis are provided in Chapter 5. Chapter 6 provides an assessment of the proposed Project's access scheme, and Chapter 7 an analysis of parking for the Project. Chapter 8 summarizes the construction impact analysis. Chapter 9 provides the summary and conclusions.



2. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the study area. The assessment of conditions relevant to this study includes a description of the study area, an inventory of the local street system in the vicinity of the project site, a review of traffic volumes on these facilities, an assessment of the resulting operating conditions, and the current transit service in the study area. A detailed description of these elements is presented in this chapter.

STUDY AREA

The project site is within the Wilshire Community Plan area of the City of Los Angeles. The study area selected for analysis extends to include Western Avenue to the west, Vermont Avenue to the east, 3rd Street to the north, and Olympic Boulevard to the south. All of the streets in the study area are under the jurisdiction of the City of Los Angeles.

EXISTING STREET SYSTEM

Major arterials serving the study area include Western Avenue, Normandie Avenue/Irlo Street, and Vermont Avenue in the north/south direction and 3rd Street, 6th Street, Wilshire Boulevard, 8th Street, and Olympic Boulevard in the east/west direction.

Interstate 10 lies approximately two miles south of the site and US-101 lies approximately two miles north of the site. Each of these interstates provides regional access to and from the study area.

The characteristics of the major roadways serving the study area are described below. The street descriptions include the designation of the roadway under the *Mobility Plan 2035* (Los Angeles Department of Planning, General Plan Mobility Element) approved by the Los Angeles City Council in January 2016.

FREEWAYS

- **Interstate 10** runs in an east/west direction and extends from the Pacific Ocean eastward through Los Angeles County and beyond. In the vicinity of the study area, the freeway provides four lanes in each direction plus auxiliary lanes. Ramps are provided at Western Avenue and Normandie Avenue.
- **US-101** runs in the southeast-northwest direction, extending from downtown Los Angeles through Hollywood and the San Fernando Valley and beyond. In the vicinity of the study area, the Hollywood Freeway provides four lanes in each direction plus auxiliary lanes. Ramps are provided at Western Avenue, Santa Monica Boulevard, and Melrose Avenue.



EAST/WEST STREETS

- **3rd Street** is designated as an Avenue II in the City of Los Angeles' *Mobility Plan 2035* and runs in the north of the project site with two travel lanes in each direction within the project study area. Parking is permitted along portions of the roadway on both sides of the street. Left-turn pockets are present at major intersections. 3rd Street is part of the Moderate Transit Enhanced Network and the pedestrian analysis segments.
- **6th Street** is designated as an Avenue II and runs north of the project site with two travel lanes in each direction and with no on-street parking during peak hours. During non-peak hours, parking is permitted on both sides of the street. Left-turn pockets are present at major intersections.
- **7th Street** is designated as an Avenue II and runs south of the project site with one travel lane in each direction. Parking is permitted on both sides of the street and left-turn pockets are present at major intersections. Portions of 7th Street are part of the Neighborhood Enhanced Network and the pedestrian analysis segments.
- **8th Street** is designated as an Avenue II and runs south of the project site with two travel lanes in each direction. Parking is generally permitted on both sides of the street and left-turn pockets are present at major intersections. A portion of 8th Street near the project site is part of the Neighborhood Enhanced Network and the pedestrian analysis segments.
- **Olympic Boulevard** is designated as a Boulevard II and runs south of the project site with three travel lanes in each direction during peak hours and with two travel lanes in each direction during non-peak hours. Parking is permitted on both sides of the street only during non-peak hours. Left-turn pockets are present at major intersections. Olympic Boulevard is part of the Vehicle Enhanced Network and the pedestrian analysis segments.
- **Wilshire Boulevard** is designated as an Avenue I and runs north of the project site with two travel lanes in each direction and turn pockets are major intersections. An additional travel lane in each direction provides dedicated right-of-way for bus-only lanes during peak hours. Parking is permitted on both sides of the street during non-peak periods. Wilshire Boulevard is part of the Tier 2 Bicycle Lane Network, the Comprehensive Transit Enhanced Network, and the pedestrian analysis segments.

NORTH/SOUTH STREETS

- **Harvard Boulevard** is designated as a Collector Street and runs west of the project site. Parking is permitted on both sides of the street. In the study area, south of 4th Street, Harvard Boulevard is part of the Neighborhood Enhanced Network.
- **Irolo Street** is designated as an Avenue III and runs east of the project site, south of Wilshire Boulevard, with one travel lane in each direction. Parking is permitted on both sides of the street. Irolo Street is part of the pedestrian analysis segments.



- **Kingsley Drive** is designated as a Local Street and runs east of the project site. Parking is permitted on both sides of the street.
- **Normandie Avenue** is designated as an Avenue III and runs east of the project site, north of Wilshire Boulevard with two southbound and one northbound travel lane during the AM peak period and one southbound and two northbound travel lanes during the PM peak period. Parking is prohibited along the east side of the street during the AM peak period and is prohibited along the west side of the street during the PM peak period. Left-turn pockets are present at major intersections. In the study area, Normandie Avenue is part of the pedestrian analysis segments.
- **Western Avenue** is designated as an Avenue II and runs west of the project site with two travel lanes in each direction. South of 6th Street, parking is generally only permitted on one side of the street. North of 6th Street, parking is permitted on both sides. Left-turn pockets are present at major intersections.
- **Vermont Avenue** is designated as an Avenue I and runs east of the project site with three travel lanes in each direction during the AM and PM peak period, north of Wilshire. There are two travel lanes in each direction south of Wilshire. Parking is generally permitted on both sides of the street except during peak periods. Left-turn pockets are present at major intersections. In the study area, Vermont Avenue is part of the pedestrian analysis segments.
- **Virgil Avenue** is designated as an Avenue II located east of the project site and runs north from Wilshire Boulevard. In the study area, Virgil Avenue provides two travel lanes in each direction with left-turn pockets at most major intersections. Virgil Avenue is part of the Bicycle Lane Network.

Lane configurations of the study intersections are provided in Appendix B.

EXISTING PUBLIC TRANSIT SERVICE

The project site is served by a high level of public transit. Figure 3 shows the various Metro bus routes, rapid bus routes, and Metro Rail lines providing service in the study area. The Project is located two blocks (approximately 700 feet) west of the Metro Purple Line Wilshire/Normandie Station. Six local Metro (Routes 16/17/316, 18, 20, 28, 66, 207), three Metro Rapid (Routes 720, 728, 757), one DASH (Wilshire Center/Koreatown), one Foothill Transit (Route 481), and one Commuter Express (Route 534) bus routes provide service within the study area. Wilshire Boulevard has east-west dedicated bus lanes. Table 1 details the transit service near the project site.

EXISTING BICYCLE AND PEDESTRIAN FACILITIES

Figure 4 shows citywide designated bicycle facilities in the project area. As shown in the figure, Wilshire has peak hour bus lanes with bicycles permitted. Approximately 0.3 miles north of the project site, 4th Street is designated a Sharrowed Route and approximately ½ mile north of the project site, Oxford Avenue includes a bike lane. A portion of 7th Street, approximately ½ mile east of the project site, also includes a bike lane. The study area generally has a mature network of pedestrian facilities including sidewalks, crosswalks and pedestrian safety features. Approximately 8- to 18-foot sidewalks are provided throughout the study area.



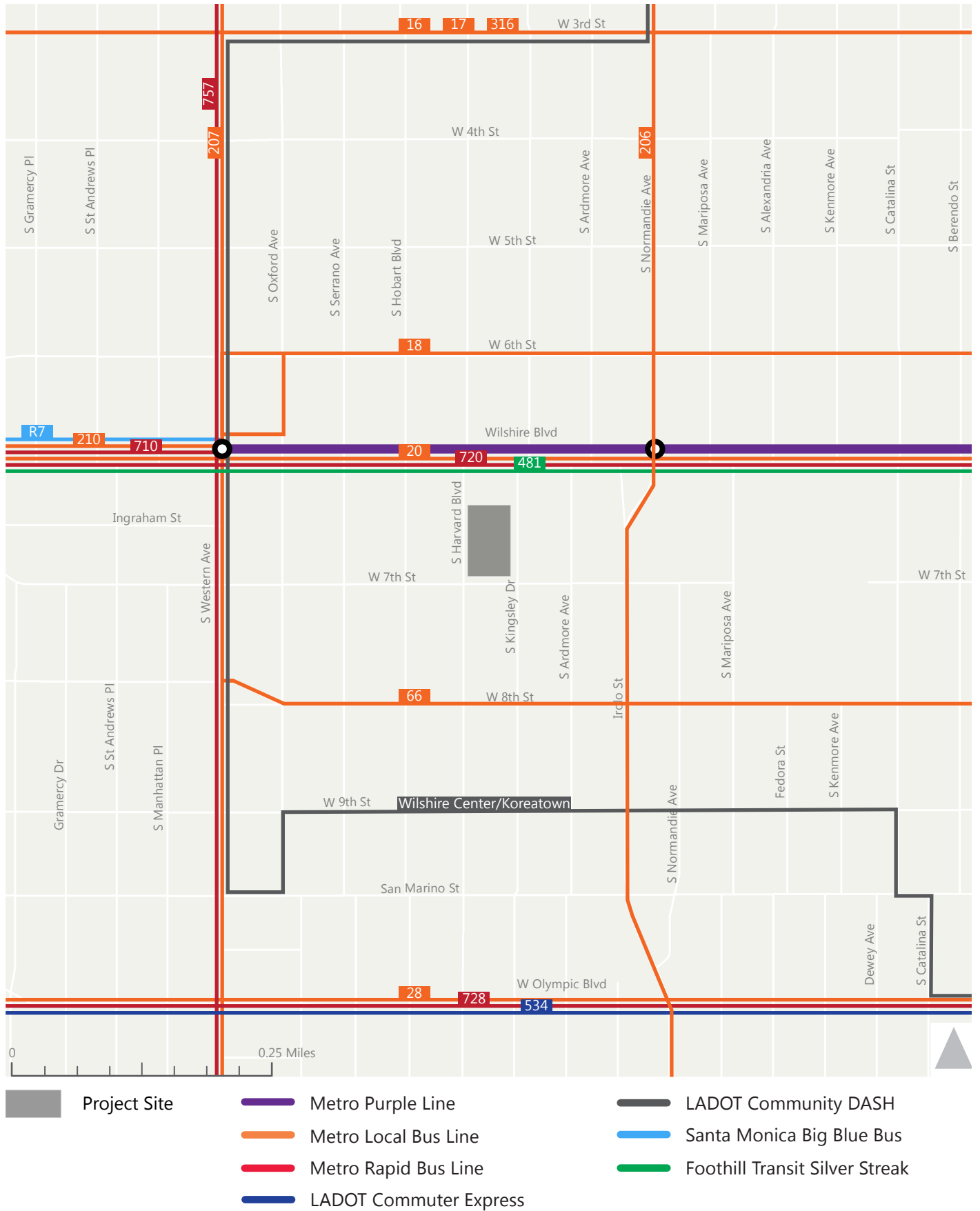


Figure 3
Existing Transit Service



TABLE 1
3600 WILSHIRE PROJECT
EXISTING TRANSIT SERVICE

Transit Route	Operator	Service Type	Service From	Via	Weekday Headways	
					AM	PM
Wilshire Center/Koreatown Loop	LADOT	Shuttle	Wilshire Center/Koreatown Loop	Western Ave	20 mins.	20 mins.
534	LADOT	Commuter	Downtown Los Angeles to West Los Angeles	Olympic Blvd	25-30 mins.	20-45 mins.
16/17/316	Metro	Local	Century City to 6th & Los Angeles	3rd St	1-8 mins.	1-9 mins.
18	Metro	Local	Wilshire Center to Montebello	6th St	8-12 mins.	6-20 mins
20	Metro	Local	Santa Monica to 7th & Main	Wilshire Blvd	6-10 mins.	12-16 mins.
28	Metro	Local	Century City to Eagle Rock	Olympic Blvd	11-14 mins.	8-20 mins
66	Metro	Local	Wilshire Center to Montebello	8th St	3-10 mins.	5-11 mins.
207	Metro	Local	Los Feliz to Hawthorne	Western Ave	10-13 mins.	10-15 mins.
720	Metro	Rapid	Santa Monica to Commerce	Wilshire Blvd	3-11 mins.	3-12 mins.
728	Metro	Rapid	Union Station to Century City	Olympic Blvd	5-8 mins.	11-12 mins.
757	Metro	Rapid	Hawthorne to Los Feliz	Western Ave	6-15 mins.	10-16 mins.
481	Foothill	Commuter	Wilshire Center to El Monte Station	Wilshire Blvd	20 mins.	15-20 mins.
Purple Line	Metro	Heavy Rail	Koreatown to Union Station	Wilshire Blvd	10 mins.	10 mins.

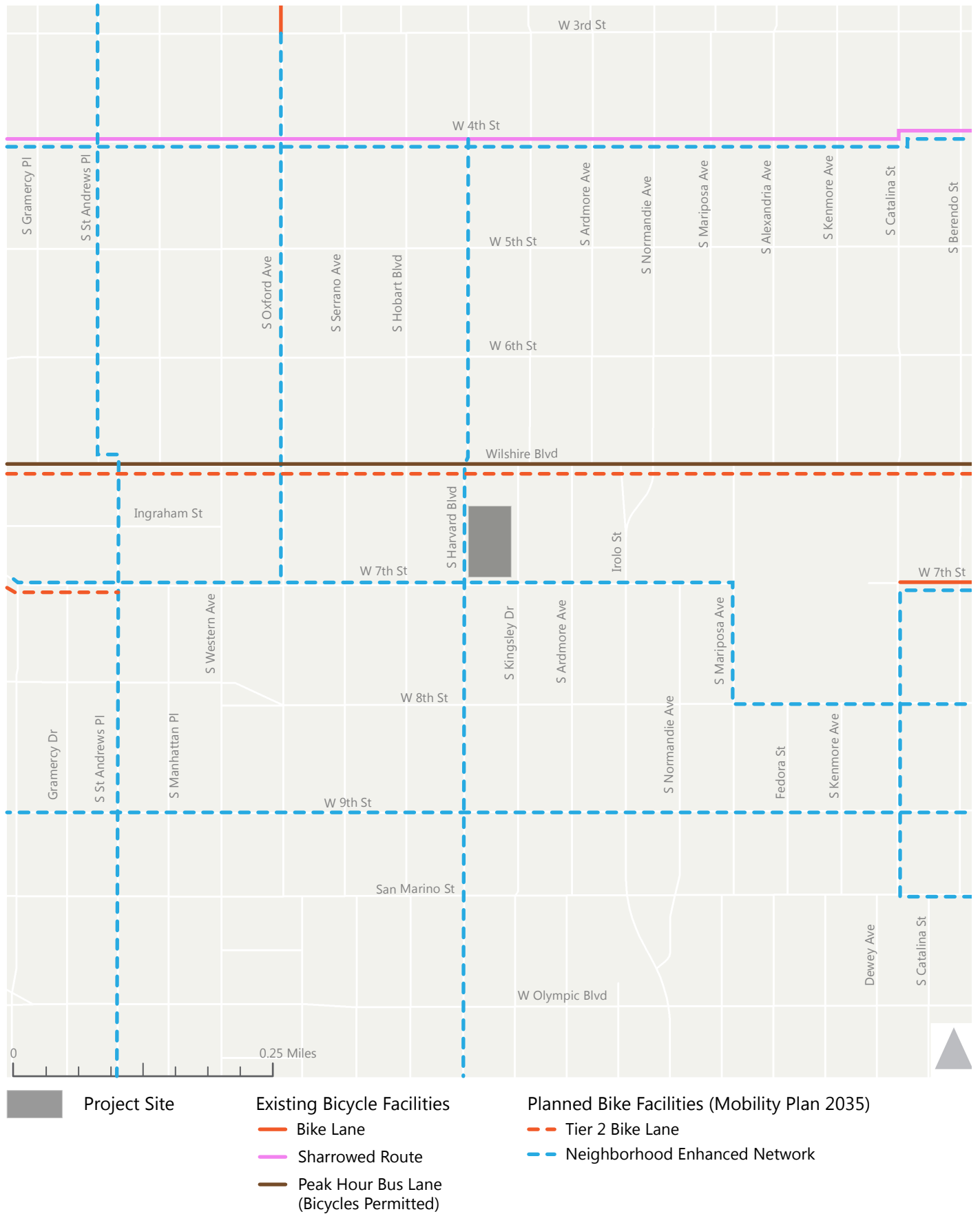


Figure 4
Existing and Planned Bicycle Facilities



The *Mobility Plan 2035* identifies corridors proposed to receive improved bicycle, pedestrian and vehicle infrastructure improvements. Tier 1 Protected Bicycle Lanes are bicycle facilities that are separated from vehicular traffic. Tier 2 and Tier 3 Bicycle Lanes are facilities on roadways with striped separation. Tier 2 Bicycle Lanes are those which are more likely to be built by 2035. The Neighborhood Enhanced Network is the network of locally-serving streets planned to contain traffic calming measures that close the gaps between streets containing bicycle facilities. The *Mobility Plan 2035* identifies Wilshire Boulevard, 7th Street west of St. Andrews Place, and Virgil Avenue north of Wilshire Boulevard as part of the Tier 2 Bike Lane Network. Several roadways near the Project are designated as part of the Neighborhood Enhanced Network such as St. Andrews Place, Oxford Avenue, Harvard Boulevard, 4th Street, 7th Street, and 9th Street.

EXISTING TRAFFIC VOLUMES AND LEVEL OF SERVICE

This section presents existing base peak hour traffic volumes, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each, indicating volume-to-capacity (V/C) ratios and levels of service (LOS).

EXISTING TRAFFIC VOLUMES

New weekday AM and PM peak hour turning movement counts were collected at the study intersections on Thursday, March 17, 2016 and Thursday, November 3, 2016. One count was collected on Tuesday, September 22, 2015. The existing weekday morning and afternoon peak hour volumes at the study intersections are provided in Appendix B. Count sheets for these intersections are contained in Appendix C.

LEVEL OF SERVICE METHODOLOGY

A variety of standard methodologies are available to analyze LOS. According to *Traffic Study Policies and Procedures* (LADOT, August 2014), this study is required to use the Critical Movement Analysis (CMA) method of intersection capacity calculation (Transportation Research Board, 1980) to analyze signalized intersections in the City of Los Angeles. The V/C ratio is then used to find the corresponding LOS based on the definitions in Table 2A. Under the CMA methodology, a V/C ratio is generated for each study intersection based on factors such as the volume of traffic and the number of lanes providing for such vehicle movement and an LOS grade.

For the driveway analysis, the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2010) methodology was used to analyze the delay. Under the HCM methodology, delay is calculated in seconds and given an LOS grade, as shown in Table 2B.

The City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to allow ATSAC-operations to manage signal timing to improve traffic flow conditions. The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC and provides fully traffic-adaptive signal control based on real-time traffic conditions. All of the study intersections located in the City of Los Angeles are currently operating under the City's ATSAC system and ATCS control. ATSAC and ATCS provide improved operating



TABLE 2A
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
CMA METHODOLOGY

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*,
Transportation Research Board, 1980.

TABLE 2B
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS

Level of Service	Average Control Delay (seconds/vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0
Source: <i>Highway Capacity Manual</i> , Transportation Research Board, 2010.	

conditions. Therefore, in accordance with City of Los Angeles procedures, a credit of 0.07 V/C reduction was applied at each intersection where ATSAC is implemented and an additional 0.03 V/C reduction was applied at each intersection where ATCS is implemented.

EXISTING LEVELS OF SERVICE

Existing year traffic volumes presented in Appendix B were analyzed using the intersection capacity analysis methodology described above to determine the existing operating conditions at the study intersections. Table 3 summarizes the results of the analysis of the existing weekday morning and afternoon peak hour V/C ratio and corresponding LOS at each of the analyzed intersections. As indicated, all of the 17 signalized intersections analyzed for impacts operate at LOS D or better during both peak periods. Analysis sheets are provided in Appendix D.



TABLE 3
3600 WILSHIRE PROJECT
EXISTING CONDITIONS INTERSECTION LEVELS OF SERVICE

NO.	INTERSECTION	PEAK HOUR	EXISTING (2016)	
			V/C	LOS
1	Western Ave & Wilshire Blvd	AM	0.832	D
		PM	0.799	C
2	Western Ave & 8th St	AM	0.562	A
		PM	0.623	B
3	Harvard Blvd & 6th St	AM	0.457	A
		PM	0.607	B
4	Harvard Blvd & Wilshire Blvd	AM	0.513	A
		PM	0.579	A
5	Harvard Blvd & 8th St	AM	0.440	A
		PM	0.537	A
6	Kingsley Dr & 6th St	AM	0.463	A
		PM	0.560	A
7	Kingsley Dr & Wilshire Blvd	AM	0.555	A
		PM	0.595	A
8	Normandie Ave & 3rd St	AM	0.661	B
		PM	0.682	B
9	Normandie Ave & 6th St	AM	0.546	A
		PM	0.591	A
10	Normandie Ave & Wilshire Blvd	AM	0.634	B
		PM	0.685	B
11	Irolo St & 7th St	AM	0.522	A
		PM	0.563	A
12	Irolo St & 8th St	AM	0.701	C
		PM	0.706	C
13	Normandie Ave & Olympic Blvd	AM	0.637	B
		PM	0.767	C
14	Vermont Ave & Wilshire Blvd	AM	0.850	D
		PM	0.804	D
15	Vermont Ave & 8th St	AM	0.648	B
		PM	0.659	B
16	Vermont Ave & 6th St	AM	0.675	B
		AM	0.643	B
17	Virgil Ave & Wilshire Blvd	AM	0.572	A
		AM	0.562	A

3. TRAFFIC PROJECTIONS

PROJECT TRAFFIC

The development of trip generation estimates for the proposed Project involves the use of a 3-step process similar to that discussed for the cumulative projects: trip generation, trip distribution, and traffic assignment. As discussed in Chapter 1, the proposed Project consists of 760 condominium units and 6,359 square feet of retail space.

This development would occur within one of the denser urban environments in the City of Los Angeles where alternative travel mode opportunities (i.e., auto, bike, pedestrian and transit) are substantial. If vehicle trip reduction in mixed-use dense urban developments such as this is understated, the result can be excessive traffic impacts and related mitigation that can discourage development of otherwise desirable projects or transportation infrastructure that is not sized to the urban setting of the development.

Current accepted methodologies, such as the Institute of Transportation Engineers (ITE) Trip Generation methodology, are primarily based on data collected at suburban, single-use, freestanding sites. These defining characteristics limit their applicability to mixed-use or multi-use development projects, such as the proposed Project, which is in a high-density walkable urban setting with frequent and nearby local and regional transit service. The land use mix, design features, and setting of the proposed Project include characteristics that influence travel behavior differently from typical single-use suburban developments. Given the context of the urban setting and the characteristics of the built environment in the study area, a MainStreet analysis was conducted to inform the Project's trip generation in the context of the urban setting, as detailed in Appendix E. The project trip generation accounts for the mix of uses provided in the Project, the dense urban setting in which it is located, and the level of transit service provided in the area.

Project Trip Generation

The MainStreet methodology as applied in this study starts by estimating the trip generation based on trip generation rates from *Trip Generation, 9th Edition* (Institute of Transportation Engineers [ITE], 2012) and then estimates reductions to account for trip internalization and external non-automobile trips. The MainStreet methodology estimates that the proposed Project would generate about 37 to 44% fewer trips than the unadjusted ITE data. Informed adjustments were made to the ITE trip generation based on the MainStreet analysis to account for the improved density and diversity of land uses, pedestrian and bicycle connectivity, and transit service in the future.

Internal trip credits can be defined as a reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. These are trips usually made via walking within the site. Reflective of the overall travel behavior characteristics of the land uses in the Wilshire corridor based on the Main Street analysis, a 15% internal credit was incorporated in the trip generation analysis. The MainStreet analysis indicated a 29 to 38% reduction in project trips due to transit, walk, and bicycle trips to the project site. Consistent with the City of Los Angeles' *Traffic Study Policies and Procedures*, which states that developments within ¼-mile walking distance of a rail transit station or a Rapid Bus stop may qualify for up to a 15% transit credit, the trip generation estimates incorporate a 15% transit credit. An



additional 10% walk/bike credit was also applied as reflective of conditions at the project site as identified through the MainStreet analysis.

Per LADOT's *Traffic Study Policies and Procedures*, Attachment I Policy on Pass-By Trips, pass-by credits were applied to portions of the development. A 50% pass-by credit was applied to the retail. Pass-by credits account for the patrons making an intermediate stop on the way from an origin to a primary trip destination without a route diversion. These trips would be attracted from traffic passing the site on Wilshire Boulevard and other nearby streets.

Lastly, an existing credit was applied to the trip generation due to the internalization of the existing office uses with the new retail development. As the existing office building will remain on the property, be directly linked to the new retail/restaurant and residential uses via a pedestrian courtyard, and share the parking supply with the new uses, the office space was included in the internalization analysis. With the new uses on site, approximately 69 daily trips, 7 trips (6 inbound/1 outbound) during the AM peak hour and 6 trips (1 inbound/5 outbound) during the PM peak hour were estimated to no longer enter or leave the site by vehicle. As such, these trips were subtracted from the Project's overall trip generation as an existing use credit.

As shown in Table 4, the Project would generate an estimated net increase of 3,307 daily trips, including 249 trips (47 inbound/202 outbound) during the AM peak hour and 309 trips (202 inbound/107 outbound) during the PM peak hour.

PROJECT TRAFFIC DISTRIBUTION

The geographic distribution of trips generated by the proposed Project is dependent on characteristics of the street system serving the project site; the level of accessibility of routes to and from the proposed project site; locations of employment and commercial centers to which residents of the Project would be drawn; and residential areas from which the office employees and other commercial visitors would be drawn. A select zone analysis was conducted for the proposed uses using the City of Los Angeles' Travel Demand Model to inform the general distribution pattern for this study. The distribution of project trips is illustrated in Figure 5.

PROJECT TRAFFIC ASSIGNMENT

The traffic to be generated by the proposed Project was assigned to the street network using the distribution pattern described in Figure 5. Appendix B provides the assignment of the proposed Project-generated peak hour traffic volumes at the analyzed intersections during the AM and PM peak hours. The assignment of traffic volumes took into consideration the locations of the proposed Project driveways on Harvard Boulevard and Kingsley Drive.

PROJECT DRIVEWAYS

The project site currently is served by three driveways, one on Harvard Boulevard and two on Kingsley Drive. As discussed, with the Project, vehicular access will be provided by two driveways on Harvard Boulevard and two driveways on Kingsley Drive. All driveways will provide 2-way all-access to Harvard Boulevard and Kingsley Drive.



**TABLE 4
3600 WILSHIRE PROJECT
TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Estimated Trip Generation						
			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour Trips			PM Peak Hour Trips		
				Rate	In%	Out%	Rate	In%	Out%		In	Out	Total	In	Out	Total
PROPOSED PROJECT																
Retail	820	6.359 ksf	42.70	0.96	62%	38%	3.71	48%	52%	272	4	2	6	12	12	24
Less: Internal Capture [b]			15%		15%	15%		15%	15%	(41)	(1)	0	(1)	(2)	(2)	(4)
Less: Transit Credit [c]			15%	15%			15%			(35)	0	0	0	(2)	(2)	(4)
Less: Walk/Bike Credit			10%	10%			10%			(19)	0	0	0	0	0	0
Total Driveway Trips										177	3	2	5	8	8	16
Less: Pass-by [d]			50%	50%			50%			(88)	(1)	(1)	(2)	(4)	(4)	(8)
Net External Vehicle Trips										89	2	1	3	4	4	8
Residential Apartments [e]	220	760 DU	6.65	0.51	20%	80%	0.62	65%	35%	5,054	78	310	388	306	165	471
Internal Capture [b]			15%		15%	15%		15%	15%	(758)	(12)	(47)	(59)	(46)	(25)	(71)
Less: Transit Credit [c]			15%	15%			15%			(644)	(10)	(39)	(49)	(39)	(21)	(60)
Less: Walk/Bike Credit			10%	10%			10%			(365)	(5)	(22)	(27)	(22)	(11)	(33)
Total Driveway Trips										3,287	51	202	253	199	108	307
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										3,376	53	203	256	203	112	315
EXISTING USE CREDIT																
Office Space Internalization [f]										69	6	1	7	1	5	6
TOTAL DRIVEWAY TRIPS										7,080	362	296	658	352	417	769
NET INCREMENTAL EXTERNAL TRIPS										3,307	47	202	249	202	107	309

Notes:

[a] Source: Institute of Transportation Engineers (ITE), *Trip Generation, 9th Edition*, 2012

[b] Internal capture represents the percentage of trips between land uses that occur within the site. Main Street model calibration of base ITE rates reflecting project & site specific characteristics.

[c] The transit credit is based on LADOT's *Traffic Study Policies and Procedures*, August 2014. The guidelines state that up to 15% transit credit may be taken for projects within 1/4 mile walking distance of a transit station, or of a RapidBus stop. The nearest transit station is the Wilshire/Normandie Purple Line station within 1/4 mile walking distance to the site.

[d] The pass-by credit is based on Attachment I of LADOT's *Traffic Study Policies and Procedures*, August 2014.

[e] The residential apartment trip generation rate is higher than the condominium rates for daily, AM, and PM peak hours; therefore, the units may be either both apartments or condominiums.

[f] The addition of the project land uses on site creates internalization opportunities with the existing office space where these trips were otherwise necessary. The office space internalization credit accounts for these trips no longer leaving the site with the project.

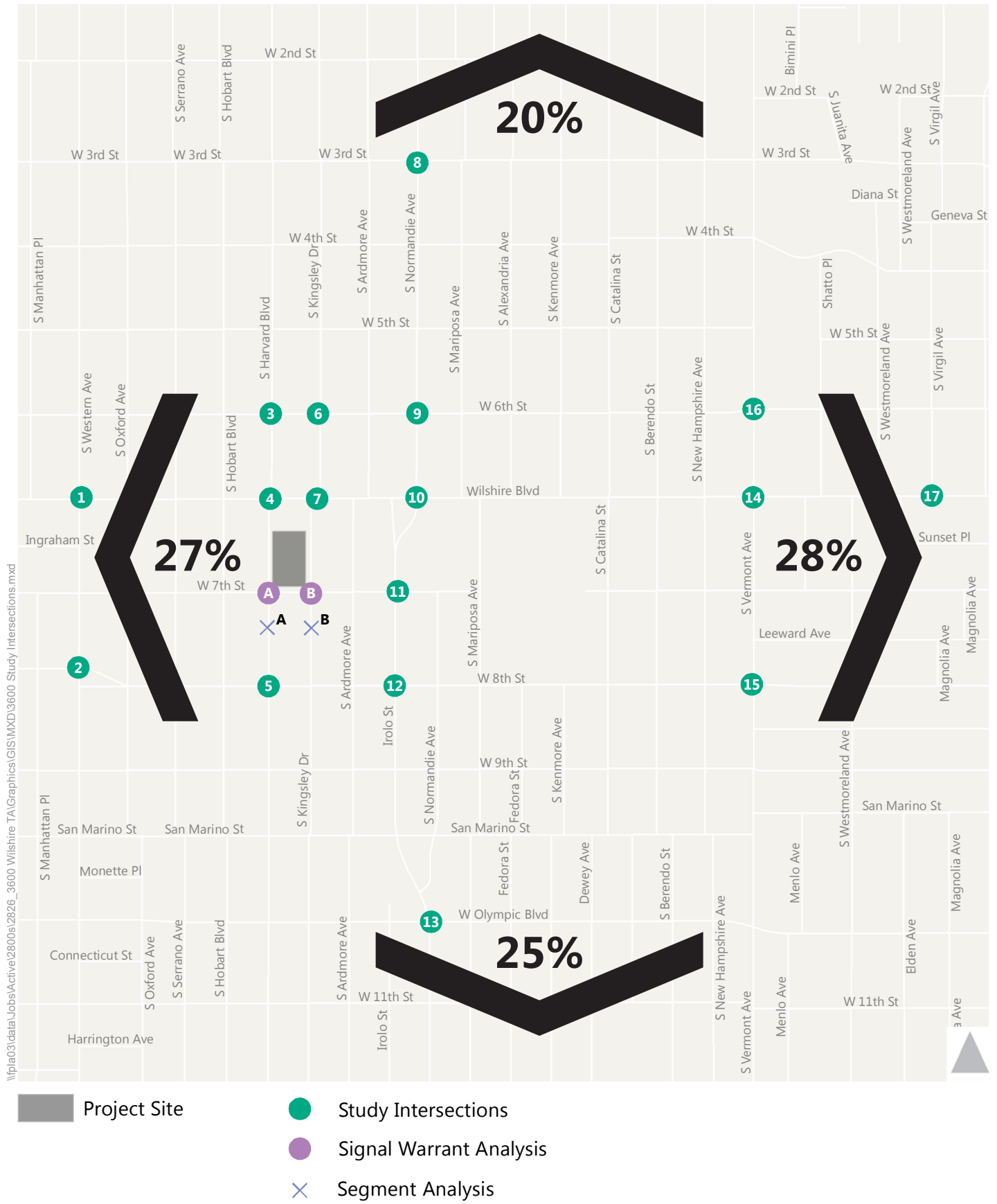


Figure 5
Trip Distribution



EXISTING PLUS PROJECT TRAFFIC CONDITIONS

The project traffic estimated and assigned to the study intersections was added to the existing traffic volumes to estimate Existing plus Project traffic volumes. Turning movement traffic volumes for the Existing plus Project scenario are provided in Appendix B. Analysis sheets are provided in Appendix D.

FUTURE YEAR 2023 TRAFFIC CONDITIONS

To evaluate the potential impacts of the proposed Project on future (Year 2023) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the Project. These forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the Project (related projects).

These projected traffic volumes, identified herein as the Future Base conditions, represent the future conditions without the proposed Project. The traffic generated by the proposed Project was then estimated and assigned to the surrounding street system. Project traffic was added to the Future Base conditions to form Future (year 2023) plus Project traffic conditions, which were analyzed to determine the incremental traffic impacts attributable to the Project itself.

The assumptions and analysis methodology used to develop each of the future year scenarios discussed above are described in more detail in the following sections.

BACKGROUND OR AMBIENT GROWTH

Based on historic trends and at the direction of LADOT, it was established that an ambient growth factor of 1% per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by year 2023. This adjustment was applied to the existing (year 2016) traffic volume data to reflect the effect of ambient growth by the year 2023.

RELATED PROJECT TRAFFIC GENERATION AND ASSIGNMENT

Future Base traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the proposed project site prior to the buildout date of the proposed Project. The list of related projects was prepared based on data from LADOT. A total of 75 cumulative projects were identified in the study area; these projects are listed in Table 5 and illustrated in Figure 6.



TABLE 5
3600 WILSHIRE PROJECT
RELATED PROJECTS

No.	Project Location	Land Use	Size		Estimated Trip Generation [a]						
					Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
						In	Out	Total	In	Out	Total
1	3323 W Olympic Bl	Apartments Office	40 27.72	Units ksf	1267	57	30	87	44	82	126
2	3670 W Wilshire Blvd	Condominiums Other	378 8	Units ksf	2480	55	142	197	144	76	220
3	3033 W Wilshire Blvd	Condominiums Retail	189 5.54	Units ksf	816	12	49	61	45	29	74
4	3060 W Olympic Bl	Retail	109.006	ksf	4134	60	26	86	169	191	360
5	805 S Catalina St	Condominiums Retail	300 5	Units ksf	1935	24	119	143	110	57	167
6	820 S Hoover St	Condominiums Retail	32 4.5	Units ksf	414	7	15	22	18	14	32
7	2924 W 8th St	Apartments Affordable Units	37 48	Units Units	416	6	17	23	18	10	28
8	621 S Catalina St	Apartments Other Retail	7 75 1.547	Units Units ksf	643	21	18	39	27	23	50
9	100 N Western Ave	Retail Apartments	30 98	ksf Units	940	17	40	57	54	38	92
10	3050 W Wilshire Blvd	Apartments School Lecture Hall	133 43.4 450	Units School Seats	-1337	-35	-16	-51	-45	-52	-97
11	3663 W Wilshire Blvd	Office School School Other	55.38 216 420	ksf Seats Seats	825	94	44	138	20	3	23
12	2755 W 15th Street	School	300	Students	486	68	57	125	24	24	48
13	3470 W Wilshire	Health Club	20.178	ksf	231	-13	6	-7	22	-1	21
14	3869 W Wilshire	Apartments	84	Units	538	8	31	39	36	19	55
15	680 S Berendo St	Apartments	177	Units	1000	15	61	76	61	32	93
16	3640 W Wilshire Blvd	Apartments	209	Units	1182	18	72	90	73	40	113
17	968 S Berendo St	Church	85.308	ksf	535	23	8	31	3	9	12
18	135 N Western Ave	Restaurant	11.904	ksf	457	2	2	4	25	13	38
19	940 S Western Avenue	Apartments Retail	79 8	Units ksf	380	6	31	37	26	11	37
20	864 S Vermont	Apartments Retail	411 43.8	Units ksf	3202	24	129	153	164	101	265
21	535 S Kingsley Dr	Apartments	85	Units	543	8	31	39	36	19	55
22	2850 W 7th St	Condominiums Other Retail	160 40 3.6	Units Rooms ksf	1057	20	72	92	72	42	114
23	800 S Harvard Blvd	Apartments Retail	131 7	Units ksf	827	14	32	46	44	33	77
24	2929 W Leeward Ave	Condominiums	80	Units	476	7	33	40	44	21	65
25	2968 W 6th St	Apartments Commercial Space Commercial Space	399 12 8	Units ksf ksf	2943	73	154	227	168	93	261
26	241 N Vermont	Apartments Retail	100 5	Units ksf	510	7	38	45	33	16	49
27	4110 W 3rd Street	Hotel Retail	174 27.8	Rooms ksf	1186	45	35	80	46	40	86
28	1011 S Serrano Ave	Apartments	91	Units	545	8	33	41	32	18	50
29	525 N Wilton Pl	Apartments	88	Units	449	6	28	34	27	14	41
30	3076 W Olympic Blvd	Apartments Retail	226 16.907	Units ksf	1567	25	78	103	90	56	146
31	3875 W Wilshire Bl	Apartments	220	Units	1238	19	77	96	77	42	119
32	3350 W Wilshire	Apartments	121	Units	728	11	43	54	47	25	72
33	3545 W Wilshire Blvd	Apartments Retail	433 49.849	Units ksf	917	-42	83	41	84	10	94
34	605 S Vermont Ave	Apartments Museum	103 30.937	Units ksf	755	17	39	56	42	37	79
35	1011 S Park View St	Apartments	108	Units	594	9	38	47	38	19	57
36	2965 W 6th St	Hotel	99	Rooms	688	26	18	44	25	25	50
37	627 S Vermont Ave	Apartments Restaurant	179 12	Units ksf	1304	34	72	106	75	40	115

38	2789 W Olympic Bl	Office Retail	27.81 20.607	ksf ksf	612	16	8	24	25	29	54
39	1255 Elden Ave	Apartments	93	Units	376	0	32	32	28	10	38
40	2972 W 7th St	Apartments Retail	180 15	Units ksf	486	7	59	66	43	8	51
41	3100 W 8th St	Apartments	100	Units	100	10	41	51	10	41	51
42	326 S Reno St	Apartments	65	Units	326	5	20	25	20	11	31
43	1017 S Mariposa Ave	Apartments	79	Units	373	5	23	28	23	12	35
44	427 S Berendo St	Apartments	85	Units	288	5	17	22	17	10	27
45	2859 W Francis Ave	Apartments	81	Units	492	7	28	35	31	5	36
46	700 S Manhattan pl	Apartments Restaurant Retail	162 6.5 3.5	Units ksf ksf	1260	19	57	76	71	46	117
47	411 S Normandie Ave	Apartments	224	Units	1407	22	86	108	87	47	134
48	3525 W 8th Street	Apartments Supermarket	367 22.906	Units ksf	1214	8	121	129	83	25	108
49	2870 W Olympic Blvd	Hotel Retail	78 16.384	Rooms ksf	834	22	14	36	30	28	58
50	850 S Crenshaw	Apartments	44	Units	293	4	18	22	18	10	28
51	815 S Kingsley Dr	Apartments	90	Units	542	8	33	41	33	17	50
52	4074 W 5th St	Apartments Retail	119 13	Units ksf	944	14	44	58	52	34	86
53	3986 W Wilshire	Apartments Coffee Shop Restaurant Retail	228 5 5 12	Units ksf ksf ksf	1354	100	-23	77	124	-77	47
54	616 S Westmoreland Ave	Apartments Restaurant Retail	72 2.765 1.043	Units ksf ksf	461	2	29	31	30	5	35
55	2525 Wilshire Bl	Condominiums Retail	160 7.5	Units ksf	1160	16	60	76	61	36	97
56	3200 W Beverly Bl	Apartments Retail	32 5.867	Units ksf	632	4	16	20	39	32	71
57	3330 W Beverly Bl	Apartments Childcare	40 4.237	Units ksf	495	26	34	63	35	32	67
58	2405 W 8th Street	Apartments Retail	144 4.406	Units ksf	333	-20	48	28	42	-15	27
59	2900 Wilshire	Apartments Retail Restaurant	644 10 5.5	DU ksf ksf	3482	81	135	216	137	81	218
60	4001 W Venice Bl	School	432	Students	557	54	43	97	16	16	32
61	2649 W San Marino Ave	Apartments	45	DU	246	4	15	19	15	8	23
62	966 S Dewey Ave	Apartments	65	DU	432	7	27	34	26	14	40
63	3240 W Wilshire Bl	Apartments	545	DU	1353	15	173	188	89	23	112
		Retail	5.222	ksf							
		Hotel	162	Rooms							
64	1125 S Crenshaw Bl	Retail	49	ksf	-399	3	16	51	-41	6	-35
		Apartments	2	DU							
65	1614 S Crenshaw Bl	Donut/Coffee w Drive-thru	1.7	ksf	1392	87	84	171	37	36	73
66	2005 W Pico Bl	Office	30.3	ksf	224	28	4	32	5	25	30
67	619 S Westlake Ave	Apartments	42	DU	254	3	17	20	16	8	24
68	422 Lake St	Apartments	80	DU	532	8	33	41	33	17	50
69	1929 W Pico Bl	Charter High School	480	Enrollment	821	140	66	206	20	42	62
70	235 N Hoover	Apartments	214	DU	1423	22	87	109	86	47	133
71	1930 W Wilshire Bl	Apartments	478	DU	1355	-44	128	84	103	-41	62
		Theatre	850	Seats							
		Classroom	50	Enrollment							
		Hotel	220	Rooms							
72	3700 Wilshire [b]	Office	103.719	DU	858	107	14	121	19	96	115
73	3700 Wilshire	Apartments	506	DU	3501	49	152	201	178	80	258
		Retail	62.036	ksf							
74	3440 Wilshire	Apartments	654	DU	2963	42	155	197	161	91	252
		Retail	16	ksf							
75	800 Western	Apartments	96	DU	4284	153	125	278	117	106	223
		Hotel	148	DU							
		Retail/Restaurant	54.54	ksf							

Note:

DU = dwelling units

ksf = one thousand square feet

[a] Related projects list is based on information provided from LADOT in August 2016

[b] Project includes the unoccupied office space of 3700 Wilshire Blvd as a related project

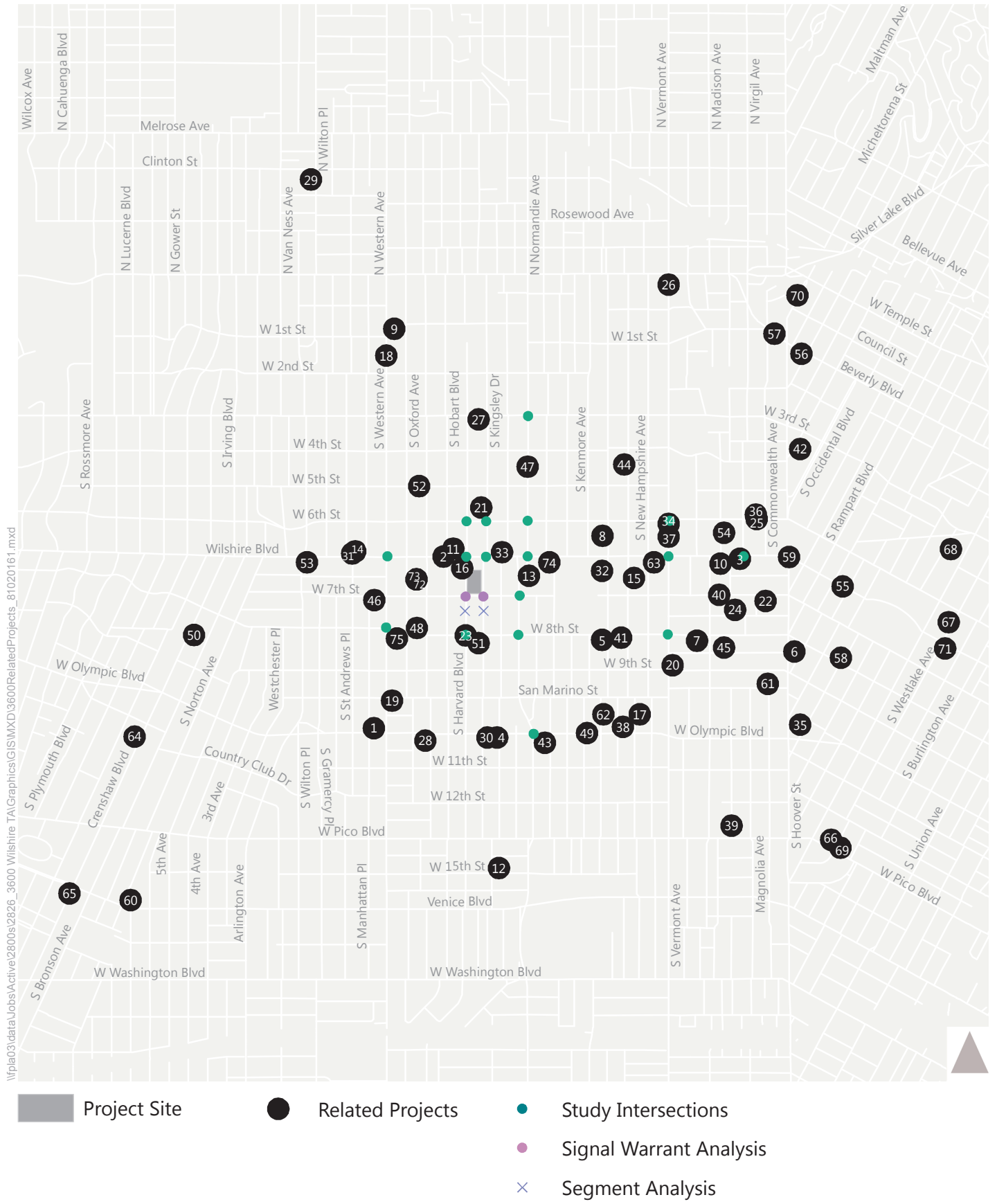


Figure 6
Related Projects

Trip Generation

Trip generation estimates for the related projects were calculated using a combination of previous study findings, publicly available environmental documentation, and trip generation rates contained in *Trip Generation, 9th Edition*. Table 5 presents the resulting trip generation estimates for these related projects. These projections are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.). Traffic mitigation measures associated with the related projects are also not in every case accounted for in the analysis.

Trip Distribution

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system. Additionally, if the traffic study or environmental document for a related project was available, the trip distribution from that study was used.

Traffic Assignment

Using the estimated trip generation and trip distribution patterns described above, traffic generated by the related projects was assigned to the street network.

TRANSPORTATION INFRASTRUCTURE PROJECTS

There are no infrastructure changes in the study area planned for implementation by year 2023 per confirmation by city staff. Therefore, network changes were not included in the analysis.

FUTURE YEAR 2023 BASE TRAFFIC VOLUMES

Future year 2023 base weekday AM and PM peak hour traffic volumes and lane geometries for the analyzed intersections are provided in Appendix B. The Future Base traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and related projects traffic.

FUTURE PLUS PROJECT TRAFFIC PROJECTIONS

The proposed Project traffic volumes were added to the year 2023 Future Base traffic projections, resulting in Future (year 2023) plus Project AM and PM peak hour traffic volumes. As provided in Appendix B, the Future (year 2023) plus Project scenario presents future traffic conditions with the completion of the proposed Project.



4. INTERSECTION TRAFFIC IMPACT ANALYSIS

The traffic impact analysis evaluates the projected LOS at each study intersection under the Existing plus Project and Future (year 2023) plus Project conditions to estimate the incremental increase in the V/C ratio caused by the proposed Project. This provides the information needed to assess the potential impact of the Project using significance criteria established by LADOT.

CRITERIA FOR DETERMINATION OF SIGNIFICANT TRAFFIC IMPACT

The City of Los Angeles has established threshold criteria to determine significant traffic impact of a proposed project in its jurisdiction. Under the LADOT guidelines, an intersection would be significantly impacted with an increase in V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D, and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A or B after the addition of the project traffic are not considered significantly impacted regardless of the increase in V/C ratio. The following summarizes the impact criteria:

LOS	Final V/C Ratio	Project-Related Increase in V/C
C	> 0.700 - 0.800	equal to or greater than 0.040
D	> 0.800 - 0.900	equal to or greater than 0.020
E or F	> 0.900	equal to or greater than 0.010

EXISTING PLUS PROJECT IMPACT ANALYSIS

EXISTING PLUS PROJECT TRAFFIC LEVEL OF SERVICE

The Existing plus Project traffic volumes presented in Appendix B were analyzed to determine the projected V/C ratios and LOS for each of the analyzed intersections under this scenario. Table 6 summarizes the Existing plus Project LOS. Analysis sheets are provided in Appendix D. As indicated in Table 6, all 17 signalized intersections are projected to operate at LOS D or better during both peak hours.

EXISTING PLUS PROJECT INTERSECTION IMPACTS

As shown in Table 6, after applying the aforementioned City of Los Angeles significant impact criteria, it is determined that the proposed Project would not result in significant impacts under Existing plus Project conditions at any of the study intersections.



TABLE 6
3600 WILSHIRE PROJECT
EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE AND IMPACT ANALYSIS

NO.	INTERSECTION	PEAK HOUR	EXISTING		EXISTING + PROJECT		V/C INCREASE	SIGNIFICANT IMPACT?
			V/C	LOS	V/C	LOS		
1	Western Ave & Wilshire Blvd	AM	0.832	D	0.840	D	0.008	No
		PM	0.799	C	0.808	D	0.009	No
2	Western Ave & 8th St	AM	0.562	A	0.571	A	0.009	No
		PM	0.623	B	0.638	B	0.015	No
3	Harvard Blvd & 6th St	AM	0.457	A	0.465	A	0.008	No
		PM	0.607	B	0.625	B	0.018	No
4	Harvard Blvd & Wilshire Blvd	AM	0.513	A	0.537	A	0.024	No
		PM	0.579	A	0.625	B	0.046	No
5	Harvard Blvd & 8th St	AM	0.440	A	0.454	A	0.014	No
		PM	0.537	A	0.571	A	0.034	No
6	Kingsley Dr & 6th St	AM	0.463	A	0.472	A	0.009	No
		PM	0.560	A	0.575	A	0.015	No
7	Kingsley Dr & Wilshire Blvd	AM	0.555	A	0.581	A	0.026	No
		PM	0.595	A	0.636	B	0.041	No
8	Normandie Ave & 3rd St	AM	0.661	B	0.664	B	0.003	No
		PM	0.682	B	0.685	B	0.003	No
9	Normandie Ave & 6th St	AM	0.546	A	0.551	A	0.005	No
		PM	0.591	A	0.597	A	0.006	No
10	Normandie Ave & Wilshire Blvd	AM	0.634	B	0.647	B	0.013	No
		PM	0.685	B	0.704	C	0.019	No
11	Irolo St & 7th St	AM	0.522	A	0.525	A	0.003	No
		PM	0.563	A	0.577	A	0.014	No
12	Irolo St & 8th St	AM	0.701	C	0.704	C	0.003	No
		PM	0.706	C	0.714	C	0.008	No
13	Normandie Ave & Olympic Blvd	AM	0.637	B	0.639	B	0.002	No
		PM	0.767	C	0.771	C	0.004	No
14	Vermont Ave & Wilshire Blvd	AM	0.850	D	0.858	D	0.008	No
		PM	0.804	D	0.813	D	0.009	No
15	Vermont Ave & 8th St	AM	0.648	B	0.650	B	0.002	No
		PM	0.659	B	0.662	B	0.003	No
16	Vermont Ave & 6th St	AM	0.675	B	0.679	B	0.004	No
		AM	0.643	B	0.645	B	0.002	No
17	Virgil Ave & Wilshire Blvd	AM	0.572	A	0.574	A	0.002	No
		AM	0.562	A	0.569	A	0.007	No



FUTURE PLUS PROJECT IMPACT ANALYSIS

FUTURE BASE TRAFFIC CONDITIONS

The year 2023 Future Base peak hour traffic volumes were analyzed to determine the projected V/C ratio and LOS for each of the analyzed intersections. Table 7 summarizes the future LOS. Ten of the 17 signalized intersections analyzed for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours under Future Base conditions. The following five intersections are projected to operate at LOS E or worse during one or both of the peak hours under Future Base conditions:

1. Western Avenue & Wilshire Boulevard (LOS F during AM and LOS E during PM)
10. Normandie Avenue & Wilshire Boulevard (LOS C during AM and LOS E during PM)
12. Irolo Street & 8th Street (LOS E during AM and PM)
13. Normandie Avenue & Olympic Boulevard (LOS C during AM and LOS E during PM)
14. Vermont Avenue & Wilshire Boulevard (LOS F during AM and PM)

FUTURE PLUS PROJECT TRAFFIC CONDITIONS

The resulting Future (year 2023) plus Project peak hour traffic volumes, provided in Appendix B, were analyzed to determine the projected future operating conditions with the addition of the proposed project traffic. The results of the Future (year 2023) plus Project analysis are also presented in Table 7, with analysis sheets provided in Appendix D. Ten of the 17 signalized intersections analyzed for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours under Future (year 2023) plus Project conditions. The following five intersections are projected to operate at LOS E or worse during one or both of the peak hours under Future (year 2023) plus Project conditions:

1. Western Avenue & Wilshire Boulevard (LOS F during AM and PM)
10. Normandie Avenue & Wilshire Boulevard (LOS C during AM and LOS E during PM)
12. Irolo Street & 8th Street (LOS E during AM and PM)
13. Normandie Avenue & Olympic Boulevard (LOS C during AM and LOS E during PM)
14. Vermont Avenue & Wilshire Boulevard (LOS F during AM and PM)

FUTURE (YEAR 2023) PLUS PROJECT INTERSECTION IMPACTS

As shown in Table 7, using the criteria for determination of significant impacts, it is determined that the proposed Project would result in significant impacts at four intersections under Future (year 2023) plus Project conditions:

7. Kingsley Drive & Wilshire Boulevard (PM peak hour)
10. Normandie Avenue & Wilshire Boulevard (PM peak hour)
12. Irolo Street & 8th Street (PM peak hour)
14. Vermont Avenue & Wilshire Boulevard (PM peak hour)



TABLE 7
3600 WILSHIRE PROJECT
FUTURE YEAR (2023) PLUS PROJECT INTERSECTION LEVELS OF SERVICE AND IMPACT ANALYSIS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2023)		FUTURE (2023) + PROJECT		V/C INCREASE	SIGNIFICANT IMPACT?
			V/C	LOS	V/C	LOS		
1	Western Ave & Wilshire Blvd	AM	1.012	F	1.021	F	0.009	No
		PM	0.999	E	1.008	F	0.009	No
2	Western Ave & 8th St	AM	0.727	C	0.734	C	0.007	No
		PM	0.856	D	0.871	D	0.015	No
3	Harvard Blvd & 6th St	AM	0.527	A	0.535	A	0.008	No
		PM	0.691	B	0.709	C	0.018	No
4	Harvard Blvd & Wilshire Blvd	AM	0.621	B	0.647	B	0.026	No
		PM	0.697	B	0.735	C	0.038	No
5	Harvard Blvd & 8th St	AM	0.554	A	0.568	A	0.014	No
		PM	0.709	C	0.743	C	0.034	No
6	Kingsley Dr & 6th St	AM	0.561	A	0.569	A	0.008	No
		PM	0.648	B	0.663	B	0.015	No
7	Kingsley Dr & Wilshire Blvd	AM	0.664	B	0.690	B	0.026	No
		PM	0.702	C	0.743	C	0.041	Yes
8	Normandie Ave & 3rd St	AM	0.755	C	0.757	C	0.002	No
		PM	0.776	C	0.779	C	0.003	No
9	Normandie Ave & 6th St	AM	0.679	B	0.683	B	0.004	No
		PM	0.679	B	0.685	B	0.006	No
10	Normandie Ave & Wilshire Blvd	AM	0.784	C	0.795	C	0.011	No
		PM	0.923	E	0.942	E	0.019	Yes
11	Irolo St & 7th St	AM	0.615	B	0.618	B	0.003	No
		PM	0.693	B	0.708	C	0.015	No
12	Irolo St & 8th St	AM	0.937	E	0.941	E	0.004	No
		PM	0.966	E	0.981	E	0.015	Yes
13	Normandie Ave & Olympic Blvd	AM	0.768	C	0.770	C	0.002	No
		PM	0.947	E	0.950	E	0.003	No
14	Vermont Ave & Wilshire Blvd	AM	1.077	F	1.085	F	0.008	No
		PM	1.016	F	1.030	F	0.014	Yes
15	Vermont Ave & 8th St	AM	0.860	D	0.863	D	0.003	No
		PM	0.876	D	0.881	D	0.005	No
16	Vermont Ave & 6th St	AM	0.833	D	0.838	D	0.005	No
		AM	0.793	C	0.795	C	0.002	No
17	Virgil Ave & Wilshire Blvd	AM	0.711	C	0.712	C	0.001	No
		AM	0.713	C	0.720	C	0.007	No

UNSIGNALIZED INTERSECTION SIGNAL WARRANT ANALYSIS

Two intersections near the project site are currently unsignalized, Harvard Boulevard & 7th Street and Kingsley Drive & 7th Street. The City of Los Angeles traffic analysis methodology and significance criteria are for signalized intersections only. The City does not provide impact thresholds for unsignalized intersections. Rather, *Traffic Study Policies & Procedures* states that “unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device.”

Traffic volumes and lane configurations, as presented in Appendix B, were used to prepare the signal warrant analysis at the Harvard Boulevard & 7th Street and Kingsley Drive & 7th Street unsignalized intersections under Existing, Existing plus Project, Future Base, and Future plus Project conditions. As shown in Table 8, the volumes at the Harvard Boulevard & 7th Street intersection met the signal warrant thresholds during the PM peak hour under all analysis scenarios. The volumes at the Kingsley Drive & 7th Street intersection met the signal warrant thresholds during the PM peak hour under all analysis scenarios, except existing conditions. Analysis sheets are provided in Appendix F.

Should LADOT find that the City would prefer to install traffic signals at either of these locations, the project would be responsible for a fair share contribution to the costs of the signal installation.

MITIGATION MEASURES

This section describes the proposed transportation mitigation program for the Project and evaluates effectiveness of the program in mitigating the significant project impacts described in the previous section. The mitigation program has been developed in discussions with LADOT, which has approved the approaches, analysis methods, and assumptions used to complete this analysis.

MITIGATION PROGRAM ELEMENTS

The mitigation program for the Project includes the following major components:

- Travel Demand Management (TDM) program
- Intersection signal equipment modifications

TRANSPORTATION DEMAND MANAGEMENT PLAN

A TDM program will be implemented as part of the mitigation package for the Project. Several TDM program elements are project features proposed for implementation. Other TDM program elements would be developed in the preparation of a detailed TDM plan, to be approved by LADOT prior to approval of a final certificate of occupancy for the Project.

Several project design features would be expected to enhance the usage of walking, biking, and transit modes as alternatives to the automobile, including:



TABLE 8
3600 WILSHIRE PROJECT
PEAK HOUR SIGNAL WARRANT ANALYSIS

No.	INTERSECTIONS	PEAK HOUR	EXISTING SIGNAL WARRANT MET	EXISTING PLUS PROJECT SIGNAL WARRANT MET	FUTURE SIGNAL WARRANT MET	FUTURE PLUS PROJECT SIGNAL WARRANT MET
A	Harvard Blvd & 7th St	AM	No	No	No	No
		PM	Yes	Yes	Yes	Yes
B	Kingsley Dr & 7th Street	AM	No	No	No	No
		PM	No	Yes	Yes	Yes

- Wide sidewalks
- Street trees along the perimeter
- Improved street and pedestrian lighting

Additional TDM program elements could include unbundled parking, rideshare programs and discounted transit passes, although the exact measures to be implemented will be determined when the plan is prepared, prior to the issuance of a final certificate of occupancy for the Project.

- Unbundled Parking – Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. The research literature shows that unbundled parking costs can reduce VMT by up to 13% (CAPCOA, 2010).
- Rideshare Programs – Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. The research literature shows that rideshare programs can reduce commuting VMT by up to 15% (CAPCOA, 2010).
- Transit Pass Discount Program – Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk, and therefore at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. The research literature shows that discounted transit passes can reduce commuting VMT by up to 20% (CAPCOA, 2010).
- Bicycle Parking and Bike Share Program – As described in Chapter 7, the Project will provide both long-term and short-term bicycle parking as well as bicycle showers and lockers for employees per the Los Angeles Municipal Code (LAMC). In addition, the Project could provide complementary amenities such as a self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the site.
- Car Share Program – The Project could allow space for a car share service within its proposed parking facilities. A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day.
- Upgrade to Transit Amenities – The Project, in conjunction with Los Angeles Metropolitan Transportation Authority and LADOT, could identify nearby bus-stops to upgrade stop locations to further encourage the use of transit in the area.

The TDM+ tool developed by Fehr & Peers was used to quantify the potential trip reduction for the Project due to implementation of these TDM measures. The TDM+ tool is based on research conducted by Fehr & Peers under contract to the California Air Pollution Control Officers Association (CAPCOA) and



elsewhere. It considers a variety of TDM strategies and the setting in which they may apply, estimates effectiveness for each, and applies caps when appropriate (for example, simply aggregating the effectiveness of individual TDM measures can sometimes yield a result that is overblown since more than one measure may be targeting the same trip). With the TDM+ tool, it was estimated that a net overall reduction in trips of approximately 10% could be achieved. The results of the TDM+ tool are presented in Appendix G.

Upon discussion with LADOT, a 5% TDM credit was applied to the residential trip generation estimates for the Project. The mitigated trip generation estimate for the Project are presented in Table 9. Appendix B shows the turning movement volumes for the TDM-mitigated Future plus Project scenario.

SIGNAL EQUIPMENT UPGRADES

The Project will upgrade traffic signal CCTV equipment at the following study intersections:

- 9. Normandie Avenue & 6th Street
- 10. Normandie Avenue & Wilshire Boulevard
- 14. Vermont Avenue & Wilshire Boulevard

Lastly, the Project will also contribute to 50% of the costs for updating a fiber optic line along Wilshire Boulevard from Van Ness Avenue to Alexandria Avenue and on Normandie Avenue from 6th Street to Wilshire Boulevard.

These improvements will enhance LADOT's ability to monitor traffic flows and adjust signal timing adaptively, thus providing more efficient traffic flows and systemwide benefits. LADOT has determined that the traffic system management improvements described above would increase intersection capacity in the system and that a 0.01 credit can be taken for the impacted intersections. Table 10 shows LOS and significant impact analysis results after implementation of the aforementioned mitigation measures under Existing and Future plus Project conditions. After applying the aforementioned mitigations, all intersections would no longer be impacted with the Project.



**TABLE 9
3600 WILSHIRE PROJECT
TDM MITIGATION TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Estimated Trip Generation						
			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour Trips			PM Peak Hour Trips		
				Rate	In%	Out%	Rate	In%	Out%		In	Out	Total	In	Out	Total
PROPOSED PROJECT																
Retail	820	6.359 ksf	42.70	0.96	62%	38%	3.71	48%	52%	272	4	2	6	12	12	24
Less: Internal Capture [b]			15%		15%	15%		15%	15%	(41)	(1)	0	(1)	(2)	(2)	(4)
Less: Transit Credit [c]			15%	15%			15%			(35)	0	0	0	(2)	(2)	(4)
Less: Walk/Bike Credit			10%	10%			10%			(19)	0	0	0	0	0	0
Total Driveway Trips										177	3	2	5	8	8	16
Less: Pass-by [d]			50%	50%			50%			(88)	(1)	(1)	(2)	(4)	(4)	(8)
Net External Vehicle Trips										89	2	1	3	4	4	8
Residential Apartments [e]	220	760 DU	6.65	0.51	20%	80%	0.62	65%	35%	5,054	78	310	388	306	165	471
Internal Capture [b]			15%		15%	15%		15%	15%	(758)	(12)	(47)	(59)	(46)	(25)	(71)
Less: Transit Credit [c]			15%	15%			15%			(644)	(10)	(39)	(49)	(39)	(21)	(60)
Less: Walk/Bike Credit			10%	10%			10%			(365)	(5)	(22)	(27)	(22)	(11)	(33)
Total Driveway Trips										3,287	51	202	253	199	108	307
Less: TDM Credit			5%	5%			5%			(164)	(3)	(10)	(13)	(10)	(5)	(15)
Net External Vehicle Trips										3,123	48	192	240	189	103	292
PROJECT EXTERNAL VEHICLE TRIPS										3,212	50	193	243	193	107	300
Office Space Internalization [f]										69	6	1	7	1	5	6
TOTAL DRIVEWAY TRIPS										7,080	362	296	658	352	417	769
NET INCREMENTAL EXTERNAL TRIPS										3,143	44	192	236	192	102	294

Notes:

[a] Source: Institute of Transportation Engineers (ITE), *Trip Generation*, 9th Edition, 2012

[b] Internal capture represents the percentage of trips between land uses that occur within the site. Main Street model calibration of base ITE rates reflecting project & site specific characteristics.

[c] The transit credit is based on LADOT's *Traffic Study Policies and Procedures*, August 2014. The guidelines state that up to 15% transit credit may be taken for projects within 1/4 mile walking distance of a transit station, or of a RapidBus stop. The nearest transit station is the Wilshire/Normandie Purple Line station within 1/4 mile walking distance to the site.

[d] The pass-by credit is based on Attachment I of LADOT's *Traffic Study Policies and Procedures*, August 2014.

[e] The residential apartment trip generation rate is higher than the condominium rates for daily, AM, and PM peak hours; therefore, the units may be either both apartments or condominiums.

[f] The addition of the project land uses on site creates internalization opportunities with the existing office space where these trips were otherwise necessary. The office space internalization credit accounts for these trips no longer leaving the site with the project.

TABLE 10
3600 WILSHIRE PROJECT
FUTURE YEAR (2023) PLUS PROJECT MITIGATIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2023)		FUTURE (2023) + PROJECT		V/C INCREASE	SIGNIFICANT IMPACT?	FUTURE + PROJECT WITH MITIGATION		V/C INCREASE	RESIDUAL IMPACT?
			V/C	LOS	V/C	LOS			V/C	LOS		
7 [a]	Kingsley Dr & Wilshire Blvd	AM	0.664	B	0.690	B	0.026	No	0.689	B	0.025	No
		PM	0.702	C	0.743	C	0.041	Yes	0.741	C	0.039	No
10	Normandie Ave & Wilshire Blvd	AM	0.784	C	0.795	C	0.011	No	0.785	1	0.001	No
		PM	0.923	E	0.942	E	0.019	Yes	0.931	1	0.008	No
12	Irolo St & 8th St	AM	0.937	E	0.941	E	0.004	No	0.931	1	-0.006	No
		PM	0.966	E	0.981	E	0.015	Yes	0.970	1	0.004	No
14	Vermont Ave & Wilshire Blvd	AM	1.077	F	1.085	F	0.008	No	1.075	1	-0.002	No
		PM	1.016	F	1.030	F	0.014	Yes	1.019	1	0.003	No

Notes:

[a] Kingley Dr & Wilshire Blvd intersection was mitigated only by the 5% TDM credit without the need of the 1% intersection capacity reduction.

5. NEIGHBORHOOD TRAFFIC IMPACT ANALYSIS

This chapter presents the results of an analysis conducted regarding the potential for project impacts on local residential streets in neighborhoods near the Project. The analysis was conducted on two residential street segments to the south of 7th Street and the project site on Harvard Boulevard and Kingsley Drive. These streets were selected in conjunction with the City of Los Angeles, as they were determined to have a greater likelihood of neighborhood cut-through traffic from the Project. The significance of potential impacts was assessed using criteria established by the City of Los Angeles.

24-hour machine counts were conducted on the two analyzed street segments in March 2016. Future daily traffic volumes were projected in a manner similar to the peak hour analysis of the study intersections, including both ambient growth at 1% per year as well as anticipated traffic from cumulative projects that could be constructed by 2023. The net new project trips were assigned to the street network based on the project trip distribution pattern presented in Chapter 3 and were added to the Future Base projection to obtain Future plus Project projections.

NEIGHBORHOOD STREET IMPACTS

Under the City of Los Angeles guidelines, a project impact on a local residential street would be considered significant if the new commercial trips generated by the project result in increases in average daily traffic (ADT) volumes as follows:

Projected ADT with Project (Final ADT)	Project-Related Increase in ADT
0 to 999	120 or more
1,000 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or more	8% or more of final ADT

Daily traffic volumes for the existing and projected future conditions are summarized in Tables 11 to 12. As shown, the proposed Project would not result in a significant impact at any of the study neighborhood street segments.



TABLE 11
3600 WILSHIRE PROJECT
NEIGHBORHOOD STREET IMPACT ANALYSIS - EXISTING PLUS PROJECT ANALYSIS

Street Segment	Weekday Two Way Daily	With Project Impact Analysis				
	Existing Base	Commercial Project Only	Existing plus Project	Project % Increase	Impact Criteria [a]	Significant Impact?
Harvard Blvd south of 7th Street	7,494	22	7,516	0.3%	8%	NO
Kingsley Dr south of 7th Street	3,877	negligible	3,877	0.0%	8%	NO

Notes:

[a] Uses City of Los Angeles impact criteria for residential street segments.

TABLE 12
3600 WILSHIRE PROJECT
NEIGHBORHOOD STREET IMPACT ANALYSIS - CUMULATIVE PLUS PROJECT ANALYSIS

Street Segment	Weekday Two-Way Daily Volume		With Project Impact Analysis				
	Existing Base	Future Year (2023)	Commercial Project Only	Future plus Project	Project % Increase	Impact Criteria [a]	Significant Impact?
Harvard Blvd south of 7th Street	7,494	8,425	22	8,447	0.3%	8%	NO
Kingsley Dr south of 7th Street	3,877	4,343	negligible	4,343	0.0%	8%	NO

Notes:

[a] Uses City of Los Angeles impact criteria for residential street segments.

6. SITE ACCESS

The proposed Project would have four driveways:

- Two full-access driveways on Harvard Boulevard
- Two full-access driveways on Kingsley Drive

The loading areas for the commercial uses will be located off Harvard Boulevard and the residential loading area will be located off Kingsley Drive.

LEVEL OF SERVICE ANALYSIS FOR PROJECT DRIVEWAYS

A level of service analysis was conducted to evaluate the ability of the project access plan to accommodate the anticipated traffic levels at the driveway access points.

The driveway locations below will be unsignalized and stop-controlled and were analyzed using the 2-way Stop methodology from the HCM. The HCM methodology determines the average vehicle delay for the stop-controlled approach to find the corresponding LOS based on the definitions presented in Table 2B. Driveway analysis LOS worksheets are included in Appendix D. Table 13 shows the results of the LOS analysis at the unsignalized driveways.

TABLE 13 – DRIVEWAY SERVICE AND IMPACT ANALYSIS

Driveway Location	Peak Hour	Existing plus Project (2016)		Future plus Project (2023)	
		Delay (seconds)	LOS	Delay (seconds)	LOS
Harvard Boulevard Northern Driveway	AM	12.4	B	12.7	B
	PM	17.5	C	18.5	C
Kingsley Drive Northern Driveway	AM	14.6	B	15.1	C
	PM	18.8	C	20.1	C
Kingsley Drive Southern Driveway	AM	14.1	B	14.6	B
	PM	17.8	C	19.0	C
Harvard Boulevard Southern Driveway	AM	12.0	B	12.5	B
	PM	16.3	C	17.6	C

As shown, the driveways are projected to operate at acceptable LOS (LOS C or better) under Existing plus Project (2016) and Future plus Project (2023) conditions.



7. PARKING

This section presents the analysis of the Project's parking requirements using the City of Los Angeles' municipal parking code.

PARKING REQUIRED PER CITY CODE

The LAMC contains a series of provisions affecting the required parking supply for the 3600 Wilshire Project. Although the Project will be constructing condominium units, as opposed to apartment units, the Project is applying for deviation from the condominium parking policy and is requesting to provide parking in accordance with the LAMC for apartment units. The applicable LAMC code requirements are as follows:

- LAMC Section 12.21A4, which establishes the basic ratios for required vehicle parking spaces for various land uses. The Project is located in the Wilshire Center/Koreatown Recovery Area per LAMC Section 12.21A.4(x), as such, the Project qualifies to use two spaces for every 1,000 square feet of combined gross floor area of commercial office, business, retail, restaurant, bar and related uses, trade schools, or research and development buildings. For residential apartments the Wilshire Center/Koreatown Recovery Area, the LAMC allows for one space per studio unit, 1.5 spaces per 1-bedroom unit, and two spaces per 2-bedroom units.
- LAMC Section 12.21A16, which implements the City's Ordinance No. 182386 by establishing minimum requirements for bicycle parking spaces. It also permits reductions in the required number of vehicle spaces at a ratio of one vehicle space reduced for every four bicycle spaces provided, up to a maximum of 15% of the required vehicle spaces for residential uses and 30% of the required vehicle spaces for non-residential uses within 1,500 feet of a portal to a fixed-rail transit station.

Table 14A summarizes the basic vehicle parking requirement for the project per LAMC, using the code requirement for apartments for the residential component of the project. As shown in Table 14A, the basic code requirement for the new uses is for 1,163 vehicle spaces. The certificate of occupancy for the existing office building requires 770 spaces that will be replaced in the Project, for a total of 1,933 vehicle spaces. Table 14B summarizes the bicycle parking requirement for the 3600 Wilshire Project per LAMC Section 12.21A16. As shown in the table, the Project would be required to provide a minimum of 842 bicycle parking spaces (79 short-term and 763 long-term) for the new uses. As indicated in the table, the number of required vehicle spaces could be reduced by 175 spaces for the new uses, reducing the required vehicle parking spaces for the new uses from 1,163 to 988.

However, the Project will also supply an additional 710 bicycle parking spaces beyond the code requirement. As indicated in Table 14C, the number of required vehicle spaces could be reduced by 178 spaces for the additional bicycle spaces. Combining the new uses and office space requirements, the total required vehicle spaces would be 1,580 spaces with the vehicle parking space reduction permitted due to the provision of the bicycle parking spaces.



TABLE 14A 3600 WILSHIRE PROJECT VEHICLE PARKING SPACES REQUIRED BY CITY CODE BASED ON APARTMENTS			
Land Use	Size	Vehicle Parking Ratio [a]	Required Vehicle Spaces
Apartment	133 studio	1 spaces per unit	133
	475 1-bdrm	1.5 spaces per unit	713
	152 2-bdrm	2 spaces per unit	304
	760 units		1,150
Retail [b]	6.359 ksf	2 spaces per ksf	13
Project Total			1,163
Existing Office	385,520 ksf	[d]	770
Project Site Total			1,933

TABLE 14B 3600 WILSHIRE PROJECT BICYCLE PARKING SPACES REQUIRED BY CITY CODE						
Land Use	Size	Short-Term Bicycle Parking		Long-Term Bicycle Parking		Total
		Bicycle Parking Ratio [c]	Required Bicycle Spaces	Bicycle Parking Ratio [c]	Required Bicycle Spaces	Required Bicycle Spaces
Apartment	760 units	1 per 10 du	76	1 per 1 du	760	836
Retail	6.359 ksf	1 per 2,000 sf	3	1 per 2,000 sf	3	6
Project Total			79		763	842

TABLE 14C 3600 WILSHIRE PROJECT POTENTIAL REDUCTION IN VEHICLE SPACES DUE TO BICYCLE SPACES					
Land Use	Reduction Potential at 1 per 4 Bicycle Spaces	Max. % Reduction of Vehicle Spaces [c]	Max. Reduction Based on Vehicle Spaces	Capped # (Lower of Reduction Potential or Max. %)	Code Required Vehicle Spaces With Reduction
Apartment	209	15%	173	173	977
Retail	2	30%	4	2	11
Project Total	211		177	175	988
Existing Office Building Parking					770
Project Site Total with Office Parking					1,758

Additional Bike Parking Beyond Code Requirement				710
Total Bike Spaces				1,552

Provision of Additional Bike Spaces	178	30%	349	178	1,580
Project Site Total with Additional Bicycle Reduction					1,580

Notes:

[a] Source: City of Los Angeles Municipal Code, Section 12.21A.4.

[b] Project site is located in the Wilshire Center/Koreatown Recovery Area. As such, reduced parking rates of 2 spaces per 1,000 sf of commercial space applies.

[c] Source: City of Los Angeles Municipal Code, Section 12.21A.16.

[d] 770 spaces are required for the existing office building, per its Certificate of Occupancy dated April 18, 1962.

8. CONSTRUCTION PERIOD IMPACT ANALYSIS

CONSTRUCTION IMPACT CRITERIA

LADOT generally considers construction-related traffic to cause adverse but not significant impacts because, while sometimes inconvenient, construction-related traffic effects are temporary. LADOT requires implementation of worksite traffic control plans to ensure that any construction-related effects are minimized to the greatest extent possible.

The LA CEQA Thresholds Guide provides four categories to be considered in regards to in-street construction impacts: temporary traffic impacts, temporary loss of access, temporary loss of bus stops or rerouting of bus lines, and temporary loss of on-street parking (LA CEQA Threshold Guide, pages L.8-2 through L.8-4). The factors to be considered in each of these categories as established in the LA CEQA Threshold Guide are as follows:

- Temporary Traffic Impacts:
 - The length of time of temporary street closures or closures of two or more traffic lanes;
 - The classification of the street (major arterial, state highway) affected;
 - The existing traffic levels and LOS on the affected street segments and intersections;
 - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
 - Potential safety issues involved with street or lane closures;
 - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary Loss of Access:
 - The length of time of any loss of vehicular or pedestrian access to a parcel fronting the construction area;
 - The availability of alternative vehicular or pedestrian access within ¼ mile of the lost access;
 - The type of land uses affected, and related safety, convenience, and/or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
 - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
 - The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated;
 - The existence of other bus stops or routes with similar routes/destinations within a ¼ mile radius of the affected stops or routes;
 - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).
- Temporary Loss of On-Street Parking:
 - The current utilization of existing on-street parking;
 - The availability of alternative parking locations or public transit options (e.g. bus, train) within ¼ mile of the project site;
 - The length of time that existing parking spaces would be unavailable.



It should be noted, however, that SB 743 as implemented in California Public Resources Code Section 21099 provides that parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. This guidance supersedes the significance guidance in the *LA CEQA Threshold Guide*.

The LAMC provides that construction activities are limited to the hours from 7:00 AM to 9:00 PM on weekdays and from 8:00 AM to 6:00 PM on Saturdays and holidays. No construction is permitted on Sundays.

CONSTRUCTION TRAFFIC

Construction of the Project is anticipated to begin in September 2017 and will be constructed in three phases:

- Phase I – Main parking structure (September 2017 – September 2018)
- Phase II – South Tower construction with parking under tower (September 2018 – 2020)
- Phase III – West Tower construction with parking under tower (September 2021 – 2023)

The total duration of construction at the site is expected to take a total of approximately 72 months, or 6 years, to complete. The construction for each phase is anticipated to involve two key stages: (1) demolition, off-site utilities, excavation; (2) structural concrete work, building framing and finishes, including rough framing, exterior skin, and interior unit finishes.

CONSTRUCTION TRUCKS

Haul Trucks

Hauling activity is expected to occur during the first stage, mostly during demolition. Up to 30 haul trucks per day are anticipated on peak haul days during Phase I and II. Haul trucks are not anticipated under Phase III.

Hauling hours are anticipated to be 7:00 AM to 5:00 PM. The haul route for the Project will most likely be westbound on 7th Street, to northbound on Western Avenue, to the US-101 Freeway to the Scholl Canyon Landfill. Trucks are expected to be staged off-site and dispatched to the project site as needed.

Equipment and Delivery Trucks

In addition to haul trucks, the site is expected to generate equipment and delivery trucks during each phase of construction. One example would be concrete delivery, which would be required for the parking garage and the buildings on-site. Other materials could include plumbing supplies, electrical fixtures, and items used in furnishing the buildings. These materials would be delivered to the site and stored on-site. These deliveries are expected to occur in variously sized vehicles including small delivery trucks to cement mixer trucks and 18-wheel trucks. Additionally, construction equipment would have to be delivered to the site. This equipment could include cranes, bulldozers, excavators, and other large items of machinery.



Most of the heavy equipment is expected to be transported to the site on large trucks such as 18-wheelers or other similar vehicles.

Minimal delivery/equipment trucks are expected to be needed under the demolition and site preparation stage of construction. During construction, Phase I is expected to generate up to 10 equipment/delivery trucks per day on peak activity days and Phases II and III are expected to generate up to 20 equipment/delivery trucks per day on peak activity days.

CONSTRUCTION EMPLOYEES

The number of construction workers would vary throughout the construction period with the construction stages generating the highest number of trips. During the construction of the parking structure under Phase I, the demolition and off-site utilities is expected to involve a total of 15 workers on site daily, and the concrete work will involve up to approximately 50 workers on a peak day. During the construction of the South Tower and parking structure under Phase II, the demolition and off-site utilities is expected to involve a total of 15 workers on site daily, and the concrete and building construction stage will involve up to approximately 173 workers on a peak day. During the construction of the West Tower and parking structure under Phase III, the demolition and off-site utilities is expected to involve a total of 15 workers on site daily, and the concrete and building construction stage will involve up to approximately 173 workers on a peak day.

CONSTRUCTION WORKER PARKING

Phase I requires the partial demolition of the existing parking garage. After demolition, approximately 250 spaces will remain in the existing parking garage that will be primarily used by the existing commercial building. In addition, 350 parking spaces will be borrowed from the building directly to the east located at 3550 Wilshire Boulevard for approximately one year until Phase I is completed to serve the existing building. The total available parking supply to the site would be approximately 600 spaces during the construction of Phase I.

Parking utilization counts collected on April 5, 2016 revealed the peak parking demand occurs at 3:00 PM with a peak demand of 549 spaces of 816 spaces currently provided. Appendix H displays the parking utilization information. This reflects a utilization of 67% of the existing parking supply. The temporary supply under Phase I construction is anticipated to provide sufficient parking for the existing commercial building throughout construction. If additional parking supply is needed, there are other parking structures nearby for users to park.

When Phase I is completed, 1,131 parking spaces will be provided on site. During all phases of construction, construction workers are anticipated to park in the existing parking structure on site, in the building directly to the east, 3550 Wilshire Boulevard, or in another parking lot near the site.



CONSTRUCTION IMPACT ASSESSMENT

LA CEQA Thresholds Guide provides four categories to be considered in regards to in-street construction impacts: temporary traffic impacts, temporary loss of access, temporary loss of bus stops or rerouting of bus lines, and temporary loss of on-street parking (*LA CEQA Threshold Guide*, pages L.8-2 through L.8-4). The factors to be considered in each of these categories, and the assessment of the Project against these factors, is presented in Table 15 and discussed below.

TEMPORARY TRAFFIC IMPACTS

Full-time closures to the parking lane are anticipated for the Project along the northern side of 7th Street. Parking is permitted on both sides of 7th Street. Since the closures during construction would be for the parking lane and not a travel lane, the temporary construction impacts on the roadway network would be considered less than significant.

The sidewalks along Harvard Boulevard, Kingsley Drive, and Wilshire Boulevard fronting the project construction site will be open during construction. However, the sidewalk on 7th Street will be closed for the duration of construction. The sidewalk on the south side of 7th Street will be open and pedestrians are anticipated to use this as a detour throughout construction. As such, the temporary impacts to pedestrians during construction would be less than significant.

7th Street is designated as an Avenue II with one travel lane in each direction. In addition, there are no emergency services in the immediate vicinity of the affected streets. The intersections of Harvard Boulevard & Wilshire Boulevard and Kingsley Drive & Wilshire Boulevard operate at LOS A during both peak hours under existing conditions, and would operate at LOS B or LOS C during the peak hours under cumulative conditions. Worksite traffic control plans would be prepared for any temporary vehicle lane, bicycle lane, or sidewalk closures in accordance with applicable City and MUTCD guidelines.

TEMPORARY LOSS OF ACCESS

The existing office building located directly north of the construction site will remain open throughout construction. In addition, a portion of the parking garage will remain open during construction and will partially provide parking for both the office building tenants and the construction workers. The parking structure at 3550 Wilshire Boulevard will also provide supplemental parking supply throughout construction. Pedestrian and vehicular access to properties located to the east and west of the project site will be open and unobstructed for the duration of construction. During each phase of construction, access to the other phases of the Project will be maintained. Since the Project's construction would not block any vehicle or pedestrian access to other parcels fronting the construction area, impacts would be less than significant.



TABLE 15
3600 WILSHIRE PROJECT
CONSTRUCTION IMPACT SIGNIFICANCE FACTORS

Significance Factor [a]	Assessment	Conclusion
Per the LA CEQA Thresholds Guide , the determination of significance shall be made on a case-by-case basis, considering the following factors:		
Temporary Traffic Impacts:		
<ul style="list-style-type: none"> • The length of time of temporary street closures or closures of two or more traffic lanes; • The classification of the street (major arterial, state highway) affected; • The existing traffic levels and level of service (LOS) on the affected street segments and intersections; • Whether the affected street directly leads to a freeway on- or off-ramp or other state highway; • Potential safety issues involved with street or lane closures; • The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street. 	<ul style="list-style-type: none"> • Temporary street closures or closures of two or more traffic lanes are not anticipated. • The street affected by temporary parking lane or sidewalk closures (7th Street) is an Arterial II. • The Harvard/Wilshire and Kingsley/Wilshire intersections currently operates at LOS A during both peak periods. Harvard/Wilshire operates at LOS B during both peak periods under cumulative. Kingsley/Wilshire operates at LOS B (AM) and LOS C (PM) under cumulative. • None of the affected streets directly lead to a freeway on- or off-ramp or other state highways. • Worksite traffic control plans would be prepared for any temporary lane closures in accordance with applicable City and MUTCD guidelines. • There are no emergency services located within the immediate vicinity of the affected streets. 	<ul style="list-style-type: none"> • Less than significant.
Temporary Loss of Access:		
<ul style="list-style-type: none"> • The length of time of any loss of vehicular or pedestrian access to a parcel fronting the construction area; • The availability of alternative vehicular or pedestrian access within ¼ mile of the lost access; • The type of land uses affected, and related safety, convenience, and/or economic issues. 	<ul style="list-style-type: none"> • Blockage of existing vehicle or pedestrian access to parcels fronting the construction area is not anticipated. Access to the office building and parking structure will remain throughout construction. 	<ul style="list-style-type: none"> • Less than significant.
Temporary Loss of Bus Stops or Rerouting of Bus Lines:		
<ul style="list-style-type: none"> • The length of time that an existing bus stop would be unavailable or that existing service would be interrupted; • The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated; • The existence of other bus stops or routes with similar routes/ destinations within a ¼mile radius of the affected stops or routes; • Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s). 	<ul style="list-style-type: none"> • There are no bus stops along the 7th Street along the project frontage. There is one bus lane on the south side of Wilshire Boulevard. As lane closures are not anticipated along Wilshire Boulevard, project construction would not require blockage of the bus lane. 	<ul style="list-style-type: none"> • Less than significant.
Temporary Loss of On-Street Parking:		
<ul style="list-style-type: none"> • The current utilization of existing on-street parking; • The availability of alternative parking locations or public transit options (e.g. bus, train) within ¼ mile of the project site; • The length of time that existing parking spaces would be unavailable. 	<ul style="list-style-type: none"> • The Project could require temporary removal of on-street parking spaces along the Project frontage on 7th Street to accommodate temporary truck staging or travel lanes. Approximately 9 metered spaces would be removed for the entire duration of construction, 72 months. • Public transit options are available within 1/4 mile of the Project site, including: Metro Purple Line Wilshire/Normandie Station and local bus routes on Wilshire, Irolo/Normandie, 3rd Street, 6th Street, 8th Street, and 9th Street. 	<ul style="list-style-type: none"> • Less than significant in accordance with SB 743/Public Resources Code Section 21099.
Note: SB 743 as implemented in California Public Resources Code Section 21099 provides that parking impacts of a residential, mixed- use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. This guidance supersedes the significance guidance in the LA CEQA Threshold Guide .		

TEMPORARY LOSS OF BUS STOPS OR REROUTING OF BUS LINES

Bus stops are not located along 7th Street where the parking lane closures would occur. A bus-only lane is located on the south side of Wilshire Boulevard adjacent to the project site and a bus stop is present directly west of Harvard Boulevard, but construction will not affect bus operations as there are no bus stops on Wilshire Boulevard along the project frontage, and closures along Wilshire Boulevard are not anticipated. Therefore, project construction would not require relocation of bus stops and the construction impacts on transit operations would be less than significant.

TEMPORARY LOSS OF ON-STREET PARKING

With the parking lane closure on 7th Street from Harvard Boulevard to Kingsley Drive, construction would require temporary removal of on-street parking spaces to accommodate the construction area footprint and/or temporary truck staging. Nine metered parking spaces would be removed on 7th Street, potentially for the entire duration of construction, 72 months. Numerous public transit options are available within ¼ mile of the project site. Also, per the provisions in the California Public Resources Code Section 21099, which implements SB 743, parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. As such, temporary parking impacts would be less than significant.

CONSTRUCTION PERIOD TRIP GENERATION

Based on the aforementioned information, a construction period trip generation analysis was conducted for each phase of construction to estimate daily, morning and evening peak hour passenger car equivalent (PCE) trips. Construction workers often travel to and from a worksite outside of the typical peak commute hours. For the purpose of the analysis, it was assumed that up to 40% of the construction workers will arrive during the peak morning commute hour and 40% will depart during the peak evening commute hour. Haul and delivery/equipment trucks were assumed to occur evening throughout the 11-hour construction day. A PCE factor of 2.5 was assumed for haul trucks assuming the use of double-belly trailer trucks and a PCE factor of 2.0 was used for delivery trucks.

Tables 16, 17, and 18 show a summary of construction period trip generation under each phase of construction. As shown in the tables, the peak construction activity day would occur during the construction stage of Phase II and Phase III towers. The maximum trip generation total to 431 daily PCE trips, of which 77 PCE trips would occur during each of the morning and evening peak hours.

At any given time, the peak construction activity is estimated to generate fewer daily and peak hour trips than are projected for the Project once it is completed and occupied (3,307 daily trips, 249 AM peak hour trips, and 309 PM peak hour trips, as shown in Table 4).

Although significant construction impacts are not anticipated, the influx of this material and equipment could create less than significant impacts on the adjacent roadway network based on the following considerations:



<p style="text-align: center;">TABLE 16 3600 WILSHIRE PROJECT PHASE I CONSTRUCTION PERIOD TRIP GENERATION</p>	
--	--

Peak Daily Activity Under Each Stage		
	Demolition & Site Preparation	Construction
Construction Workers	15	50
Passenger Car Equivalent (PCE) factor	1.0	1.0
Haul Trucks	30	1
Type of Trucks	Double-belly Trailer	Double-belly Trailer
Passenger Car Equivalent (PCE) factor	2.5	2.5
Delivery/Equipment Trucks	4	10
Type of Truck	Super 10s	Super 10s
Passenger Car Equivalent (PCE) factor	2.0	2.0

CONSTRUCTION PERIOD TRIP GENERATION

Phase	Daily PCE Trips [1]	Morning Peak Hour PCE Trips			Evening Peak Hour PCE Trips		
		In	Out	Total	In	Out	Total
Demolition & Site Preparation							
Construction Worker Trips[2]	30	6	0	6	0	6	6
Haul Truck Trips [3]	150	7	7	14	7	7	14
Delivery/Equipment Truck Trips [3]	16	1	1	2	1	1	2
Stage 1 Total	196	14	8	22	8	14	22
Construction							
Construction Worker Trips[2]	100	20	0	20	0	20	20
Haul Truck Trips [3]	5	0	0	0	0	0	0
Delivery/Equipment Truck Trips [3]	40	2	2	4	2	2	4
Stage 2 Total	145	22	2	24	2	22	24

PCE - Passenger car equivalent

Notes:

[1] - Daily trips were calculated by counting two trips, one inbound and one outbound trip for each vehicle

[2] - Up to 40% of the construction workers were assumed to arrive during the morning peak hour of adjacent street traffic. A total of up to 40% worker were assumed to depart during the evening peak hour.

[3] - Daily haul, delivery/equipment, and trash truck trips were assumed to occur evenly throughout an 11-hour construction day.

Therefore, the daily truck trips were divided by 11 hours to calculate morning and evening peak hour truck trips.

<p style="text-align: center;">TABLE 17 3600 WILSHIRE PROJECT PHASE II CONSTRUCTION PERIOD TRIP GENERATION</p>

Peak Daily Activity Under Each Stage		
	Demolition & Site Preparation	Construction
<i>Construction Workers</i>	15	173
Passenger Car Equivalent (PCE) factor	1.0	1.0
<i>Haul Trucks</i>	30	1
Type of Trucks	Double-belly Trailer	Double-belly Trailer
Passenger Car Equivalent (PCE) factor	2.5	2.5
<i>Delivery/Equipment Trucks</i>	4	20
Type of Truck	Super 10s	Super 10s
Passenger Car Equivalent (PCE) factor	2.0	2.0

CONSTRUCTION PERIOD TRIP GENERATION

Phase	Daily PCE Trips [1]	Morning Peak Hour PCE Trips			Evening Peak Hour PCE Trips		
		In	Out	Total	In	Out	Total
Demolition & Site Preparation							
Construction Worker Trips[2]	30	6	0	6	0	6	6
Haul Truck Trips [3]	150	7	7	14	7	7	14
Delivery/Equipment Truck Trips [3]	16	1	1	2	1	1	2
Stage 1 Total	196	14	8	22	8	14	22
Construction							
Construction Worker Trips[2]	346	69	0	69	0	69	69
Haul Truck Trips [3]	5	0	0	0	0	0	0
Delivery/Equipment Truck Trips [3]	80	4	4	8	4	4	8
Stage 2 Total	431	73	4	77	4	73	77

PCE - Passenger car equivalent

Notes:

[1] - Daily trips were calculated by counting two trips, one inbound and one outbound trip for each vehicle

[2] - Up to 40% of the construction workers were assumed to arrive during the morning peak hour of adjacent street traffic. A total of up to 40% worker were assumed to depart during the evening peak hour.

[3] - Daily haul, delivery/equipment, and trash truck trips were assumed to occur evenly throughout an 11-hour construction day.

Therefore, the daily truck trips were divided by 11 hours to calculate morning and evening peak hour truck trips.

<p style="text-align: center;">TABLE 18 3600 WILSHIRE PROJECT PHASE III CONSTRUCTION PERIOD TRIP GENERATION</p>
--

Peak Daily Activity Under Each Stage		
	Demolition & Site Preparation	Construction
Construction Workers	0	173
Passenger Car Equivalent (PCE) factor	1.0	1.0
Haul Trucks	0	1
Type of Trucks	Double-belly Trailer	Double-belly Trailer
Passenger Car Equivalent (PCE) factor	2.5	2.5
Delivery/Equipment Trucks	0	20
Type of Truck	Super 10s	Super 10s
Passenger Car Equivalent (PCE) factor	2.0	2.0

CONSTRUCTION PERIOD TRIP GENERATION

Phase	Daily PCE Trips [1]	Morning Peak Hour PCE Trips			Evening Peak Hour PCE Trips		
		In	Out	Total	In	Out	Total
Demolition & Site Preparation							
Construction Worker Trips[2]	0	0	0	0	0	0	0
Haul Truck Trips [3]	0	0	0	0	0	0	0
Delivery/Equipment Truck Trips [3]	0	0	0	0	0	0	0
Stage 1 Total	0	0	0	0	0	0	0
Construction							
Construction Worker Trips[2]	346	69	0	69	0	69	69
Haul Truck Trips [3]	5	0	0	0	0	0	0
Delivery/Equipment Truck Trips [3]	80	4	4	8	4	4	8
Stage 2 Total	431	73	4	77	4	73	77

PCE - Passenger car equivalent

Notes:

[1] - Daily trips were calculated by counting two trips, one inbound and one outbound trip for each vehicle

[2] - Up to 40% of the construction workers were assumed to arrive during the morning peak hour of adjacent street traffic. A total of up to 40% worker were assumed to depart during the evening peak hour.

[3] - Daily haul, delivery/equipment, and trash truck trips were assumed to occur evenly throughout an 11-hour construction day.

Therefore, the daily truck trips were divided by 11 hours to calculate morning and evening peak hour truck trips.

- There may be intermittent periods when large numbers of material deliveries are required, such as when concrete trucks will be needed for the parking garage and the buildings.
- Some of the materials and equipment could require the use of large trucks (18-wheelers), which could create additional congestion on the adjacent roadways.
- Delivery vehicles may need to park temporarily on adjacent roadways such as Harvard Boulevard, Kingsley Drive, and 7th Street as they deliver their items. Based on past experience, it is not uncommon for these types of deliveries to result in temporary lane closures.

CONSTRUCTION MITIGATION MEASURES

As shown in Table 15, impacts related to construction traffic were found to be less than significant. In addition, the peak construction activity will generate fewer daily and peak hour trips than are projected for the Project once it is completed and occupied. While mitigation measures are not required to mitigate significant impacts, to be conservative a Construction Traffic Management Plan and Construction Worker Parking Plan should be implemented.

A Construction Traffic Management Plan will be developed by the contractor and approved by the City of Los Angeles to alleviate construction period impacts, which may include but is not limited to the following measures:

- Provide off-site truck staging in a legal area furnished by the construction truck contractor. Anticipated truck access to the project site will be off 7th Street.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
- As parking lane and/or sidewalk closures are anticipated along 7th Street, worksite traffic control plan(s), approved by the City of Los Angeles, should be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
- Establish requirements for loading/unloading and storage of materials on the project site, where parking spaces would be encumbered, length of time traffic travel lanes can be encumbered, sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses and residences.
- Ensure that access will remain unobstructed for land uses in proximity to the project site during project construction.
- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the project site and neighboring businesses and residences.



A Construction Worker Parking Plan will also be developed by the contractor and approved by the City of Los Angeles to ensure that the parking location requirements for construction workers will be strictly enforced. These could include but are not limited to the following measures:

- During construction activities when construction worker parking cannot be accommodated on the project site, the plan shall identify alternate parking location(s) for construction workers and the method of transportation to and from the project site (if beyond walking distance) for approval by the City 30 days prior to commencement of construction.
- Provide all construction contractors with written information on where their workers and their subcontractors are permitted to park, and provide clear consequences to violators for failure to follow these regulations. This information will clearly state that no parking is permitted on residential streets.



9. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze the potential traffic impacts of the proposed development on the current site of 3600 Wilshire Boulevard. The following summarizes the results of this analysis:

- The Project as analyzed in this study involves the construction of 760 condominium units and 6,359 square feet of retail space. The existing office building on the project site will remain. The Project will demolish the existing parking structure and build six levels of parking, two levels underground and four levels aboveground. All users will have access to all driveways.
- The proposed Project is located on Wilshire Boulevard between Harvard Boulevard and Kingsley Drive. Inbound and outbound vehicular access will be provided by four separate driveways, two on Harvard Boulevard and two on Kingsley Drive. The loading areas for the commercial uses will be located off Harvard Boulevard and the residential loading area will be located off Kingsley Drive.
- The Project would generate an estimated net increase of 3,307 daily vehicle trips, including 249 trips during the AM peak hour and 309 trips during the PM peak hour.
- The LOS analysis for the existing plus project scenario determined that the Project would not result in significant impacts at study area intersections. The LOS analysis for the Future plus Project scenario determined that the project would result in significant impacts at study area intersections. After proposed mitigations, all impacts would be fully mitigated.
- The Project would not significantly impact the two neighborhood street segments analyzed.
- The Project is required to provide a total of 1,933 vehicle parking spaces using the basic code requirements for apartments and including replacement of the 770 spaces required for the existing office building. With the provision of 1,552 bicycle parking spaces, the required parking would be reduced to 1,580 vehicle spaces. If the Project is granted a variance from City of Los Angeles' condominium parking policy, the Project will meet the required vehicular and bicycle parking according to the LAMC for apartments.
- Impacts related to construction traffic were found to be less than significant. In addition, the peak construction activity will generate fewer daily and peak hour trips than are projected for the Project once it is completed and occupied. While mitigation measures are not required to mitigate significant impacts, to be conservative, a Construction Traffic Management Plan and Construction Worker Parking Plan should be implemented.



REFERENCES

2010 Highway Capacity Manual, Transportation Research Board, 2010.

City of Los Angeles Municipal Code

Enhancing Internal Trip Capture Estimation for Mixed-Use Developments NCHRP Report 684

Traffic Study Policies and Procedures, LADOT, August 2014.

Trip Generation, 9th Edition, ITE, 2012.

APPENDIX A:
LADOT MOU

TRAFFIC STUDY - MEMORANDUM OF UNDERSTANDING (MOU)

This MOU acknowledges that the traffic study for the following project will be prepared in accordance with the latest version of LADOT's Traffic Study Policies and Procedures:

Project Name: 3600 Wilshire

Project Address: 3600 Wilshire Boulevard, Los Angeles, CA 90010

Project Description: See Figure 1. Project includes 760 apartment units and 10,670 sf retail.

Geographic Distribution: N ___ % S ___ % E ___ % W ___ % See Figure 2.

Attach graphic illustrating project trip distribution percentages at the studied intersections

Trip Generation Rate(s): ITE 9th Edition / Other See Table 1.

Attach trip generation table with a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/out/totals), proposed trip credits, etc.

	<u>in</u>	<u>out</u>	<u>total</u>
AM Trips	<u>34</u>	<u>201</u>	<u>235</u>
PM Trips	<u>202</u>	<u>99</u>	<u>301</u>

Project Buildout Year: 2023

Ambient or CMP Growth Rate: 1 % Per Yr.

Related Projects: See Attached Table 2 and Figure 3.

Subject to Freeway Impact Analysis in addition to CMP Analysis: YES x NO (See Attachment A)
(freeway analysis screening filter should be included in this MOU; selecting "yes" implies that at least one criteria was satisfied)

Study Intersections: See Figure 2.

1. Western Ave & Wilshire Blvd	6. Kingsley Dr & 6 th St	11. Irolo St & 7 th St
2. Western Ave & 8 th St	7. Kingsley Dr & Wilshire Blvd	12. Irolo St & 8 th St
3. Harvard Blvd & 6 th St	8. Normandie Ave & 3 rd St	13. Normandie Ave & Olympic Blvd
4. Harvard Blvd & Wilshire Blvd	9. Normandie Ave & 6 th St	14. Vermont Ave & Wilshire Blvd
5. Harvard Blvd & 8 th St	10. Normandie Ave & Wilshire Blvd	15. Vermont Ave & 8 th St

Trip Credits: (Exact amount of credit subject to approval by LADOT)

	Yes	No
Transit Usage	X	
Transportation Demand Management		X
Existing Active Land Use	X	
Previous Land Use		X
Internal Trip	X	
Pass-By Trip	X	

Consultant

Name: Tom Gaul, Fehr & Peers

Address: 600 Wilshire, Suite 1050, Los Angeles, CA 90017

Phone No.: 213-261-3050

Approved by: 
Consultant's Representative

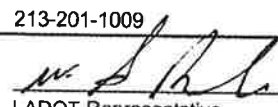
9/13/16
Date

Developer

Garrett Lee, Jamison Properties

3470 Wilshire Blvd, St 700, Los Angeles, CA 90010

213-201-1009


LADOT Representative

9-13-16
Date

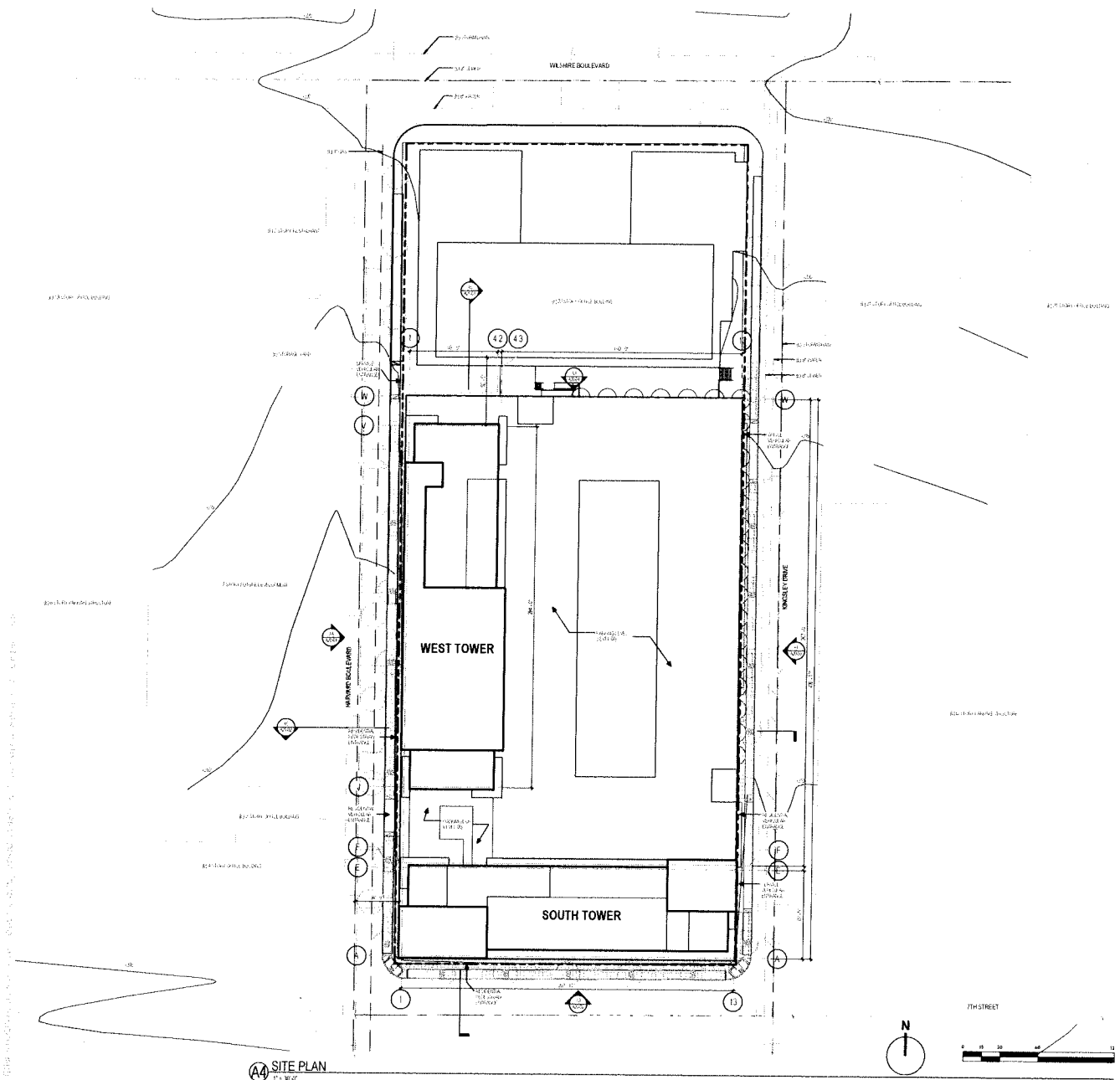


Figure 1
Site Plan



TABLE 1
3600 WILSHIRE PROJECT
TRIP GENERATION

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]				Estimated Trip Generation										
			AM Peak Hour		PM Peak Hour		Daily	AM Peak Hour Trips			PM Peak Hour Trips						
			Rate	In%	Out%	Rate		In%	Out%	In	Out	Total	In	Out	Total		
PROPOSED PROJECT																	
Retail	820	10,670 ksf	42.70	62%	38%	3.71	48%	456	6	4	10	19	21	40			
Less: Internal Capture [b]			15%	15%	15%		15%	(68)	(11)	(11)	(2)	(3)	(3)	(6)			
Less: Transit Credit [c]			15%			15%		(58)	(11)	0	(1)	(2)	(3)	(5)			
Less: Walk/Bike Credit			10%			10%		(33)	0	0	0	(1)	(1)	(2)			
Total Driveway Trips								297	4	3	7	13	14	27			
Less: Pass-by [d]			50%			50%		(148)	(2)	(11)	(3)	(6)	(2)	(8)			
Net External Vehicle Trips								149	2	2	4	7	7	14			
Residential Apartments	220	760 DU	6.65	20%	80%	0.62	65%	5,054	78	310	388	306	165	471			
Internal Capture [b]			15%	15%	15%		15%	(758)	(12)	(47)	(59)	(46)	(25)	(71)			
Less: Transit Credit [c]			15%			15%		(644)	(10)	(39)	(49)	(39)	(21)	(60)			
Less: Walk/Bike Credit			10%			10%		(365)	(5)	(22)	(22)	(22)	(11)	(33)			
Net External Vehicle Trips								3,287	51	202	253	199	108	307			
TOTAL PROJECT EXTERNAL VEHICLE TRIPS								3,436	53	204	257	206	115	321			
EXISTING USE CREDIT																	
Office Space Internalization [e]								172	19	3	22	4	16	20			
TOTAL DRIVEWAY TRIPS								5,335	274	235	509	252	319	571			
NET INCREMENTAL EXTERNAL TRIPS								3,264	34	201	235	202	99	301			

Notes:

[a] Source: Institute of Transportation Engineers (ITE), *Trip Generation*, 9th Edition, 2012

[b] Internal capture represents the percentage of trips between land uses that occur within the site. Main Street model calibration of base ITE rates reflecting project & site specific characteristics.

[c] The transit credit is based on LADOT's *Traffic Study Policies and Procedures*, August 2014. The guidelines state that up to 25% transit credit may be taken for projects adjacent to a transit station or Rapid Bus stop.

[d] The pass-by credit is based on Attachment 1 of LADOT's *Traffic Study Policies and Procedures*, August 2014.

[e] The addition of the project land uses on site creates internalization opportunities with the existing office space where these trips were otherwise necessary. The office space internalization credit accounts for these trips no longer being present with the project.

**TABLE 2
3600 WILSHIRE PROJECT
RELATED PROJECTS**

No.	Project Location	Land Use	Size	Estimated Trip Generation [a]						
				Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
					In	Out	Total	In	Out	Total
1	3323 W Olympic Bl	Apartments Office	40 Units 27.72 ksf	1267	57	30	87	44	82	126
2	3670 W Wilshire Blvd	Condominiums Other	378 Units 8 ksf	2480	55	142	197	144	76	220
3	3033 W Wilshire Blvd	Condominiums Retail	189 Units 5.54 ksf	816	12	49	61	45	29	74
4	3060 W Olympic Bl	Retail	109.006 ksf	4134	60	26	86	169	191	360
5	805 S Catalina St	Condominiums Retail	300 Units 5 ksf	1935	24	119	143	110	57	167
6	820 S Hoover St	Condominiums Retail	32 Units 4.5 ksf	414	7	15	22	18	14	32
7	2924 W 8th St	Apartments Affordable Units	37 Units 48 Units	416	6	17	23	18	10	28
8	621 S Catalina St	Apartments Other Retail	7 Units 75 Units 1.547 ksf	643	21	18	39	27	23	50
9	100 N Western Ave	Retail Apartments	30 ksf 98 Units	940	17	40	57	54	38	92
10	3050 W Wilshire Blvd	Apartments School Lecture Hall	133 Units 43.4 School 450 Seats	-1337	-35	-16	-51	-45	-52	-97
11	3663 W Wilshire Blvd	Office School School Other	55.38 ksf 216 Seats 420 Seats	825	94	44	138	20	3	23
12	2755 W 15th Street	School	300 Students	486	68	57	125	24	24	48
13	3470 W Wilshire	Health Club	20.178 ksf	231	-13	6	-7	22	-1	21
14	3869 W Wilshire	Apartments	84 Units	538	8	31	39	36	19	55
15	680 S Berendo St	Apartments	177 Units	1000	15	61	76	61	32	93
16	3640 W Wilshire Blvd	Apartments	209 Units	1182	18	72	90	73	40	113
17	968 S Berendo St	Church	85.308 ksf	535	23	8	31	3	9	12
18	135 N Western Ave	Restaurant	11.904 ksf	457	2	2	4	25	13	38
19	940 S Western Avenue	Apartments Retail	79 Units 8 ksf	380	6	31	37	26	11	37
20	864 S Vermont	Apartments Retail	411 Units 43.8 ksf	3202	24	129	153	164	101	265
21	535 S Kingsley Dr	Apartments	85 Units	543	8	31	39	36	19	55
22	2850 W 7th St	Condominiums Other Retail	160 Units 40 Rooms 3.6 ksf	1057	20	72	92	72	42	114
23	800 S Harvard Blvd	Apartments Retail	131 Units 7 ksf	827	14	32	46	44	33	77
24	2929 W Leeward Ave	Condominiums	80 Units	476	7	33	40	44	21	65
25	2968 W 6th St	Apartments Commercial Space Commercial Space	399 Units 12 ksf 8 ksf	2943	73	154	227	168	93	261
26	241 N Vermont	Apartments Retail	100 Units 5 ksf	510	7	38	45	33	16	49
27	4110 W 3rd Street	Hotel Retail	174 Rooms 27.8 ksf	1186	45	35	80	46	40	86
28	1011 S Serrano Ave	Apartments	91 Units	545	8	33	41	32	18	50
29	525 N Wilton Pl	Apartments	88 Units	449	6	28	34	27	14	41
30	3076 W Olympic Blvd	Apartments Retail	226 Units 16.907 ksf	1567	25	78	103	90	56	146
31	3875 W Wilshire Bl	Apartments	220 Units	1238	19	77	96	77	42	119
32	3350 W Wilshire	Apartments	121 Units	728	11	43	54	47	25	72
33	3545 W Wilshire Blvd	Apartments Retail	433 Units 49.849 ksf	917	-42	83	41	84	10	94
34	605 S Vermont Ave	Apartments Museum	103 Units 30.937 ksf	755	17	39	56	42	37	79
35	1011 S Park View St	Apartments	108 Units	594	9	38	47	38	19	57
36	2965 W 6th St	Hotel	99 Rooms	688	26	18	44	25	25	50
37	627 S Vermont Ave	Apartments Restaurant	179 Units 12 ksf	1304	34	72	106	75	40	115

38	2789 W Olympic Bl	Office Retail	27.81 20.607	ksf ksf	612	16	8	24	25	29	54
39	1255 Elden Ave	Apartments	93	Units	376	0	32	32	28	10	38
40	2972 W 7th St	Apartments Retail	180 15	Units ksf	486	7	59	66	43	8	51
41	3100 W 8th St	Apartments	100	Units	100	10	41	51	10	41	51
42	326 S Reno St	Apartments	65	Units	326	5	20	25	20	11	31
43	1017 S Mariposa Ave	Apartments	79	Units	373	5	23	28	23	12	35
44	427 S Berendo St	Apartments	85	Units	288	5	17	22	17	10	27
45	2859 W Francis Ave	Apartments	81	Units	492	7	28	35	31	5	36
46	700 S Manhattan pl	Apartments Restaurant Retail	162 6.5 3.5	Units ksf ksf	1260	19	57	76	71	46	117
47	411 S Normandie Ave	Apartments	224	Units	1407	22	86	108	87	47	134
48	3525 W 8th Street	Apartments Supermarket	367 22.906	Units ksf	1214	8	121	129	83	25	108
49	2870 W Olympic Blvd	Hotel Retail	78 16.384	Rooms ksf	834	22	14	36	30	28	58
50	850 S Crenshaw	Apartments	44	Units	293	4	18	22	18	10	28
51	815 S Kingsley Dr	Apartments	90	Units	542	8	33	41	33	17	50
52	4074 W 5th St	Apartments Retail	119 13	Units ksf	944	14	44	58	52	34	86
53	3986 W Wilshire	Apartments Coffee Shop Restaurant Retail	228 5 5 12	Units ksf ksf ksf	1354	100	-23	77	124	-77	47
54	616 S Westmoreland Ave	Apartments Restaurant Retail	72 2.765 1.043	Units ksf ksf	461	2	29	31	30	5	35
55	2525 Wilshire Bl	Condominiums Retail	160 7.5	Units ksf	1160	16	60	76	61	36	97
56	3200 W Beverly Bl	Apartments Retail	32 5.867	Units ksf	632	4	16	20	39	32	71
57	3330 W Beverly Bl	Apartments Childcare	40 4.237	Units ksf	495	26	34	63	35	32	67
58	2405 W 8th Street	Apartments Retail	144 4.406	Units ksf	333	-20	48	28	42	-15	27
59	2900 Wilshire	Apartments Retail Restaurant	644 10 5.5	DU ksf ksf	3482	81	135	216	137	81	218
60	4001 W Venice Bl	School	432	Students	557	54	43	97	16	16	32
61	2649 W San Marino Ave	Apartments	45	DU	246	4	15	19	15	8	23
62	966 S Dewey Ave	Apartments	65	DU	432	7	27	34	26	14	40
63	3240 W Wilshire Bl	Apartments Retail Hotel	545 5.222 162	DU ksf Rooms	1353	15	173	188	89	23	112
64	1125 S Crenshaw Bl	Retail Apartments	49 2	ksf DU	-399	3	16	51	-41	6	-35
65	1614 S Crenshaw Bl	Donut/Coffee w Drive-thru	1.7	ksf	1392	87	84	171	37	36	73
66	2005 W Pico Bl	Office	30.3	ksf	224	28	4	32	5	25	30
67	619 S Westlake Ave	Apartments	42	DU	254	3	17	20	16	8	24
68	422 Lake St	Apartments	80	DU	532	8	33	41	33	17	50
69	1929 W Pico Bl	Charter High School	480	Enrollment	821	140	66	206	20	42	62
70	235 N Hoover	Apartments	214	DU	1423	22	87	109	86	47	133
71	1930 W Wilshire Bl	Apartments Theatre Classroom Hotel	478 850 50 220	DU Seats Enrollment Rooms	1355	-44	128	84	103	-41	62
72	3700 Wilshire [b]	Office	103.719	DU	858	107	14	121	19	96	115
73	3700 Wilshire	Apartments Retail	506 62.036	DU ksf	3501	49	152	201	178	80	258
74	3440 Wilshire	Apartments Retail	654 16	DU ksf	2963	42	155	197	161	91	252
75	800 Western	Apartments Hotel Retail/Restaurant	96 148 54.54	DU DU ksf	4284	153	125	278	117	106	223

Note:

DU = dwelling units

ksf = one thousand square feet

[a] Related projects list is based on information provided from LADOT in August 2016

[b] Project includes the unoccupied office space of 3700 Wilshire Blvd as a related project

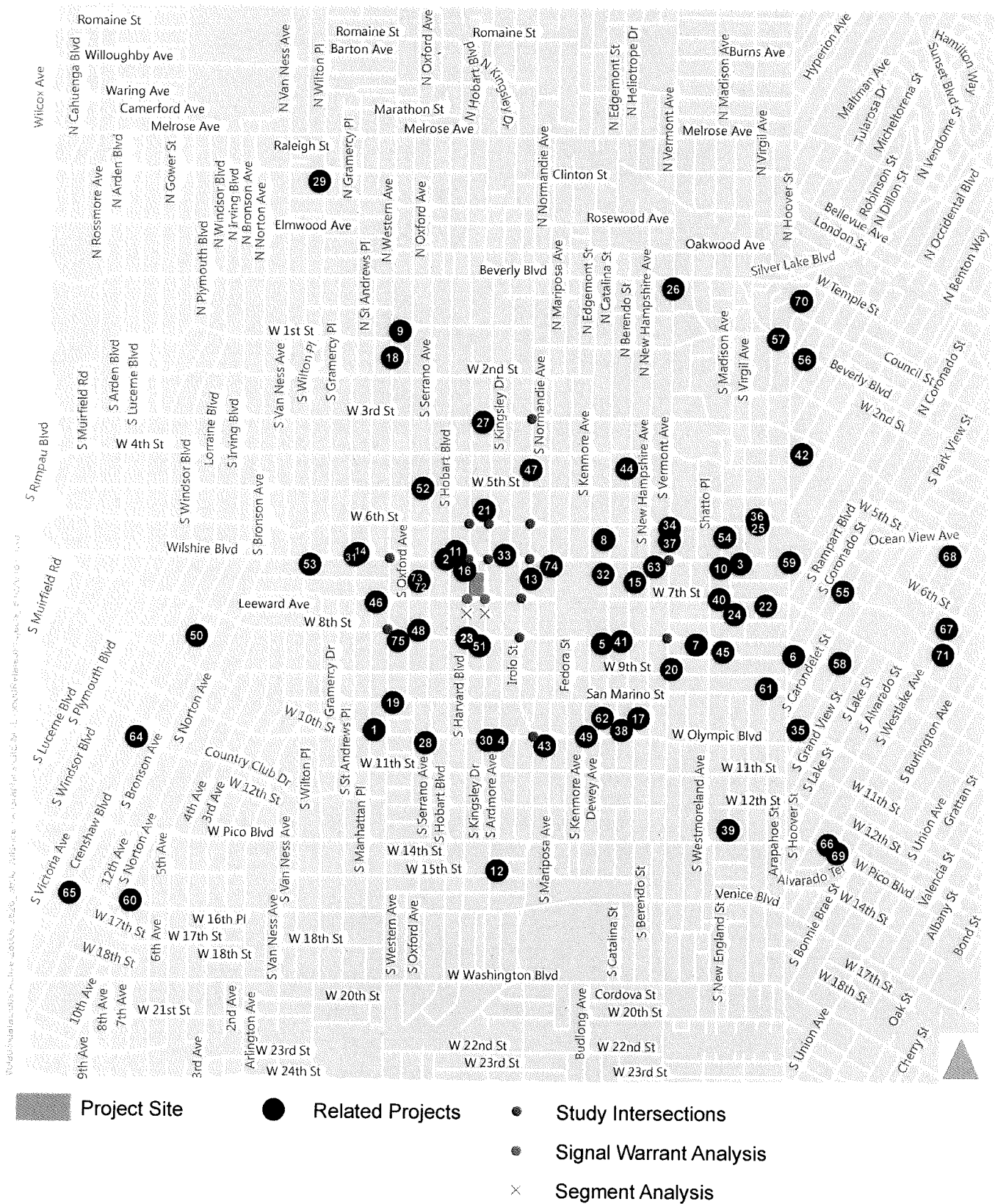


Figure 3

3600 Wilshire Related Projects





MOU ATTACHMENT A
FREEWAY SCREENING FOR 3600 WILSHIRE PROJECT IN ACCORDANCE WITH SCREENING CRITERIA
DESCRIBED IN SECTION 3 OF THE "AGREEMENT BETWEEN CITY OF LOS ANGELES AND CALTRANS
DISTRICT 7 ON FREEWAY IMPACT ANALYSIS PROCEDURES" (DECEMBER 2015)

INTRODUCTION

Section 3.1 of the "Agreement Between City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedures" originally dated October 2013 specifies the freeway mainline and ramp screening criteria for development projects in the City of Los Angeles. Section 3.1 was amended in December of 2015 with the following threshold criteria:

"City will require Project applicants to work with Caltrans and prepare a Freeway Impact Analysis, utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies" ("TIS Guide"), for land use proposals that meet any of the following criteria:

- The project's peak hour trips would result in a 1-percent or more increase to the freeway mainline capacity of a freeway segment operating at level-of-service (LOS) E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a 2-percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a 1-percent or more increase to the capacity of a freeway off-ramp operating at LOS E or F (based on an assumed ramp capacity of 850 vehicles per hour per lane); or
- The project's peak hour trips would result in a 2-percent or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed ramp capacity of 850 vehicles per hour per lane)."

The purpose of this analysis is to apply the screening criteria to determine whether a Freeway Impact Analysis would be required for the 3600 Wilshire project. The methodologies used to conduct the screening analysis for the project, and the results of the screening, are described below.

FREEWAY MAINLINE SEGMENT SCREENING

The 3600 Wilshire project is located at 3600 Wilshire Boulevard, Los Angeles, CA 90010 with regional access provided by the Interstate 10 (I-10) freeway and US Route 101 (US-101). Five sections of freeways were selected for a freeway screening analysis:

- I-10 Freeway west of Normandie Avenue – 4 lanes in each direction
- I-10 Freeway east of Normandie Avenue – 4 lanes in each direction
- US-101 north of Western Avenue – 4 lanes in each directions
- US-101 south of Silverlake Boulevard (north of Rampart Boulevard) – 4 lanes in each directions
- US-101 south of Rampart Boulevard – 4 lanes in each directions

Project trips on the freeway facilities are shown in Table A1 and the mainline screening analysis is shown in Table A2. As shown in Table A2, the freeway capacity is 8,000 vph for 4 lanes. The most rigorous trigger criteria for LOS E/F operations was used for the screening analysis. For LOS E or F operations, the threshold test is whether the project would use 1% of the available capacity (80 vph for 4 lanes). Because no more

than 31 project trips are expected to occur in any analyzed peak hour on any particular segment, the mainline screening threshold is not met and therefore a Freeway Impact Analysis is not required.

FREEWAY RAMP SCREENING

Project trips on the freeway off-ramp facilities are shown in Table A1 and the freeway off-ramp screening analysis is shown in Table A3. Six freeway off-ramps were selected for a freeway screening analysis. The most rigorous trigger criteria for LOS E/F operations was used for the screening analysis. For LOS E or F operations, the threshold test is whether the project would use 1% of the capacity (based on an assumed ramp capacity of 850 vehicles per hour per lane), or approximately 9 vph for 1-lane and 17 vph for 2-lanes. Because no more than 6 project trips are expected to occur in any analyzed peak hour on 1-lane ramps and no more than 15 project trips are expected to occur in any analyzed peak hour on 2-lane ramps, the freeway off-ramp screening thresholds are not met and therefore a Freeway Impact Analysis is not required.

TABLE A1
3600 WILSHIRE PROJECT
TRIP GENERATION AND FREEWAY SEGMENT AND RAMP TRIPS

Freeway Trip Percentage		Freeway Trips					
		AM Peak Hour			PM Peak Hour		
Direction	%	In	Out	Total	In	Out	Total
PROPOSED PROJECT TRIPS		34	201	235	202	99	301
Freeway Ramps							
I-10 EB Normandie Ave Off	7.5%	3	15	18	15	7	22
I-10 WB Normandie Ave Off	7.5%	3	15	18	15	7	22
US-101 SB Western Ave Off	7.5%	3	15	18	15	7	22
US-101 SB Melrose Ave Off	3.0%	1	6	7	6	3	9
US-101 NB Silverlake Blvd Off	7.5%	3	15	18	15	7	22
US-101 NB Rampart Blvd Off	3.0%	1	6	7	6	3	9
Freeway Segments							
I-10 w/o Normandie Ave	7.5%	3	15	18	15	7	22
I-10 e/o Normandie Ave	7.5%	3	15	18	15	7	22
US-101 n/o Western Ave	10.5%	4	21	25	21	10	31
US-101 s/o Silverlake Blvd and n/o Rampart Blvd	7.5%	3	15	18	15	7	22
US-101 s/o Rampart Blvd	10.5%	4	21	25	21	10	31

TABLE A2
3600 WILSHIRE PROJECT

PROJECT TRIP GENERATION

	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Project Trip Generation	34	201	202	99

MAINLINE SCREENING

Freeway Segment	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
<i>I-10 w/o Normandie Ave</i>	EB	WB	EB	WB
# of Lanes [a]	4	4	4	4
Capacity	8,000	8,000	8,000	8,000
Worst-case LOS	E/F	E/F	E/F	E/F
Trigger % [b]	1%	1%	1%	1%
Trigger	80	80	80	80
Project Trips	3	15	15	7
Exceed Trigger?	no	no	no	no
<i>I-10 e/o Normandie Ave</i>	WB	EB	WB	EB
# of Lanes [a]	4	4	4	4
Capacity	8,000	8,000	8,000	8,000
Worst-case LOS	E/F	E/F	E/F	E/F
Trigger % [b]	1%	1%	1%	1%
Trigger	80	80	80	80
Project Trips	3	15	15	7
Exceed Trigger?	no	no	no	no
<i>US-101 n/o Western Ave</i>	SB	NB	SB	NB
# of Lanes [a]	4	4	4	4
Capacity	8,000	8,000	8,000	8,000
Worst-case LOS	E/F	E/F	E/F	E/F
Trigger % [b]	1%	1%	1%	1%
Trigger	80	80	80	80
Project Trips	4	21	21	10
Exceed Trigger?	no	no	no	no
<i>US-101 s/o Silverlake Blvd and n/o Rampart Blvd</i>	NB	SB	NB	SB
# of Lanes [a]	4	4	4	4
Capacity	8,000	8,000	8,000	8,000
Worst-case LOS	E/F	E/F	E/F	E/F
Trigger % [b]	1%	1%	1%	1%
Trigger	80	80	80	80
Project Trips	3	15	15	7
Exceed Trigger?	no	no	no	no
<i>US-101 s/o Rampart Blvd</i>	NB	SB	NB	SB
# of Lanes [a]	4	4	4	4
Capacity	8,000	8,000	8,000	8,000
Worst-case LOS	E/F	E/F	E/F	E/F
Trigger % [b]	1%	1%	1%	1%
Trigger	80	80	80	80
Project Trips	4	21	21	10
Exceed Trigger?	no	no	no	no

Notes:

- # of lanes does not include auxiliary or HOV lanes.
- The worst-case assumption of LOS was used with the most stringent trigger thresholds: LOS E/F
Threshold: 1% of capacity if LOS E or F, 2% of capacity if LOS D, using 2,000 vphpl capacity

**TABLE A3
3600 WILSHIRE PROJECT**

PROJECT TRIP GENERATION

	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Project Trip Generation	34	201	202	99

RAMP SCREENING

Off-Ramp	Peak Hour	Worst-Case Off-Ramp LOS [a]	Ramp Terminus		Project Trips	Exceed Trigger?
			# of Lanes	Trigger		
<i>I-10 EB Normandie Ave Off</i>	AM	E/F	2	17	3	no
	PM	E/F		17	15	no
<i>I-10 WB Normandie Ave Off</i>	AM	E/F	2	17	3	no
	PM	E/F		17	15	no
<i>US-101 SB Western Ave Off</i>	AM	E/F	2	17	3	no
	PM	E/F		17	15	no
<i>US-101 SB Melrose Ave Off</i>	AM	E/F	1	9	1	no
	PM	E/F		9	6	no
<i>US-101 NB Silverlake Blvd Off</i>	AM	E/F	2	17	3	no
	PM	E/F		17	15	no
<i>US-101 NB Rampart Blvd Off</i>	AM	E/F	1	9	1	no
	PM	E/F		9	6	no

Notes:

- a. The worst-case assumption of LOS was used with the most stringent trigger thresholds: LOS E/F
Threshold: 1% of capacity if ramp at LOS E or F, 2% if ramp at LOS D, using HCM intersection methodology at ramp terminus

APPENDIX B:
LANE CONFIGURATIONS AND TRAFFIC VOLUMES

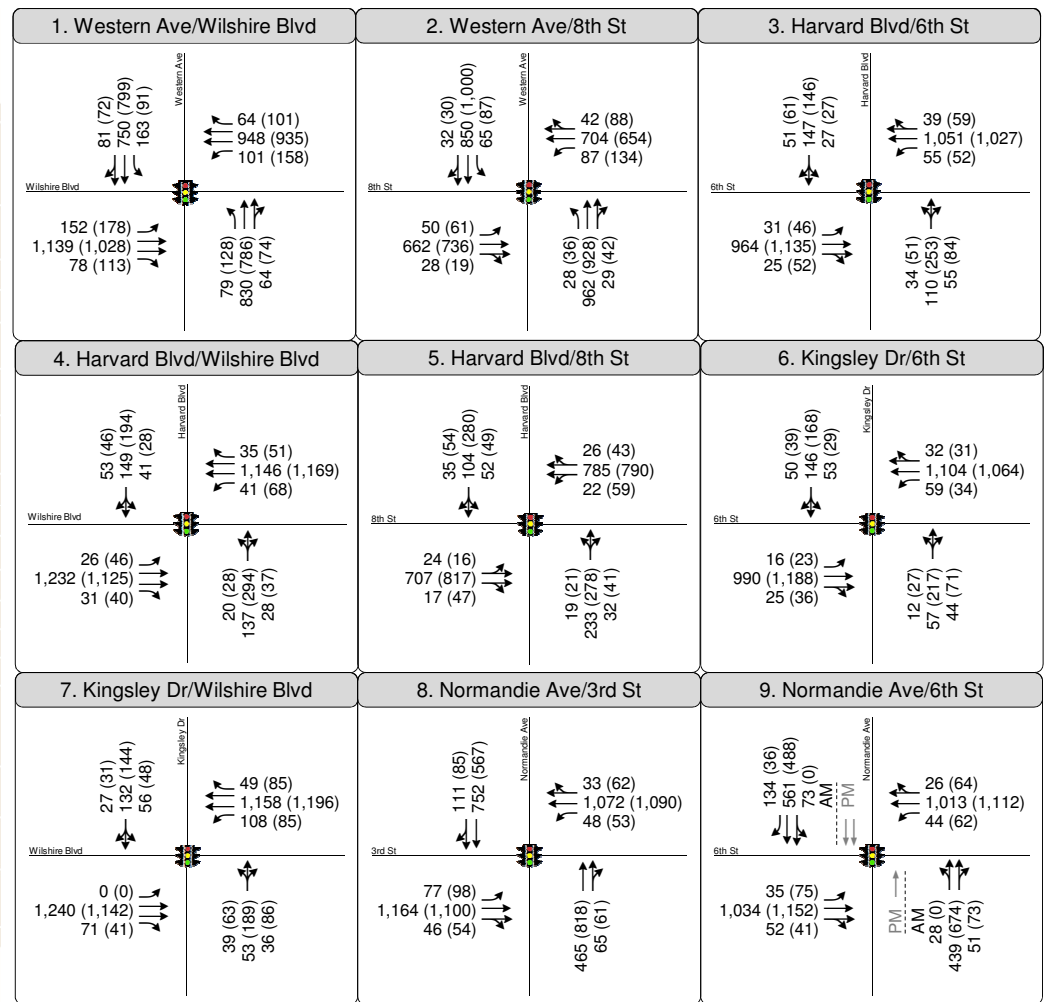
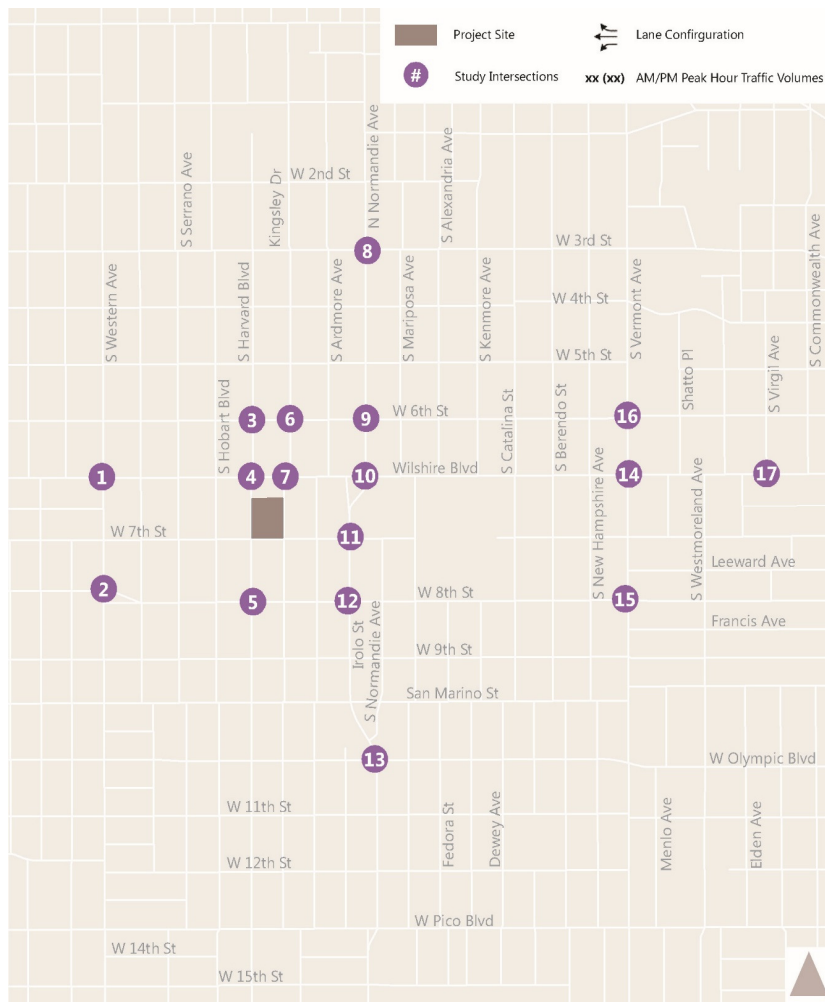


Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2016) Volumes



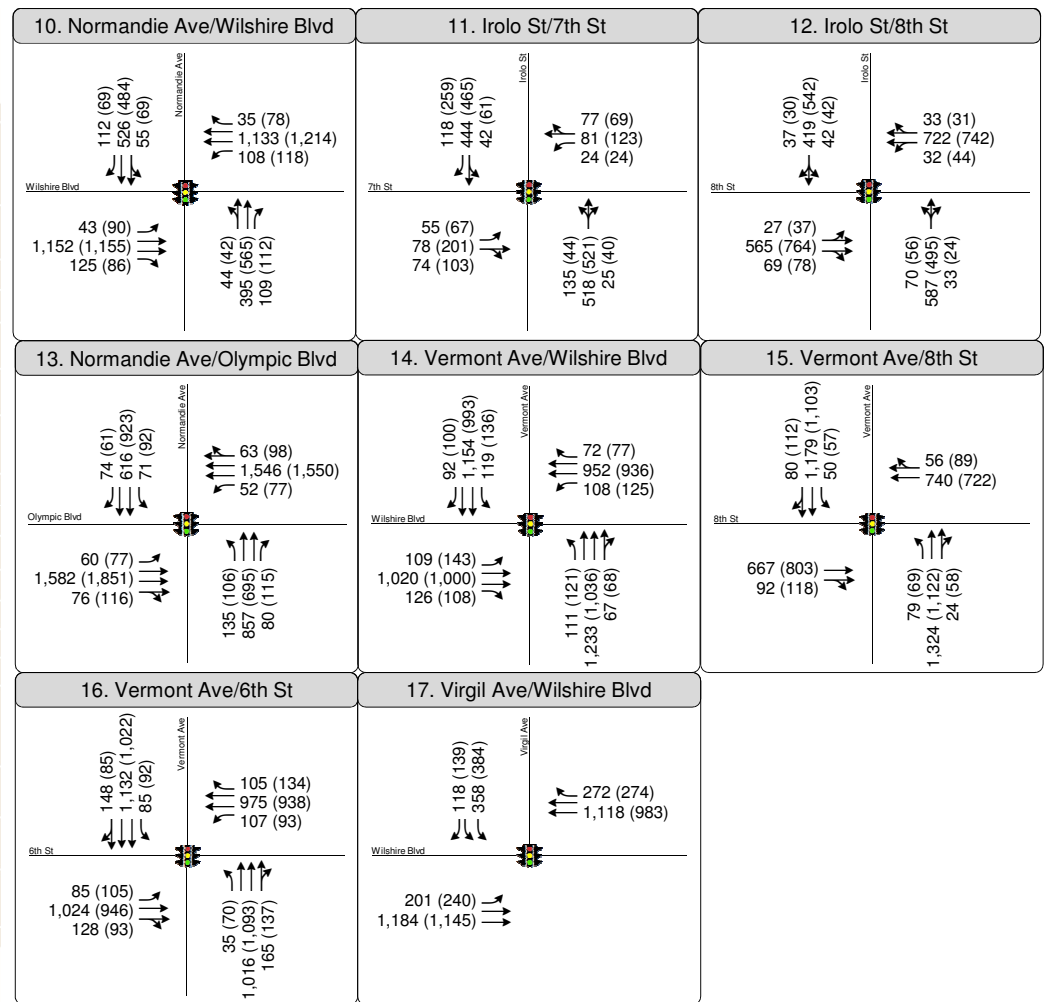
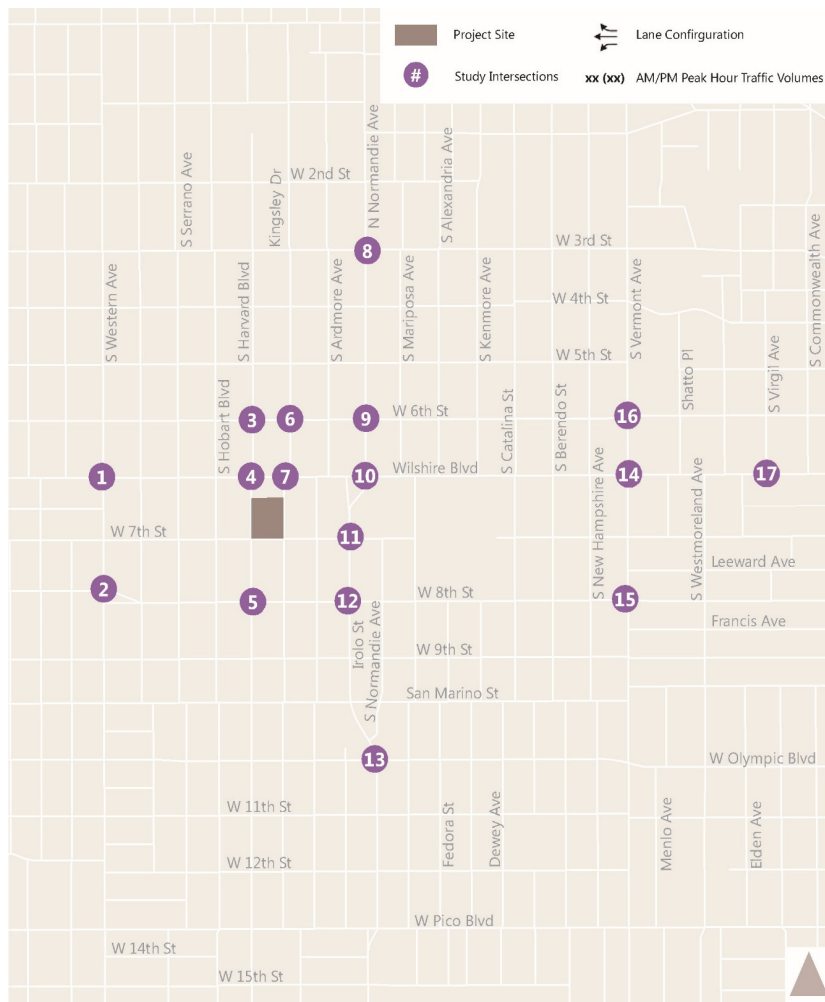


Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2016) Volumes



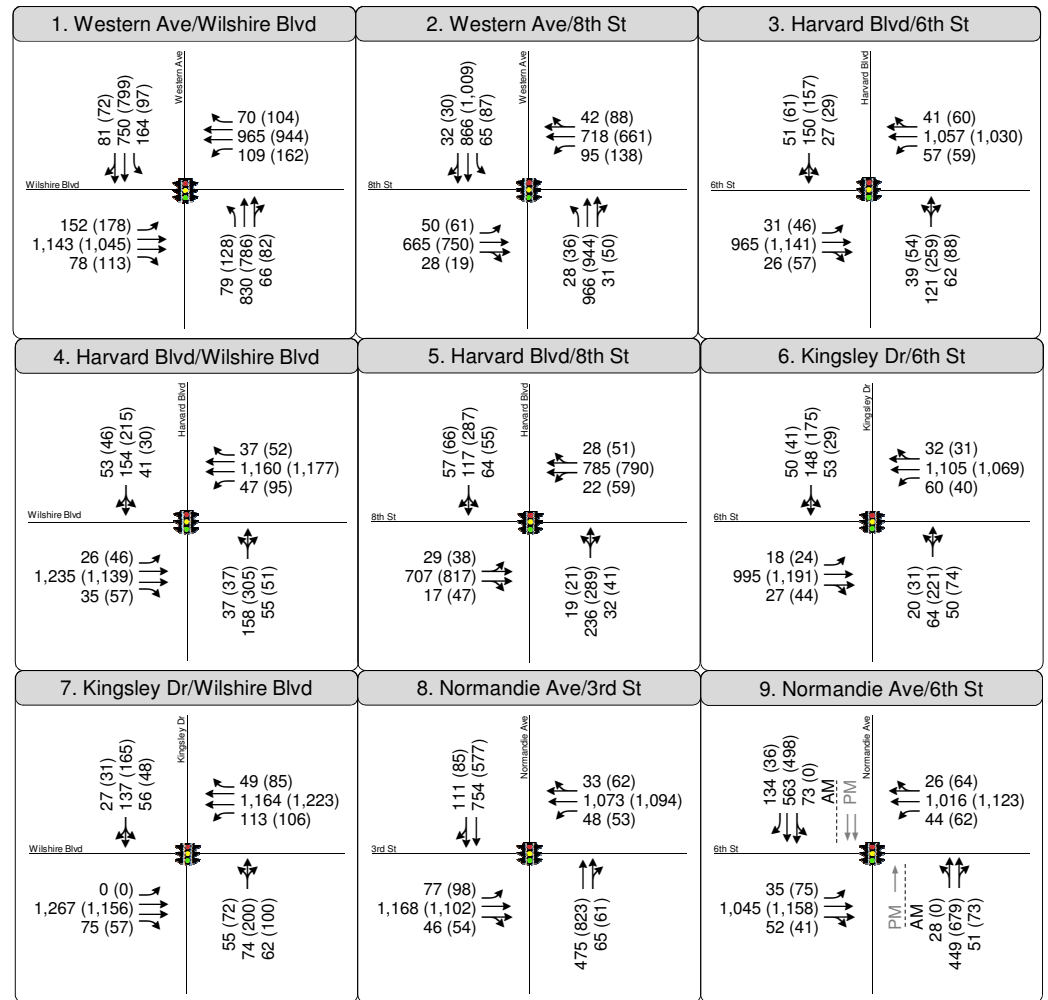
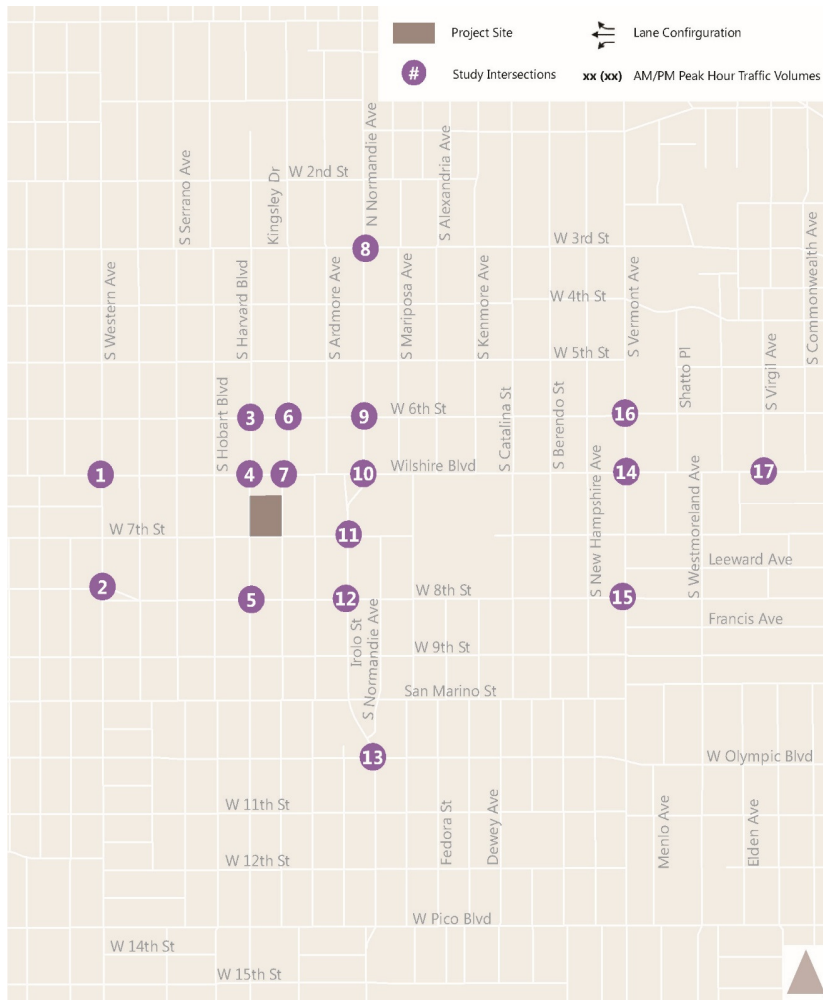


Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Existing plus Project Volumes



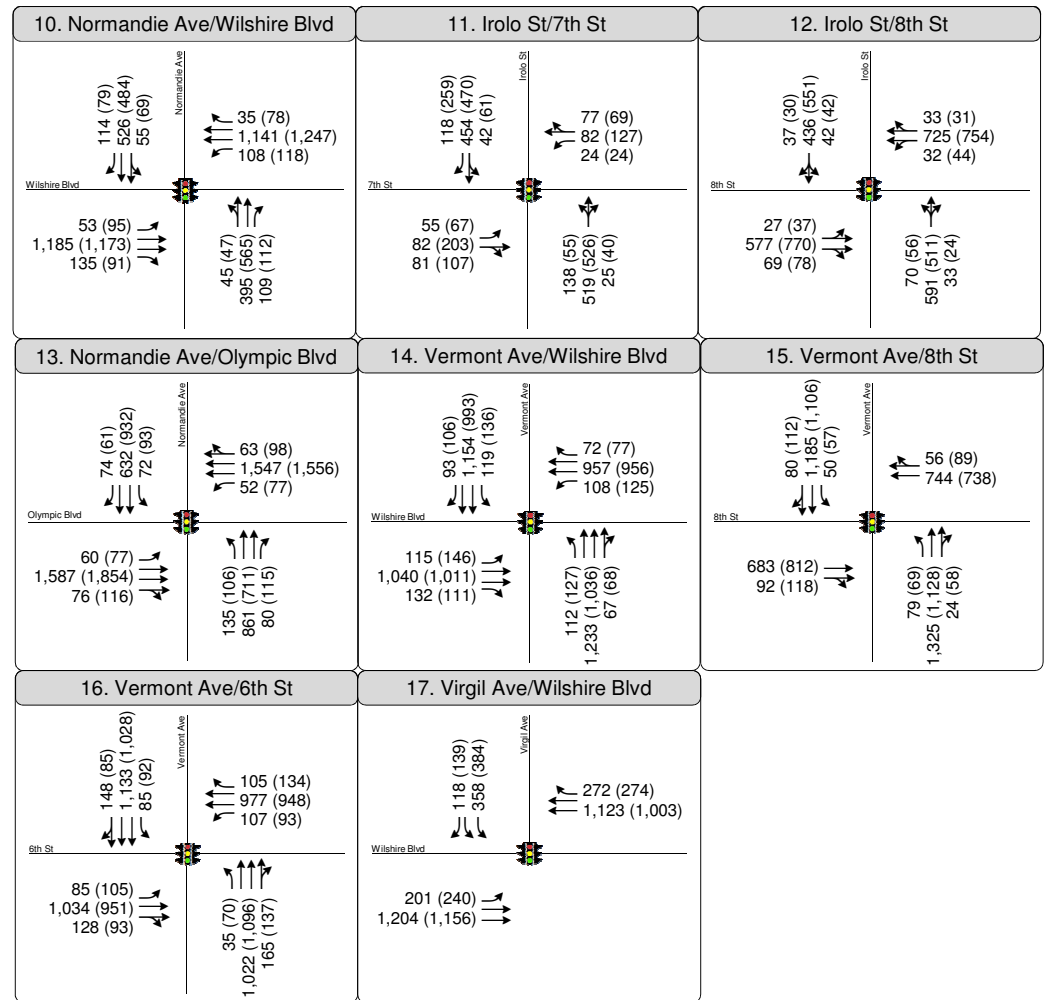
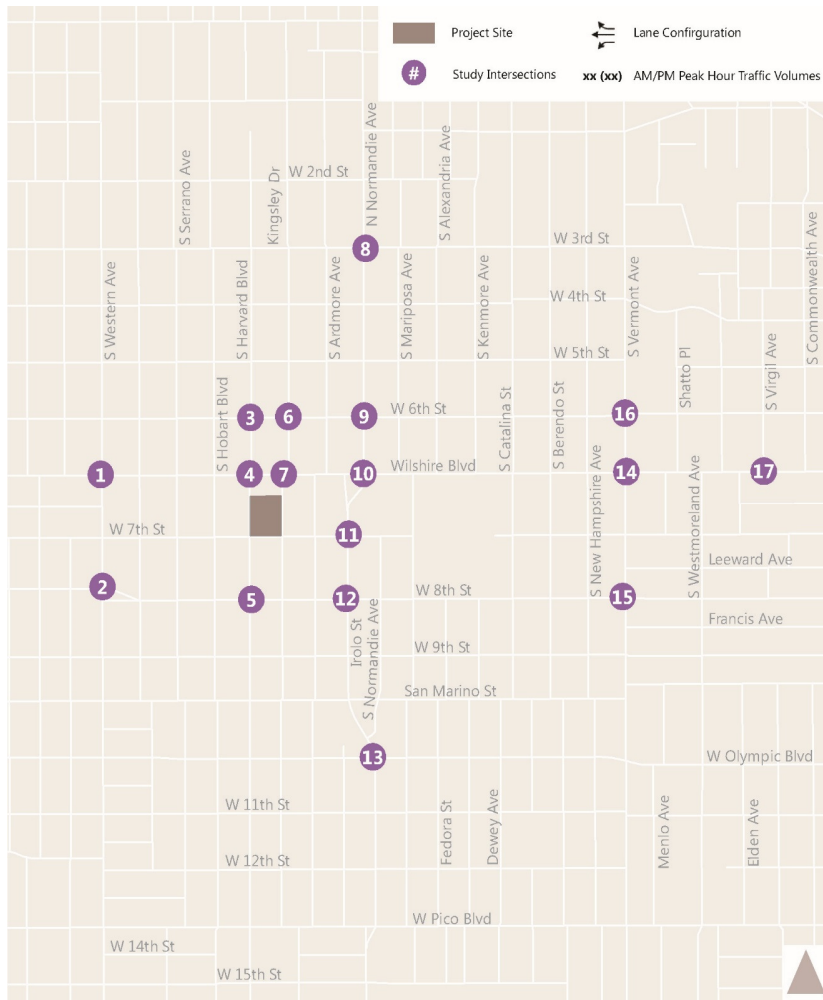


Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Existing plus Project Volumes



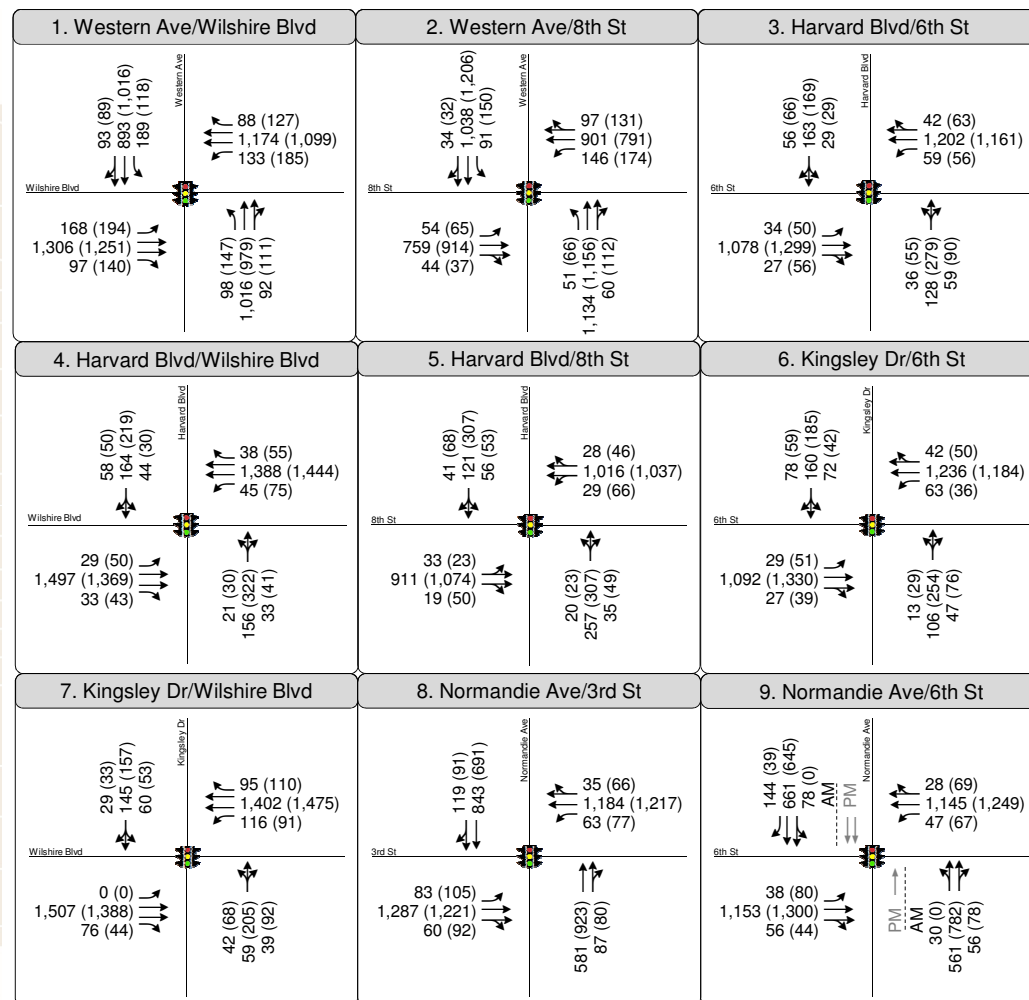
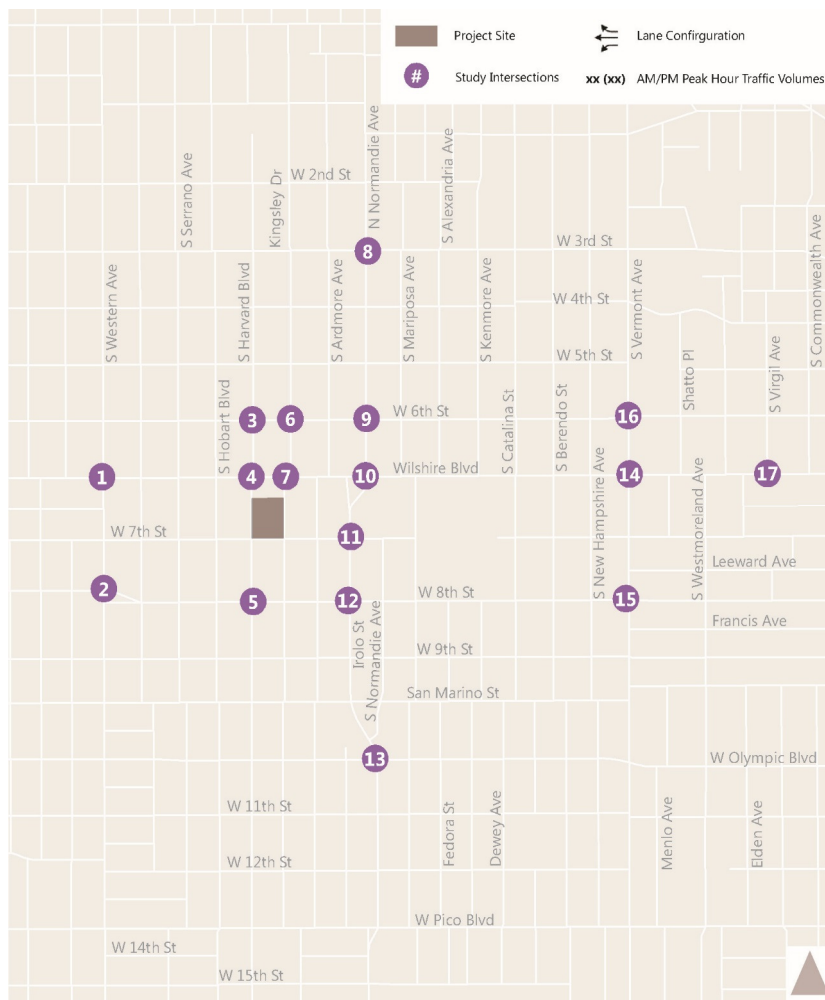


Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Future (2023) Volumes



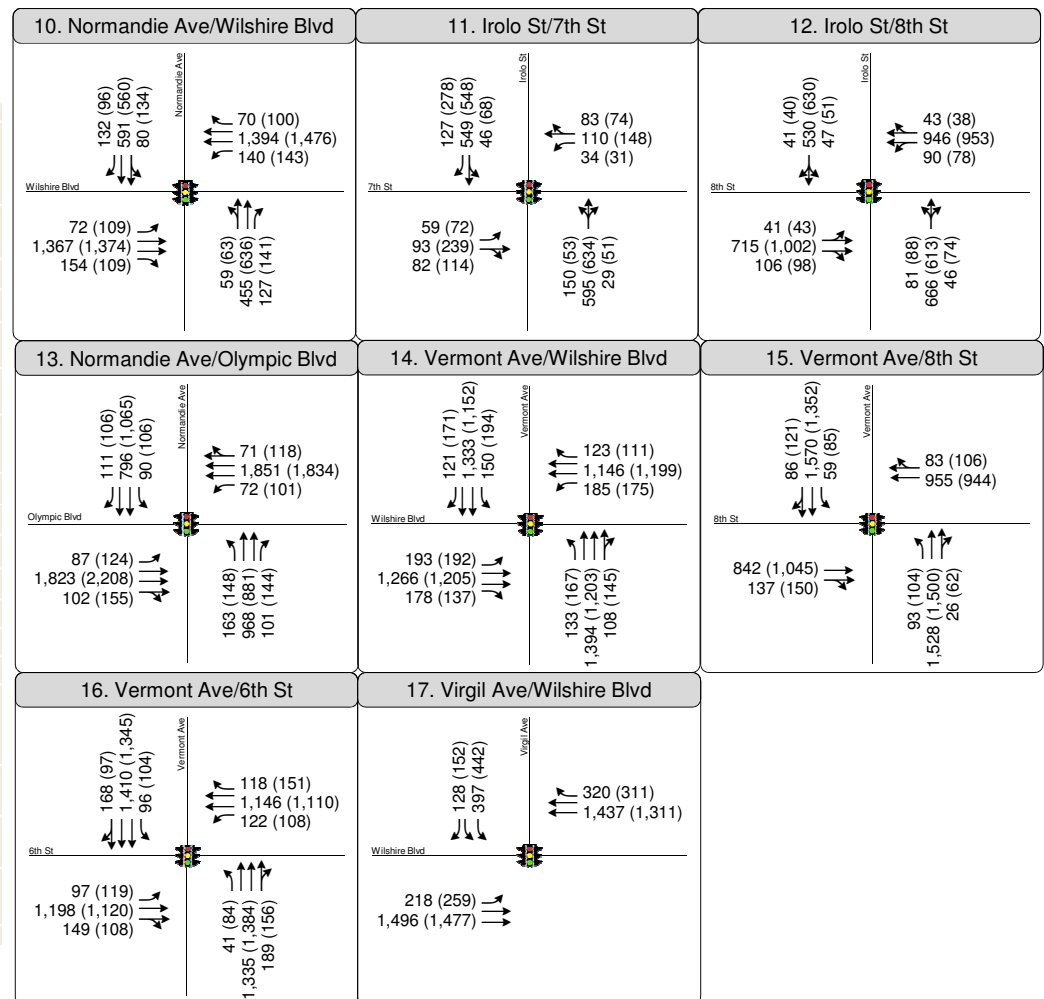
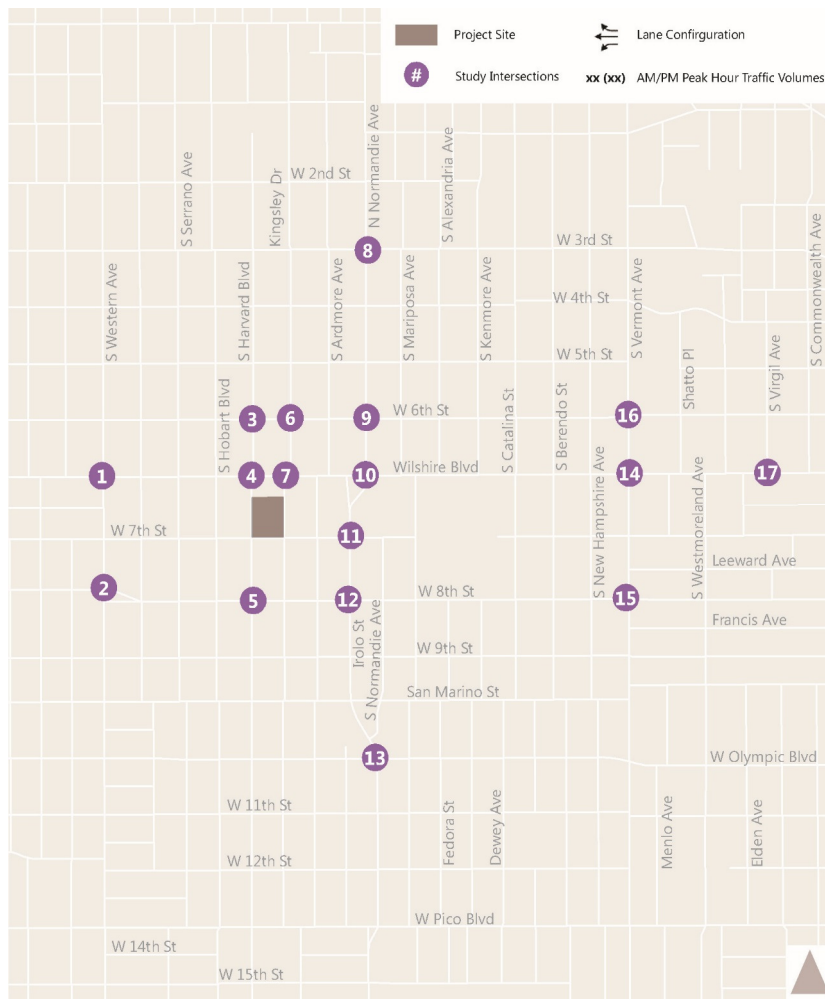


Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Future (2023) Volumes



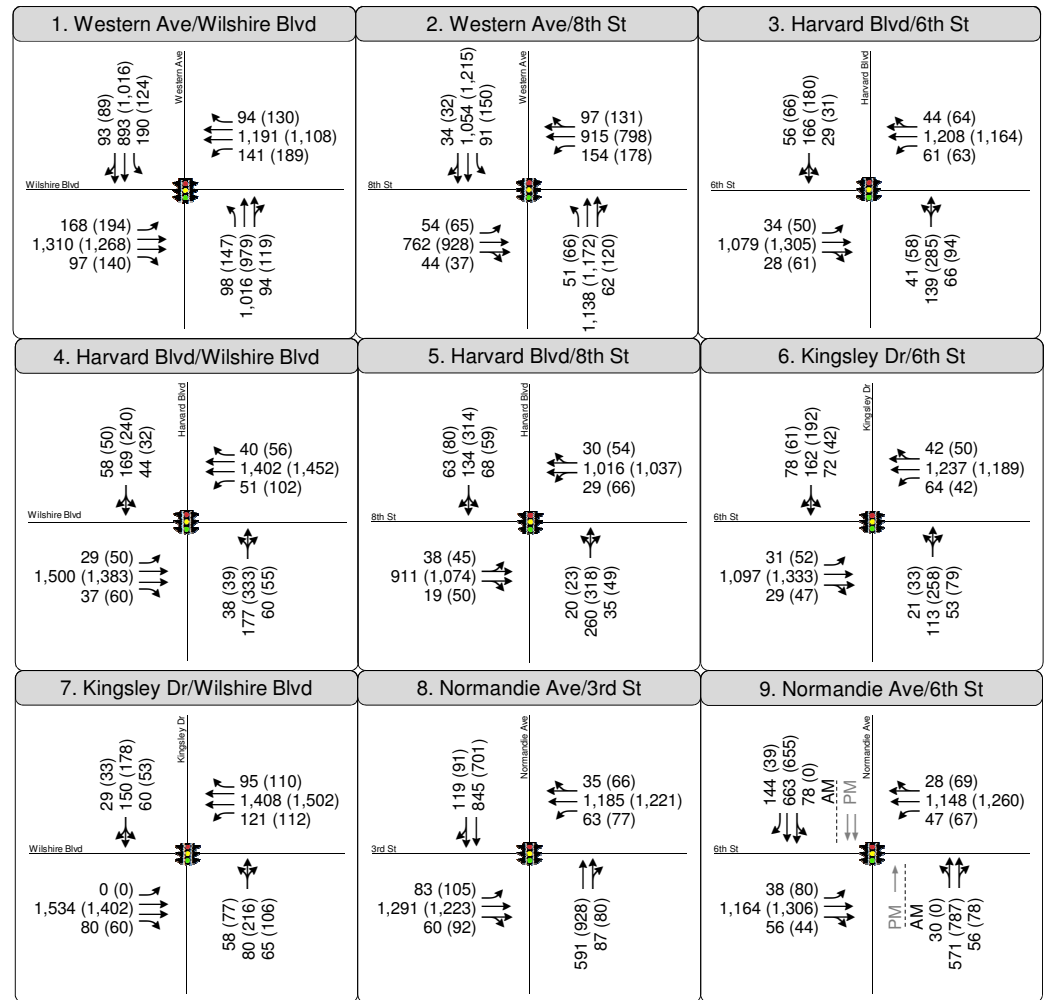
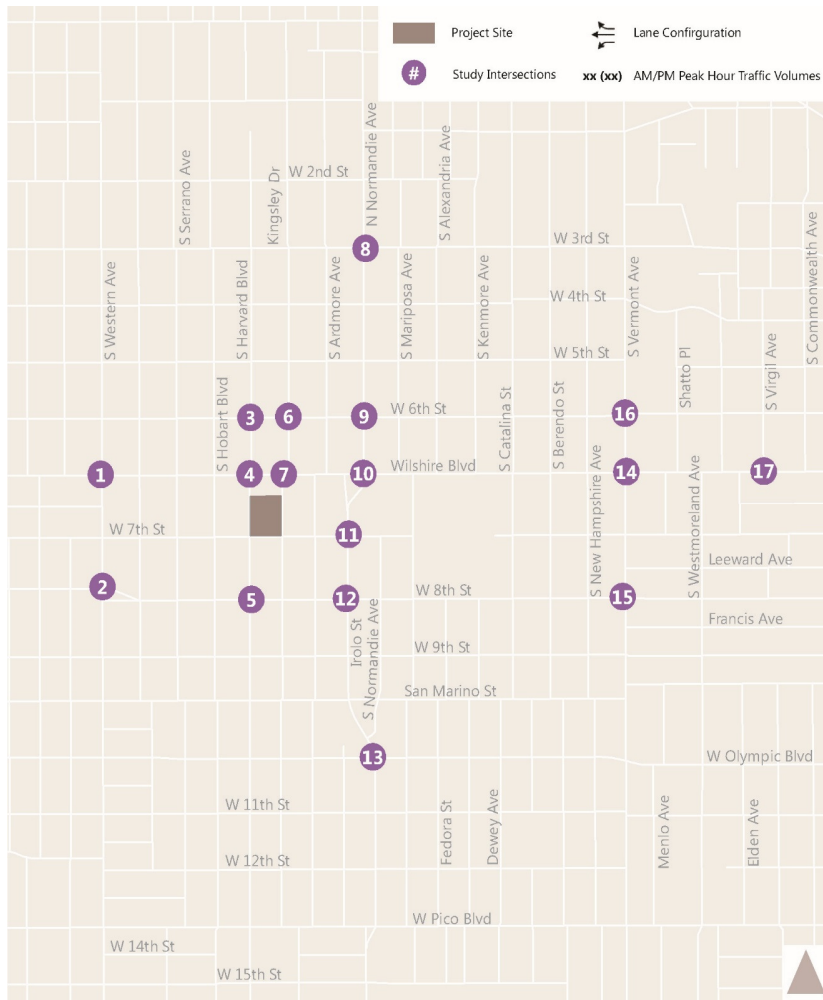


Figure 4
Peak Hour Traffic Volumes and Lane Configurations
Future plus Project Volumes



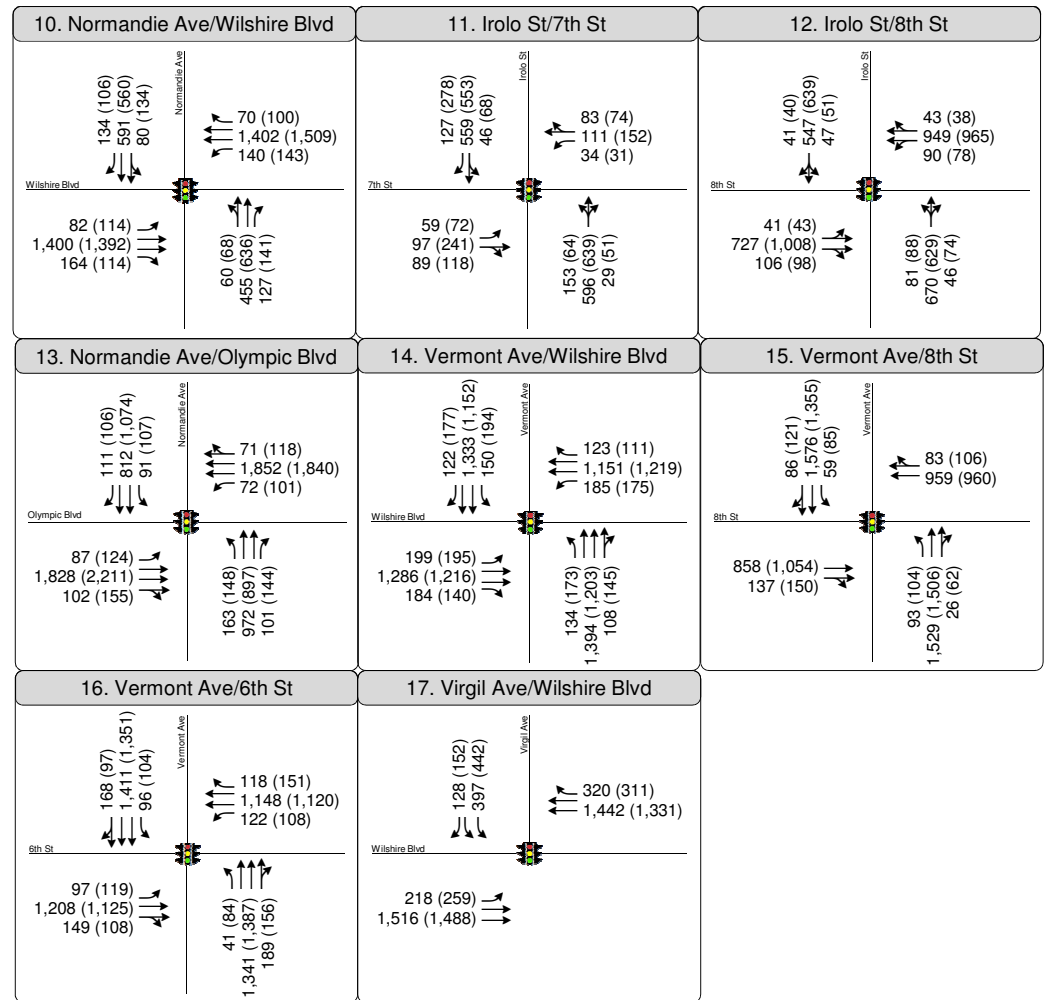
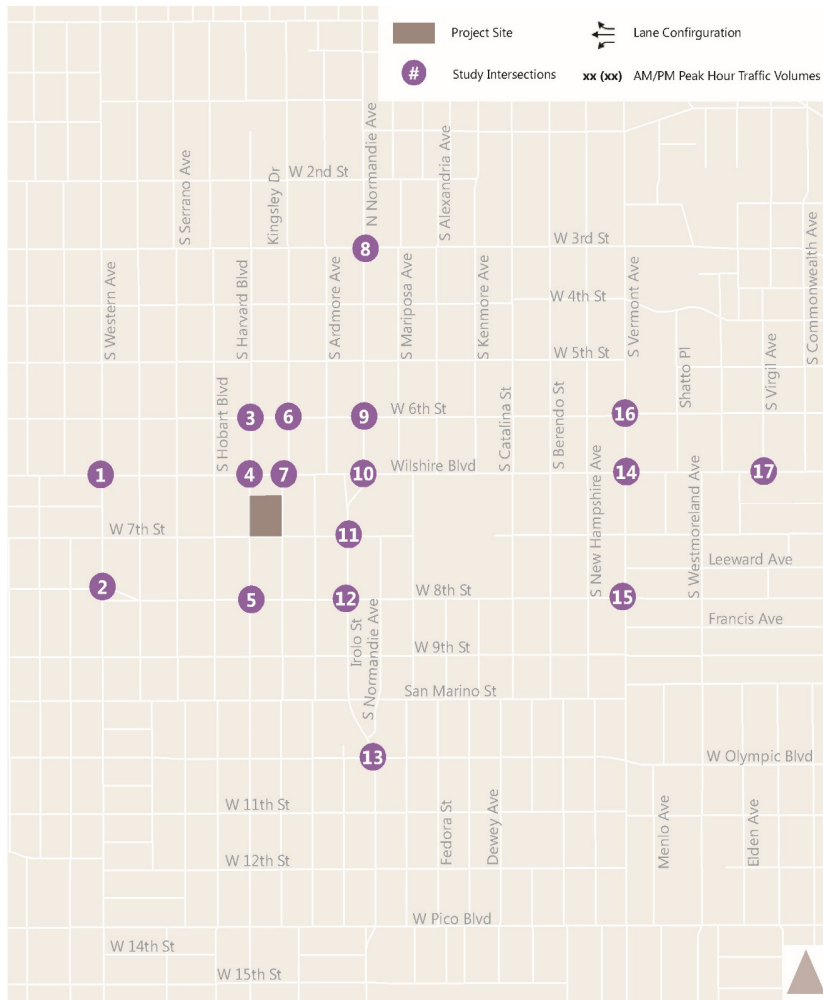


Figure 4
Peak Hour Traffic Volumes and Lane Configurations
Future plus Project Volumes



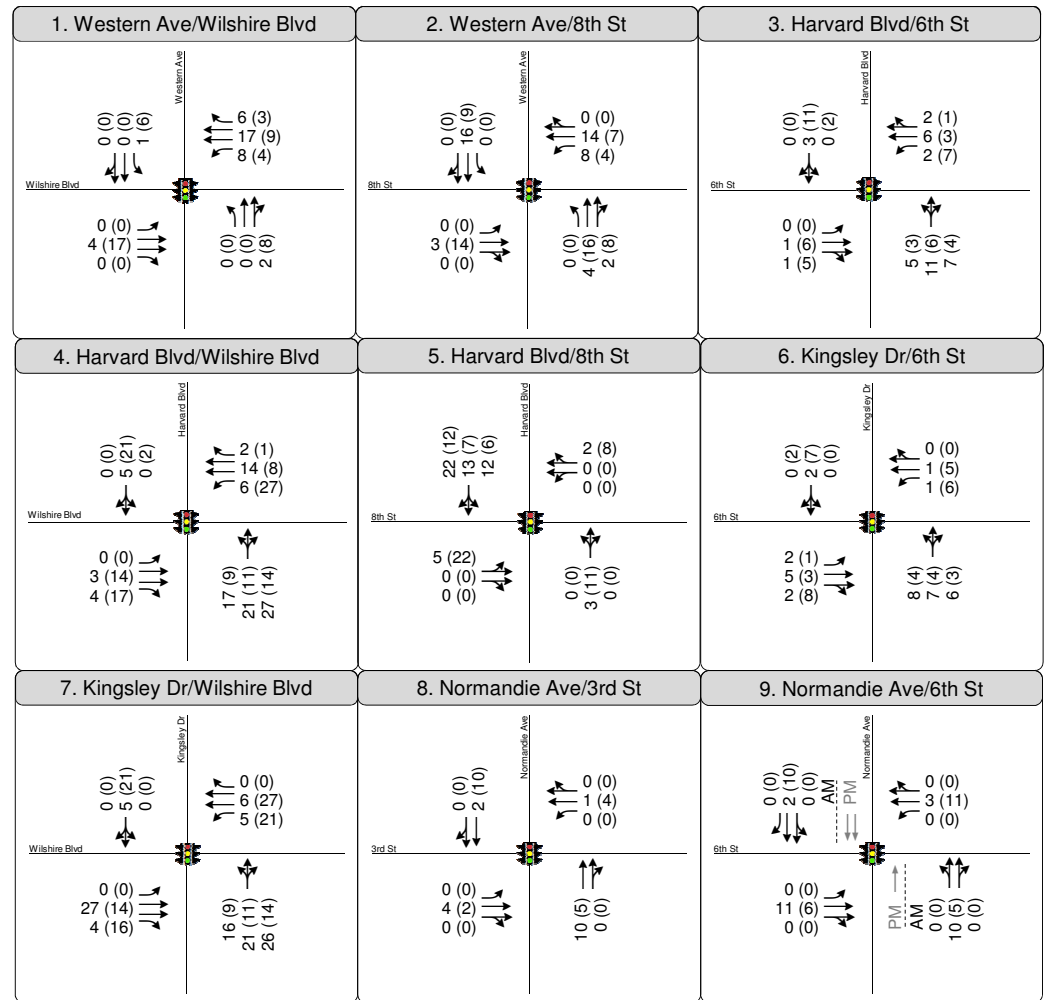
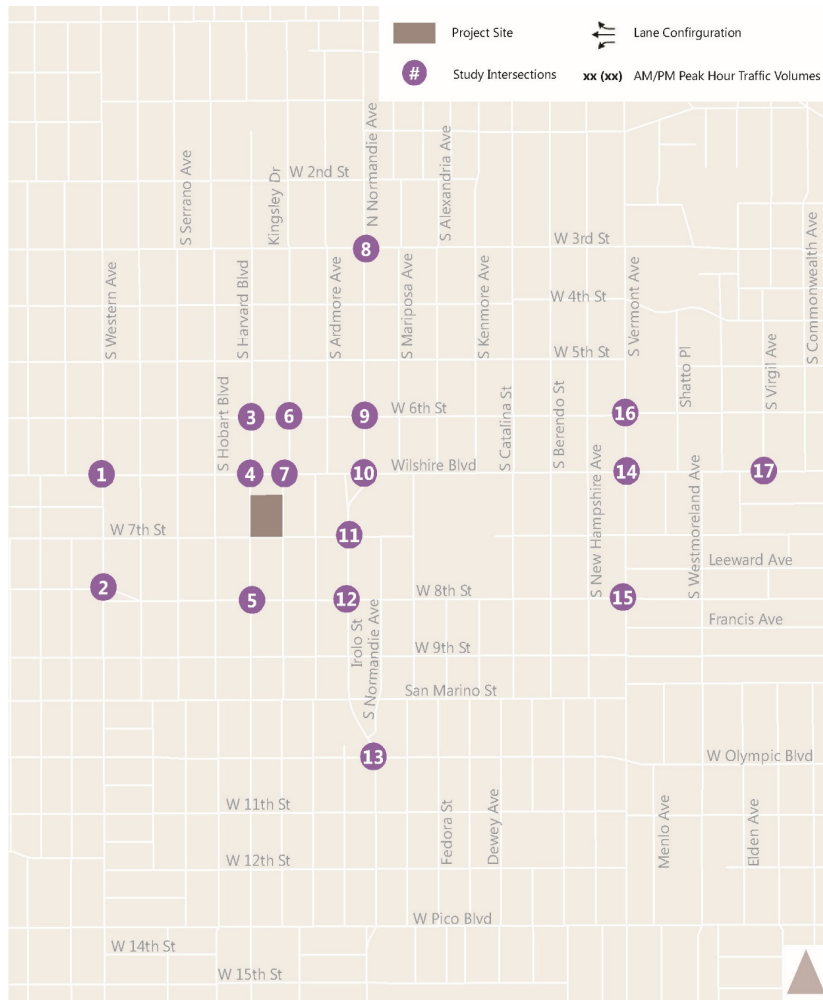


Figure 5
Peak Hour Traffic Volumes and Lane Configurations
Project Only Volumes



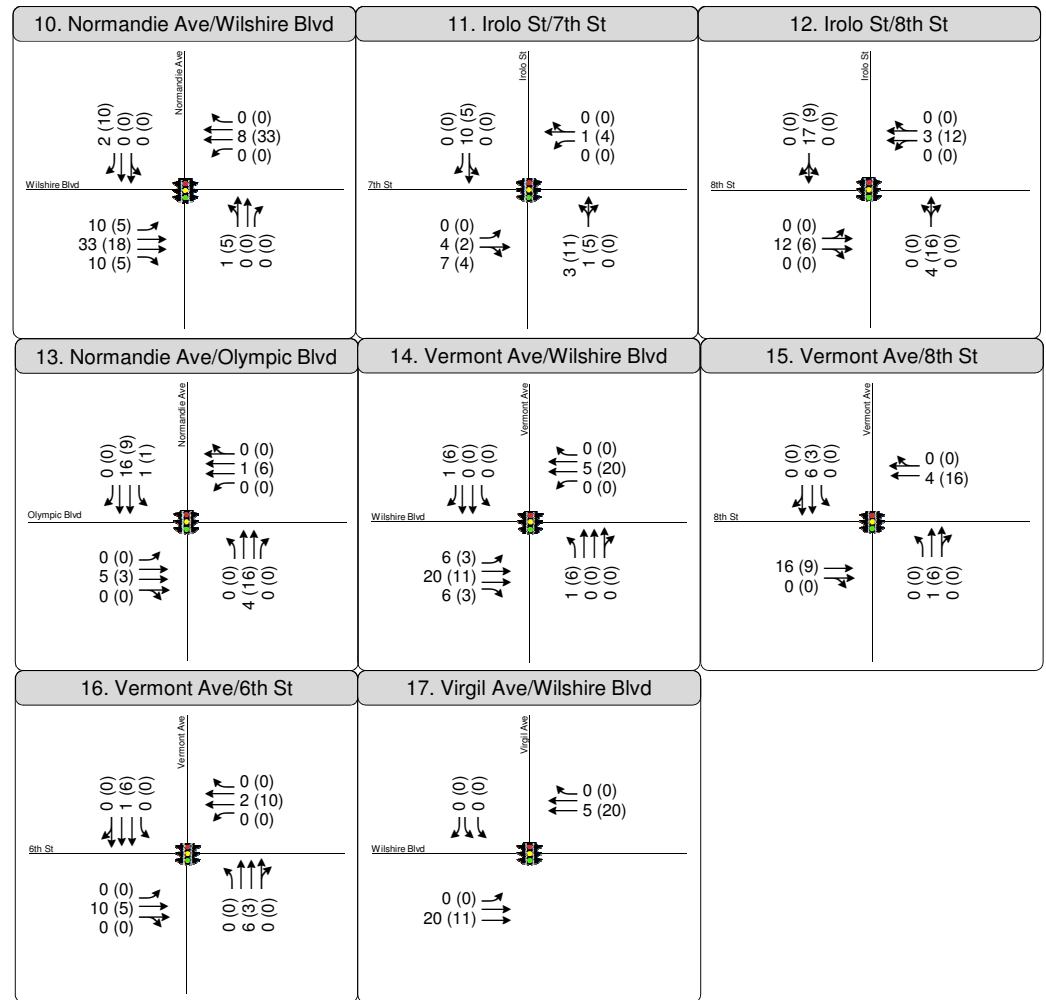
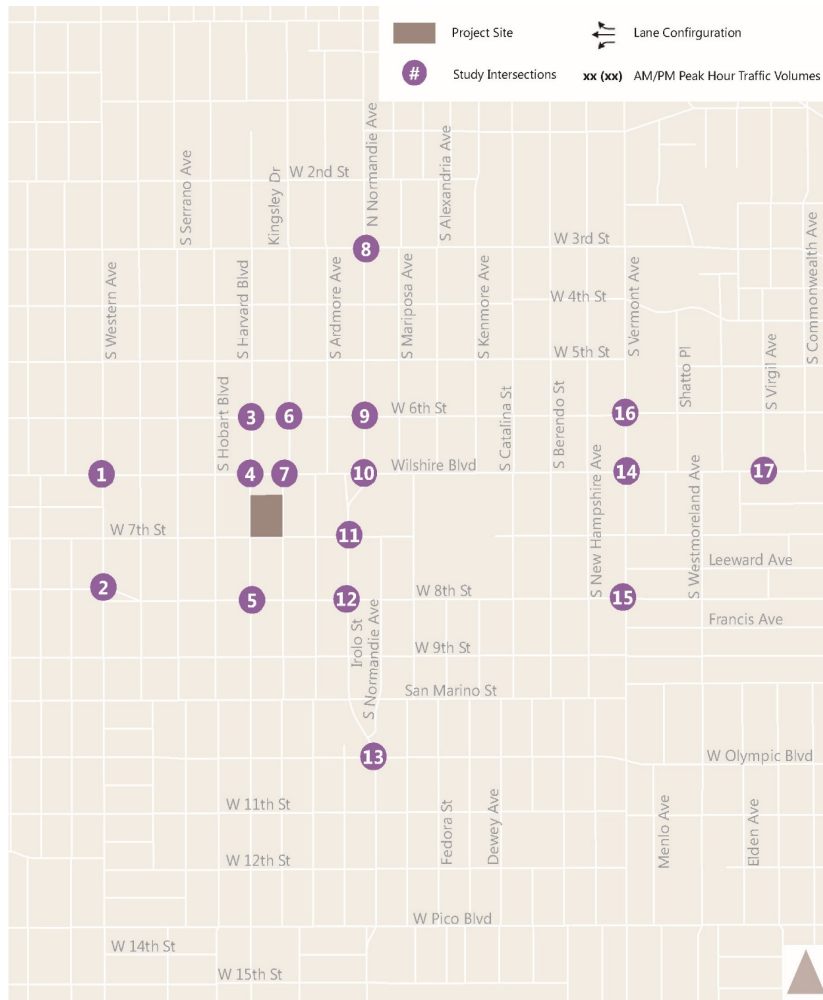


Figure 5
Peak Hour Traffic Volumes and Lane Configurations
Project Only Volumes



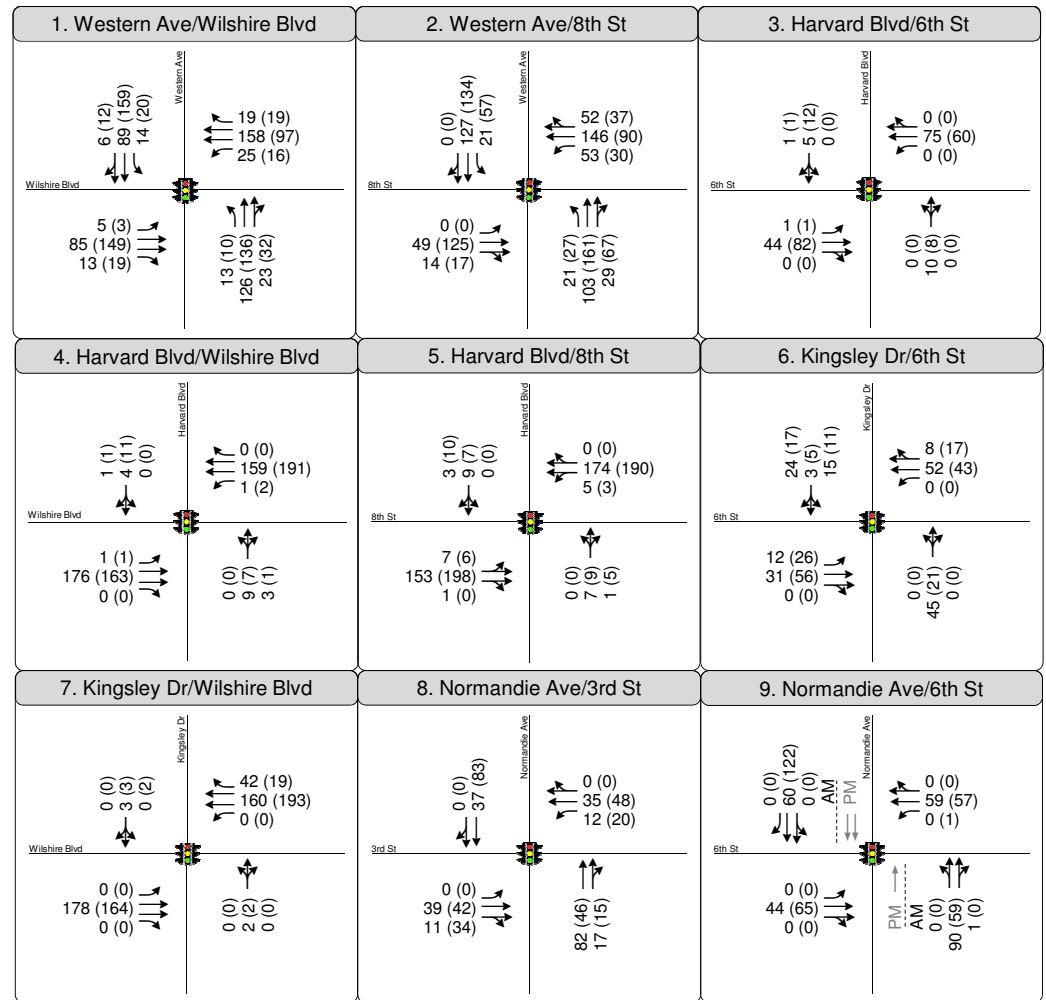
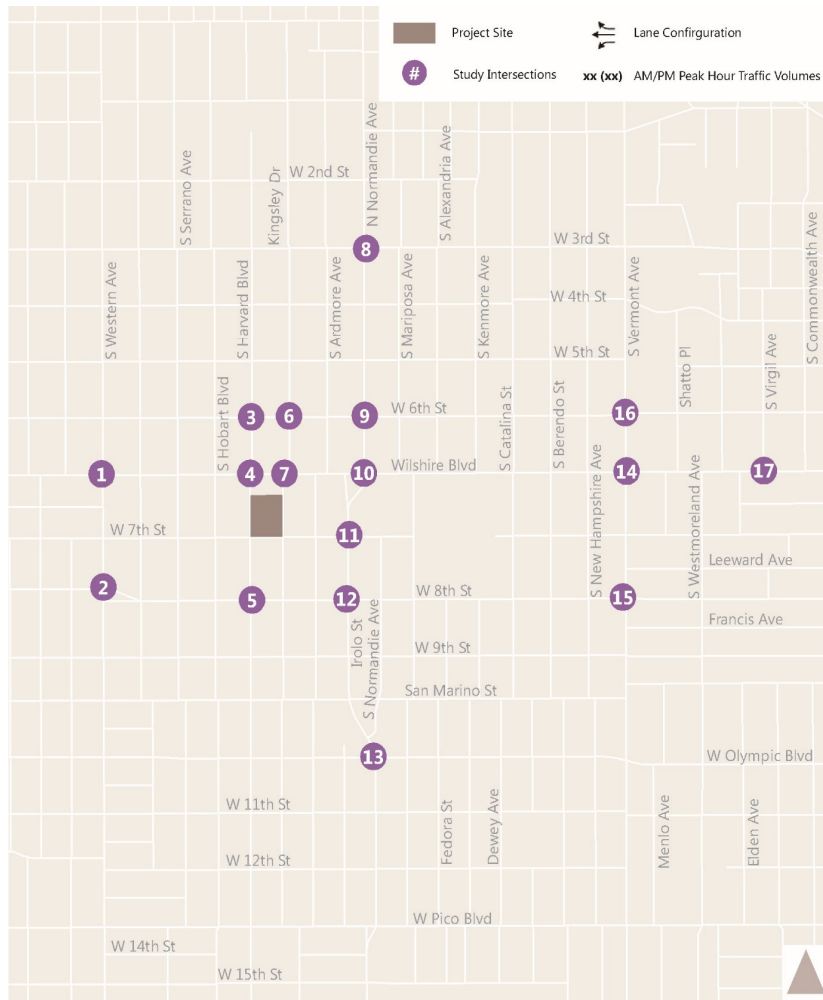


Figure 6
Peak Hour Traffic Volumes and Lane Configurations
Related Project Only Volumes



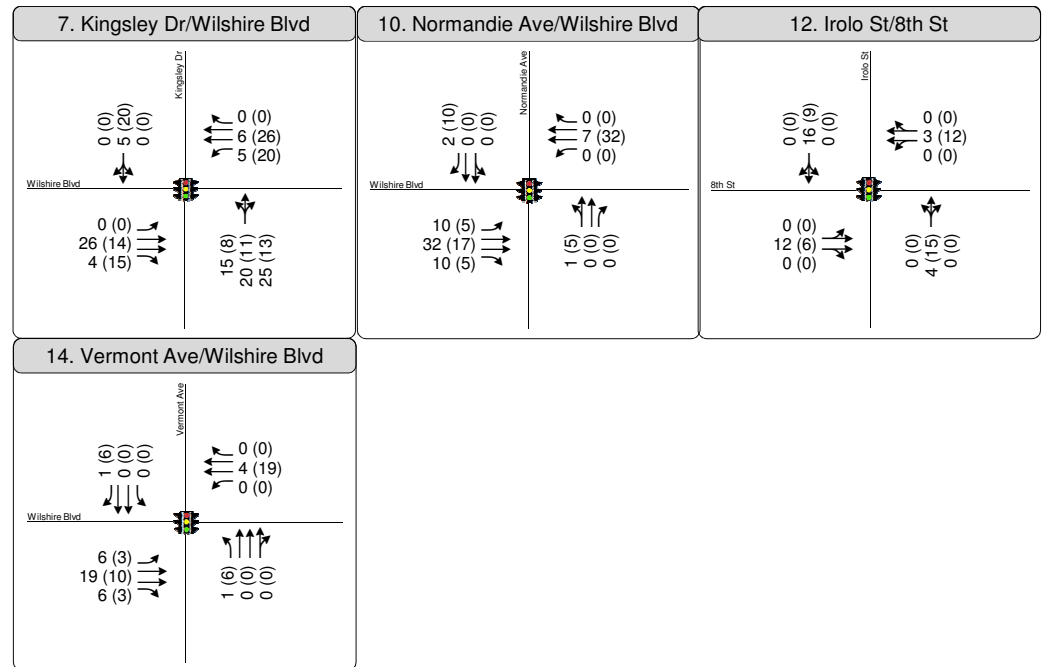
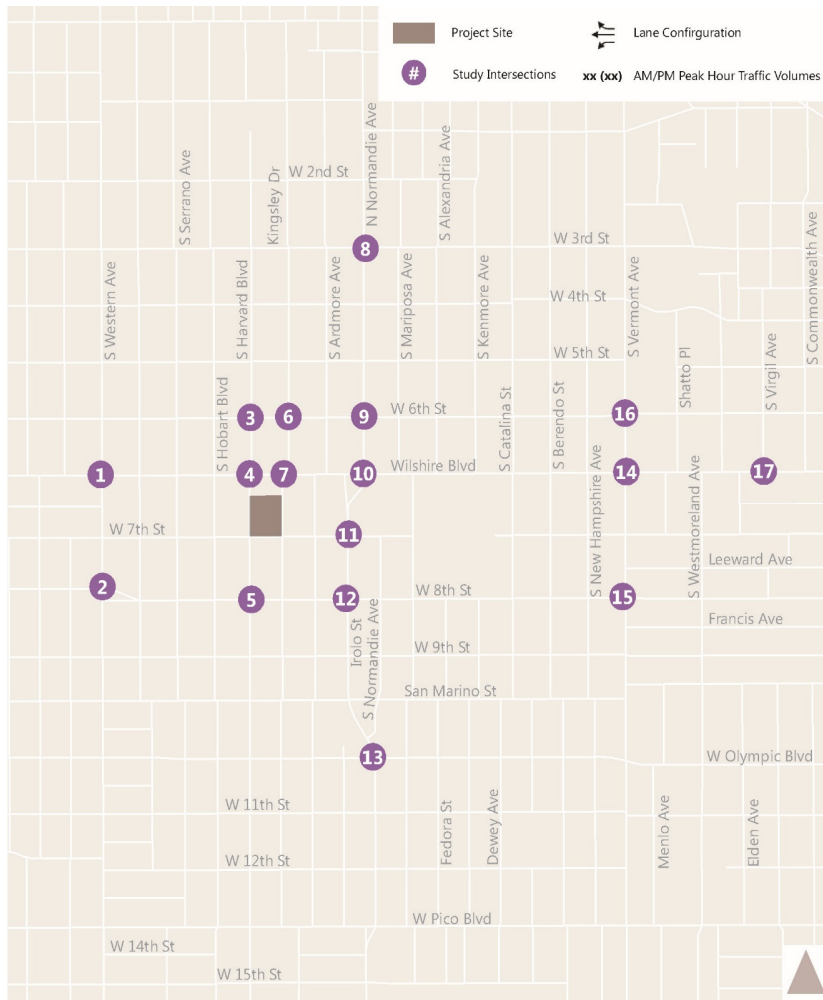


Figure 7
Peak Hour Traffic Volumes and Lane Configurations
Mitigated Project Only Volumes



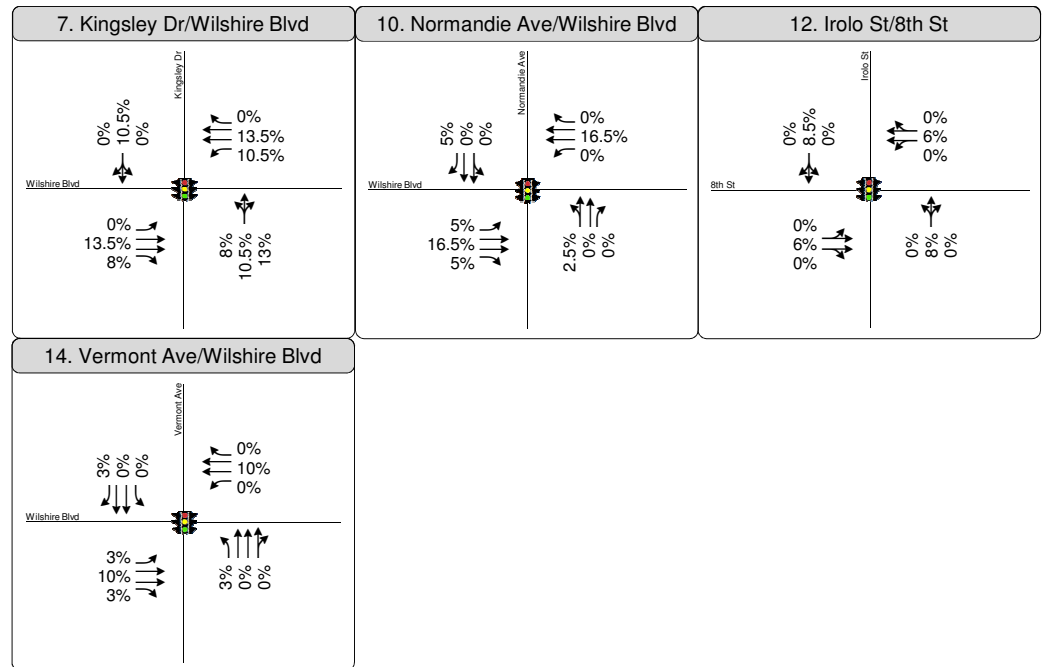
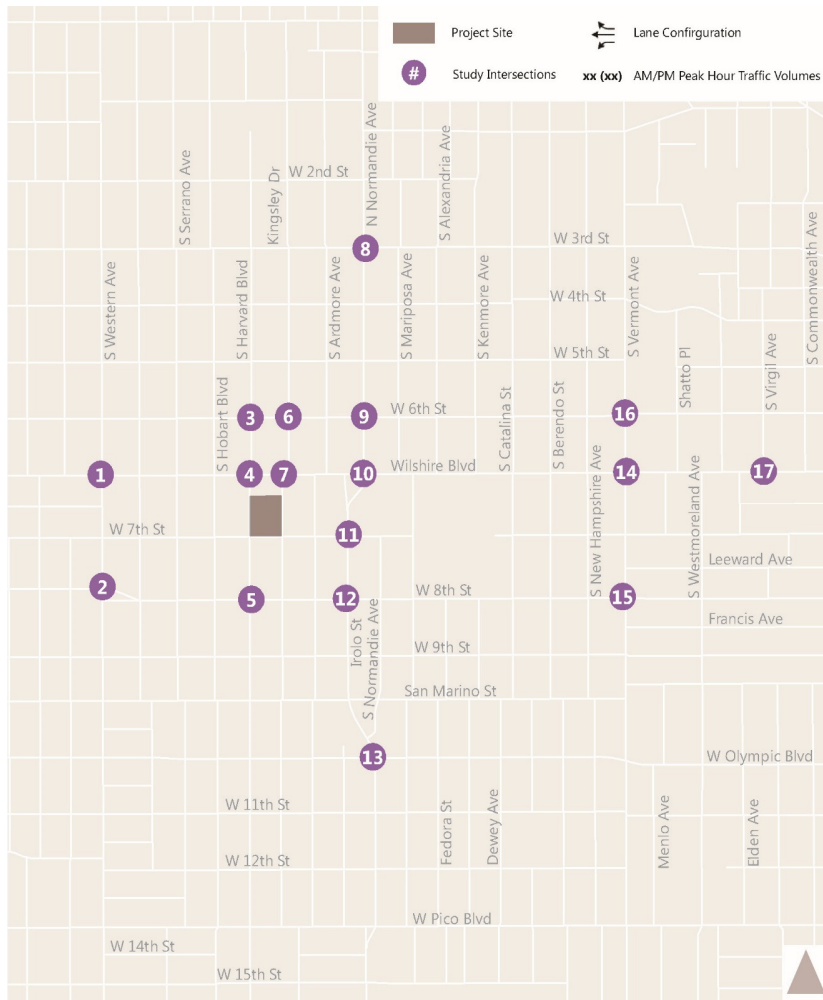


Figure 8
Peak Hour Traffic Volumes and Lane Configurations
Project Trip Distribution at Mitigated Intersections



APPENDIX C:
COUNT SHEETS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-006

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Western Ave			Western Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	34	220	13	20	156	17	30	153	4	14	261	10	932
7:15 AM	30	221	11	19	167	12	29	207	13	19	303	10	1041
7:30 AM	29	229	5	13	174	14	37	231	16	20	261	14	1043
7:45 AM	20	218	13	32	206	18	34	287	15	20	257	12	1132
8:00 AM	12	199	22	39	185	12	46	277	22	35	245	21	1115
8:15 AM	19	211	14	49	205	24	40	272	22	24	225	18	1123
8:30 AM	28	202	15	43	154	27	32	303	19	22	221	13	1079
8:45 AM	17	168	32	37	164	16	41	255	23	42	222	15	1032
9:00 AM	24	167	25	34	144	16	26	214	30	30	225	16	951
9:15 AM	27	185	25	24	160	15	30	175	24	28	185	9	887
9:30 AM	21	166	30	38	194	19	42	178	21	24	219	15	967
9:45 AM	17	168	25	31	180	7	36	215	12	25	204	16	936
TOTAL VOLUMES :	NL 278	NT 2354	NR 230	SL 379	ST 2089	SR 197	EL 423	ET 2767	ER 221	WL 303	WT 2828	WR 169	TOTAL 12238
APPROACH %'s :	9.71%	82.25%	8.04%	14.22%	78.39%	7.39%	12.40%	81.12%	6.48%	9.18%	85.70%	5.12%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	79	830	64	163	750	81	152	1139	78	101	948	64	4449
PEAK HR FACTOR :	0.969			0.894			0.967			0.924			0.983

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-006

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Western Ave			Western Ave			Wilshire Blvd			Wilshire Blvd				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL	
3:00 PM	21	184	25	28	177	21	39	200	25	37	190	30	977	
3:15 PM	25	180	22	39	221	14	49	208	25	39	196	22	1040	
3:30 PM	23	203	26	36	223	21	35	240	17	41	224	18	1107	
3:45 PM	24	199	10	42	219	17	38	227	24	27	208	27	1062	
4:00 PM	18	196	15	40	203	16	39	233	24	34	209	20	1047	
4:15 PM	22	174	23	26	184	20	41	246	26	31	228	14	1035	
4:30 PM	24	202	13	29	179	23	40	241	27	40	221	22	1061	
4:45 PM	27	203	15	22	200	17	44	246	28	34	217	24	1077	
5:00 PM	33	193	17	15	205	9	43	245	20	45	227	25	1077	
5:15 PM	36	192	19	28	204	15	40	264	29	45	232	34	1138	
5:30 PM	35	202	24	26	196	22	45	272	28	34	244	25	1153	
5:45 PM	24	199	14	22	194	26	50	247	36	34	232	17	1095	
TOTAL VOLUMES :	NL 312	NT 2327	NR 223	SL 353	ST 2405	SR 221	EL 503	ET 2869	ER 309	WL 441	WT 2628	WR 278	TOTAL 12869	
APPROACH %'s :	10.90%	81.31%	7.79%	11.85%	80.73%	7.42%	13.66%	77.94%	8.39%	13.18%	78.52%	8.31%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	128	786	74	91	799	72	178	1028	113	158	935	101	4463	
PEAK HR FACTOR :	0.946			0.974			0.956			0.960			0.968	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-008

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

NS/EW Streets:		AM												
		Western Ave			Western Ave			8th St			8th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM		7	236	14	17	175	3	8	67	7	18	181	12	745
7:15 AM		7	249	6	10	190	5	6	75	2	23	203	17	793
7:30 AM		6	245	7	20	237	4	10	125	6	22	168	10	860
7:45 AM		3	226	11	18	204	9	16	115	4	20	180	16	822
8:00 AM		6	258	4	19	244	8	11	132	6	22	158	9	877
8:15 AM		5	240	8	19	197	10	8	185	5	13	169	12	871
8:30 AM		11	224	8	10	217	9	18	153	12	30	186	13	891
8:45 AM		6	240	9	17	192	5	13	192	5	22	191	8	900
9:00 AM		8	219	10	17	200	11	12	132	9	32	157	15	822
9:15 AM		11	228	7	12	190	7	18	106	8	26	164	15	792
9:30 AM		2	231	6	22	183	6	10	107	7	29	158	24	785
9:45 AM		8	226	7	14	222	5	7	110	8	37	122	21	787
TOTAL VOLUMES :		NL 80	NT 2822	NR 97	SL 195	ST 2451	SR 82	EL 137	ET 1499	ER 79	WL 294	WT 2037	WR 172	TOTAL 9945
APPROACH %'s :		2.67%	94.10%	3.23%	7.15%	89.85%	3.01%	7.99%	87.41%	4.61%	11.75%	81.38%	6.87%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		28	962	29	65	850	32	50	662	28	87	704	42	3539
PEAK HR FACTOR :		0.951			0.874			0.881			0.909			0.983

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-008

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Western Ave			Western Ave			8th St			8th St				
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	
3:00 PM	11	230	7	15	261	8	11	114	12	33	99	14	815	
3:15 PM	5	237	17	13	245	12	20	131	6	35	109	19	849	
3:30 PM	7	228	8	21	281	9	13	118	12	39	100	29	865	
3:45 PM	6	232	16	17	215	11	15	131	9	20	101	25	798	
4:00 PM	6	235	12	28	271	9	9	151	8	41	108	27	905	
4:15 PM	8	233	10	24	268	12	17	156	12	34	100	19	893	
4:30 PM	5	247	14	25	269	7	20	172	8	38	115	14	934	
4:45 PM	6	232	9	31	261	17	20	168	5	36	140	24	949	
5:00 PM	7	237	7	23	271	14	17	190	4	32	167	15	984	
5:15 PM	9	238	10	20	260	5	12	161	4	33	156	23	931	
5:30 PM	9	217	13	26	233	7	17	189	3	37	171	29	951	
5:45 PM	11	236	12	18	236	4	15	196	8	32	160	21	949	
TOTAL VOLUMES :	NL 90	NT 2802	NR 135	SL 261	ST 3071	SR 115	EL 186	ET 1877	ER 91	WL 410	WT 1526	WR 259	TOTAL 10823	
APPROACH %'s :	2.97%	92.57%	4.46%	7.57%	89.09%	3.34%	8.64%	87.14%	4.22%	18.68%	69.52%	11.80%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	36	928	42	87	1000	30	61	736	19	134	654	88	3815	
PEAK HR FACTOR :	0.971			0.907			0.932			0.924			0.969	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-003

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

NS/EW Streets:		AM												
		Harvard Blvd			Harvard Blvd			6th St			6th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM		3	23	7	4	13	10	2	118	0	9	201	3	393
7:15 AM		9	22	6	11	14	7	2	165	7	4	254	4	505
7:30 AM		8	20	15	13	31	16	3	215	5	7	240	6	579
7:45 AM		3	32	13	8	26	12	8	239	8	6	262	5	622
8:00 AM		3	18	16	10	37	12	8	261	4	13	258	10	650
8:15 AM		13	30	12	4	39	16	4	230	6	10	283	10	657
8:30 AM		8	27	15	6	39	9	8	229	6	18	270	9	644
8:45 AM		10	35	12	7	32	14	11	244	9	14	240	10	638
9:00 AM		12	22	14	5	27	14	6	229	4	13	194	14	554
9:15 AM		22	24	12	3	36	10	5	203	5	10	180	10	520
9:30 AM		6	31	12	6	28	12	14	175	4	7	176	9	480
9:45 AM		5	26	8	5	22	13	7	203	6	5	153	10	463
TOTAL VOLUMES :		NL 102	NT 310	NR 142	SL 82	ST 344	SR 145	EL 78	ET 2511	ER 64	WL 116	WT 2711	WR 100	TOTAL 6705
APPROACH %'s :		18.41%	55.96%	25.63%	14.36%	60.25%	25.39%	2.94%	94.65%	2.41%	3.96%	92.62%	3.42%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		34	110	55	27	147	51	31	964	25	55	1051	39	2589
PEAK HR FACTOR :		0.873			0.953			0.934			0.945			0.985

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-003

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Harvard Blvd			Harvard Blvd			6th St			6th St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 0	TOTAL	
3:00 PM	10	31	15	6	26	9	6	231	8	12	161	13	528	
3:15 PM	10	39	17	19	21	8	7	256	15	6	169	15	582	
3:30 PM	17	41	19	5	19	10	11	227	9	11	164	12	545	
3:45 PM	16	49	23	12	31	10	15	253	5	14	196	21	645	
4:00 PM	5	45	15	7	26	10	10	278	14	14	202	10	636	
4:15 PM	9	50	14	4	30	6	10	265	5	14	240	23	670	
4:30 PM	15	57	22	5	43	5	12	307	12	15	217	24	734	
4:45 PM	10	42	20	6	33	15	10	289	8	17	213	22	685	
5:00 PM	14	62	18	9	40	12	15	259	15	15	263	11	733	
5:15 PM	8	59	22	8	40	14	8	285	9	17	272	20	762	
5:30 PM	14	72	20	4	36	18	15	313	12	9	263	11	787	
5:45 PM	15	60	24	6	30	17	8	278	16	11	229	17	711	
TOTAL VOLUMES :	NL 143	NT 607	NR 229	SL 91	ST 375	SR 134	EL 127	ET 3241	ER 128	WL 155	WT 2589	WR 199	TOTAL 8018	
APPROACH %'s :	14.61%	62.00%	23.39%	15.17%	62.50%	22.33%	3.63%	92.71%	3.66%	5.27%	87.97%	6.76%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	51	253	84	27	146	61	46	1135	52	52	1027	59	2993	
PEAK HR FACTOR :	0.915			0.944			0.907			0.921			0.951	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-004

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Harvard Blvd			Harvard Blvd			Wilshire Blvd			Wilshire Blvd			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	2	0	1	1	0	
7:00 AM	3	22	5	5	11	5	5	166	4	8	279	5	518
7:15 AM	4	35	5	4	8	10	6	224	1	1	308	1	607
7:30 AM	1	26	6	10	33	10	4	262	6	3	294	4	659
7:45 AM	3	39	5	6	21	6	5	296	8	4	277	4	674
8:00 AM	5	31	12	16	35	10	4	330	6	6	299	6	760
8:15 AM	3	37	3	6	35	20	10	279	11	15	285	10	714
8:30 AM	4	30	7	8	43	8	7	323	8	14	278	12	742
8:45 AM	8	39	6	11	36	15	5	300	6	6	284	7	723
9:00 AM	6	36	8	6	30	17	2	235	7	9	256	0	612
9:15 AM	9	28	8	8	35	13	7	223	7	14	222	11	585
9:30 AM	1	30	13	4	23	11	9	206	7	14	267	9	594
9:45 AM	2	30	15	6	26	7	5	237	8	14	233	12	595
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	49	383	93	90	336	132	69	3081	79	108	3282	81	7783
APPROACH %'s :	9.33%	72.95%	17.71%	16.13%	60.22%	23.66%	2.14%	95.42%	2.45%	3.11%	94.55%	2.33%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	20	137	28	41	149	53	26	1232	31	41	1146	35	2939
PEAK HR FACTOR :	0.873		0.980				0.948			0.982			0.967

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-004

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Harvard Blvd			Harvard Blvd			Wilshire Blvd			Wilshire Blvd				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 0	TOTAL	
3:00 PM	3	31	11	7	30	11	14	228	12	15	255	6	623	
3:15 PM	4	34	20	10	32	13	11	267	6	11	267	14	689	
3:30 PM	5	61	10	7	34	23	13	268	7	18	239	4	689	
3:45 PM	4	64	13	3	37	8	10	259	4	14	261	8	685	
4:00 PM	13	40	15	8	48	10	7	262	5	18	254	7	687	
4:15 PM	3	65	18	8	39	10	9	259	7	10	268	7	703	
4:30 PM	7	62	9	3	46	12	12	263	9	13	286	11	733	
4:45 PM	5	54	10	5	42	16	6	296	5	3	277	6	725	
5:00 PM	6	72	6	5	51	14	8	265	9	22	274	11	743	
5:15 PM	5	69	13	11	51	14	8	299	9	18	334	13	844	
5:30 PM	11	76	7	6	47	5	19	281	10	15	296	17	790	
5:45 PM	6	77	11	6	45	13	11	280	12	13	265	10	749	
TOTAL VOLUMES :	NL 72	NT 705	NR 143	SL 79	ST 502	SR 149	EL 128	ET 3227	ER 95	WL 170	WT 3276	WR 114	TOTAL 8660	
APPROACH %'s :	7.83%	76.63%	15.54%	10.82%	68.77%	20.41%	3.71%	93.54%	2.75%	4.78%	92.02%	3.20%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	28	294	37	28	194	46	46	1125	40	68	1169	51	3126	
PEAK HR FACTOR :	0.955			0.882			0.958			0.882			0.926	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-005

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Harvard Blvd			Harvard Blvd			8th St			8th St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	2	0	0	2	0	
7:00 AM	2	31	10	2	16	7	4	87	4	5	196	2	366
7:15 AM	5	39	7	3	15	1	1	115	4	6	223	1	420
7:30 AM	5	33	7	6	29	7	3	147	3	7	189	9	445
7:45 AM	8	52	12	14	28	5	5	159	5	11	222	11	532
8:00 AM	5	39	9	9	28	9	10	183	6	7	190	5	500
8:15 AM	1	62	9	12	28	11	4	172	3	7	176	9	494
8:30 AM	5	60	2	14	30	5	4	182	3	2	214	4	525
8:45 AM	8	72	12	17	18	10	6	170	5	6	205	8	537
9:00 AM	10	53	8	6	32	4	9	137	4	6	205	11	485
9:15 AM	4	55	6	7	31	6	6	130	4	6	178	11	444
9:30 AM	7	53	2	6	29	4	5	119	2	5	190	4	426
9:45 AM	5	46	15	3	26	14	9	132	2	9	187	15	463
TOTAL VOLUMES :	NL 65	NT 595	NR 99	SL 99	ST 310	SR 83	EL 66	ET 1733	ER 45	WL 77	WT 2375	WR 90	TOTAL 5637
APPROACH %'s :	8.56%	78.39%	13.04%	20.12%	63.01%	16.87%	3.58%	93.98%	2.44%	3.03%	93.43%	3.54%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	19	233	32	52	104	35	24	707	17	22	785	26	2056
PEAK HR FACTOR :	0.772			0.936			0.940			0.947			0.957

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-005

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Harvard Blvd			Harvard Blvd			8th St			8th St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL	
3:00 PM	9	41	9	11	40	11	7	139	10	7	142	6	432	
3:15 PM	4	51	8	11	35	12	3	150	3	7	143	12	439	
3:30 PM	4	63	16	7	40	6	7	147	10	10	149	9	468	
3:45 PM	5	57	8	13	57	10	3	180	8	14	149	11	515	
4:00 PM	6	63	5	8	69	9	6	176	7	5	156	7	517	
4:15 PM	5	63	11	14	57	13	7	163	9	11	177	7	537	
4:30 PM	4	51	8	9	65	9	10	189	8	15	186	10	564	
4:45 PM	4	62	8	4	54	6	10	204	9	5	179	8	553	
5:00 PM	7	62	12	17	63	17	6	180	10	15	213	12	614	
5:15 PM	8	76	8	8	86	9	1	224	9	18	175	12	634	
5:30 PM	4	64	14	15	64	13	4	193	13	11	200	11	606	
5:45 PM	2	76	7	9	67	15	5	220	15	15	202	8	641	
TOTAL VOLUMES :	NL 62	NT 729	NR 114	SL 126	ST 697	SR 130	EL 69	ET 2165	ER 111	WL 133	WT 2071	WR 113	TOTAL 6520	
APPROACH %'s :	6.85%	80.55%	12.60%	13.22%	73.14%	13.64%	2.94%	92.32%	4.73%	5.74%	89.38%	4.88%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	21	278	41	49	280	54	16	817	47	59	790	43	2495	
PEAK HR FACTOR :	0.924			0.930			0.917			0.929			0.973	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-006

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Kingsley Dr			Kingsley Dr			6th St			6th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	3	11	11	9	15	12	4	127	0	10	202	3	407
7:15 AM	6	12	9	9	24	11	1	178	5	8	243	4	510
7:30 AM	3	16	30	19	30	13	5	238	4	16	235	1	610
7:45 AM	3	18	8	20	41	9	1	251	5	13	264	9	642
8:00 AM	2	15	5	14	37	14	5	270	9	15	270	15	671
8:15 AM	1	11	11	10	34	16	4	229	5	15	297	5	638
8:30 AM	6	13	20	9	34	11	6	240	6	16	273	3	637
8:45 AM	5	10	13	5	59	9	5	250	5	17	243	9	630
9:00 AM	10	12	13	4	40	13	1	246	3	17	209	3	571
9:15 AM	10	13	16	10	38	8	4	212	7	15	180	6	519
9:30 AM	7	15	16	12	18	5	3	191	4	14	179	3	467
9:45 AM	4	6	11	7	25	4	4	207	8	17	159	3	455
TOTAL VOLUMES :	NL 60	NT 152	NR 163	SL 128	ST 395	SR 125	EL 43	ET 2639	ER 61	WL 173	WT 2754	WR 64	TOTAL 6757
APPROACH %'s :	16.00%	40.53%	43.47%	19.75%	60.96%	19.29%	1.57%	96.21%	2.22%	5.78%	92.08%	2.14%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	12	57	44	53	146	50	16	990	25	59	1104	32	2588
PEAK HR FACTOR :	0.724			0.889			0.908			0.942			0.964

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-006

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Kingsley Dr			Kingsley Dr			6th St			6th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
3:00 PM	7	33	11	27	24	6	7	246	5	10	178	3	557
3:15 PM	10	17	14	20	20	5	9	285	9	9	170	13	581
3:30 PM	3	27	20	25	21	8	7	264	6	11	195	10	597
3:45 PM	5	26	13	24	36	7	4	274	10	11	224	12	646
4:00 PM	5	39	12	26	33	4	13	283	10	10	209	12	656
4:15 PM	3	37	13	16	36	7	7	263	7	9	255	10	663
4:30 PM	5	41	14	7	36	9	7	297	4	9	230	10	669
4:45 PM	8	33	15	9	40	6	8	294	8	18	224	9	672
5:00 PM	4	59	20	8	43	9	7	278	3	11	280	9	731
5:15 PM	9	40	17	4	37	12	7	303	8	8	277	7	729
5:30 PM	11	52	14	10	43	9	6	317	14	5	264	7	752
5:45 PM	3	66	20	7	45	9	3	290	11	10	243	8	715
TOTAL VOLUMES :	NL 73	NT 470	NR 183	SL 183	ST 414	SR 91	EL 85	ET 3394	ER 95	WL 121	WT 2749	WR 110	TOTAL 7968
APPROACH %'s :	10.06%	64.74%	25.21%	26.60%	60.17%	13.23%	2.38%	94.96%	2.66%	4.06%	92.25%	3.69%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	27	217	71	29	168	39	23	1188	36	34	1064	31	2927
PEAK HR FACTOR :	0.885			0.952			0.925			0.941			0.973

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-007

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Kingsley Dr			Kingsley Dr			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	3	0	1	3	0	
7:00 AM	3	6	3	5	8	6	0	169	4	19	291	9	523
7:15 AM	10	15	10	11	19	7	0	219	11	22	308	10	642
7:30 AM	4	13	13	15	23	8	0	277	10	12	282	10	667
7:45 AM	7	14	6	14	36	6	0	294	15	37	277	17	723
8:00 AM	11	10	10	19	28	7	0	346	13	18	293	13	768
8:15 AM	10	13	8	11	27	7	0	292	13	27	293	9	710
8:30 AM	8	18	5	8	34	8	0	299	21	43	282	11	737
8:45 AM	10	12	13	18	43	5	0	303	24	20	290	16	754
9:00 AM	5	21	16	16	36	8	0	246	15	36	250	15	664
9:15 AM	7	14	20	15	31	8	0	219	14	43	240	16	627
9:30 AM	9	14	13	10	25	9	0	213	17	25	277	21	633
9:45 AM	9	17	24	6	20	8	0	246	22	32	247	18	649
TOTAL VOLUMES :	NL 93	NT 167	NR 141	SL 148	ST 330	SR 87	EL 0	ET 3123	ER 179	WL 334	WT 3330	WR 165	TOTAL 8097
APPROACH %'s :	23.19%	41.65%	35.16%	26.19%	58.41%	15.40%	0.00%	94.58%	5.42%	8.72%	86.97%	4.31%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	39	53	36	56	132	27	0	1240	71	108	1158	49	2969
PEAK HR FACTOR :	0.914			0.814			0.913			0.978			0.966

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-007

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Kingsley Dr			Kingsley Dr			Wilshire Blvd			Wilshire Blvd				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0	1	0	0	1	0	0	3	0	1	3	0		
3:00 PM	13	28	15	11	21	8	0	239	14	25	271	13	658	
3:15 PM	11	14	22	13	16	7	0	267	19	22	267	16	674	
3:30 PM	13	24	19	13	19	7	0	266	18	29	247	18	673	
3:45 PM	13	26	11	18	38	5	0	261	13	19	272	14	690	
4:00 PM	10	27	14	10	23	12	0	276	23	21	251	12	679	
4:15 PM	13	38	19	15	32	5	0	257	17	17	274	16	703	
4:30 PM	10	32	16	13	31	4	0	263	15	12	288	16	700	
4:45 PM	22	32	18	15	42	11	0	296	10	20	252	10	728	
5:00 PM	19	53	24	11	32	10	0	271	10	18	280	17	745	
5:15 PM	16	30	25	14	27	7	0	304	9	24	331	20	807	
5:30 PM	18	46	18	10	35	7	0	283	11	23	312	23	786	
5:45 PM	10	60	19	13	50	7	0	284	11	20	273	25	772	
TOTAL VOLUMES :	NL 168	NT 410	NR 220	SL 156	ST 366	SR 90	EL 0	ET 3267	ER 170	WL 250	WT 3318	WR 200	TOTAL 8615	
APPROACH %'s :	21.05%	51.38%	27.57%	25.49%	59.80%	14.71%	0.00%	95.05%	4.95%	6.63%	88.06%	5.31%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	63	189	86	48	144	31	0	1142	41	85	1196	85	3110	
PEAK HR FACTOR :	0.880			0.796			0.945			0.911			0.963	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-008

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Normandie Ave			Normandie Ave			3rd St			3rd St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2	0	0	2	0	1	2	0	1	2	0	
7:00 AM	4	109	18	0	135	25	18	200	4	8	232	9	762
7:15 AM	1	134	18	1	171	25	12	233	6	9	280	4	894
7:30 AM	0	137	11	0	179	24	17	253	12	11	287	4	935
7:45 AM	1	126	12	0	199	19	12	278	8	10	286	13	964
8:00 AM	0	104	15	2	216	15	14	258	9	13	253	16	915
8:15 AM	0	117	20	0	183	28	14	298	12	8	252	7	939
8:30 AM	0	121	15	0	190	27	22	295	12	14	269	7	972
8:45 AM	2	105	20	1	190	31	21	303	14	14	271	11	983
9:00 AM	0	122	10	0	189	25	20	268	8	12	280	8	942
9:15 AM	0	101	14	0	172	19	10	254	13	8	248	16	855
9:30 AM	2	103	6	2	163	22	20	254	12	16	269	12	881
9:45 AM	1	102	13	1	156	19	14	270	12	13	224	13	838
TOTAL VOLUMES :	NL 11	NT 1381	NR 172	SL 7	ST 2143	SR 279	EL 194	ET 3164	ER 122	WL 136	WT 3151	WR 120	TOTAL 10880
APPROACH %'s :	0.70%	88.30%	11.00%	0.29%	88.23%	11.49%	5.57%	90.92%	3.51%	3.99%	92.49%	3.52%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	2	465	65	1	752	111	77	1164	46	48	1072	33	3836
PEAK HR FACTOR :	0.971			0.973			0.952			0.961			0.976

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-008

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Normandie Ave			Normandie Ave			3rd St			3rd St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2	0	0	2	0	1	2	0	1	2	0	
3:00 PM	0	114	20	3	119	19	25	272	9	3	224	16	824
3:15 PM	0	123	17	3	141	21	14	287	12	7	238	12	875
3:30 PM	0	161	13	1	144	19	17	272	9	11	260	14	921
3:45 PM	1	138	13	2	139	14	27	267	12	10	236	15	874
4:00 PM	2	149	20	0	144	14	24	263	16	16	247	14	909
4:15 PM	0	180	15	2	128	24	33	281	8	10	257	14	952
4:30 PM	1	193	13	0	148	16	27	291	12	15	265	16	997
4:45 PM	1	188	14	0	133	24	23	279	19	15	270	17	983
5:00 PM	0	221	17	0	154	28	23	285	10	11	267	16	1032
5:15 PM	0	216	17	0	132	17	25	245	13	12	288	13	978
5:30 PM	0	194	10	1	123	17	20	260	19	14	285	9	952
5:45 PM	1	173	20	1	137	29	26	253	12	13	288	8	961
TOTAL VOLUMES :	NL 6	NT 2050	NR 189	SL 13	ST 1642	SR 242	EL 284	ET 3255	ER 151	WL 137	WT 3125	WR 164	TOTAL 11258
APPROACH %'s :	0.27%	91.31%	8.42%	0.69%	86.56%	12.76%	7.70%	88.21%	4.09%	4.00%	91.21%	4.79%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	2	818	61	0	567	85	98	1100	54	53	1090	62	3990
PEAK HR FACTOR :	0.925		0.896			0.948			0.962			0.967	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-009

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Normandie Ave			Normandie Ave			6th St			6th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2	0	0	3	0	1	2	0	1	1	0	
7:00 AM	6	122	9	10	128	23	6	129	15	12	197	5	662
7:15 AM	7	104	9	10	141	29	5	181	10	11	222	6	735
7:30 AM	12	102	9	16	133	27	10	256	13	5	217	1	801
7:45 AM	6	123	10	21	136	29	8	270	10	12	239	4	868
8:00 AM	7	96	16	23	153	39	9	280	15	7	246	6	897
8:15 AM	7	113	13	18	135	34	9	250	16	14	271	9	889
8:30 AM	8	107	12	11	137	32	9	234	11	11	257	7	836
8:45 AM	4	89	12	31	135	32	13	258	18	14	243	9	858
9:00 AM	15	95	20	17	135	28	14	225	11	15	186	8	769
9:15 AM	17	84	16	15	144	27	14	232	13	17	182	9	770
9:30 AM	15	95	25	14	117	16	12	192	11	13	172	4	686
9:45 AM	10	97	15	16	127	17	9	205	10	13	163	9	691
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	114	1227	166	202	1621	333	118	2712	153	144	2595	77	9462
	7.56%	81.42%	11.02%	9.37%	75.19%	15.45%	3.96%	90.92%	5.13%	5.11%	92.15%	2.73%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	28	439	51	73	561	134	35	1034	52	44	1013	26	3490
PEAK HR FACTOR :	0.932			0.893			0.922			0.921			0.973

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-009

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Normandie Ave			Normandie Ave			6th St			6th St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0	2	0	0	3	0	1	2	0	1	1	0		
3:00 PM	9	105	18	6	103	16	17	253	15	10	175	7	734	
3:15 PM	11	118	15	11	132	6	12	266	20	15	174	8	788	
3:30 PM	8	140	13	11	136	13	18	263	16	13	182	6	819	
3:45 PM	10	109	22	7	119	15	15	287	12	16	203	8	823	
4:00 PM	3	138	16	1	134	9	13	285	16	14	230	12	871	
4:15 PM	1	160	19	2	137	19	18	261	15	13	234	21	900	
4:30 PM	6	159	25	2	121	14	18	267	14	12	234	14	886	
4:45 PM	6	152	17	2	125	19	21	293	13	12	242	21	923	
5:00 PM	3	193	21	2	136	11	12	272	13	19	266	19	967	
5:15 PM	3	165	12	2	118	7	23	300	11	18	305	14	978	
5:30 PM	2	156	16	5	120	6	21	287	10	15	278	11	927	
5:45 PM	9	160	24	0	114	12	19	293	7	10	263	20	931	
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
APPROACH %'s :	71	1755	218	51	1495	147	207	3327	162	167	2786	161	10547	
	3.47%	85.86%	10.67%	3.01%	88.30%	8.68%	5.60%	90.02%	4.38%	5.36%	89.47%	5.17%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	17	674	73	9	488	36	75	1152	41	62	1112	64	3803	
PEAK HR FACTOR :	0.880			0.894			0.949			0.918			0.972	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-014

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Irolo St			Irolo St			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	2	1	1	3	0	1	3	0	
7:00 AM	15	124	13	14	125	18	6	164	14	10	272	3	778
7:15 AM	12	118	18	12	129	22	3	215	13	17	281	7	847
7:30 AM	19	110	27	12	130	20	10	300	20	12	273	4	937
7:45 AM	12	115	22	7	130	22	8	282	23	36	273	6	936
8:00 AM	6	92	30	15	133	27	15	323	32	23	293	10	999
8:15 AM	8	111	24	11	121	37	5	283	23	26	278	7	934
8:30 AM	15	113	21	13	132	26	11	253	32	31	293	7	947
8:45 AM	15	79	34	16	140	22	12	293	38	28	269	11	957
9:00 AM	18	100	38	21	117	28	18	240	17	24	251	12	884
9:15 AM	18	101	34	21	134	22	6	237	26	26	228	8	861
9:30 AM	22	125	29	13	108	34	11	214	22	19	266	8	871
9:45 AM	12	90	37	17	120	18	12	231	20	20	249	19	845
TOTAL VOLUMES :	NL 172	NT 1278	NR 327	SL 172	ST 1519	SR 296	EL 117	ET 3035	ER 280	WL 272	WT 3226	WR 102	TOTAL 10796
APPROACH %'s :	9.68%	71.92%	18.40%	8.66%	76.45%	14.90%	3.41%	88.43%	8.16%	7.56%	89.61%	2.83%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	44	395	109	55	526	112	43	1152	125	108	1133	35	3837
PEAK HR FACTOR :	0.919			0.973			0.892			0.964			0.960

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-014

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Irolo St			Irolo St			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	2	1	1	3	0	1	3	0	
3:00 PM	20	105	27	12	110	16	12	231	26	25	263	14	861
3:15 PM	16	103	17	14	131	23	16	264	20	23	269	20	916
3:30 PM	11	121	38	18	133	25	19	262	13	24	260	12	936
3:45 PM	12	117	34	15	125	19	19	276	17	25	244	15	918
4:00 PM	13	127	20	12	128	16	21	270	10	27	271	14	929
4:15 PM	14	146	17	14	140	24	13	260	26	28	264	17	963
4:30 PM	16	138	25	14	125	20	18	291	19	26	275	24	991
4:45 PM	11	147	25	9	125	15	22	284	21	26	258	18	961
5:00 PM	8	160	24	18	126	16	23	295	14	30	296	19	1029
5:15 PM	9	131	24	24	121	10	19	287	27	31	342	23	1048
5:30 PM	15	133	32	10	131	20	25	292	24	29	289	12	1012
5:45 PM	10	141	32	17	106	23	23	281	21	28	287	24	993
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	155	1569	315	177	1501	227	230	3293	238	322	3318	212	11557
	7.60%	76.95%	15.45%	9.29%	78.79%	11.92%	6.12%	87.56%	6.33%	8.36%	86.14%	5.50%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	42	565	112	69	484	69	90	1155	86	118	1214	78	4082
PEAK HR FACTOR :	0.936			0.966			0.976			0.890			0.974

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-011

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Irolo St			Irolo St			7th St			7th St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM	9	141	2	5	101	15	3	6	9	6	5	10	312
7:15 AM	12	129	9	4	99	21	9	8	14	5	10	14	334
7:30 AM	27	133	11	11	124	28	12	17	19	5	9	17	413
7:45 AM	23	116	12	11	113	35	16	20	16	4	21	17	404
8:00 AM	28	122	3	10	116	29	11	31	18	7	17	15	407
8:15 AM	25	134	6	9	104	30	13	29	13	5	31	13	412
8:30 AM	37	134	5	9	117	24	17	17	20	2	22	15	419
8:45 AM	38	112	5	10	111	37	9	29	17	5	18	18	409
9:00 AM	31	134	10	14	99	19	18	19	23	10	23	26	426
9:15 AM	29	138	5	9	117	38	11	13	14	7	18	18	417
9:30 AM	22	144	9	2	100	32	11	18	22	8	16	17	401
9:45 AM	24	123	12	9	106	22	11	30	19	6	21	15	398
TOTAL VOLUMES :	NL 305	NT 1560	NR 89	SL 103	ST 1307	SR 330	EL 141	ET 237	ER 204	WL 70	WT 211	WR 195	TOTAL 4752
APPROACH %'s :	15.61%	79.84%	4.55%	5.92%	75.11%	18.97%	24.23%	40.72%	35.05%	14.71%	44.33%	40.97%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	135	518	25	42	444	118	55	78	74	24	81	77	1671
PEAK HR FACTOR :	0.963		0.921			0.863			0.771			0.981	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-011

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Irolo St			Irolo St			7th St			7th St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
3:00 PM	16	119	9	16	132	26	7	22	25	7	17	18	414
3:15 PM	24	92	5	12	147	23	14	36	26	5	15	16	415
3:30 PM	18	126	5	8	139	20	6	38	17	6	20	17	420
3:45 PM	12	121	7	12	126	26	10	34	21	4	21	13	407
4:00 PM	15	129	11	9	138	30	9	36	19	9	15	16	436
4:15 PM	13	127	5	13	137	46	10	37	27	6	22	14	457
4:30 PM	18	125	13	13	130	46	14	38	22	3	20	23	465
4:45 PM	16	135	8	19	139	39	13	44	15	6	17	10	461
5:00 PM	3	146	12	15	128	48	17	48	29	9	35	12	502
5:15 PM	13	121	11	9	106	69	12	39	24	4	34	18	460
5:30 PM	14	125	7	21	120	86	16	57	31	6	21	17	521
5:45 PM	14	129	10	16	111	56	22	57	19	5	33	22	494
TOTAL VOLUMES :	NL 176	NT 1495	NR 103	SL 163	ST 1553	SR 515	EL 150	ET 486	ER 275	WL 70	WT 270	WR 196	TOTAL 5452
APPROACH %'s :	9.92%	84.27%	5.81%	7.31%	69.61%	23.08%	16.47%	53.35%	30.19%	13.06%	50.37%	36.57%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	44	521	40	61	465	259	67	201	103	24	123	69	1977
PEAK HR FACTOR :	0.939			0.865			0.892			0.900			0.949

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-015

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Irolo St			Irolo St			8th St			8th St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
7:00 AM	8	118	4	9	97	7	4	73	13	9	165	9	516
7:15 AM	16	120	7	7	113	5	2	86	21	7	145	4	533
7:30 AM	14	121	3	6	116	6	3	114	17	5	153	5	563
7:45 AM	8	153	4	10	119	6	1	106	24	4	143	3	581
8:00 AM	14	143	4	8	126	9	6	116	15	5	143	6	595
8:15 AM	20	154	6	10	104	7	5	131	25	8	167	7	644
8:30 AM	14	155	11	15	107	6	7	156	19	7	176	8	681
8:45 AM	15	136	5	7	96	10	10	158	15	8	218	9	687
9:00 AM	21	142	11	10	112	14	5	120	10	9	161	9	624
9:15 AM	18	132	7	10	90	11	10	140	13	3	178	8	620
9:30 AM	11	160	5	9	114	9	6	112	15	9	167	5	622
9:45 AM	17	133	6	5	126	3	9	121	9	7	162	8	606
TOTAL VOLUMES :	NL 176	NT 1667	NR 73	SL 106	ST 1320	SR 93	EL 68	ET 1433	ER 196	WL 81	WT 1978	WR 81	TOTAL 7272
APPROACH %'s :	9.19%	87.00%	3.81%	6.98%	86.90%	6.12%	4.01%	84.44%	11.55%	3.79%	92.43%	3.79%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	70	587	33	42	419	37	27	565	69	32	722	33	2636
PEAK HR FACTOR :	0.958		0.915				0.903			0.837			0.959

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5159-015

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Irolo St			Irolo St			8th St			8th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	2	0	0	2	0	
3:00 PM	10	129	12	13	150	6	8	159	20	10	114	9	640
3:15 PM	11	135	7	10	142	10	9	162	16	7	126	9	644
3:30 PM	14	130	10	9	166	9	6	152	14	14	115	9	648
3:45 PM	13	121	11	10	137	6	6	137	13	8	145	7	614
4:00 PM	15	125	9	8	155	3	3	158	15	13	144	4	652
4:15 PM	11	137	11	3	154	7	12	181	15	11	96	3	641
4:30 PM	13	141	5	6	148	5	9	167	13	12	118	2	639
4:45 PM	15	145	6	13	155	6	5	184	10	9	155	12	715
5:00 PM	17	127	4	14	142	4	8	198	21	16	153	7	711
5:15 PM	8	123	7	6	141	6	12	163	20	11	179	6	682
5:30 PM	21	119	6	13	132	11	9	195	14	13	194	8	735
5:45 PM	10	126	7	9	127	9	8	208	23	4	216	10	757
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	158	1558	95	114	1749	82	95	2064	194	128	1755	86	8078
	8.72%	86.03%	5.25%	5.86%	89.92%	4.22%	4.04%	87.72%	8.24%	6.50%	89.13%	4.37%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	56	495	24	42	542	30	37	764	78	44	742	31	2885
PEAK HR FACTOR :	0.971			0.959			0.919			0.888			0.953

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-013

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Irolo St			Irolo St			Olympic Blvd			Olympic Blvd			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	41	172	15	14	124	30	9	199	7	8	403	8	1030
7:15 AM	40	203	20	15	119	12	14	237	14	12	396	9	1091
7:30 AM	33	214	20	23	168	14	13	343	24	2	373	11	1238
7:45 AM	34	210	19	15	151	24	15	370	14	7	433	17	1309
8:00 AM	27	223	17	26	166	20	17	404	17	10	366	16	1309
8:15 AM	38	204	27	16	148	14	15	415	24	16	382	15	1314
8:30 AM	36	220	17	14	151	16	13	393	21	19	365	15	1280
8:45 AM	39	232	17	18	131	16	20	421	22	8	353	20	1297
9:00 AM	31	228	18	19	135	14	7	351	12	13	320	11	1159
9:15 AM	41	203	23	16	140	23	18	329	21	11	322	14	1161
9:30 AM	27	192	23	14	137	11	13	316	13	14	258	13	1031
9:45 AM	36	199	28	19	126	22	8	326	22	13	286	10	1095
TOTAL VOLUMES :	NL 423	NT 2500	NR 244	SL 209	ST 1696	SR 216	EL 162	ET 4104	ER 211	WL 133	WT 4257	WR 159	TOTAL 14314
APPROACH %'s :	13.36%	78.94%	7.70%	9.85%	79.96%	10.18%	3.62%	91.67%	4.71%	2.92%	93.58%	3.50%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	135	857	80	71	616	74	60	1582	76	52	1546	63	5212
PEAK HR FACTOR :	0.982		0.897			0.946			0.909			0.992	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-013

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Irolo St			Irolo St			Olympic Blvd			Olympic Blvd				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	
3:00 PM	26	164	34	21	176	19	19	346	30	8	292	19	1154	
3:15 PM	22	133	18	20	206	14	17	393	33	18	260	17	1151	
3:30 PM	28	178	22	28	198	20	18	419	22	13	311	15	1272	
3:45 PM	19	169	29	19	205	24	19	404	52	18	278	14	1250	
4:00 PM	28	164	30	21	188	27	16	433	54	19	249	15	1244	
4:15 PM	31	172	36	21	220	13	23	427	44	17	340	25	1369	
4:30 PM	23	163	26	33	233	15	16	472	34	16	315	16	1362	
4:45 PM	27	180	34	18	220	17	19	482	23	16	313	15	1364	
5:00 PM	25	154	25	18	238	23	22	438	40	20	386	29	1418	
5:15 PM	30	165	35	26	233	13	18	458	30	22	375	21	1426	
5:30 PM	29	191	35	22	232	8	19	458	22	19	365	18	1418	
5:45 PM	22	185	20	26	220	17	18	497	24	16	424	30	1499	
TOTAL VOLUMES :	NL 310	NT 2018	NR 344	SL 273	ST 2569	SR 210	EL 224	ET 5227	ER 408	WL 202	WT 3908	WR 234	TOTAL 15927	
APPROACH %'s :	11.60%	75.52%	12.87%	8.94%	84.17%	6.88%	3.82%	89.21%	6.96%	4.65%	89.96%	5.39%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	106	695	115	92	923	61	77	1851	116	77	1550	98	5761	
PEAK HR FACTOR :	0.898			0.964			0.948			0.918			0.961	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-014

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

NS/EW Streets:		AM												
		Vermont Ave			Vermont Ave			Wilshire Blvd			Wilshire Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM		28	317	22	20	277	27	26	136	20	14	230	20	1137
7:15 AM		30	307	10	25	294	20	34	206	14	22	227	15	1204
7:30 AM		28	359	19	31	317	23	27	266	26	21	240	17	1374
7:45 AM		28	307	16	20	288	22	33	268	32	26	242	20	1302
8:00 AM		30	281	13	38	279	26	31	234	39	29	224	18	1242
8:15 AM		25	286	19	30	270	21	18	252	29	32	246	17	1245
8:30 AM		27	273	17	45	278	31	29	240	31	25	273	17	1286
8:45 AM		27	240	27	45	242	30	33	237	26	33	247	15	1202
9:00 AM		20	256	25	29	284	29	21	229	23	29	214	13	1172
9:15 AM		34	263	26	24	246	21	24	190	28	24	192	17	1089
9:30 AM		29	280	19	34	243	26	18	191	24	24	207	20	1115
9:45 AM		24	250	23	31	230	22	31	203	24	24	216	14	1092
TOTAL VOLUMES :		NL 330	NT 3419	NR 236	SL 372	ST 3248	SR 298	EL 325	ET 2652	ER 316	WL 303	WT 2758	WR 203	TOTAL 14460
APPROACH %'s :		8.28%	85.80%	5.92%	9.49%	82.90%	7.61%	9.87%	80.53%	9.60%	9.28%	84.50%	6.22%	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		111	1233	67	119	1154	92	109	1020	126	108	952	72	5163
PEAK HR FACTOR :		0.869			0.920			0.942			0.959			0.939

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-014

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Vermont Ave			Vermont Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
3:00 PM	32	234	26	30	254	13	29	205	31	35	208	22	1119
3:15 PM	17	232	14	23	252	25	30	184	26	32	181	26	1042
3:30 PM	29	256	19	29	236	19	33	225	24	37	199	22	1128
3:45 PM	27	240	15	22	251	12	35	225	42	38	181	21	1109
4:00 PM	30	289	31	22	268	39	32	231	40	42	195	18	1237
4:15 PM	20	263	21	28	242	22	35	218	17	30	228	13	1137
4:30 PM	28	252	31	21	261	34	41	224	33	32	217	18	1192
4:45 PM	26	270	14	24	255	20	30	227	27	36	194	25	1148
5:00 PM	26	284	18	27	269	17	38	263	25	35	216	16	1234
5:15 PM	28	246	15	38	245	31	26	249	28	32	249	18	1205
5:30 PM	26	244	23	32	235	28	40	231	33	29	235	29	1185
5:45 PM	41	262	12	39	244	24	39	257	22	29	236	14	1219
TOTAL VOLUMES :	NL 330	NT 3072	NR 239	SL 335	ST 3012	SR 284	EL 408	ET 2739	ER 348	WL 407	WT 2539	WR 242	TOTAL 13955
APPROACH %'s :	9.06%	84.37%	6.56%	9.23%	82.95%	7.82%	11.67%	78.37%	9.96%	12.77%	79.64%	7.59%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	121	1036	68	136	993	100	143	1000	108	125	936	77	4843
PEAK HR FACTOR :	0.934			0.979			0.959			0.952			0.981

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-015

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Vermont Ave			Vermont Ave			8th St			8th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
7:00 AM	25	328	5	5	250	20	0	84	16	0	181	24	938
7:15 AM	21	347	6	8	248	17	0	113	11	0	175	20	966
7:30 AM	20	359	6	12	293	19	0	152	29	0	207	11	1108
7:45 AM	20	345	3	16	303	25	0	170	20	0	213	15	1130
8:00 AM	17	320	6	10	309	20	0	161	17	0	151	17	1028
8:15 AM	22	300	9	12	274	16	0	184	26	1	169	13	1026
8:30 AM	13	323	8	14	255	12	1	178	29	0	195	15	1043
8:45 AM	15	305	8	10	238	19	2	173	23	1	201	11	1006
9:00 AM	25	282	10	16	252	18	0	130	19	0	160	15	927
9:15 AM	19	319	13	13	282	25	2	129	15	3	150	19	989
9:30 AM	20	323	11	10	267	26	0	100	28	1	162	15	963
9:45 AM	22	286	15	7	252	15	1	114	36	1	151	18	918
TOTAL VOLUMES :	NL 239	NT 3837	NR 100	SL 133	ST 3223	SR 232	EL 6	ET 1688	ER 269	WL 7	WT 2115	WR 193	TOTAL 12042
APPROACH %'s :	5.72%	91.88%	2.39%	3.71%	89.83%	6.47%	0.31%	85.99%	13.70%	0.30%	91.36%	8.34%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	79	1324	24	50	1179	80	0	667	92	1	740	56	4292
PEAK HR FACTOR :	0.927			0.951			0.904			0.874			0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-015

Day: Thursday

City: Los Angeles

Date: 3/17/2016

TOTALS

PM

NS/EW Streets:		Vermont Ave			Vermont Ave			8th St			8th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	2	0	1	2	0	0	2	0	0	2	0	
3:00 PM		20	269	14	11	279	27	1	162	21	1	126	22	953
3:15 PM		16	271	13	11	313	23	0	145	24	0	126	22	964
3:30 PM		15	272	16	16	278	37	4	163	31	0	118	13	963
3:45 PM		12	267	14	16	299	25	0	175	26	1	125	16	976
4:00 PM		19	278	9	9	282	26	0	180	32	3	135	23	996
4:15 PM		15	271	11	11	260	23	0	193	35	2	128	17	966
4:30 PM		13	275	15	9	284	20	0	185	23	0	162	13	999
4:45 PM		19	279	17	8	306	21	1	202	30	0	177	19	1079
5:00 PM		16	273	14	17	292	28	2	172	30	0	157	17	1018
5:15 PM		14	276	9	16	255	27	0	228	23	1	186	22	1057
5:30 PM		20	270	20	14	264	37	0	208	36	0	175	21	1065
5:45 PM		19	303	15	10	292	20	0	195	29	1	204	29	1117
TOTAL VOLUMES :		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :		198	3304	167	148	3404	314	8	2208	340	9	1819	234	12153
		5.40%	90.05%	4.55%	3.83%	88.05%	8.12%	0.31%	86.38%	13.30%	0.44%	88.22%	11.35%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		69	1122	58	57	1103	112	2	803	118	2	722	89	4257
PEAK HR FACTOR :		0.927			0.944			0.919			0.869			0.953

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-016

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

NS/EW Streets:		AM												
		Harvard Blvd			Harvard Blvd			7th St			7th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM		8	31	2	1	17	2	2	12	6	2	18	2	103
7:15 AM		6	35	8	1	9	2	3	12	7	4	21	6	114
7:30 AM		10	25	8	3	25	5	5	28	4	3	30	5	151
7:45 AM		12	45	9	8	25	5	3	36	5	9	28	4	189
8:00 AM		11	36	5	5	31	1	6	41	10	7	30	7	190
8:15 AM		13	43	12	4	28	3	2	38	11	3	25	9	191
8:30 AM		29	41	9	6	30	3	6	25	6	4	38	7	204
8:45 AM		17	52	16	4	27	5	6	57	9	5	35	10	243
9:00 AM		12	52	16	3	22	5	8	30	9	4	26	8	195
9:15 AM		15	42	9	2	34	4	9	30	8	3	32	8	196
9:30 AM		10	37	16	3	20	3	6	20	9	3	25	3	155
9:45 AM		8	36	19	6	23	11	9	24	16	4	26	10	192
TOTAL VOLUMES :		NL 151	NT 475	NR 129	SL 46	ST 291	SR 49	EL 65	ET 353	ER 100	WL 51	WT 334	WR 79	TOTAL 2123
APPROACH %'s :		20.00%	62.91%	17.09%	11.92%	75.39%	12.69%	12.55%	68.15%	19.31%	10.99%	71.98%	17.03%	
PEAK HR START TIME :		830 AM												TOTAL
PEAK HR VOL :		73	187	50	15	113	17	29	142	32	16	131	33	838
PEAK HR FACTOR :		0.912			0.906			0.705			0.900			0.862

CONTROL : 2-Way Stop (NB/SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-016

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM														
NS/EW Streets:	Harvard Blvd			Harvard Blvd			7th St			7th St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	
3:00 PM	6	32	6	7	45	8	5	27	10	9	36	10	201	
3:15 PM	10	46	14	6	39	8	5	34	13	4	44	8	231	
3:30 PM	18	53	9	11	41	8	5	40	12	4	38	8	247	
3:45 PM	6	58	4	7	49	4	7	34	13	14	46	12	254	
4:00 PM	14	47	9	10	56	5	4	35	25	7	41	12	265	
4:15 PM	9	60	11	6	51	8	5	41	16	8	40	6	261	
4:30 PM	11	49	6	4	55	8	9	31	15	17	35	10	250	
4:45 PM	12	46	8	2	38	9	4	49	7	16	33	12	236	
5:00 PM	11	68	9	5	70	10	9	51	13	19	56	8	329	
5:15 PM	12	60	11	4	71	10	9	38	18	16	53	12	314	
5:30 PM	15	63	10	8	62	6	3	64	17	13	49	7	317	
5:45 PM	8	70	13	7	63	8	12	55	24	11	54	9	334	
TOTAL VOLUMES :	NL 132	NT 652	NR 110	SL 77	ST 640	SR 92	EL 77	ET 499	ER 183	WL 138	WT 525	WR 114	TOTAL 3239	
APPROACH %'s :	14.77%	72.93%	12.30%	9.52%	79.11%	11.37%	10.14%	65.74%	24.11%	17.76%	67.57%	14.67%		
PEAK HR START TIME :	500 PM													TOTAL
PEAK HR VOL :	46	261	43	24	266	34	33	208	72	59	212	36	1294	
PEAK HR FACTOR :	0.962			0.953			0.860			0.925			0.969	

CONTROL : 2-Way Stop (NB/SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-017

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

AM													
NS/EW Streets:	Kingsley Dr			Kingsley Dr			7th St			7th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
7:00 AM	3	17	1	6	7	3	3	11	1	0	15	2	69
7:15 AM	8	19	5	11	14	2	7	12	3	3	17	9	110
7:30 AM	4	20	5	5	20	2	12	29	1	2	28	10	138
7:45 AM	5	17	4	20	19	5	13	36	2	2	30	6	159
8:00 AM	5	22	10	15	15	9	12	39	5	4	30	18	184
8:15 AM	6	34	8	11	12	7	15	31	9	9	25	13	180
8:30 AM	6	35	9	17	19	10	13	21	7	5	33	18	193
8:45 AM	6	41	4	17	14	10	27	45	3	3	36	20	226
9:00 AM	6	27	9	20	12	8	19	24	4	6	24	24	183
9:15 AM	4	36	12	16	18	10	13	22	3	5	29	22	190
9:30 AM	7	25	11	18	13	2	19	19	2	4	22	6	148
9:45 AM	4	24	7	19	15	10	18	25	7	5	32	15	181
TOTAL VOLUMES :	NL 64	NT 317	NR 85	SL 175	ST 178	SR 78	EL 171	ET 314	ER 47	WL 48	WT 321	WR 163	TOTAL 1961
APPROACH %'s :	13.73%	68.03%	18.24%	40.60%	41.30%	18.10%	32.14%	59.02%	8.83%	9.02%	60.34%	30.64%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	22	139	34	70	63	38	72	112	17	19	122	84	792
PEAK HR FACTOR :	0.938			0.929			0.670			0.953			0.876

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5157-017

Day: Thursday

City: Los Angeles

TOTALS

Date: 3/17/2016

PM													
NS/EW Streets:	Kingsley Dr			Kingsley Dr			7th St			7th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
3:00 PM	4	13	5	23	23	22	9	27	6	3	28	11	174
3:15 PM	1	12	4	21	32	22	8	45	2	3	36	14	200
3:30 PM	5	19	5	29	26	9	10	40	8	4	34	11	200
3:45 PM	4	23	8	17	35	23	9	32	5	1	45	7	209
4:00 PM	3	10	3	18	37	17	15	36	3	2	38	6	188
4:15 PM	2	9	6	23	43	16	9	44	2	10	35	7	206
4:30 PM	4	10	6	22	41	14	7	31	4	7	49	7	202
4:45 PM	4	23	8	17	48	12	9	47	4	5	44	8	229
5:00 PM	5	9	7	28	58	22	13	48	4	9	56	13	272
5:15 PM	3	14	9	28	29	18	11	38	5	6	60	8	229
5:30 PM	5	12	6	30	44	20	11	60	10	4	43	18	263
5:45 PM	4	24	3	38	54	17	4	60	12	8	54	11	289
TOTAL VOLUMES :	NL 44	NT 178	NR 70	SL 294	ST 470	SR 212	EL 115	ET 508	ER 65	WL 62	WT 522	WR 121	TOTAL 2661
APPROACH %'s :	15.07%	60.96%	23.97%	30.12%	48.16%	21.72%	16.72%	73.84%	9.45%	8.79%	74.04%	17.16%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	17	59	25	124	185	77	39	206	31	27	213	50	1053
PEAK HR FACTOR :	0.815			0.885			0.852			0.929			0.911

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5749-001

Day: Thursday

City: Los Angeles

TOTALS

Date: 11/3/2016

NS/EW Streets:		AM												
		Vermont Ave			Vermont Ave			6th St			6th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL	
7:00 AM	12	288	26	19	286	22	12	128	23	25	185	21	1047	
7:15 AM	7	284	35	16	297	19	17	177	30	18	191	28	1119	
7:30 AM	13	283	27	22	284	31	30	231	34	25	210	23	1213	
7:45 AM	11	263	36	23	297	37	16	281	30	29	245	30	1298	
8:00 AM	5	257	59	20	261	36	14	258	35	23	247	29	1244	
8:15 AM	6	213	43	20	290	44	25	254	29	30	273	23	1250	
8:30 AM	10	244	34	28	230	45	16	212	37	20	230	14	1120	
8:45 AM	15	238	33	19	267	30	12	250	35	16	201	20	1136	
9:00 AM	20	242	35	22	251	34	21	206	20	30	183	25	1089	
9:15 AM	9	231	28	22	256	34	22	191	30	28	184	28	1063	
9:30 AM	16	239	28	21	252	27	24	189	24	28	171	28	1047	
9:45 AM	17	232	34	24	259	23	28	151	13	29	194	28	1032	
TOTAL VOLUMES :	NL 141	NT 3014	NR 418	SL 256	ST 3230	SR 382	EL 237	ET 2528	ER 340	WL 301	WT 2514	WR 297	TOTAL 13658	
APPROACH %'s :	3.95%	84.35%	11.70%	6.62%	83.51%	9.88%	7.63%	81.42%	10.95%	9.67%	80.78%	9.54%		
PEAK HR START TIME :	730 AM													TOTAL
PEAK HR VOL :	35	1016	165	85	1132	148	85	1024	128	107	975	105	5005	
PEAK HR FACTOR :	0.941			0.956			0.946			0.910			0.964	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5749-001

Day: Thursday

City: Los Angeles

TOTALS

Date: 11/3/2016

NS/EW Streets:		PM											
		Vermont Ave			Vermont Ave			6th St			6th St		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
3:00 PM	16	231	41	17	274	26	34	224	31	30	163	30	1117
3:15 PM	18	282	46	20	253	18	32	216	25	25	159	30	1124
3:30 PM	14	269	39	20	262	20	29	212	20	25	196	28	1134
3:45 PM	15	265	37	23	258	25	21	231	27	31	195	33	1161
4:00 PM	14	262	40	23	271	18	35	207	22	30	178	24	1124
4:15 PM	20	261	45	19	257	18	31	256	22	22	188	38	1177
4:30 PM	17	259	33	19	283	23	23	241	29	24	223	24	1198
4:45 PM	18	269	35	21	267	24	31	211	30	30	219	33	1188
5:00 PM	13	273	33	24	233	22	29	231	26	23	229	41	1177
5:15 PM	22	287	36	24	260	14	23	256	17	22	221	31	1213
5:30 PM	17	264	33	23	262	25	22	248	20	18	269	29	1230
5:45 PM	20	211	35	25	231	29	22	239	22	27	258	24	1143
TOTAL VOLUMES :	NL 204	NT 3133	NR 453	SL 258	ST 3111	SR 262	EL 332	ET 2772	ER 291	WL 307	WT 2498	WR 365	TOTAL 13986
APPROACH %'s :	5.38%	82.66%	11.95%	7.11%	85.68%	7.22%	9.78%	81.65%	8.57%	9.68%	78.80%	11.51%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	70	1093	137	92	1022	85	105	946	93	93	938	134	4808
PEAK HR FACTOR :	0.942			0.961			0.966			0.922			0.977

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5600-003

Day: Tuesday

City: Los Angeles

TOTALS

Date: 9/22/2015

AM													
NS/EW Streets:	S Virgil Ave			S Virgil Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 2	ST 0	SR 1	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM	0	0	0	71	0	27	28	182	0	0	265	68	641
7:15 AM	0	0	0	84	0	30	59	199	0	0	242	66	680
7:30 AM	0	0	0	93	0	31	71	295	0	0	287	79	856
7:45 AM	0	0	0	87	0	28	49	303	0	0	261	75	803
8:00 AM	0	0	0	88	0	27	40	290	0	1	291	65	802
8:15 AM	0	0	0	90	0	32	41	296	0	0	279	53	791
8:30 AM	0	0	0	64	0	28	46	278	0	0	253	63	732
8:45 AM	0	0	0	79	0	32	44	248	0	0	287	67	757
9:00 AM	0	0	0	81	0	34	42	227	0	0	248	61	693
9:15 AM	0	0	0	67	0	41	27	223	0	0	265	50	673
9:30 AM	0	0	0	75	0	23	38	228	0	2	256	51	673
9:45 AM	0	0	0	80	0	45	32	211	0	0	249	62	679
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 959	ST 0	SR 378	EL 517	ET 2980	ER 0	WL 3	WT 3183	WR 760	TOTAL 8780
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	71.73%	0.00%	28.27%	14.78%	85.22%	0.00%	0.08%	80.66%	19.26%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	0	358	0	118	201	1184	0	1	1118	272	3252
PEAK HR FACTOR :	0.000			0.960			0.946			0.950			0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5600-003

Day: Tuesday

City: Los Angeles

TOTALS

Date: 9/22/2015

PM

NS/EW Streets:		S Virgil Ave			S Virgil Ave			Wilshire Blvd			Wilshire Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 2	ST 0	SR 1	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
3:00 PM		0	0	0	81	0	36	54	267	0	0	196	67	701
3:15 PM		0	0	0	98	0	34	51	230	0	0	199	57	669
3:30 PM		0	0	0	85	0	31	63	234	0	0	216	54	683
3:45 PM		0	0	0	85	0	38	67	235	0	1	222	82	730
4:00 PM		0	0	0	115	0	32	71	272	0	0	199	56	745
4:15 PM		0	0	0	90	0	27	58	247	0	0	233	84	739
4:30 PM		0	0	0	123	0	26	53	287	0	0	253	68	810
4:45 PM		0	0	0	93	0	33	61	255	0	0	248	60	750
5:00 PM		0	0	0	90	0	38	59	306	0	0	227	66	786
5:15 PM		0	0	0	87	0	31	56	277	0	1	246	72	770
5:30 PM		0	0	0	109	0	42	63	258	0	1	252	67	792
5:45 PM		0	0	0	98	0	28	62	304	0	0	258	69	819
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 1154	ST 0	SR 396	EL 718	ET 3172	ER 0	WL 3	WT 2749	WR 802	TOTAL 8994
APPROACH %'s :		#DIV/0!	#DIV/0!	#DIV/0!	74.45%	0.00%	25.55%	18.46%	81.54%	0.00%	0.08%	77.35%	22.57%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		0	0	0	384	0	139	240	1145	0	2	983	274	3167
PEAK HR FACTOR :		0.000			0.866			0.946			0.963			0.967

CONTROL : Signalized

VOLUME

S Harvard Blvd Bet. 7th St & 8th St

Day: Thursday

Date: 3/17/2016

City: Los Angeles

Project #: CA16_5158_001

DAILY TOTALS					NB	SB						EB	WB						Total
					4,068	3,426						0	0						7,494
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	8			13		12:00	60	55			115							
00:15	3	4			7		12:15	65	48			113							
00:30	3	5			8		12:30	47	62			109							
00:45	5	16	3	20	8	36	12:45	56	228	48	213	104	441						
01:00	5	6			11		13:00	66	44			110							
01:15	6	2			8		13:15	63	60			123							
01:30	1	4			5		13:30	74	50			124							
01:45	2	14	4	16	6	30	13:45	66	269	57	211	123	480						
02:00	1	4			5		14:00	50	49			99							
02:15	2	2			4		14:15	39	49			88							
02:30	2	5			7		14:30	69	44			113							
02:45	1	6	4	15	5	21	14:45	63	221	57	199	120	420						
03:00	0	4			4		15:00	43	66			109							
03:15	1	1			2		15:15	71	52			123							
03:30	0	1			1		15:30	78	60			138							
03:45	1	2	1	7	2	9	15:45	67	259	73	251	140	510						
04:00	1	1			2		16:00	71	90			161							
04:15	1	4			5		16:15	78	74			152							
04:30	2	3			5		16:30	67	88			155							
04:45	1	5	1	9	2	14	16:45	71	287	58	310	129	597						
05:00	3	1			4		17:00	81	108			189							
05:15	6	4			10		17:15	88	94			182							
05:30	2	3			5		17:30	82	97			179							
05:45	8	19	6	14	14	33	17:45	99	350	91	390	190	740						
06:00	12	12			24		18:00	89	75			164							
06:15	12	6			18		18:15	97	80			177							
06:30	15	14			29		18:30	90	80			170							
06:45	29	68	13	45	42	113	18:45	87	363	79	314	166	677						
07:00	39	25			64		19:00	74	66			140							
07:15	50	20			70		19:15	59	50			109							
07:30	42	29			71		19:30	49	41			90							
07:45	67	198	44	118	111	316	19:45	47	229	41	198	88	427						
08:00	50	44			94		20:00	48	33			81							
08:15	70	46			116		20:15	41	31			72							
08:30	74	40			114		20:30	39	45			84							
08:45	90	284	40	170	130	454	20:45	46	174	34	143	80	317						
09:00	69	37			106		21:00	56	33			89							
09:15	70	42			112		21:15	59	30			89							
09:30	59	36			95		21:30	37	34			71							
09:45	63	261	45	160	108	421	21:45	43	195	32	129	75	324						
10:00	67	45			112		22:00	32	18			50							
10:15	59	35			94		22:15	27	24			51							
10:30	62	30			92		22:30	22	17			39							
10:45	59	247	44	154	103	401	22:45	14	95	21	80	35	175						
11:00	56	41			97		23:00	6	21			27							
11:15	49	50			99		23:15	18	14			32							
11:30	63	47			110		23:30	16	16			32							
11:45	60	228	60	198	120	426	23:45	10	50	11	62	21	112						
TOTALS	1348	926			2274		TOTALS	2720	2500			5220							
SPLIT %	59.3%	40.7%			30.3%		SPLIT %	52.1%	47.9%			69.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					4,068	3,426						0	0						7,494

AM Peak Hour	08:15	11:45			08:15		PM Peak Hour	17:45	17:00			17:00							
AM Pk Volume	303	225			466		PM Pk Volume	375	390			740							
Pk Hr Factor	0.842	0.907			0.896		Pk Hr Factor	0.947	0.903			0.974							
7 - 9 Volume	482	288	0	0	770		4 - 6 Volume	637	700	0	0	1337							
7 - 9 Peak Hour	08:00	07:45			08:00		4 - 6 Peak Hour	17:00	17:00			17:00							
7 - 9 Pk Volume	284	174	0	0	454		4 - 6 Pk Volume	350	390	0	0	740							
Pk Hr Factor	0.789	0.946	0.000	0.000	0.873		Pk Hr Factor	0.884	0.903	0.000	0.000	0.974							

VOLUME

Kingsley Dr Bet. 7th St & 8th St

Day: Thursday
Date: 3/17/2016City: Los Angeles
Project #: CA16_5158_002

DAILY TOTALS					NB	SB						EB	WB						Total
					1,803	2,074						0	0						3,877
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	10			15		12:00	26	30			56							
00:15	5	6			11		12:15	25	31			56							
00:30	7	4			11		12:30	27	23			50							
00:45	7	24	7	27	14	51	12:45	18	96	21	105	39	201						
01:00	4	2			6		13:00	16	32			48							
01:15	4	8			12		13:15	20	32			52							
01:30	8	5			13		13:30	18	27			45							
01:45	4	20	6	21	10	41	13:45	20	74	31	122	51	196						
02:00	5	6			11		14:00	19	15			34							
02:15	1	3			4		14:15	17	15			32							
02:30	5	6			11		14:30	28	20			48							
02:45	5	16	2	17	7	33	14:45	15	79	19	69	34	148						
03:00	5	3			8		15:00	21	35			56							
03:15	1	2			3		15:15	19	36			55							
03:30	2	1			3		15:30	24	42			66							
03:45	1	9	3	9	4	18	15:45	37	101	37	150	74	251						
04:00	2	1			3		16:00	15	43			58							
04:15	2	1			3		16:15	16	48			64							
04:30	1	2			3		16:30	22	56			78							
04:45	3	8	0	4	3	12	16:45	31	84	49	196	80	280						
05:00	3	5			8		17:00	24	75			99							
05:15	8	4			12		17:15	22	41			63							
05:30	6	0			6		17:30	23	51			74							
05:45	6	23	4	13	10	36	17:45	29	98	76	243	105	341						
06:00	6	8			14		18:00	24	46			70							
06:15	9	5			14		18:15	23	50			73							
06:30	15	5			20		18:30	26	57			83							
06:45	16	46	11	29	27	75	18:45	36	109	38	191	74	300						
07:00	20	8			28		19:00	32	26			58							
07:15	34	19			53		19:15	21	28			49							
07:30	27	24			51		19:30	32	28			60							
07:45	31	112	22	73	53	185	19:45	25	110	18	100	43	210						
08:00	31	25			56		20:00	18	14			32							
08:15	53	27			80		20:15	16	33			49							
08:30	43	32			75		20:30	23	23			46							
08:45	57	184	20	104	77	288	20:45	33	90	23	93	56	183						
09:00	39	23			62		21:00	16	28			44							
09:15	49	26			75		21:15	20	19			39							
09:30	44	15			59		21:30	23	31			54							
09:45	33	165	29	93	62	258	21:45	16	75	16	94	32	169						
10:00	28	33			61		22:00	11	24			35							
10:15	25	19			44		22:15	15	17			32							
10:30	22	22			44		22:30	12	14			26							
10:45	13	88	22	96	35	184	22:45	12	50	21	76	33	126						
11:00	20	22			42		23:00	9	12			21							
11:15	27	28			55		23:15	7	14			21							
11:30	33	30			63		23:30	7	10			17							
11:45	27	107	24	104	51	211	23:45	12	35	9	45	21	80						
TOTALS	802	590			1392		TOTALS	1001	1484			2485							
SPLIT %	57.6%	42.4%			35.9%		SPLIT %	40.3%	59.7%			64.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					1,803	2,074						0	0						3,877

AM Peak Hour	08:15	11:30			08:15		PM Peak Hour	18:45	17:00			17:00							
AM Pk Volume	192	115			294		PM Pk Volume	121	243			341							
Pk Hr Factor	0.842	0.927			0.919		Pk Hr Factor	0.840	0.799			0.812							
7 - 9 Volume	296	177	0	0	473		4 - 6 Volume	182	439	0	0	621							
7 - 9 Peak Hour	08:00	07:45			08:00		4 - 6 Peak Hour	16:45	17:00			17:00							
7 - 9 Pk Volume	184	106	0	0	288		4 - 6 Pk Volume	100	243	0	0	341							
Pk Hr Factor	0.807	0.828	0.000	0.000	0.900		Pk Hr Factor	0.806	0.799	0.000	0.000	0.812							

APPENDIX D:
LOS ANALYSIS SHEETS

Level of Service Worksheet (Circular 212 Method)



I/S #: **1**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: Wilshire Blvd

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	79	128	1	128
	Left-Through		0			0	
	Through	830	1	447	786	1	430
	Through-Right		1			1	
	Right	64	0	64	74	0	74
	Left-Through-Right		0			0	
SOUTHBOUND	Left	163	1	163	91	1	91
	Left-Through		0			0	
	Through	750	1	416	799	1	436
	Through-Right		1			1	
	Right	81	0	81	72	0	72
	Left-Through-Right		0			0	
EASTBOUND	Left	152	1	152	178	1	178
	Left-Through		0			0	
	Through	1139	2	570	1028	2	514
	Through-Right		0			0	
	Right	78	1	39	113	1	49
	Left-Through-Right		0			0	
WESTBOUND	Left	101	1	101	158	1	158
	Left-Through		0			0	
	Through	948	2	474	935	2	468
	Through-Right		0			0	
	Right	64	1	0	101	1	56
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 610			North-South: 564		
		East-West: 671			East-West: 672		
		SUM: 1281			SUM: 1236		
VOLUME/CAPACITY (V/C) RATIO:		0.932			0.899		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.832			0.799		
LEVEL OF SERVICE (LOS):		D			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **2**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: 8th St

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	1	28	36	1	36
	Left-Through		0			0	
	Through	962	1	496	928	1	485
	Through-Right		1			1	
	Right	29	0	29	42	0	42
	Left-Through-Right		0			0	
SOUTHBOUND	Left	65	1	65	87	1	87
	Left-Through		0			0	
	Through	850	1	441	1000	1	515
	Through-Right		1			1	
	Right	32	0	32	30	0	30
	Left-Through-Right		0			0	
EASTBOUND	Left	50	1	50	61	1	61
	Left-Through		0			0	
	Through	662	1	345	736	1	378
	Through-Right		1			1	
	Right	28	0	28	19	0	19
	Left-Through-Right		0			0	
WESTBOUND	Left	87	1	87	134	1	134
	Left-Through		0			0	
	Through	704	1	373	654	1	371
	Through-Right		1			1	
	Right	42	0	42	88	0	88
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 561			North-South: 572		
		East-West: 432			East-West: 512		
		SUM: 993			SUM: 1084		
VOLUME/CAPACITY (V/C) RATIO:		0.662			0.723		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.562			0.623		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **3**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 6th St

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	34	0	34	51	0	51
	Left-Through		0			0	
	Through	110	0	199	253	0	388
	Through-Right		0			0	
	Right	55	0	0	84	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	27	0	27	27	0	27
	Left-Through		0			0	
	Through	147	0	225	146	0	234
	Through-Right		0			0	
	Right	51	0	0	61	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	31	1	31	46	1	46
	Left-Through		0			0	
	Through	964	1	495	1135	1	594
	Through-Right		1			1	
	Right	25	0	25	52	0	52
	Left-Through-Right		0			0	
WESTBOUND	Left	55	1	55	52	1	52
	Left-Through		0			0	
	Through	1051	1	545	1027	1	543
	Through-Right		1			1	
	Right	39	0	39	59	0	59
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 259			North-South: 415		
		East-West: 576			East-West: 646		
		SUM: 835			SUM: 1061		
VOLUME/CAPACITY (V/C) RATIO:		0.557			0.707		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.457			0.607		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **4**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: Wilshire Blvd

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	20	28	0	28
	Left-Through		0			0	
	Through	137	0	185	294	0	359
	Through-Right		0			0	
	Right	28	0	0	37	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	41	0	41	28	0	28
	Left-Through		0			0	
	Through	149	0	243	194	0	268
	Through-Right		0			0	
	Right	53	0	0	46	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	26	1	26	46	1	46
	Left-Through		0			0	
	Through	1232	2	616	1125	2	563
	Through-Right		0			0	
	Right	31	1	31	40	1	40
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	41	1	41	68	1	68
	Left-Through		0			0	
	Through	1146	2	573	1169	2	585
	Through-Right		0			0	
	Right	35	1	35	51	1	51
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 263			North-South: 387		
		East-West: 657			East-West: 631		
		SUM: 920			SUM: 1018		
VOLUME/CAPACITY (V/C) RATIO:		0.613			0.679		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.513			0.579		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **5**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 8th St

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	19	0	19	21	0	21
	Left-Through		0			0	
	Through	233	0	284	278	0	340
	Through-Right		0			0	
	Right	32	0	0	41	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	52	0	52	49	0	49
	Left-Through		0			0	
	Through	104	0	191	280	0	383
	Through-Right		0			0	
	Right	35	0	0	54	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	24	0	24	16	0	16
	Left-Through		1			1	
	Through	707	0	410	817	0	464
	Through-Right		1			1	
	Right	17	0	410	47	0	464
	Left-Through-Right		0			0	
WESTBOUND	Left	22	0	22	59	0	59
	Left-Through		1			1	
	Through	785	0	450	790	0	535
	Through-Right		1			1	
	Right	26	0	450	43	0	535
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 336			North-South: 404		
		East-West: 474			East-West: 551		
		SUM: 810			SUM: 955		
VOLUME/CAPACITY (V/C) RATIO:		0.540			0.637		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.440			0.537		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **6**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Existing
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	12	0	12	27	0	27
	Left-Through		0			0	
	Through	57	0	113	217	0	315
	Through-Right		0			0	
	Right	44	0	0	71	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	53	0	53	29	0	29
	Left-Through		0			0	
	Through	146	0	249	168	0	236
	Through-Right		0			0	
	Right	50	0	0	39	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	16	1	16	23	1	23
	Left-Through		0			0	
	Through	990	1	508	1188	1	612
	Through-Right		1			1	
	Right	25	0	25	36	0	36
	Left-Through-Right		0			0	
WESTBOUND	Left	59	1	59	34	1	34
	Left-Through		0			0	
	Through	1104	1	568	1064	1	548
	Through-Right		1			1	
	Right	32	0	32	31	0	31
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 261			North-South: 344		
		East-West: 584			East-West: 646		
		SUM: 845			SUM: 990		
VOLUME/CAPACITY (V/C) RATIO:		0.563			0.660		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.463			0.560		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **7**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Existing
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	39	0	39	63	0	63
	Left-Through		0			0	
	Through	53	0	128	189	0	338
	Through-Right		0			0	
	Right	36	0	0	86	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	56	0	56	48	0	48
	Left-Through		0			0	
	Through	132	0	215	144	0	223
	Through-Right		0			0	
	Right	27	0	0	31	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	0	1	0	0	1	0
	Left-Through		0			0	
	Through	1240	2	620	1142	2	571
	Through-Right		0			0	
	Right	71	1	71	41	1	41
	Left-Through-Right		0			0	
WESTBOUND	Left	108	1	108	85	1	85
	Left-Through		0			0	
	Through	1158	2	579	1196	2	598
	Through-Right		0			0	
	Right	49	1	49	85	1	85
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 254			North-South: 386		
		East-West: 728			East-West: 656		
		SUM: 982			SUM: 1042		
VOLUME/CAPACITY (V/C) RATIO:		0.655			0.695		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.555			0.595		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **8**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: 3rd St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		3			3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	465	1	265	818	1	440
	Through-Right		1			1	
	Right	65	0	65	61	0	61
	Left-Through-Right		0			0	
SOUTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	752	1	432	567	1	326
	Through-Right		1			1	
	Right	111	0	111	85	0	85
	Left-Through-Right		0			0	
EASTBOUND	Left	77	1	77	98	1	98
	Left-Through		0			0	
	Through	1164	1	605	1100	1	577
	Through-Right		1			1	
	Right	46	0	46	54	0	54
	Left-Through-Right		0			0	
WESTBOUND	Left	48	1	48	53	1	53
	Left-Through		0			0	
	Through	1072	1	553	1090	1	576
	Through-Right		1			1	
	Right	33	0	33	62	0	62
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 432			North-South: 440		
		East-West: 653			East-West: 674		
		SUM: 1085			SUM: 1114		
VOLUME/CAPACITY (V/C) RATIO:		0.761			0.782		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.661			0.682		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **9**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	0	28	0	0	0
	Left-Through		1			0	
	Through	439	0	301	674	1	374
	Through-Right		1			1	
	Right	51	0	301	73	0	73
	Left-Through-Right		0			0	
SOUTHBOUND	Left	73	0	73	0	0	0
	Left-Through		1			0	
	Through	561	1	354	488	2	244
	Through-Right		0			0	
	Right	134	1	117	36	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	35	1	35	75	1	75
	Left-Through		0			0	
	Through	1034	1	543	1152	1	597
	Through-Right		1			1	
	Right	52	0	52	41	0	41
	Left-Through-Right		0			0	
WESTBOUND	Left	44	1	44	62	1	62
	Left-Through		0			0	
	Through	1013	1	520	1112	1	588
	Through-Right		1			1	
	Right	26	0	26	64	0	64
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 382			North-South: 374		
		East-West: 587			East-West: 663		
		SUM: 969			SUM: 1037		
VOLUME/CAPACITY (V/C) RATIO:		0.646			0.691		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.546			0.591		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **10**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		3			3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	44	0	44	42	0	42
	Left-Through		1			1	
	Through	395	1	286	565	1	325
	Through-Right		0			0	
	Right	109	1	55	112	1	53
	Left-Through-Right		0			0	
SOUTHBOUND	Left	55	0	55	69	0	69
	Left-Through		1			1	
	Through	526	1	318	484	1	380
	Through-Right		0			0	
	Right	112	1	91	69	1	24
	Left-Through-Right		0			0	
EASTBOUND	Left	43	1	43	90	1	90
	Left-Through		0			0	
	Through	1152	2	576	1155	2	578
	Through-Right		0			0	
	Right	125	1	125	86	1	86
	Left-Through-Right		0			0	
WESTBOUND	Left	108	1	108	118	1	118
	Left-Through		0			0	
	Through	1133	2	567	1214	2	607
	Through-Right		0			0	
	Right	35	1	35	78	1	78
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 362			North-South: 422		
		East-West: 684			East-West: 697		
		SUM: 1046			SUM: 1119		
VOLUME/CAPACITY (V/C) RATIO:		0.734			0.785		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.634			0.685		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: 11

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St
Scenario: Existing
Count Date: 3/17/2016

East-West Street: 7th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	135	0	135	44	0	44
	Left-Through		0			0	
	Through	518	0	678	521	0	605
	Through-Right		0			0	
	Right	25	0	0	40	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	42	0	42	61	0	61
	Left-Through		1			1	
	Through	444	0	486	465	0	526
	Through-Right		0			0	
	Right	118	1	91	259	1	226
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	55	1	55	67	1	67
	Left-Through		0			0	
	Through	78	0	152	201	0	304
	Through-Right		1			1	
	Right	74	0	0	103	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	24	1	24	24	1	24
	Left-Through		0			0	
	Through	81	0	158	123	0	192
	Through-Right		1			1	
	Right	77	0	0	69	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South:		720	North-South:		666
		East-West:		213	East-West:		328
		SUM:		933	SUM:		994
VOLUME/CAPACITY (V/C) RATIO:				0.622			0.663
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.522			0.563
LEVEL OF SERVICE (LOS):				A			A

Level of Service Worksheet (Circular 212 Method)



I/S #: 12

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Irolo St

East-West Street: 8th St

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	70	0	70	56	0	56
	Left-Through		0			0	
	Through	587	0	690	495	0	575
	Through-Right		0			0	
	Right	33	0	0	24	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	42	0	42	42	0	42
	Left-Through		0			0	
	Through	419	0	498	542	0	614
	Through-Right		0			0	
	Right	37	0	0	30	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	27	0	27	37	0	37
	Left-Through		1			1	
	Through	565	0	371	764	0	495
	Through-Right		1			1	
	Right	69	0	371	78	0	495
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	32	0	32	44	0	44
	Left-Through		1			1	
	Through	722	0	442	742	0	475
	Through-Right		1			1	
	Right	33	0	442	31	0	475
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 732			North-South: 670		
		East-West: 469			East-West: 539		
		SUM: 1201			SUM: 1209		
VOLUME/CAPACITY (V/C) RATIO:		0.801			0.806		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.701			0.706		
LEVEL OF SERVICE (LOS):		C			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **13**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: Olympic Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	135	1	135	106	1	106
	Left-Through		0			0	
	Through	857	2	429	695	2	348
	Through-Right		0			0	
	Right	80	1	54	115	1	77
	Left-Through-Right		0			0	
SOUTHBOUND	Left	71	1	71	92	1	92
	Left-Through		0			0	
	Through	616	2	308	923	2	462
	Through-Right		0			0	
	Right	74	1	44	61	1	23
	Left-Through-Right		0			0	
EASTBOUND	Left	60	1	60	77	1	77
	Left-Through		0			0	
	Through	1582	2	553	1851	2	656
	Through-Right		1			1	
	Right	76	0	76	116	0	116
	Left-Through-Right		0			0	
WESTBOUND	Left	52	1	52	77	1	77
	Left-Through		0			0	
	Through	1546	2	536	1550	2	549
	Through-Right		1			1	
	Right	63	0	63	98	0	98
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 500			North-South: 568		
		East-West: 605			East-West: 733		
		SUM: 1105			SUM: 1301		
VOLUME/CAPACITY (V/C) RATIO:		0.737			0.867		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.637			0.767		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: 14

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3		NB-- 0	SB-- 3	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	111	1	111	121	1	121
	Left-Through		0			0	
	Through	1233	2	433	1036	2	368
	Through-Right		1			1	
	Right	67	0	67	68	0	68
	Left-Through-Right		0			0	
SOUTHBOUND	Left	119	1	119	136	1	136
	Left-Through		0			0	
	Through	1154	2	577	993	2	497
	Through-Right		0			0	
	Right	92	1	0	100	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	109	1	109	143	1	143
	Left-Through		0			0	
	Through	1020	2	510	1000	2	500
	Through-Right		0			0	
	Right	126	1	71	108	1	48
	Left-Through-Right		0			0	
WESTBOUND	Left	108	1	108	125	1	125
	Left-Through		0			0	
	Through	952	2	476	936	2	468
	Through-Right		0			0	
	Right	72	1	13	77	1	9
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 688			North-South: 618		
		East-West: 618			East-West: 625		
		SUM: 1306			SUM: 1243		
VOLUME/CAPACITY (V/C) RATIO:		0.950			0.904		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.850			0.804		
LEVEL OF SERVICE (LOS):		D			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: 15

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Existing
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	79	69	1	69
	Left-Through		0			0	
	Through	1324	1	674	1122	1	590
	Through-Right		1			1	
	Right	24	0	24	58	0	58
	Left-Through-Right		0			0	
SOUTHBOUND	Left	50	1	50	57	1	57
	Left-Through		0			0	
	Through	1179	1	630	1103	1	608
	Through-Right		1			1	
	Right	80	0	80	112	0	112
	Left-Through-Right		0			0	
EASTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	667	1	380	803	1	461
	Through-Right		1			1	
	Right	92	0	92	118	0	118
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	740	1	398	722	1	406
	Through-Right		1			1	
	Right	56	0	56	89	0	89
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 724			North-South: 677		
		East-West: 398			East-West: 461		
		SUM: 1122			SUM: 1138		
VOLUME/CAPACITY (V/C) RATIO:		0.748			0.759		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.648			0.659		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **16**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Vermont Ave

East-West Street: 6th St

Scenario: Existing

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	35	1	35	70	1	70
	Left-Through		0			0	
	Through	1016	2	394	1093	2	410
	Through-Right		1			1	
	Right	165	0	165	137	0	137
	Left-Through-Right		0			0	
SOUTHBOUND	Left	85	1	85	92	1	92
	Left-Through		0			0	
	Through	1132	2	427	1022	2	369
	Through-Right		1			1	
	Right	148	0	148	85	0	85
	Left-Through-Right		0			0	
EASTBOUND	Left	85	1	85	105	1	105
	Left-Through		0			0	
	Through	1024	1	576	946	1	520
	Through-Right		1			1	
	Right	128	0	128	93	0	93
	Left-Through-Right		0			0	
WESTBOUND	Left	107	1	107	93	1	93
	Left-Through		0			0	
	Through	975	2	488	938	2	469
	Through-Right		0			0	
	Right	105	1	63	134	1	88
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 479			North-South: 502		
		East-West: 683			East-West: 613		
		SUM: 1162			SUM: 1115		
VOLUME/CAPACITY (V/C) RATIO:		0.775			0.743		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.675			0.643		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: 17

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Virgil
Scenario: Existing
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
SOUTHBOUND	Left	358	2	197	384	2	211
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	118	1	18	139	1	19
	Left-Through-Right		0			0	
EASTBOUND	Left	201	1	201	240	1	240
	Left-Through		0			0	
	Through	1184	2	592	1145	2	573
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	1118	2	559	983	2	492
	Through-Right		0			0	
	Right	272	1	174	274	1	169
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		197	North-South:		211
		East-West:		760	East-West:		732
		SUM:		957	SUM:		943
VOLUME/CAPACITY (V/C) RATIO:				0.672			0.662
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.572			0.562
LEVEL OF SERVICE (LOS):				A			A

Level of Service Worksheet (Circular 212 Method)



I/S #: **1**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Western Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	79	128	1	128
	Left-Through		0			0	
	Through	830	1	448	786	1	434
	Through-Right		1			1	
	Right	66	0	66	82	0	82
	Left-Through-Right		0			0	
SOUTHBOUND	Left	164	1	164	97	1	97
	Left-Through		0			0	
	Through	750	1	416	799	1	436
	Through-Right		1			1	
	Right	81	0	81	72	0	72
	Left-Through-Right		0			0	
EASTBOUND	Left	152	1	152	178	1	178
	Left-Through		0			0	
	Through	1143	2	572	1045	2	523
	Through-Right		0			0	
	Right	78	1	39	113	1	49
	Left-Through-Right		0			0	
WESTBOUND	Left	109	1	109	162	1	162
	Left-Through		0			0	
	Through	965	2	483	944	2	472
	Through-Right		0			0	
	Right	70	1	0	104	1	56
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 612			North-South: 564		
		East-West: 681			East-West: 685		
		SUM: 1293			SUM: 1249		
VOLUME/CAPACITY (V/C) RATIO:		0.940			0.908		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.840			0.808		
LEVEL OF SERVICE (LOS):		D			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: **2**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Western Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	1	28	36	1	36
	Left-Through		0			0	
	Through	966	1	499	944	1	497
	Through-Right		1			1	
	Right	31	0	31	50	0	50
	Left-Through-Right		0			0	
SOUTHBOUND	Left	65	1	65	87	1	87
	Left-Through		0			0	
	Through	866	1	449	1009	1	520
	Through-Right		1			1	
	Right	32	0	32	30	0	30
	Left-Through-Right		0			0	
EASTBOUND	Left	50	1	50	61	1	61
	Left-Through		0			0	
	Through	665	1	347	750	1	385
	Through-Right		1			1	
	Right	28	0	28	19	0	19
	Left-Through-Right		0			0	
WESTBOUND	Left	95	1	95	138	1	138
	Left-Through		0			0	
	Through	718	1	380	661	1	375
	Through-Right		1			1	
	Right	42	0	42	88	0	88
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 564			North-South: 584		
		East-West: 442			East-West: 523		
		SUM: 1006			SUM: 1107		
VOLUME/CAPACITY (V/C) RATIO:		0.671			0.738		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.571			0.638		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **3**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Harvard Blvd
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	39	0	39	54	0	54
	Left-Through		0			0	
	Through	121	0	222	259	0	401
	Through-Right		0			0	
	Right	62	0	0	88	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	27	0	27	29	0	29
	Left-Through		0			0	
	Through	150	0	228	157	0	247
	Through-Right		0			0	
	Right	51	0	0	61	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	31	1	31	46	1	46
	Left-Through		0			0	
	Through	965	1	496	1141	1	599
	Through-Right		1			1	
	Right	26	0	26	57	0	57
	Left-Through-Right		0			0	
WESTBOUND	Left	57	1	57	59	1	59
	Left-Through		0			0	
	Through	1057	1	549	1030	1	545
	Through-Right		1			1	
	Right	41	0	41	60	0	60
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 267			North-South: 430		
		East-West: 580			East-West: 658		
		SUM: 847			SUM: 1088		
VOLUME/CAPACITY (V/C) RATIO:		0.565			0.725		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.465			0.625		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: 4

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Harvard Blvd
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	37	0	37	37	0	37
	Left-Through		0			0	
	Through	158	0	250	305	0	393
	Through-Right		0			0	
	Right	55	0	0	51	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	41	0	41	30	0	30
	Left-Through		0			0	
	Through	154	0	248	215	0	291
	Through-Right		0			0	
	Right	53	0	0	46	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	26	1	26	46	1	46
	Left-Through		0			0	
	Through	1235	2	618	1139	2	570
	Through-Right		0			0	
	Right	35	1	35	57	1	57
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	47	1	47	95	1	95
	Left-Through		0			0	
	Through	1160	2	580	1177	2	589
	Through-Right		0			0	
	Right	37	1	37	52	1	52
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South:		291	North-South:		423
		East-West:		665	East-West:		665
		SUM:		956	SUM:		1088
VOLUME/CAPACITY (V/C) RATIO:				0.637			0.725
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.537			0.625
LEVEL OF SERVICE (LOS):				A			B

Level of Service Worksheet (Circular 212 Method)



I/S #: **5**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Harvard Blvd
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	19	0	19	21	0	21
	Left-Through		0			0	
	Through	236	0	287	289	0	351
	Through-Right		0			0	
	Right	32	0	0	41	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	64	0	64	55	0	55
	Left-Through		0			0	
	Through	117	0	238	287	0	408
	Through-Right		0			0	
	Right	57	0	0	66	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	29	0	29	38	0	38
	Left-Through		1			1	
	Through	707	0	420	817	0	508
	Through-Right		1			1	
	Right	17	0	420	47	0	508
	Left-Through-Right		0			0	
WESTBOUND	Left	22	0	22	59	0	59
	Left-Through		1			1	
	Through	785	0	451	790	0	539
	Through-Right		1			1	
	Right	28	0	451	51	0	539
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 351			North-South: 429		
		East-West: 480			East-West: 577		
		SUM: 831			SUM: 1006		
VOLUME/CAPACITY (V/C) RATIO:		0.554			0.671		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.454			0.571		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **6**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
		No. of Phases			No. of Phases		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				2			2
Right Turns: FREE-1, NRTOR-2 or OLA-3?				0			0
ATSAC-1 or ATSAC+ATCS-2?				0			0
Override Capacity				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	20	31	0	31
	Left-Through		0			0	
	Through	64	0	134	221	0	326
	Through-Right		0			0	
	Right	50	0	0	74	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	53	0	53	29	0	29
	Left-Through		0			0	
	Through	148	0	251	175	0	245
	Through-Right		0			0	
	Right	50	0	0	41	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	18	1	18	24	1	24
	Left-Through		0			0	
	Through	995	1	511	1191	1	618
	Through-Right		1			1	
	Right	27	0	27	44	0	44
	Left-Through-Right		0			0	
WESTBOUND	Left	60	1	60	40	1	40
	Left-Through		0			0	
	Through	1105	1	569	1069	1	550
	Through-Right		1			1	
	Right	32	0	32	31	0	31
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		271	North-South:		355
		East-West:		587	East-West:		658
		SUM:		858	SUM:		1013
VOLUME/CAPACITY (V/C) RATIO:				0.572			0.675
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.472			0.575
LEVEL OF SERVICE (LOS):				A			A

Level of Service Worksheet (Circular 212 Method)



I/S #: **7**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	55	0	55	72	0	72
	Left-Through		0			0	
	Through	74	0	191	200	0	372
	Through-Right		0			0	
	Right	62	0	0	100	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	56	0	56	48	0	48
	Left-Through		0			0	
	Through	137	0	220	165	0	244
	Through-Right		0			0	
	Right	27	0	0	31	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	1	0	0	1	0
	Left-Through		0			0	
	Through	1267	2	634	1156	2	578
	Through-Right		0			0	
	Right	75	1	75	57	1	57
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	113	1	113	106	1	106
	Left-Through		0			0	
	Through	1164	2	582	1223	2	612
	Through-Right		0			0	
	Right	49	1	49	85	1	85
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 275			North-South: 420		
		East-West: 747			East-West: 684		
		SUM: 1022			SUM: 1104		
VOLUME/CAPACITY (V/C) RATIO:		0.681			0.736		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.581			0.636		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **8**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 3rd St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	475	1	270	823	1	442
	Through-Right		1			1	
	Right	65	0	65	61	0	61
	Left-Through-Right		0			0	
SOUTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	754	1	433	577	1	331
	Through-Right		1			1	
	Right	111	0	111	85	0	85
	Left-Through-Right		0			0	
EASTBOUND	Left	77	1	77	98	1	98
	Left-Through		0			0	
	Through	1168	1	607	1102	1	578
	Through-Right		1			1	
	Right	46	0	46	54	0	54
	Left-Through-Right		0			0	
WESTBOUND	Left	48	1	48	53	1	53
	Left-Through		0			0	
	Through	1073	1	553	1094	1	578
	Through-Right		1			1	
	Right	33	0	33	62	0	62
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		433	North-South:		442
		East-West:		655	East-West:		676
		SUM:		1088	SUM:		1118
VOLUME/CAPACITY (V/C) RATIO:				0.764			0.785
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.664			0.685
LEVEL OF SERVICE (LOS):				B			B

Level of Service Worksheet (Circular 212 Method)



I/S #: 9

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	0	28	0	0	0
	Left-Through		1			0	
	Through	449	0	306	679	1	376
	Through-Right		1			1	
	Right	51	0	306	73	0	73
	Left-Through-Right		0			0	
SOUTHBOUND	Left	73	0	73	0	0	0
	Left-Through		1			0	
	Through	563	1	355	498	2	249
	Through-Right		0			0	
	Right	134	1	117	36	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	35	1	35	75	1	75
	Left-Through		0			0	
	Through	1045	1	549	1158	1	600
	Through-Right		1			1	
	Right	52	0	52	41	0	41
	Left-Through-Right		0			0	
WESTBOUND	Left	44	1	44	62	1	62
	Left-Through		0			0	
	Through	1016	1	521	1123	1	594
	Through-Right		1			1	
	Right	26	0	26	64	0	64
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 383			North-South: 376		
		East-West: 593			East-West: 669		
		SUM: 976			SUM: 1045		
VOLUME/CAPACITY (V/C) RATIO:		0.651			0.697		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.551			0.597		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **10**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	45	0	45	47	0	47
	Left-Through		1			1	
	Through	395	1	288	565	1	330
	Through-Right		0			0	
	Right	109	1	55	112	1	53
	Left-Through-Right		0			0	
SOUTHBOUND	Left	55	0	55	69	0	69
	Left-Through		1			1	
	Through	526	1	318	484	1	380
	Through-Right		0			0	
	Right	114	1	88	79	1	32
	Left-Through-Right		0			0	
EASTBOUND	Left	53	1	53	95	1	95
	Left-Through		0			0	
	Through	1185	2	593	1173	2	587
	Through-Right		0			0	
	Right	135	1	135	91	1	91
	Left-Through-Right		0			0	
WESTBOUND	Left	108	1	108	118	1	118
	Left-Through		0			0	
	Through	1141	2	571	1247	2	624
	Through-Right		0			0	
	Right	35	1	35	78	1	78
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		363	North-South:		427
		East-West:		701	East-West:		719
		SUM:		1064	SUM:		1146
VOLUME/CAPACITY (V/C) RATIO:				0.747			0.804
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.647			0.704
LEVEL OF SERVICE (LOS):				B			C

Level of Service Worksheet (Circular 212 Method)



I/S #: **11**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 7th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	138	0	138	55	0	55
	Left-Through		0			0	
	Through	519	0	682	526	0	621
	Through-Right		0			0	
	Right	25	0	0	40	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	42	0	42	61	0	61
	Left-Through		1			1	
	Through	454	0	496	470	0	531
	Through-Right		0			0	
	Right	118	1	91	259	1	226
	Left-Through-Right		0			0	
EASTBOUND	Left	55	1	55	67	1	67
	Left-Through		0			0	
	Through	82	0	163	203	0	310
	Through-Right		1			1	
	Right	81	0	0	107	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	24	1	24	24	1	24
	Left-Through		0			0	
	Through	82	0	159	127	0	196
	Through-Right		1			1	
	Right	77	0	0	69	0	0
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 724			North-South: 682		
		East-West: 214			East-West: 334		
		SUM: 938			SUM: 1016		
VOLUME/CAPACITY (V/C) RATIO:		0.625			0.677		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.525			0.577		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: 12

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	70	0	70	56	0	56
	Left-Through		0			0	
	Through	591	0	694	511	0	591
	Through-Right		0			0	
	Right	33	0	0	24	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	42	0	42	42	0	42
	Left-Through		0			0	
	Through	436	0	515	551	0	623
	Through-Right		0			0	
	Right	37	0	0	30	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	27	0	27	37	0	37
	Left-Through		1			1	
	Through	577	0	377	770	0	498
	Through-Right		1			1	
	Right	69	0	377	78	0	498
	Left-Through-Right		0			0	
WESTBOUND	Left	32	0	32	44	0	44
	Left-Through		1			1	
	Through	725	0	443	754	0	481
	Through-Right		1			1	
	Right	33	0	443	31	0	481
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 736			North-South: 679		
		East-West: 470			East-West: 542		
		SUM: 1206			SUM: 1221		
VOLUME/CAPACITY (V/C) RATIO:		0.804			0.814		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.704			0.714		
LEVEL OF SERVICE (LOS):		C			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **13**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Olympic Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	135	1	135	106	1	106
	Left-Through		0			0	
	Through	861	2	431	711	2	356
	Through-Right		0			0	
	Right	80	1	54	115	1	77
	Left-Through-Right		0			0	
SOUTHBOUND	Left	72	1	72	93	1	93
	Left-Through		0			0	
	Through	632	2	316	932	2	466
	Through-Right		0			0	
	Right	74	1	44	61	1	23
	Left-Through-Right		0			0	
EASTBOUND	Left	60	1	60	77	1	77
	Left-Through		0			0	
	Through	1587	2	554	1854	2	657
	Through-Right		1			1	
	Right	76	0	76	116	0	116
	Left-Through-Right		0			0	
WESTBOUND	Left	52	1	52	77	1	77
	Left-Through		0			0	
	Through	1547	2	537	1556	2	551
	Through-Right		1			1	
	Right	63	0	63	98	0	98
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 503			North-South: 572		
		East-West: 606			East-West: 734		
		SUM: 1109			SUM: 1306		
VOLUME/CAPACITY (V/C) RATIO:		0.739			0.871		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.639			0.771		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: 14

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3		NB-- 0	SB-- 3	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	112	1	112	127	1	127
	Left-Through		0			0	
	Through	1233	2	433	1036	2	368
	Through-Right		1			1	
	Right	67	0	67	68	0	68
	Left-Through-Right		0			0	
SOUTHBOUND	Left	119	1	119	136	1	136
	Left-Through		0			0	
	Through	1154	2	577	993	2	497
	Through-Right		0			0	
	Right	93	1	0	106	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	115	1	115	146	1	146
	Left-Through		0			0	
	Through	1040	2	520	1011	2	506
	Through-Right		0			0	
	Right	132	1	76	111	1	48
	Left-Through-Right		0			0	
WESTBOUND	Left	108	1	108	125	1	125
	Left-Through		0			0	
	Through	957	2	479	956	2	478
	Through-Right		0			0	
	Right	72	1	13	77	1	9
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 689			North-South: 624		
		East-West: 628			East-West: 631		
		SUM: 1317			SUM: 1255		
VOLUME/CAPACITY (V/C) RATIO:		0.958			0.913		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.858			0.813		
LEVEL OF SERVICE (LOS):		D			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: 15

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	79	69	1	69
	Left-Through		0			0	
	Through	1325	1	675	1128	1	593
	Through-Right		1			1	
	Right	24	0	24	58	0	58
	Left-Through-Right		0			0	
SOUTHBOUND	Left	50	1	50	57	1	57
	Left-Through		0			0	
	Through	1185	1	633	1106	1	609
	Through-Right		1			1	
	Right	80	0	80	112	0	112
	Left-Through-Right		0			0	
EASTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	683	1	388	812	1	465
	Through-Right		1			1	
	Right	92	0	92	118	0	118
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	744	1	400	738	1	414
	Through-Right		1			1	
	Right	56	0	56	89	0	89
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 725			North-South: 678		
		East-West: 400			East-West: 465		
		SUM: 1125			SUM: 1143		
VOLUME/CAPACITY (V/C) RATIO:		0.750			0.762		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.650			0.662		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **16**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	35	1	35	70	1	70
	Left-Through		0			0	
	Through	1022	2	396	1096	2	411
	Through-Right		1			1	
	Right	165	0	165	137	0	137
	Left-Through-Right		0			0	
SOUTHBOUND	Left	85	1	85	92	1	92
	Left-Through		0			0	
	Through	1133	2	427	1028	2	371
	Through-Right		1			1	
	Right	148	0	148	85	0	85
	Left-Through-Right		0			0	
EASTBOUND	Left	85	1	85	105	1	105
	Left-Through		0			0	
	Through	1034	1	581	951	1	522
	Through-Right		1			1	
	Right	128	0	128	93	0	93
	Left-Through-Right		0			0	
WESTBOUND	Left	107	1	107	93	1	93
	Left-Through		0			0	
	Through	977	2	489	948	2	474
	Through-Right		0			0	
	Right	105	1	63	134	1	88
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		481	North-South:		503
		East-West:		688	East-West:		615
		SUM:		1169	SUM:		1118
VOLUME/CAPACITY (V/C) RATIO:				0.779			0.745
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.679			0.645
LEVEL OF SERVICE (LOS):				B			B

Level of Service Worksheet (Circular 212 Method)



I/S #: 17

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Virgil
Scenario: Existing plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		3			3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
SOUTHBOUND	Left	358	2	197	384	2	211
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	118	1	18	139	1	19
	Left-Through-Right		0			0	
EASTBOUND	Left	201	1	201	240	1	240
	Left-Through		0			0	
	Through	1204	2	602	1156	2	578
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	1123	2	562	1003	2	502
	Through-Right		0			0	
	Right	272	1	174	274	1	169
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 197			North-South: 211		
		East-West: 763			East-West: 742		
		SUM: 960			SUM: 953		
VOLUME/CAPACITY (V/C) RATIO:		0.674			0.669		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.574			0.569		
LEVEL OF SERVICE (LOS):		A			A		

Level of Service Worksheet (Circular 212 Method)



I/S #: **1**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: Wilshire Blvd

Scenario: Future Year 2023

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	98	1	98	147	1	147
	Left-Through		0			0	
	Through	1016	1	554	979	1	545
	Through-Right		1			1	
	Right	92	0	92	111	0	111
	Left-Through-Right		0			0	
SOUTHBOUND	Left	189	1	189	118	1	118
	Left-Through		0			0	
	Through	893	1	493	1016	1	553
	Through-Right		1			1	
	Right	93	0	93	89	0	89
	Left-Through-Right		0			0	
EASTBOUND	Left	168	1	168	194	1	194
	Left-Through		0			0	
	Through	1306	2	653	1251	2	626
	Through-Right		0			0	
	Right	97	1	48	140	1	67
	Left-Through-Right		0			0	
WESTBOUND	Left	133	1	133	185	1	185
	Left-Through		0			0	
	Through	1174	2	587	1099	2	550
	Through-Right		0			0	
	Right	88	1	0	127	1	68
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 743			North-South: 700		
		East-West: 786			East-West: 811		
		SUM: 1529			SUM: 1511		
VOLUME/CAPACITY (V/C) RATIO:		1.112			1.099		
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.012			0.999		
LEVEL OF SERVICE (LOS):		F			E		

Level of Service Worksheet (Circular 212 Method)



I/S #: **2**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: 8th St

Scenario: Future Year 2023

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	51	66	1	66
	Left-Through		0			0	
	Through	1134	1	597	1156	1	634
	Through-Right		1			1	
	Right	60	0	60	112	0	112
	Left-Through-Right		0			0	
SOUTHBOUND	Left	91	1	91	150	1	150
	Left-Through		0			0	
	Through	1038	1	536	1206	1	619
	Through-Right		1			1	
	Right	34	0	34	32	0	32
	Left-Through-Right		0			0	
EASTBOUND	Left	54	1	54	65	1	65
	Left-Through		0			0	
	Through	759	1	402	914	1	476
	Through-Right		1			1	
	Right	44	0	44	37	0	37
	Left-Through-Right		0			0	
WESTBOUND	Left	146	1	146	174	1	174
	Left-Through		0			0	
	Through	901	1	499	791	1	461
	Through-Right		1			1	
	Right	97	0	97	131	0	131
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 688			North-South: 784		
		East-West: 553			East-West: 650		
		SUM: 1241			SUM: 1434		
VOLUME/CAPACITY (V/C) RATIO:		0.827			0.956		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.727			0.856		
LEVEL OF SERVICE (LOS):		C			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: **3**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 6th St

Scenario: Future Year 2023

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	36	0	36	55	0	55
	Left-Through		0			0	
	Through	128	0	223	279	0	424
	Through-Right		0			0	
	Right	59	0	0	90	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	29	0	29	29	0	29
	Left-Through		0			0	
	Through	163	0	248	169	0	264
	Through-Right		0			0	
	Right	56	0	0	66	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	34	1	34	50	1	50
	Left-Through		0			0	
	Through	1078	1	553	1299	1	678
	Through-Right		1			1	
	Right	27	0	27	56	0	56
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	59	1	59	56	1	56
	Left-Through		0			0	
	Through	1202	1	622	1161	1	612
	Through-Right		1			1	
	Right	42	0	42	63	0	63
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South:		284	North-South:		453
		East-West:		656	East-West:		734
		SUM:		940	SUM:		1187
VOLUME/CAPACITY (V/C) RATIO:				0.627			0.791
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.527			0.691
LEVEL OF SERVICE (LOS):				A			B

Level of Service Worksheet (Circular 212 Method)



I/S #:
4

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

Scenario: Future Year 2023

Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	21	0	21	30	0	30
	Left-Through		0			0	
	Through	156	0	210	322	0	393
	Through-Right		0			0	
	Right	33	0	0	41	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	44	0	44	30	0	30
	Left-Through		0			0	
	Through	164	0	266	219	0	299
	Through-Right		0			0	
	Right	58	0	0	50	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	29	1	29	50	1	50
	Left-Through		0			0	
	Through	1497	2	749	1369	2	685
	Through-Right		0			0	
	Right	33	1	33	43	1	43
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	45	1	45	75	1	75
	Left-Through		0			0	
	Through	1388	2	694	1444	2	722
	Through-Right		0			0	
	Right	38	1	38	55	1	55
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 287			North-South: 423		
		East-West: 794			East-West: 772		
		SUM: 1081			SUM: 1195		
VOLUME/CAPACITY (V/C) RATIO:		0.721			0.797		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.621			0.697		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **5**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 8th St

Scenario: Future Year 2023

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	20	23	0	23
	Left-Through		0			0	
	Through	257	0	312	307	0	379
	Through-Right		0			0	
	Right	35	0	0	49	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	56	0	56	53	0	53
	Left-Through		0			0	
	Through	121	0	218	307	0	428
	Through-Right		0			0	
	Right	41	0	0	68	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	33	0	33	23	0	23
	Left-Through		1			1	
	Through	911	0	564	1074	0	631
	Through-Right		1			1	
	Right	19	0	564	50	0	631
	Left-Through-Right		0			0	
WESTBOUND	Left	29	0	29	66	0	66
	Left-Through		1			1	
	Through	1016	0	580	1037	0	740
	Through-Right		1			1	
	Right	28	0	580	46	0	740
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 368			North-South: 451		
		East-West: 613			East-West: 763		
		SUM: 981			SUM: 1214		
VOLUME/CAPACITY (V/C) RATIO:		0.654			0.809		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.554			0.709		
LEVEL OF SERVICE (LOS):		A			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **6**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	13	0	13	29	0	29
	Left-Through		0			0	
	Through	106	0	166	254	0	359
	Through-Right		0			0	
	Right	47	0	0	76	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	72	0	72	42	0	42
	Left-Through		0			0	
	Through	160	0	310	185	0	286
	Through-Right		0			0	
	Right	78	0	0	59	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	29	1	29	51	1	51
	Left-Through		0			0	
	Through	1092	1	560	1330	1	685
	Through-Right		1			1	
	Right	27	0	27	39	0	39
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	63	1	63	36	1	36
	Left-Through		0			0	
	Through	1236	1	639	1184	1	617
	Through-Right		1			1	
	Right	42	0	42	50	0	50
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 323			North-South: 401		
		East-West: 668			East-West: 721		
		SUM: 991			SUM: 1122		
VOLUME/CAPACITY (V/C) RATIO:		0.661			0.748		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.561			0.648		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **7**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	42	0	42	68	0	68
	Left-Through		0			0	
	Through	59	0	140	205	0	365
	Through-Right		0			0	
	Right	39	0	0	92	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	60	0	60	53	0	53
	Left-Through		0			0	
	Through	145	0	234	157	0	243
	Through-Right		0			0	
	Right	29	0	0	33	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	1	0	0	1	0
	Left-Through		0			0	
	Through	1507	2	754	1388	2	694
	Through-Right		0			0	
	Right	76	1	76	44	1	44
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	116	1	116	91	1	91
	Left-Through		0			0	
	Through	1402	2	701	1475	2	738
	Through-Right		0			0	
	Right	95	1	95	110	1	110
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 276			North-South: 418		
		East-West: 870			East-West: 785		
		SUM: 1146			SUM: 1203		
VOLUME/CAPACITY (V/C) RATIO:		0.764			0.802		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.664			0.702		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **8**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 3rd St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	581	1	334	923	1	502
	Through-Right		1			1	
	Right	87	0	87	80	0	80
	Left-Through-Right		0			0	
SOUTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	843	1	481	691	1	391
	Through-Right		1			1	
	Right	119	0	119	91	0	91
	Left-Through-Right		0			0	
EASTBOUND	Left	83	1	83	105	1	105
	Left-Through		0			0	
	Through	1287	1	674	1221	1	657
	Through-Right		1			1	
	Right	60	0	60	92	0	92
	Left-Through-Right		0			0	
WESTBOUND	Left	63	1	63	77	1	77
	Left-Through		0			0	
	Through	1184	1	610	1217	1	642
	Through-Right		1			1	
	Right	35	0	35	66	0	66
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		481	North-South:		502
		East-West:		737	East-West:		747
		SUM:		1218	SUM:		1249
VOLUME/CAPACITY (V/C) RATIO:				0.855			0.876
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.755			0.776
LEVEL OF SERVICE (LOS):				C			C

Level of Service Worksheet (Circular 212 Method)



I/S #: **9**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	30	0	30	0	0	0
	Left-Through		1			0	
	Through	561	0	369	782	1	430
	Through-Right		1			1	
	Right	56	0	369	78	0	78
	Left-Through-Right		0			0	
SOUTHBOUND	Left-Right		0			0	
	Left	78	0	78	0	0	0
	Left-Through		1			0	
	Through	661	1	487	645	2	323
	Through-Right		0			0	
	Right	144	1	125	39	1	0
EASTBOUND	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	38	1	38	80	1	80
	Left-Through		0			0	
	Through	1153	1	605	1300	1	672
	Through-Right		1			1	
WESTBOUND	Right	56	0	56	44	0	44
	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	47	1	47	67	1	67
	Left-Through		0			0	
	Through	1145	1	587	1249	1	659
CRITICAL VOLUMES	Through-Right		1			1	
	Right	28	0	28	69	0	69
	Left-Through-Right		0			0	
	Left-Right		0			0	
	North-South:			517	North-South:		430
	East-West:			652	East-West:		739
SUM:				1169	SUM:		1169
VOLUME/CAPACITY (V/C) RATIO:				0.779			0.779
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.679			0.679
LEVEL OF SERVICE (LOS):				B			B

Level of Service Worksheet (Circular 212 Method)



I/S #: **10**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	59	0	59	63	0	63
	Left-Through		1			1	
	Through	455	1	346	636	1	444
	Through-Right		0			0	
	Right	127	1	57	141	1	70
	Left-Through-Right		0			0	
SOUTHBOUND	Left	80	0	80	134	0	134
	Left-Through		1			1	
	Through	591	1	376	560	1	548
	Through-Right		0			0	
	Right	132	1	96	96	1	42
	Left-Through-Right		0			0	
EASTBOUND	Left	72	1	72	109	1	109
	Left-Through		0			0	
	Through	1367	2	684	1374	2	687
	Through-Right		0			0	
	Right	154	1	154	109	1	109
	Left-Through-Right		0			0	
WESTBOUND	Left	140	1	140	143	1	143
	Left-Through		0			0	
	Through	1394	2	697	1476	2	738
	Through-Right		0			0	
	Right	70	1	70	100	1	100
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		435	North-South:		611
		East-West:		824	East-West:		847
		SUM:		1259	SUM:		1458
VOLUME/CAPACITY (V/C) RATIO:				0.884			1.023
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.784			0.923
LEVEL OF SERVICE (LOS):				C			E

Level of Service Worksheet (Circular 212 Method)



I/S #: 11

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 7th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	150	0	150	53	0	53
	Left-Through		0			0	
	Through	595	0	774	634	0	738
	Through-Right		0			0	
	Right	29	0	0	51	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	46	0	46	68	0	68
	Left-Through		1			1	
	Through	549	0	595	548	0	616
	Through-Right		0			0	
	Right	127	1	98	278	1	242
	Left-Through-Right		0			0	
EASTBOUND	Left	59	1	59	72	1	72
	Left-Through		0			0	
	Through	93	0	175	239	0	353
	Through-Right		1			1	
	Right	82	0	0	114	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	34	1	34	31	1	31
	Left-Through		0			0	
	Through	110	0	193	148	0	222
	Through-Right		1			1	
	Right	83	0	0	74	0	0
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 820			North-South: 806		
		East-West: 252			East-West: 384		
		SUM: 1072			SUM: 1190		
VOLUME/CAPACITY (V/C) RATIO:		0.715			0.793		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.615			0.693		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: 12

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	81	0	81	88	0	88
	Left-Through		0			0	
	Through	666	0	793	613	0	775
	Through-Right		0			0	
	Right	46	0	0	74	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	47	0	47	51	0	51
	Left-Through		0			0	
	Through	530	0	618	630	0	721
	Through-Right		0			0	
	Right	41	0	0	40	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	41	0	41	43	0	43
	Left-Through		1			1	
	Through	715	0	493	1002	0	636
	Through-Right		1			1	
	Right	106	0	493	98	0	636
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	90	0	90	78	0	78
	Left-Through		1			1	
	Through	946	0	675	953	0	730
	Through-Right		1			1	
	Right	43	0	675	38	0	730
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 840			North-South: 826		
		East-West: 716			East-West: 773		
		SUM: 1556			SUM: 1599		
VOLUME/CAPACITY (V/C) RATIO:		1.037			1.066		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.937			0.966		
LEVEL OF SERVICE (LOS):		E			E		

Level of Service Worksheet (Circular 212 Method)



I/S #: **13**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: Olympic Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	163	1	163	148	1	148
	Left-Through		0			0	
	Through	968	2	484	881	2	441
	Through-Right		0			0	
	Right	101	1	65	144	1	94
	Left-Through-Right		0			0	
SOUTHBOUND	Left	90	1	90	106	1	106
	Left-Through		0			0	
	Through	796	2	398	1065	2	533
	Through-Right		0			0	
	Right	111	1	68	106	1	44
	Left-Through-Right		0			0	
EASTBOUND	Left	87	1	87	124	1	124
	Left-Through		0			0	
	Through	1823	2	642	2208	2	788
	Through-Right		1			1	
	Right	102	0	102	155	0	155
	Left-Through-Right		0			0	
WESTBOUND	Left	72	1	72	101	1	101
	Left-Through		0			0	
	Through	1851	2	641	1834	2	651
	Through-Right		1			1	
	Right	71	0	71	118	0	118
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		574	North-South:		681
		East-West:		728	East-West:		889
		SUM:		1302	SUM:		1570
VOLUME/CAPACITY (V/C) RATIO:				0.868			1.047
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.768			0.947
LEVEL OF SERVICE (LOS):				C			E

Level of Service Worksheet (Circular 212 Method)



I/S #:
14

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3		NB-- 0	SB-- 3	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	133	1	133	167	1	167
	Left-Through		0			0	
	Through	1394	2	501	1203	2	449
	Through-Right		1			1	
	Right	108	0	108	145	0	145
	Left-Through-Right		0			0	
SOUTHBOUND	Left	150	1	150	194	1	194
	Left-Through		0			0	
	Through	1333	2	667	1152	2	576
	Through-Right		0			0	
	Right	121	1	0	171	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	193	1	193	192	1	192
	Left-Through		0			0	
	Through	1266	2	633	1205	2	603
	Through-Right		0			0	
	Right	178	1	112	137	1	54
	Left-Through-Right		0			0	
WESTBOUND	Left	185	1	185	175	1	175
	Left-Through		0			0	
	Through	1146	2	573	1199	2	600
	Through-Right		0			0	
	Right	123	1	48	111	1	14
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 800			North-South: 743		
		East-West: 818			East-West: 792		
		SUM: 1618			SUM: 1535		
VOLUME/CAPACITY (V/C) RATIO:		1.177			1.116		
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.077			1.016		
LEVEL OF SERVICE (LOS):		F			F		

Level of Service Worksheet (Circular 212 Method)



I/S #: 15

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 8th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	93	1	93	104	1	104
	Left-Through		0			0	
	Through	1528	1	777	1500	1	781
	Through-Right		1			1	
	Right	26	0	26	62	0	62
	Left-Through-Right		0			0	
SOUTHBOUND	Left	59	1	59	85	1	85
	Left-Through		0			0	
	Through	1570	1	828	1352	1	737
	Through-Right		1			1	
	Right	86	0	86	121	0	121
	Left-Through-Right		0			0	
EASTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	842	1	490	1045	1	598
	Through-Right		1			1	
	Right	137	0	137	150	0	150
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	955	1	519	944	1	525
	Through-Right		1			1	
	Right	83	0	83	106	0	106
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 921			North-South: 866		
		East-West: 519			East-West: 598		
		SUM: 1440			SUM: 1464		
VOLUME/CAPACITY (V/C) RATIO:		0.960			0.976		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.860			0.876		
LEVEL OF SERVICE (LOS):		D			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: 16

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: 6th St

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	41	1	41	84	1	84
	Left-Through		0			0	
	Through	1335	2	508	1384	2	513
	Through-Right		1			1	
	Right	189	0	189	156	0	156
	Left-Through-Right		0			0	
SOUTHBOUND	Left	96	1	96	104	1	104
	Left-Through		0			0	
	Through	1410	2	526	1345	2	481
	Through-Right		1			1	
	Right	168	0	168	97	0	97
	Left-Through-Right		0			0	
EASTBOUND	Left	97	1	97	119	1	119
	Left-Through		0			0	
	Through	1198	1	674	1120	1	614
	Through-Right		1			1	
	Right	149	0	149	108	0	108
	Left-Through-Right		0			0	
WESTBOUND	Left	122	1	122	108	1	108
	Left-Through		0			0	
	Through	1146	2	573	1110	2	555
	Through-Right		0			0	
	Right	118	1	70	151	1	99
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		604	North-South:		617
		East-West:		796	East-West:		722
		SUM:		1400	SUM:		1339
VOLUME/CAPACITY (V/C) RATIO:				0.933			0.893
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.833			0.793
LEVEL OF SERVICE (LOS):				D			C

Level of Service Worksheet (Circular 212 Method)



I/S #: 17

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Virgil
Scenario: Future Year 2023
Count Date: 3/17/2016

East-West Street: Wilshire Blvd

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
SOUTHBOUND	Left	397	2	218	442	2	243
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	128	1	19	152	1	23
	Left-Through-Right		0			0	
EASTBOUND	Left	218	1	218	259	1	259
	Left-Through		0			0	
	Through	1496	2	748	1477	2	739
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	1437	2	719	1311	2	656
	Through-Right		0			0	
	Right	320	1	211	311	1	190
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 218			North-South: 243		
		East-West: 937			East-West: 915		
		SUM: 1155			SUM: 1158		
VOLUME/CAPACITY (V/C) RATIO:		0.811			0.813		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.711			0.713		
LEVEL OF SERVICE (LOS):		C			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **1**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: Wilshire Blvd

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases				4			4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	98	1	98	147	1	147
	Left-Through		0			0	
	Through	1016	1	555	979	1	549
	Through-Right		1			1	
	Right	94	0	94	119	0	119
	Left-Through-Right		0			0	
SOUTHBOUND	Left	190	1	190	124	1	124
	Left-Through		0			0	
	Through	893	1	493	1016	1	553
	Through-Right		1			1	
	Right	93	0	93	89	0	89
	Left-Through-Right		0			0	
EASTBOUND	Left	168	1	168	194	1	194
	Left-Through		0			0	
	Through	1310	2	655	1268	2	634
	Through-Right		0			0	
	Right	97	1	48	140	1	67
	Left-Through-Right		0			0	
WESTBOUND	Left	141	1	141	189	1	189
	Left-Through		0			0	
	Through	1191	2	596	1108	2	554
	Through-Right		0			0	
	Right	94	1	0	130	1	68
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		745	North-South:		700
		East-West:		796	East-West:		823
		SUM:		1541	SUM:		1523
VOLUME/CAPACITY (V/C) RATIO:				1.121			1.108
V/C LESS ATSAC/ATCS ADJUSTMENT:				1.021			1.008
LEVEL OF SERVICE (LOS):				F			F

Level of Service Worksheet (Circular 212 Method)



I/S #: **2**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Western Ave

East-West Street: 8th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	51	66	1	66
	Left-Through		0			0	
	Through	1138	1	600	1172	1	646
	Through-Right		1			1	
	Right	62	0	62	120	0	120
	Left-Through-Right		0			0	
SOUTHBOUND	Left-Right		0			0	
	Left	91	1	91	150	1	150
	Left-Through		0			0	
	Through	1054	1	544	1215	1	624
	Through-Right		1			1	
	Right	34	0	34	32	0	32
EASTBOUND	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	54	1	54	65	1	65
	Left-Through		0			0	
	Through	762	1	403	928	1	483
	Through-Right		1			1	
WESTBOUND	Right	44	0	44	37	0	37
	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	154	1	154	178	1	178
	Left-Through		0			0	
	Through	915	1	506	798	1	465
			1			1	
		97	0	97	131	0	131
			0			0	
			0			0	
CRITICAL VOLUMES		North-South: 691		North-South: 796			
		East-West: 560		East-West: 661			
		SUM: 1251		SUM: 1457			
VOLUME/CAPACITY (V/C) RATIO:		0.834		0.971			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.734		0.871			
LEVEL OF SERVICE (LOS):		C		D			

Level of Service Worksheet (Circular 212 Method)



I/S #: **3**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 6th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	41	0	41	58	0	58
	Left-Through		0			0	
	Through	139	0	246	285	0	437
	Through-Right		0			0	
	Right	66	0	0	94	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	29	0	29	31	0	31
	Left-Through		0			0	
	Through	166	0	251	180	0	277
	Through-Right		0			0	
	Right	56	0	0	66	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	34	1	34	50	1	50
	Left-Through		0			0	
	Through	1079	1	554	1305	1	683
	Through-Right		1			1	
	Right	28	0	28	61	0	61
	Left-Through-Right		0			0	
WESTBOUND	Left	61	1	61	63	1	63
	Left-Through		0			0	
	Through	1208	1	626	1164	1	614
	Through-Right		1			1	
	Right	44	0	44	64	0	64
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 292			North-South: 468		
		East-West: 660			East-West: 746		
		SUM: 952			SUM: 1214		
VOLUME/CAPACITY (V/C) RATIO:		0.635			0.809		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.535			0.709		
LEVEL OF SERVICE (LOS):		A			C		

Level of Service Worksheet (Circular 212 Method)



I/S #:
4

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: Wilshire Blvd

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	38	0	38	39	0	39
	Left-Through		0			0	
	Through	177	0	275	333	0	427
	Through-Right		0			0	
	Right	60	0	0	55	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	44	0	44	32	0	32
	Left-Through		0			0	
	Through	169	0	271	240	0	322
	Through-Right		0			0	
	Right	58	0	0	50	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	29	1	29	50	1	50
	Left-Through		0			0	
	Through	1500	2	750	1383	2	692
	Through-Right		0			0	
	Right	37	1	37	60	1	60
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	51	1	51	102	1	102
	Left-Through		0			0	
	Through	1402	2	701	1452	2	726
	Through-Right		0			0	
	Right	40	1	40	56	1	56
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 319			North-South: 459		
		East-West: 801			East-West: 794		
		SUM: 1120			SUM: 1253		
VOLUME/CAPACITY (V/C) RATIO:		0.747			0.835		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.647			0.735		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **5**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Harvard Blvd

East-West Street: 8th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	20	23	0	23
	Left-Through		0			0	
	Through	260	0	315	318	0	390
	Through-Right		0			0	
	Right	35	0	0	49	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	68	0	68	59	0	59
	Left-Through		0			0	
	Through	134	0	265	314	0	453
	Through-Right		0			0	
	Right	63	0	0	80	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	38	0	38	45	0	45
	Left-Through		1			1	
	Through	911	0	579	1074	0	697
	Through-Right		1			1	
	Right	19	0	579	50	0	697
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	29	0	29	66	0	66
	Left-Through		1			1	
	Through	1016	0	581	1037	0	744
	Through-Right		1			1	
	Right	30	0	581	54	0	744
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South:		383	North-South:		476
		East-West:		619	East-West:		789
		SUM:		1002	SUM:		1265
VOLUME/CAPACITY (V/C) RATIO:				0.668			0.843
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.568			0.743
LEVEL OF SERVICE (LOS):				A			C

Level of Service Worksheet (Circular 212 Method)



I/S #: **6**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Kingsley Dr

East-West Street: 6th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	21	0	21	33	0	33
	Left-Through		0			0	
	Through	113	0	187	258	0	370
	Through-Right		0			0	
	Right	53	0	0	79	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	72	0	72	42	0	42
	Left-Through		0			0	
	Through	162	0	312	192	0	295
	Through-Right		0			0	
	Right	78	0	0	61	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	31	1	31	52	1	52
	Left-Through		0			0	
	Through	1097	1	563	1333	1	690
	Through-Right		1			1	
	Right	29	0	29	47	0	47
	Left-Through-Right		0			0	
WESTBOUND	Left	64	1	64	42	1	42
	Left-Through		0			0	
	Through	1237	1	640	1189	1	620
	Through-Right		1			1	
	Right	42	0	42	50	0	50
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 333			North-South: 412		
		East-West: 671			East-West: 732		
		SUM: 1004			SUM: 1144		
VOLUME/CAPACITY (V/C) RATIO:		0.669			0.763		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.569			0.663		
LEVEL OF SERVICE (LOS):		A			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **7**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Kingsley Dr

East-West Street: Wilshire Blvd

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	58	0	58	77	0	77
	Left-Through		0			0	
	Through	80	0	203	216	0	399
	Through-Right		0			0	
	Right	65	0	0	106	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	60	0	60	53	0	53
	Left-Through		0			0	
	Through	150	0	239	178	0	264
	Through-Right		0			0	
	Right	29	0	0	33	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	1	0	0	1	0
	Left-Through		0			0	
	Through	1534	2	767	1402	2	701
	Through-Right		0			0	
	Right	80	1	80	60	1	60
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	121	1	121	112	1	112
	Left-Through		0			0	
	Through	1408	2	704	1502	2	751
	Through-Right		0			0	
	Right	95	1	95	110	1	110
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 297			North-South: 452		
		East-West: 888			East-West: 813		
		SUM: 1185			SUM: 1265		
VOLUME/CAPACITY (V/C) RATIO:		0.790			0.843		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.690			0.743		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **8**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Normandie Ave

East-West Street: 3rd St

Scenario: Future Year 2023 plus Project
Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	591	1	339	928	1	504
	Through-Right		1			1	
	Right	87	0	87	80	0	80
	Left-Through-Right		0			0	
SOUTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	845	1	482	701	1	396
	Through-Right		1			1	
	Right	119	0	119	91	0	91
	Left-Through-Right		0			0	
EASTBOUND	Left	83	1	83	105	1	105
	Left-Through		0			0	
	Through	1291	1	676	1223	1	658
	Through-Right		1			1	
	Right	60	0	60	92	0	92
	Left-Through-Right		0			0	
WESTBOUND	Left	63	1	63	77	1	77
	Left-Through		0			0	
	Through	1185	1	610	1221	1	644
	Through-Right		1			1	
	Right	35	0	35	66	0	66
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		482	North-South:		504
		East-West:		739	East-West:		749
		SUM:		1221	SUM:		1253
VOLUME/CAPACITY (V/C) RATIO:				0.857			0.879
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.757			0.779
LEVEL OF SERVICE (LOS):				C			C

Level of Service Worksheet (Circular 212 Method)



I/S #: 9

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Normandie Ave

East-West Street: 6th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	30	0	30	0	0	0
	Left-Through		1			0	
	Through	571	0	374	787	1	433
	Through-Right		1			1	
	Right	56	0	374	78	0	78
	Left-Through-Right		0			0	
SOUTHBOUND	Left	78	0	78	0	0	0
	Left-Through		1			0	
	Through	663	1	488	655	2	328
	Through-Right		0			0	
	Right	144	1	125	39	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	38	1	38	80	1	80
	Left-Through		0			0	
	Through	1164	1	610	1306	1	675
	Through-Right		1			1	
	Right	56	0	56	44	0	44
	Left-Through-Right		0			0	
WESTBOUND	Left	47	1	47	67	1	67
	Left-Through		0			0	
	Through	1148	1	588	1260	1	665
	Through-Right		1			1	
	Right	28	0	28	69	0	69
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 518			North-South: 433		
		East-West: 657			East-West: 745		
		SUM: 1175			SUM: 1178		
VOLUME/CAPACITY (V/C) RATIO:		0.783			0.785		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.683			0.685		
LEVEL OF SERVICE (LOS):		B			B		

Level of Service Worksheet (Circular 212 Method)



I/S #: **10**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
Scenario: Future Year 2023 plus Project
Count Date: 3/17/2016

East-West Street: Wilshire Blvd
Analyst: Fehr & Peers
Date:

		AM			PM		
No. of Phases				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0
Override Capacity				2			2
				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	60	0	60	68	0	68
	Left-Through		1			1	
	Through	455	1	348	636	1	454
	Through-Right		0			0	
	Right	127	1	57	141	1	70
	Left-Through-Right		0			0	
SOUTHBOUND	Left-Right		0			0	
	Left	80	0	80	134	0	134
	Left-Through		1			1	
	Through	591	1	376	560	1	548
	Through-Right		0			0	
	Right	134	1	93	106	1	49
EASTBOUND	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	82	1	82	114	1	114
	Left-Through		0			0	
	Through	1400	2	700	1392	2	696
	Through-Right		0			0	
WESTBOUND	Right	164	1	164	114	1	114
	Left-Through-Right		0			0	
	Left-Right		0			0	
	Left	140	1	140	143	1	143
	Left-Through		0			0	
	Through	1402	2	701	1509	2	755
CRITICAL VOLUMES	Through-Right		0			0	
	Right	70	1	70	100	1	100
	Left-Through-Right		0			0	
	Left-Right		0			0	
	North-South:			436	North-South:		616
	East-West:			840	East-West:		869
SUM:				1276	SUM:		1485
VOLUME/CAPACITY (V/C) RATIO:				0.895			1.042
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.795			0.942
LEVEL OF SERVICE (LOS):				C			E

Level of Service Worksheet (Circular 212 Method)



I/S #: **11**

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Irolo St

East-West Street: 7th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	153	0	153	64	0	64
	Left-Through		0			0	
	Through	596	0	778	639	0	754
	Through-Right		0			0	
	Right	29	0	0	51	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	46	0	46	68	0	68
	Left-Through		1			1	
	Through	559	0	605	553	0	621
	Through-Right		0			0	
	Right	127	1	98	278	1	242
	Left-Through-Right		0			0	
EASTBOUND	Left	59	1	59	72	1	72
	Left-Through		0			0	
	Through	97	0	186	241	0	359
	Through-Right		1			1	
	Right	89	0	0	118	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	34	1	34	31	1	31
	Left-Through		0			0	
	Through	111	0	194	152	0	226
	Through-Right		1			1	
	Right	83	0	0	74	0	0
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 824			North-South: 822		
		East-West: 253			East-West: 390		
		SUM: 1077			SUM: 1212		
VOLUME/CAPACITY (V/C) RATIO:		0.718			0.808		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.618			0.708		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: 12

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Irolo St

East-West Street: 8th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	81	0	81	88	0	88
	Left-Through		0			0	
	Through	670	0	797	629	0	791
	Through-Right		0			0	
	Right	46	0	0	74	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	47	0	47	51	0	51
	Left-Through		0			0	
	Through	547	0	635	639	0	730
	Through-Right		0			0	
	Right	41	0	0	40	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	41	0	41	43	0	43
	Left-Through		1			1	
	Through	727	0	499	1008	0	682
	Through-Right		1			1	
	Right	106	0	499	98	0	682
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	90	0	90	78	0	78
	Left-Through		1			1	
	Through	949	0	676	965	0	736
	Through-Right		1			1	
	Right	43	0	676	38	0	736
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 844			North-South: 842		
		East-West: 717			East-West: 779		
		SUM: 1561			SUM: 1621		
VOLUME/CAPACITY (V/C) RATIO:		1.041			1.081		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.941			0.981		
LEVEL OF SERVICE (LOS):		E			E		

Level of Service Worksheet (Circular 212 Method)



I/S #: 13
PROJECT TITLE: 3600 Wilshire Project
North-South Street: Irolo St/Normandie Ave
East-West Street: Olympic Blvd
Scenario: Future Year 2023 plus Project
Count Date: 3/17/2016
Analyst: Fehr & Peers
Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	163	1	163	148	1	148
	Left-Through		0			0	
	Through	972	2	486	897	2	449
	Through-Right		0			0	
	Right	101	1	65	144	1	94
	Left-Through-Right		0			0	
SOUTHBOUND	Left	91	1	91	107	1	107
	Left-Through		0			0	
	Through	812	2	406	1074	2	537
	Through-Right		0			0	
	Right	111	1	68	106	1	44
	Left-Through-Right		0			0	
EASTBOUND	Left	87	1	87	124	1	124
	Left-Through		0			0	
	Through	1828	2	643	2211	2	789
	Through-Right		1			1	
	Right	102	0	102	155	0	155
	Left-Through-Right		0			0	
WESTBOUND	Left	72	1	72	101	1	101
	Left-Through		0			0	
	Through	1852	2	641	1840	2	653
	Through-Right		1			1	
	Right	71	0	71	118	0	118
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 577			North-South: 685		
		East-West: 728			East-West: 890		
		SUM: 1305			SUM: 1575		
VOLUME/CAPACITY (V/C) RATIO:		0.870			1.050		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.770			0.950		
LEVEL OF SERVICE (LOS):		C			E		

Level of Service Worksheet (Circular 212 Method)



I/S #:
14

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Vermont Ave

East-West Street: Wilshire Blvd

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3		NB-- 0	SB-- 3	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	134	1	134	173	1	173
	Left-Through		0			0	
	Through	1394	2	501	1203	2	449
	Through-Right		1			1	
	Right	108	0	108	145	0	145
	Left-Through-Right		0			0	
SOUTHBOUND	Left	150	1	150	194	1	194
	Left-Through		0			0	
	Through	1333	2	667	1152	2	576
	Through-Right		0			0	
	Right	122	1	0	177	1	0
	Left-Through-Right		0			0	
EASTBOUND	Left	199	1	199	195	1	195
	Left-Through		0			0	
	Through	1286	2	643	1216	2	608
	Through-Right		0			0	
	Right	184	1	117	140	1	54
	Left-Through-Right		0			0	
WESTBOUND	Left	185	1	185	175	1	175
	Left-Through		0			0	
	Through	1151	2	576	1219	2	610
	Through-Right		0			0	
	Right	123	1	48	111	1	14
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 801			North-South: 749		
		East-West: 828			East-West: 805		
		SUM: 1629			SUM: 1554		
VOLUME/CAPACITY (V/C) RATIO:		1.185			1.130		
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.085			1.030		
LEVEL OF SERVICE (LOS):		F			F		

Level of Service Worksheet (Circular 212 Method)



I/S #: 15

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Vermont Ave

East-West Street: 8th St

Scenario: Future Year 2023 plus Project
Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	93	1	93	104	1	104
	Left-Through		0			0	
	Through	1529	1	778	1506	1	784
	Through-Right		1			1	
	Right	26	0	26	62	0	62
	Left-Through-Right		0			0	
SOUTHBOUND	Left	59	1	59	85	1	85
	Left-Through		0			0	
	Through	1576	1	831	1355	1	738
	Through-Right		1			1	
	Right	86	0	86	121	0	121
	Left-Through-Right		0			0	
EASTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	858	1	498	1054	1	602
	Through-Right		1			1	
	Right	137	0	137	150	0	150
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	959	1	521	960	1	533
	Through-Right		1			1	
	Right	83	0	83	106	0	106
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 924			North-South: 869		
		East-West: 521			East-West: 602		
		SUM: 1445			SUM: 1471		
VOLUME/CAPACITY (V/C) RATIO:		0.963			0.981		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.863			0.881		
LEVEL OF SERVICE (LOS):		D			D		

Level of Service Worksheet (Circular 212 Method)



I/S #: 16

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Vermont Ave

East-West Street: 6th St

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	41	1	41	84	1	84
	Left-Through		0			0	
	Through	1341	2	510	1387	2	514
	Through-Right		1			1	
	Right	189	0	189	156	0	156
	Left-Through-Right		0			0	
SOUTHBOUND	Left	96	1	96	104	1	104
	Left-Through		0			0	
	Through	1411	2	526	1351	2	483
	Through-Right		1			1	
	Right	168	0	168	97	0	97
	Left-Through-Right		0			0	
EASTBOUND	Left	97	1	97	119	1	119
	Left-Through		0			0	
	Through	1208	1	679	1125	1	617
	Through-Right		1			1	
	Right	149	0	149	108	0	108
	Left-Through-Right		0			0	
WESTBOUND	Left	122	1	122	108	1	108
	Left-Through		0			0	
	Through	1148	2	574	1120	2	560
	Through-Right		0			0	
	Right	118	1	70	151	1	99
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 606			North-South: 618		
		East-West: 801			East-West: 725		
		SUM: 1407			SUM: 1343		
VOLUME/CAPACITY (V/C) RATIO:		0.938			0.895		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.838			0.795		
LEVEL OF SERVICE (LOS):		D			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: 17

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Virgil

East-West Street: Wilshire Blvd

Scenario: Future Year 2023 plus Project

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

		AM			PM		
No. of Phases		3			3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
SOUTHBOUND	Left	397	2	218	442	2	243
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	128	1	19	152	1	23
	Left-Through-Right		0			0	
EASTBOUND	Left	218	1	218	259	1	259
	Left-Through		0			0	
	Through	1516	2	758	1488	2	744
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
WESTBOUND	Left	0	0	0	0	0	0
	Left-Through		0			0	
	Through	1442	2	721	1331	2	666
	Through-Right		0			0	
	Right	320	1	211	311	1	190
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 218			North-South: 243		
		East-West: 939			East-West: 925		
		SUM: 1157			SUM: 1168		
VOLUME/CAPACITY (V/C) RATIO:		0.812			0.820		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.712			0.720		
LEVEL OF SERVICE (LOS):		C			C		

Level of Service Worksheet (Circular 212 Method)



I/S #: **7**

PROJECT TITLE: 3600 Wilshire Project
North-South Street: Kingsley Dr

East-West Street: Wilshire Blvd

Scenario: Future Year plus Project - Mitigation

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		2			2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	57	0	57	76	0	76
	Left-Through		0			0	
	Through	79	0	200	216	0	397
	Through-Right		0			0	
	Right	64	0	0	105	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	60	0	60	53	0	53
	Left-Through		0			0	
	Through	150	0	239	177	0	263
	Through-Right		0			0	
	Right	29	0	0	33	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	0	1	0	0	1	0
	Left-Through		0			0	
	Through	1533	2	767	1402	2	701
	Through-Right		0			0	
	Right	80	1	80	59	1	59
	Left-Through-Right		0			0	
WESTBOUND	Left	121	1	121	111	1	111
	Left-Through		0			0	
	Through	1408	2	704	1501	2	751
	Through-Right		0			0	
	Right	95	1	95	110	1	110
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 296			North-South: 450		
		East-West: 888			East-West: 812		
		SUM: 1184			SUM: 1262		
VOLUME/CAPACITY (V/C) RATIO:		0.789			0.841		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.689			0.741		
LEVEL OF SERVICE (LOS):		B			C		

Level of Service Worksheet (Circular 212 Method)



I/S #:
10

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Irolo St/Normandie Ave

East-West Street: Wilshire Blvd

Scenario: Future Year plus Project - Mitigation

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
No. of Phases		3			3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0		NB-- 0	SB-- 0	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	60	0	60	68	0	68
	Left-Through		1			1	
	Through	455	1	348	636	1	454
	Through-Right		0			0	
	Right	127	1	57	141	1	70
	Left-Through-Right		0			0	
SOUTHBOUND	Left	80	0	80	134	0	134
	Left-Through		1			1	
	Through	591	1	376	560	1	548
	Through-Right		0			0	
	Right	134	1	93	106	1	49
	Left-Through-Right		0			0	
EASTBOUND	Left	82	1	82	114	1	114
	Left-Through		0			0	
	Through	1399	2	700	1391	2	696
	Through-Right		0			0	
	Right	164	1	164	114	1	114
	Left-Through-Right		0			0	
WESTBOUND	Left	140	1	140	143	1	143
	Left-Through		0			0	
	Through	1401	2	701	1508	2	754
	Through-Right		0			0	
	Right	70	1	70	100	1	100
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South: 436			North-South: 616		
		East-West: 840			East-West: 868		
		SUM: 1276			SUM: 1484		
VOLUME/CAPACITY (V/C) RATIO:		0.895			1.041		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.795			0.941		
MITIGATION CREDIT:		0.010			0.010		
V/C LESS MITIGATION CREDIT:		0.785			0.931		
LEVEL OF SERVICE (LOS):		C			E		

Level of Service Worksheet (Circular 212 Method)



I/S #:
12

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Irolo St

East-West Street: 8th St

Scenario: Future Year plus Project - Mitigation

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

10/18/2016

		AM			PM		
		No. of Phases			No. of Phases		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				2			2
Right Turns: FREE-1, NRTOR-2 or OLA-3?				0			0
ATSAC-1 or ATSAC+ATCS-2?				0			0
Override Capacity				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	81	0	81	88	0	88
	Left-Through		0			0	
	Through	670	0	797	628	0	790
	Through-Right		0			0	
	Right	46	0	0	74	0	0
	Left-Through-Right		1			1	
SOUTHBOUND	Left	47	0	47	51	0	51
	Left-Through		0			0	
	Through	546	0	634	639	0	730
	Through-Right		0			0	
	Right	41	0	0	40	0	0
	Left-Through-Right		1			1	
EASTBOUND	Left	41	0	41	43	0	43
	Left-Through		1			1	
	Through	727	0	499	1008	0	682
	Through-Right		1			1	
	Right	106	0	499	98	0	682
	Left-Through-Right		0			0	
WESTBOUND	Left	90	0	90	78	0	78
	Left-Through		1			1	
	Through	949	0	676	965	0	736
	Through-Right		1			1	
	Right	43	0	676	38	0	736
	Left-Through-Right		0			0	
CRITICAL VOLUMES		North-South:		844	North-South:		841
		East-West:		717	East-West:		779
		SUM:		1561	SUM:		1620
VOLUME/CAPACITY (V/C) RATIO:				1.041			1.080
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.941			0.980
MITIGATION CREDIT:				0.010			0.010
V/C LESS MITIGATION CREDIT:				0.931			0.970
LEVEL OF SERVICE (LOS):				E			E

Level of Service Worksheet (Circular 212 Method)



I/S #:
14

PROJECT TITLE: 3600 Wilshire Project

North-South Street: Vermont Ave

East-West Street: Wilshire Blvd

Scenario: Future Year plus Project - Mitigation

Count Date: 3/17/2016

Analyst: Fehr & Peers

Date:

1/29/2017

		AM			PM		
No. of Phases		4			4		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3		NB-- 0	SB-- 3	
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0		EB-- 0	WB-- 0	
Override Capacity		2			2		
		0			0		
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	134	1	134	173	1	173
	Left-Through		0			0	
	Through	1394	2	501	1203	2	449
	Through-Right		1			1	
	Right	108	0	108	145	0	145
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	150	1	150	194	1	194
	Left-Through		0			0	
	Through	1333	2	667	1152	2	576
	Through-Right		0			0	
	Right	122	1	0	177	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	199	1	199	195	1	195
	Left-Through		0			0	
	Through	1285	2	643	1215	2	608
	Through-Right		0			0	
	Right	184	1	117	140	1	54
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	185	1	185	175	1	175
	Left-Through		0			0	
	Through	1150	2	575	1218	2	609
	Through-Right		0			0	
	Right	123	1	48	111	1	14
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES		North-South: 801			North-South: 749		
		East-West: 828			East-West: 804		
		SUM: 1629			SUM: 1553		
VOLUME/CAPACITY (V/C) RATIO:		1.185			1.129		
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.085			1.029		
MITIGATION CREDIT:		0.010			0.010		
V/C LESS MITIGATION CREDIT:		1.075			1.019		
LEVEL OF SERVICE (LOS):		F			F		




1: Harvard Boulevard & Northern Driveway

HCM 2010 TWSC

Existing Plus Project AM

Intersection

Int Delay, s/veh 2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	48	233	32	59	280
Future Vol, veh/h	26	48	233	32	59	280
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	52	253	35	64	304




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	704	271	0
Stage 1	271	-	-
Stage 2	433	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	403	768	1274
Stage 1	775	-	-
Stage 2	654	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	379	768	1274
Mov Cap-2 Maneuver	379	-	-
Stage 1	775	-	-
Stage 2	615	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	564	1274
HCM Lane V/C Ratio	-	-	0.143	0.05
HCM Control Delay (s)	-	-	12.4	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2




2: Kingsley Drive & Northern Driveway HCM 2010 TWSC

Existing Plus Project AM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	27	38	175	363	53
Future Vol, veh/h	47	27	38	175	363	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	29	41	190	395	58
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	696	423	452	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	408	631	1109	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	391	631	1109	-	-	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.6	1.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1109	-	454	-	-	
HCM Lane V/C Ratio	0.037	-	0.177	-	-	
HCM Control Delay (s)	8.4	0	14.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	




3: Kingsley Drive & Southern Driveway HCM 2010 TWSC

Existing Plus Project AM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	27	37	166	338	52
Future Vol, veh/h	47	27	37	166	338	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	29	40	180	367	57
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	657	396	424	0	-	0
Stage 1	396	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	430	653	1135	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	413	653	1135	-	-	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.1	1.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1135	-	477	-	-	
HCM Lane V/C Ratio	0.035	-	0.169	-	-	
HCM Control Delay (s)	8.3	0	14.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	

4: Harvard Boulevard & Southern Driveway HCM 2010 TWSC

Existing Plus Project AM

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	48	217	32	59	247
Future Vol, veh/h	26	48	217	32	59	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	52	236	35	64	268
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	650	253	0	0	271	0
Stage 1	253	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	434	786	-	-	1292	-
Stage 1	789	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	409	786	-	-	1292	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12		0		1.5	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 594	1292	-		
HCM Lane V/C Ratio	-	- 0.135	0.05	-		
HCM Control Delay (s)	-	- 12	7.9	0		
HCM Lane LOS	-	- B	A	A		
HCM 95th %tile Q(veh)	-	- 0.5	0.2	-		




1: Harvard Boulevard & Northern Driveway

HCM 2010 TWSC

Existing Plus Project PM

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	68	427	31	57	359
Future Vol, veh/h	36	68	427	31	57	359
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	74	464	34	62	390

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	995	481	0
Stage 1	481	-	-
Stage 2	514	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	271	585	1066
Stage 1	622	-	-
Stage 2	600	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	251	585	1066
Mov Cap-2 Maneuver	251	-	-
Stage 1	622	-	-
Stage 2	556	-	-




Approach	WB	NB	SB
HCM Control Delay, s	17.5	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	401	1066
HCM Lane V/C Ratio	-	-	0.282	0.058
HCM Control Delay (s)	-	-	17.5	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.1	0.2

2: Kingsley Drive & Northern Driveway




HCM 2010 TWSC

Existing Plus Project PM

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	38	37	404	321	51
Future Vol, veh/h	66	38	37	404	321	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	41	40	439	349	55
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	897	377	404	0	-	0
Stage 1	377	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	310	670	1155	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	296	670	1155	-	-	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.8	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1155	-	372	-	-	
HCM Lane V/C Ratio	0.035	-	0.304	-	-	
HCM Control Delay (s)	8.2	0	18.8	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-	




3: Kingsley Drive & Southern Driveway HCM 2010 TWSC

Existing Plus Project PM

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	39	37	375	308	51
Future Vol, veh/h	66	39	37	375	308	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	42	40	408	335	55
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	851	363	390	0	-	0
Stage 1	363	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	330	682	1169	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	315	682	1169	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.8	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1169	-	394	-	-	
HCM Lane V/C Ratio	0.034	-	0.29	-	-	
HCM Control Delay (s)	8.2	0	17.8	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-	

4: Harvard Boulevard & Southern Driveway HCM 2010 TWSC




Existing Plus Project PM

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	68	390	31	57	338
Future Vol, veh/h	36	68	390	31	57	338
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	74	424	34	62	367
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	932	441	0	0	458	0
Stage 1	441	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	296	616	-	-	1103	-
Stage 1	648	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	275	616	-	-	1103	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16.3	0		1.2		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	431	1103	-	
HCM Lane V/C Ratio	-	-	0.262	0.056	-	
HCM Control Delay (s)	-	-	16.3	8.5	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1	0.2	-	

1: Harvard Boulevard & Northern Driveway

HCM 2010 TWSC

Cumulative Plus Project AM




Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	48	246	32	59	296
Future Vol, veh/h	26	48	246	32	59	296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	52	267	35	64	322
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	735	285	0	0	302	0
Stage 1	285	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	387	754	-	-	1259	-
Stage 1	763	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	363	754	-	-	1259	-
Mov Cap-2 Maneuver	363	-	-	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12.7		0		1.3	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	547	1259	-	
HCM Lane V/C Ratio	-	-	0.147	0.051	-	
HCM Control Delay (s)	-	-	12.7	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-	

2: Kingsley Drive & Northern Driveway HCM 2010 TWSC

Cumulative Plus Project AM

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	27	38	184	385	53
Future Vol, veh/h	47	27	38	184	385	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	29	41	200	418	58




Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	730	447	476	0	-	0
Stage 1	447	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	389	612	1086	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	612	1086	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	1.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1086	-	435	-	-
HCM Lane V/C Ratio	0.038	-	0.185	-	-
HCM Control Delay (s)	8.4	0	15.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-




3: Kingsley Drive & Southern Driveway HCM 2010 TWSC

Cumulative Plus Project AM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	27	37	177	363	52
Future Vol, veh/h	47	27	37	177	363	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	29	40	192	395	57
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	696	423	451	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	408	631	1109	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	631	1109	-	-	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.6	1.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1109	-	455	-	-	
HCM Lane V/C Ratio	0.036	-	0.177	-	-	
HCM Control Delay (s)	8.4	0	14.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	

4: Harvard Boulevard & Southern Driveway HCM 2010 TWSC

Cumulative Plus Project AM

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	48	242	32	59	268
Future Vol, veh/h	26	48	242	32	59	268
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	52	263	35	64	291
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	700	280	0	0	298	0
Stage 1	280	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	405	759	-	-	1263	-
Stage 1	767	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	381	759	-	-	1263	-
Mov Cap-2 Maneuver	381	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12.5		0		1.4	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 563	1263	-		
HCM Lane V/C Ratio	-	- 0.143	0.051	-		
HCM Control Delay (s)	-	- 12.5	8	0		
HCM Lane LOS	-	- B	A	A		
HCM 95th %tile Q(veh)	-	- 0.5	0.2	-		




1: Harvard Boulevard & Northern Driveway

HCM 2010 TWSC

Cumulative Plus Project PM

Intersection

Int Delay, s/veh 2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	68	453	31	57	381
Future Vol, veh/h	36	68	453	31	57	381
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	74	492	34	62	414




Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1047	509	0	0	526	0
Stage 1	509	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	253	564	-	-	1041	-
Stage 1	604	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	564	-	-	1041	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	18.5		0		1.1
HCM LOS	C				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 379	1041	-
HCM Lane V/C Ratio	-	- 0.298	0.06	-
HCM Control Delay (s)	-	- 18.5	8.7	0
HCM Lane LOS	-	- C	A	A
HCM 95th %tile Q(veh)	-	- 1.2	0.2	-




2: Kingsley Drive & Northern Driveway HCM 2010 TWSC

Cumulative Plus Project PM

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	38	37	428	340	51
Future Vol, veh/h	66	38	37	428	340	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	41	40	465	370	55
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	943	397	425	0	-	0
Stage 1	397	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	291	652	1134	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	277	652	1134	-	-	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	552	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.1	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1134	-	351	-	-	
HCM Lane V/C Ratio	0.035	-	0.322	-	-	
HCM Control Delay (s)	8.3	0	20.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-	




3: Kingsley Drive & Southern Driveway HCM 2010 TWSC

Cumulative Plus Project PM

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	39	37	401	330	51
Future Vol, veh/h	66	39	37	401	330	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	42	40	436	359	55
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	902	386	414	0	-	0
Stage 1	386	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	308	662	1145	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	294	662	1145	-	-	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1145	-	370	-	-	
HCM Lane V/C Ratio	0.035	-	0.308	-	-	
HCM Control Delay (s)	8.3	0	19	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-	

4: Harvard Boulevard & Southern Driveway HCM 2010 TWSC

Cumulative Plus Project PM

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	68	424	31	57	373
Future Vol, veh/h	36	68	424	31	57	373
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	74	461	34	62	405
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1007	478	0	0	495	0
Stage 1	478	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	267	587	-	-	1069	-
Stage 1	624	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	247	587	-	-	1069	-
Mov Cap-2 Maneuver	247	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	17.6		0		1.1	
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 398	1069	-		
HCM Lane V/C Ratio	-	- 0.284	0.058	-		
HCM Control Delay (s)	-	- 17.6	8.6	0		
HCM Lane LOS	-	- C	A	A		
HCM 95th %tile Q(veh)	-	- 1.2	0.2	-		

APPENDIX E:
MAIN STREET ANALYSIS

Appendix E – 3600 Wilshire MainStreet Analysis

Trip Generation Methodology

Current accepted methodologies, such as the Institute of Transportation Engineers (ITE) Trip Generation methodology, are primarily based on data collected at suburban, single-use, freestanding sites. These defining characteristics limit their applicability to mixed-use or multi-use development projects, such as the proposed project, which is in a high density walkable urban setting with frequent and nearby local and regional transit service. The land use mix, design features, and setting of the proposed project include characteristics that influence travel behavior differently from typical single-use suburban developments. Thus, traditional data and methodologies, such as ITE, would not accurately estimate the project vehicle trip generation. In response to the limitations in the ITE methodology, and to provide a straightforward and empirically validated method of estimating vehicle trip generation at mixed-use developments, the US Environmental Protection Agency (EPA) sponsored a national study of the trip generation characteristics of multi-use sites. Travel survey data was gathered from 239 mixed-use developments in six major metropolitan regions, and correlated with the characteristics of the sites and their surroundings. The findings indicate that the amount of external traffic generated is affected by a wide variety of factors, each pertaining to one or more of the following characteristics:

- **The relative numbers of residents and jobs on the site** – the better the site jobs/ housing balance, the greater the proportion of commute trips that remain internal.
- **The amount of retail and service use on the site relative to the number of residences** – the greater the degree to which retail and service opportunities match the needs generated by site residents, the greater the internalization of household-generated shopping, personal services and entertainment travel.
- **The amount of retail and service use relative to the number of employees** – the better the balance of employee-oriented retail and service opportunities, the greater the internal capture of lunchtime and after-work dining, shopping and errands by site employees.
- **The overall size of the development** – the larger the scale of the development in terms of acreage and total amounts of residential and commercial use, the greater the likelihood that travel destinations can be satisfied within the site as a whole.
- **The density of development** – the greater the concentration of dwellings and commercial space per acre, the greater the likelihood that the interacting land uses will be near enough together to encourage walking or short-distance internal driving.
- **The internal connectivity for walking or driving among different activities** – measured in terms of the ratio of intersections to total land area within the site directly influences trip internalization and the number of trips made by walking instead of driving.
- **The availability of transit** – the greater the number of jobs within a reasonable travel time via transit, the greater the share of travel likely to occur by transit, and the lower the traffic generation.
- **The number of convenient trip destinations within the immediate area** – the number of retail and other jobs in neighborhoods immediately surrounding the multi-use site increases the amount of walking to/from the site and reduces vehicular traffic generation. These characteristics were

related statistically to the trip behavior observed at the study development sites using Hierarchical Linear Modeling (HLM) techniques. This quantified relationships between characteristics of the mixed-use developments and the likelihood that trips generated by those mixed-use developments will stay internal and/or use modes of transportation other than the private vehicle.

These statistical relationships produced equations, known as the EPA MXD model, that allows predicting external vehicle trip reduction as a function of the mixed-use development characteristics. Applying the external vehicle trip reduction percentage to "raw trips", as predicted by ITE, produces an estimate for the number of vehicle trips traveling in or out of the site.

Validation of MXD/MainStreet Model

Since the conclusion of the EPA sponsored study, Fehr & Peers has been actively enhancing the MXD model to improve sensitivity to various site characteristics, improve peak hour performance, and continue to validate the model against mixed-use sites where data is available. A set of 28 independent mixed-use sites across the country that were not included in the initial EPA model development have been tested to validate the model. These sites represent locations where it is expected that traditional data and methodologies, such as ITE, would not accurately estimate the project vehicle trip generation. Table 1 presents the performance of the MXD model against ITE and ITE internalization procedures.

Based on all statistical measurements, the MXD model performs better than the ITE recommended procedures for these types of sites. The MXD model has been approved for use by the EPA¹. It has also been peer-reviewed in the ASCE Journal of Urban Planning and Development², peer-reviewed in a 2012 TRB paper evaluating various smart growth trip generation methodologies³, recommended by SANDAG for use on mixed-use smart growth developments⁴, and has been used successfully in multiple certified EIRs in California. Fehr & Peers has incorporated the MXD model into its MainStreet model. Appendix A presents certified EIRs that have used the Main Street model or its predecessors.

¹ Trip Generation Tool for Mixed-Use Developments (2012). www.epa.gov/dced/mxd_tripgeneration.html

² "Traffic Generated by Mixed-Use Developments – Six-Region Study Using Consistent Built Environmental Measures." Journal of Urban Planning and Development, 137(3), 248-261.

³ Shafizadeh, Kevan et al. "Evaluation of the Operation and Accuracy of Available Smart Growth Trip Generation Methodologies for Use in California". Presented at 91st Annual Meeting of the Transportation Research Board, Washington D.C., 2012.

⁴ SANDAG Smart Growth Trip Generation and Parking Study.
<http://www.sandag.org/index.asp?projectid=378&fuseaction=projects.detail>

TABLE 1
3600 WILSHIRE PROJECT
VALIDATION STATISTICS COMPARISON

Validation Statistic	ITE Raw	ITE with Internalization	MXD Model
Daily			
Average Model Error ¹	30%	17%	4%
% RSME ²	42%	28%	17%
R-Squared ³	0.72	0.87	0.95
AM Peak Hour			
Average Model Error ¹	57%	53%	3%
% RSME ²	58%	76%	34%
R-Squared ³	56%	56%	91%
PM Peak Hour			
Average Model Error ¹	56%	41%	22%
% RSME ²	96%	81%	59%
R-Squared ³	-56%	-11%	41%

Notes:

1. Average model error measures the difference between the estimated trip generation and the counted trip generation of 28 survey sites.
2. RMSE stands for percent root mean squared error is a demand assessment of performance of transportation models in that it does not apply average that would allow over-estimates and under-estimates to cancel one another out and it penalizes proportionally more for large errors. A % RMSE of less than 40% is generally considered acceptable in transportation modeling.
3. R-squared is a statistical measure that indicates, in this case, the degree to which each method explains the variation in trip generation among the 28 survey sites. A R-Squared value closer to 1.0 indicates that the method fully explains the variation in trip generation amongst the survey sites and would be suitable to be used for that set of site types.

MainStreet Analysis

Table 2 summarizes the input values and data sources for the MainStreet model for the project and surrounding neighborhood. The MainStreet model uses both internal project land uses and local and regional demographic data. Table 3 summarize the estimated trip generation for project neighborhood using the MXD/MainStreet methodology.

As shown in Tables 2, the MainStreet methodology accounts for the following:

- Internal Capture trips – are defined as trips made internal to the project area. The MainStreet methodology reduces the ITE-based automobile trip generation by about 7 percent for the daily and 11 percent for the AM and PM peak hours to account for internal trips within the neighborhood. Considering the expected shortage of parking, traffic congestion, available transit service, and walkability of the project area, most internal trips are expected to be non-auto trips. Adjusting for non-auto trips between compatible land uses within the site, the final internal capture for non-auto trips is expected to be between 7 and 11 percent.
- External Walk, Bike, and Transit trips - are defined as external trips made using non-automobile modes. The Main Street methodology reduces the ITE-based automobile trip generation by about 29 to 38 percent to account for external walk, bike, or transit trips.

Overall, the Project is estimated to generate up to 48 percent fewer trips than estimated by the unadjusted ITE methodology. In consultation with LADOT, 15% was used as the internalization capture for daily, AM, and PM peak hours; 15% transit and 10% walk/bike credit for a total credit of 40% on project trips.

TABLE 2
3600 WILSHIRE PROJECT
MXD/MAIN STREET NEIGHBORHOOD ANALYSIS

Land Use	ITE Code	Quantity	Units	Daily	AM PEAK HOUR			PM PEAK HOUR		
					In	Out	Total	In	Out	Total
Neighborhood Land Uses										
Apartment	220	2,640	du	17,556	269	1,077	1,346	1,064	573	1,637
General Office Building	710	5,700	Empl.	18,924	2,408	328	2,736	446	2,176	2,622
Shopping Center	820	67.67	ksf	2,890	40	25	65	120	131	251
High-Turnover Restaurant	932	7	ksf	890	42	34	76	41	28	69
Fast-Food w/o Drive-Through Window	933	7	ksf	5,012	184	123	307	93	90	183
Net Raw Project Trips				45,272	2,943	1,587	4,530	1,764	2,998	4,762
REDUCTIONS										
Internal Capture				-3,384	-330	-178	-508	-200	-340	-540
External Walk, Bike, and Transit				-13,288	-1114	-601	-1715	-578	-981	-1559
Total Reductions				-16,672	-1,444	-779	-2,223	-778	-1,321	-2,099
Net New Project Trips				28,600	1,499	808	2,307	986	1,677	2,663
PERCENT REDUCTIONS										
Internal Capture Percentage Reductions				7%	11%	11%	11%	11%	11%	11%
External Walk, Bike, and Transit Percentage Reductions				29%	38%	38%	38%	33%	33%	33%
Total Percent Reductions				37%	49%	49%	49%	44%	44%	44%

TABLE 3
3600 WILSHIRE PROJECT
MXD/MAINSTREET MODEL INPUTS

Input Variable	Input Value	Source
<i>Main Street Specific Inputs</i>		
Project Area (Acres)	40.27	Project site plan
Intersections per Square Mile	100	EPA Smart Location Database (2013) - 2010 Scenario
Employment within 1 mile of Project site	36,000	SCAG Model 2035
Employment within a 30 minute trip by transit	0.05	SCAG Model 2035
Average Household Size within Project area	2.43	ACS 2012 (5-year) - All Housing Types
Average Vehicles Owned per Dwelling Unit within Project site	1.1	ACS 2012 (5-year) - All Housing Types
Average Household Size near Project site	2.43	ACS 2012 (5-year) - All Housing Types
Average Vehicle Ownership near Project site	1.1	ACS 2012 (5-year) - All Housing Types
<i>Land Use Inputs</i>		
Multi-Family Dwelling Units	2,640	Project Neighborhood TAZ & Project Land Uses
Retail (Square Feet)	67,670	Project Neighborhood TAZ & Project Land Uses
Gen. Office (Employees)	5,700	Project Neighborhood TAZ & Project Land Uses
High-Turnover Restaurant (Square Feet)	7,000	Project Neighborhood TAZ & Project Land Uses
Fast-Food without Drive-Through (Square Feet)	7,000	Project Neighborhood TAZ & Project Land Uses

Comparisons with Mode Share Data

US Census data were used to check the reasonability of the MainStreet model results presented above. Table 4 shows journey to work mode share data for the census tracts in the project area based on the 2012 American Community Survey (ACS) data. The data shows that nearly half of the area residents' journey to work is by non-automobile modes. Table 7 also compares the project area mode share with journey to work data for residents throughout all of the City of Los Angeles, all of the County of Los Angeles, and the entire Southern California Association of Governments (SCAG) region. City of Los Angeles, County of Los Angeles, and SCAG residents have higher automobile mode shares because of more suburban development patterns.

The current project area residents' automobile mode share is about 18 percent lower than City of Los Angeles, 25 percent lower than County of Los Angeles, and about 26 percent lower than SCAG mode share.

TABLE 4 – AMERICAN COMMUNITY SURVEY (ACS) (2012) – DAILY JOURNEY TO WORK MODE SHARE

Mode	MPO SCAG	County Los Angeles	City Los Angeles	Tracts Project Area
Auto	80%	79%	72%	54%
Transit	6%	6%	11%	24%
Walk	13%	13%	16%	17%
Bike	1%	1%	1%	4%



**APPENDIX A
BROADWAY-VALDEZ DISTRICT SPECIFIC PLAN
CERTIFIED EIRS USING MXD (4Ds) MODEL**

Name	Date Published	Jurisdiction	Description	% Reduction
Treasure Island DEIR¹	July 2010	City of San Francisco	8,000 DUs 140,000 SF retail 100,000 SF office 311,000 SF commercial flex 274,000 SF other	56-61% reduction
Candlestick Point / Hunters Point DEIR²	November 2009	City of San Francisco	10,500 DUs 885,000 SF retail 2,650,000 SF office/R&D	44-50% reduction
Parkmerced DEIR³	May 2010	City of San Francisco	8,900 DUs 230,000 SF retail 105,000 SF office 164,000 SF other	34-38% reduction
Fairfield Train Station DEIR⁴	December 2010	City of Fairfield	6,790 DUs 150,000 SF retail	25% reduction
Redwood City Downtown Precise Plan DEIR⁵	August 2010	Redwood City	2,500 DUs 221,000 SF retail 275,000 SF office	21-29% reduction
Pittsburg/Bay Point BART Station Master Plan DEIR⁶	June 2011	City of Pittsburg	1,168 DU 95,000 SF retail 50,000 SF office	26-32% reduction
Newhall Ranch Draft EIS/EIR⁷	April 2009	Los Angeles County U.S. Army Corps of Engineers	21,000 DUs 5,500,000 SF commercial	29-33% reduction
Broadway-Valdez District Specific Plan		City of Oakland	1,796 DUs 1,118,345 SF retail 694,730 SF office 180 Hotel rooms	27-34% reduction

1. http://sfplanning.org/index.aspx?page=1828#2007_0903E
2. http://sfplanning.org/index.aspx?page=1828#2007_0946E
3. http://sfplanning.org/index.aspx?page=1828#2008_0021E
4. http://www.fairfield.ca.gov/gov/depts/cd/planning/train_station_deir.asp
5. <http://www.redwoodcity.org/phed/planning/precise/FINAL-DTPP/EIR.htm>
6. <http://www.ci.pittsburg.ca.us/index.aspx?page=225>
7. <http://www.dfg.ca.gov/regions/5/newhall/final/>
Source: Fehr and Peers, 2012.

APPENDIX F:
SIGNAL WARRANT

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Existing 2016 AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	171	Major Street Left Turn (see note [b]):	70
Major Street (Approach 2):	<u>195</u>	Minor Street (Higher Volume App.):	<u>225</u>
Major Street Total (Both Approaches):	366	Minor Street Total:	295

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	510
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Existing 2016 PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	386	Major Street Left Turn (see note [b]):	124
Major Street (Approach 2):	<u>101</u>	Minor Street (Higher Volume App.):	<u>290</u>
Major Street Total (Both Approaches):	487	Minor Street Total:	414

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	420
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Existing plus Project AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	208	Major Street Left Turn (see note [b]):	78
Major Street (Approach 2):	<u>197</u>	Minor Street (Higher Volume App.):	<u>229</u>
Major Street Total (Both Approaches):	405	Minor Street Total:	307

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	480
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Existing plus Project PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	406	Major Street Left Turn (see note [b]):	128
Major Street (Approach 2):	<u>112</u>	Minor Street (Higher Volume App.):	<u>305</u>
Major Street Total (Both Approaches):	518	Minor Street Total:	433

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	410
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Future 2023 AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	187	Major Street Left Turn (see note [b]):	75
Major Street (Approach 2):	<u>214</u>	Minor Street (Higher Volume App.):	<u>269</u>
Major Street Total (Both Approaches):	401	Minor Street Total:	344

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	480
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Future 2023 PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	417	Major Street Left Turn (see note [b]):	133
Major Street (Approach 2):	<u>116</u>	Minor Street (Higher Volume App.):	<u>333</u>
Major Street Total (Both Approaches):	533	Minor Street Total:	466

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	400
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Future plus Project AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	224	Major Street Left Turn (see note [b]):	83
Major Street (Approach 2):	<u>216</u>	Minor Street (Higher Volume App.):	<u>273</u>
Major Street Total (Both Approaches):	440	Minor Street Total:	356

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	450
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Kingsley Dr
 Minor Street: 7th St
 Scenario: Future plus Project PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	437	Major Street Left Turn (see note [b]):	137
Major Street (Approach 2):	<u>127</u>	Minor Street (Higher Volume App.):	<u>348</u>
Major Street Total (Both Approaches):	564	Minor Street Total:	485

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	380
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Existing 2016 AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	145	Major Street Left Turn (see note [b]):	73
Major Street (Approach 2):	<u>310</u>	Minor Street (Higher Volume App.):	<u>203</u>
Major Street Total (Both Approaches):	455	Minor Street Total:	276

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	440
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Existing 2016 PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	324	Major Street Left Turn (see note [b]):	46
Major Street (Approach 2):	<u>350</u>	Minor Street (Higher Volume App.):	<u>313</u>
Major Street Total (Both Approaches):	674	Minor Street Total:	359

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	320
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Existing plus Project AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	180	Major Street Left Turn (see note [b]):	73
Major Street (Approach 2):	<u>320</u>	Minor Street (Higher Volume App.):	<u>208</u>
Major Street Total (Both Approaches):	500	Minor Street Total:	281

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	420
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Existing plus Project PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	343	Major Street Left Turn (see note [b]):	46
Major Street (Approach 2):	<u>391</u>	Minor Street (Higher Volume App.):	<u>326</u>
Major Street Total (Both Approaches):	734	Minor Street Total:	372

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	300
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Future 2023 AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	159	Major Street Left Turn (see note [b]):	80
Major Street (Approach 2):	<u>345</u>	Minor Street (Higher Volume App.):	<u>232</u>
Major Street Total (Both Approaches):	504	Minor Street Total:	312

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	410
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Future 2023 PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	361	Major Street Left Turn (see note [b]):	52
Major Street (Approach 2):	<u>390</u>	Minor Street (Higher Volume App.):	<u>359</u>
Major Street Total (Both Approaches):	751	Minor Street Total:	411

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	290
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Future plus Project AM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	194	Major Street Left Turn (see note [b]):	80
Major Street (Approach 2):	<u>355</u>	Minor Street (Higher Volume App.):	<u>248</u>
Major Street Total (Both Approaches):	549	Minor Street Total:	328

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	390
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **NO**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

TRAFFIC SIGNAL WARRANTS**PEAK HOUR VEHICULAR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)**

Major Street: Harvard Blvd
 Minor Street: 7th St
 Scenario: Future plus Project PM
 Urban/Rural: u (U=urban, R=rural [a])

PEAK HOUR VOLUME (MUTCD Warrant 3, Caltrans Warrant 11)

Number of Lanes on Each Approach

Major Street: 1
 Minor Street: 1

Vehicles Per Hour (Peak Hour)

Major Street (Approach 1):	380	Major Street Left Turn (see note [b]):	52
Major Street (Approach 2):	<u>431</u>	Minor Street (Higher Volume App.):	<u>372</u>
Major Street Total (Both Approaches):	811	Minor Street Total:	424

Minimum Volume on Major Street to Satisfy Warrant (see note [d]):	450	Minimum Volume on Minor Street to Satisfy Warrant (see note [d]):	270
--	-----	--	-----

PEAK HOUR VOLUME WARRANT SATISFIED? **YES**

Notes:

- a. May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.
- b. Heavier left-turn movement from the major street may be included with minor street volume if a separate signal phase is proposed for left-turn movements.
- c. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-1.
- d. From: USDOT, FHWA, "Manual on Uniform Traffic Control Devices," 2001, Figure 4C-3.

Adopted from: U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices, Millennium Edition," 2001; and Caltrans, "Traffic Manual," 2002.

APPENDIX G:
TDM+ ANALYSIS

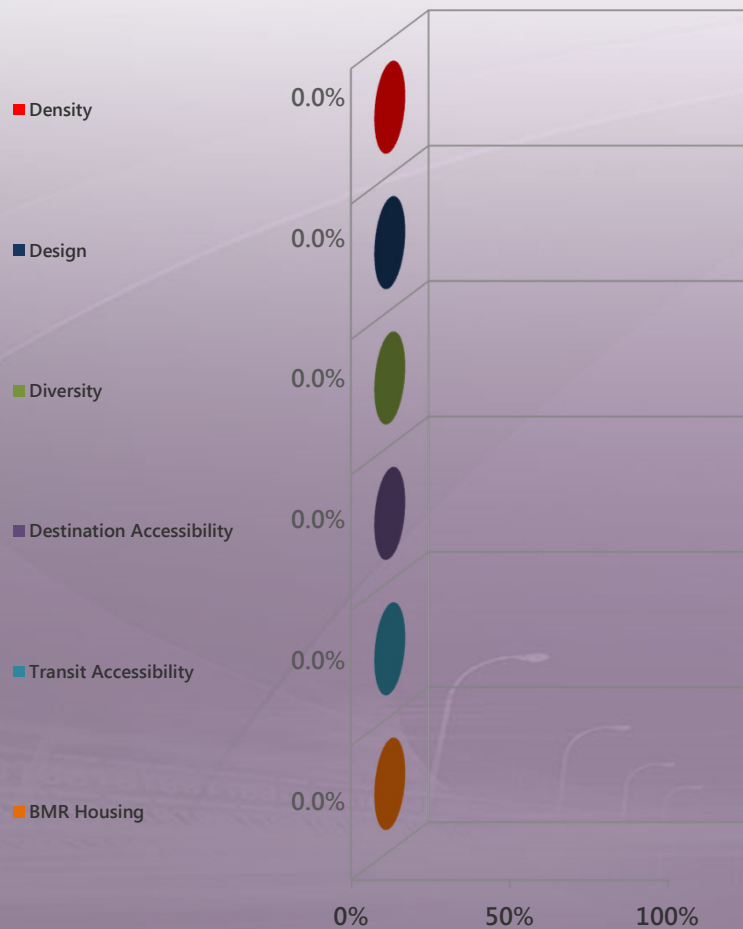
TDM+ Land Use/Location Strategies

FEHR PEERS

Category Reduction = 0.0%

Project Location

urban



Density

200

housing units per acre

Design

100

number of intersections per mi²

Diversity

100 %

Total Percentages

% single family residential	10	% commercial	0	% institutional
80 % multifamily residential	0	% industrial	10	% park

Destination Accessibility

5

distance to downtown or major job center (mi)

Transit Accessibility

1

distance to transit station (mi)

Below Market Rate Housing

5

percentage of units that are deed-restricted BMR housing

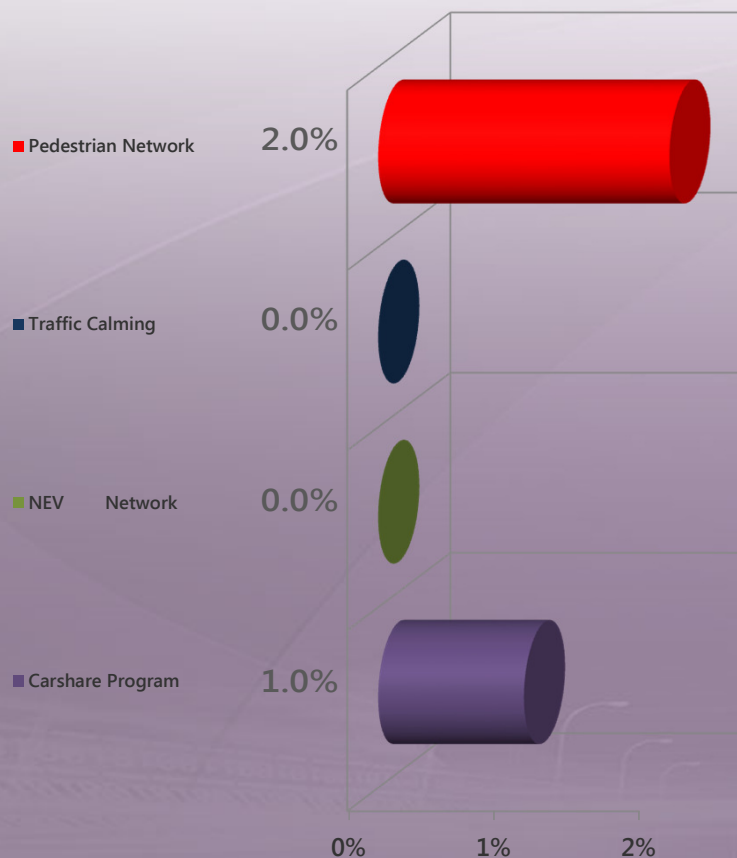
TDM+ Neighborhood/Site Enhancements



FEHR PEERS

Category Reduction = 3.0%

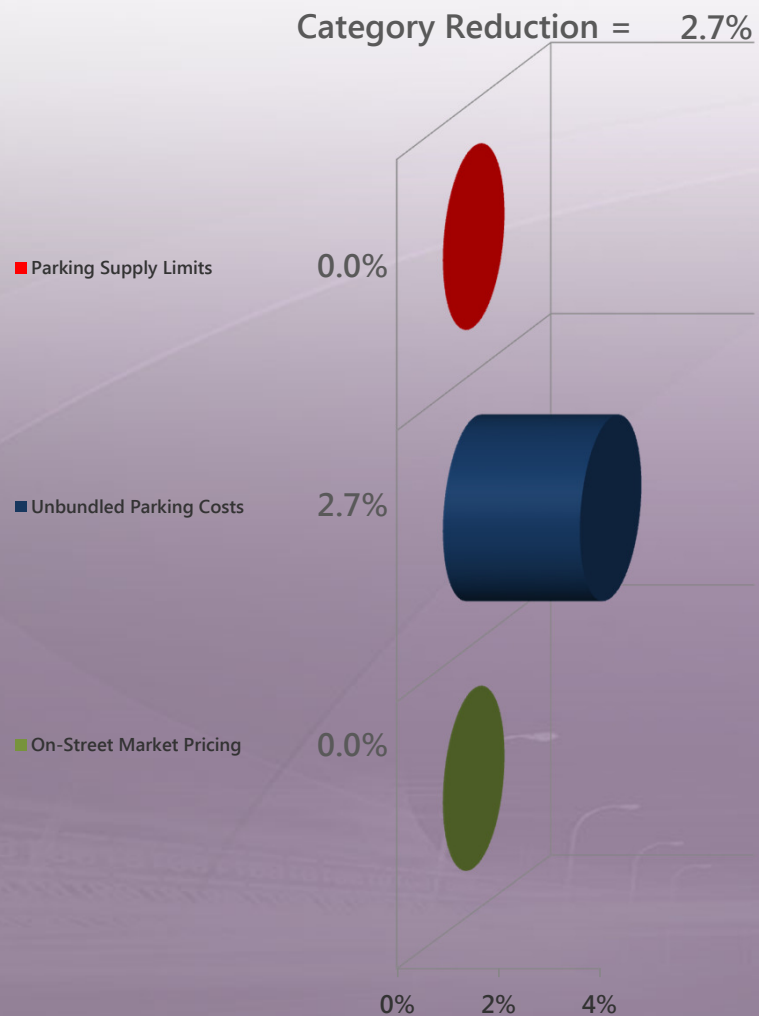
Project Location



<input checked="" type="checkbox"/> Pedestrian Network *	<input type="text" value="within project and connecting off-site"/>
<input type="checkbox"/> Traffic Calming *	<input type="text" value="75%"/> percentage of streets within project with traffic calming improvements <input type="text" value="100%"/> percentage of intersections within project with traffic calming improvements
<input type="checkbox"/> NEV Network *	1 NEV per <input type="text" value="20"/> number of households
<input checked="" type="checkbox"/> Carshare Program *	<input type="text" value="urban + comprehensive transit"/> project setting

TDM+ Parking Policy/Pricing

FEHR PEERS



Project Location

Parking Supply Limits

ITE parking provision for the project site improvements

Actual parking provision for the project site

Unbundle
Parking Costs

monthly parking cost for the project site

On-Street
Market Pricing

percent increase in on-street parking prices
(min 25%, max 50%)

TDM+ Transit System Improvements



FEHR PEERS

Category Reduction = 0.0%

Project Location

■ Network Expansion

0.0%

■ Service Frequency/ Speed

0.0%

■ Bus Rapid Transit

0.0%

0% 50% 100%

Network
Expansion

10

percentage increase of transit network coverage

9.4

percent existing transit mode share (as a % of total daily trips)

*

Service
Frequency/
Speed

10

percentage reduction in headways (increase in frequency)

9.4

percent existing transit mode share (as a % of total daily trips)

*

<50% of lines (within project) improved

Bus Rapid
Transit

30

percentage of lines serving project converted to BRT

5

percent existing transit mode share (as a % of total daily trips)

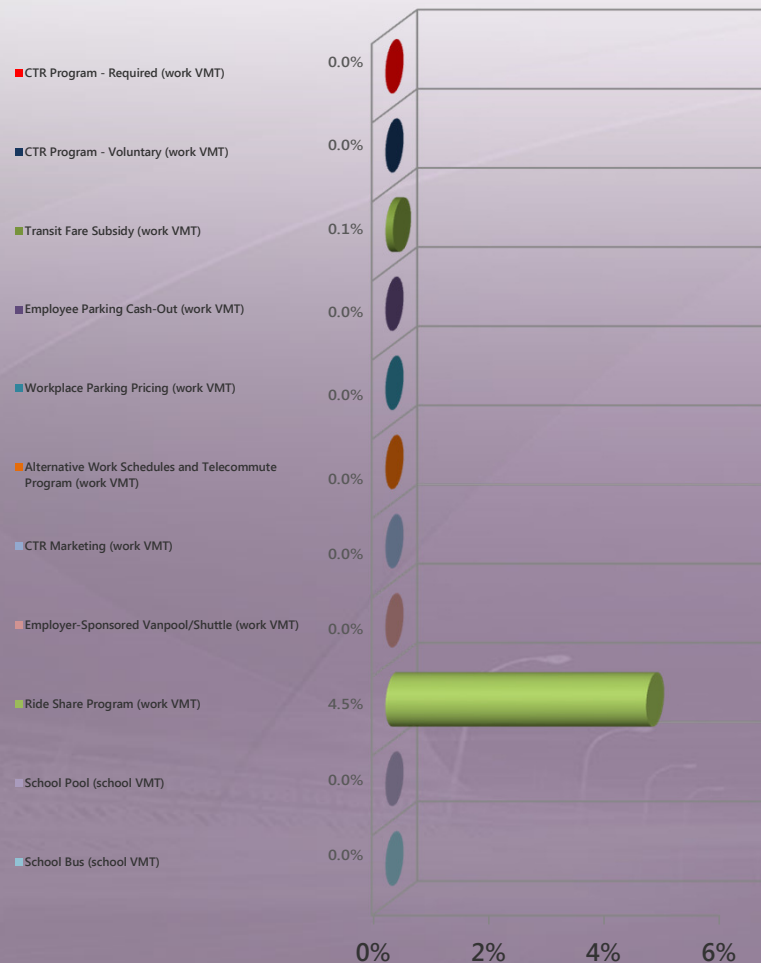
*

TDM+ Commute Trip Reduction (CTR) Programs



FEHR PEERS

Category Reduction = 4.6%



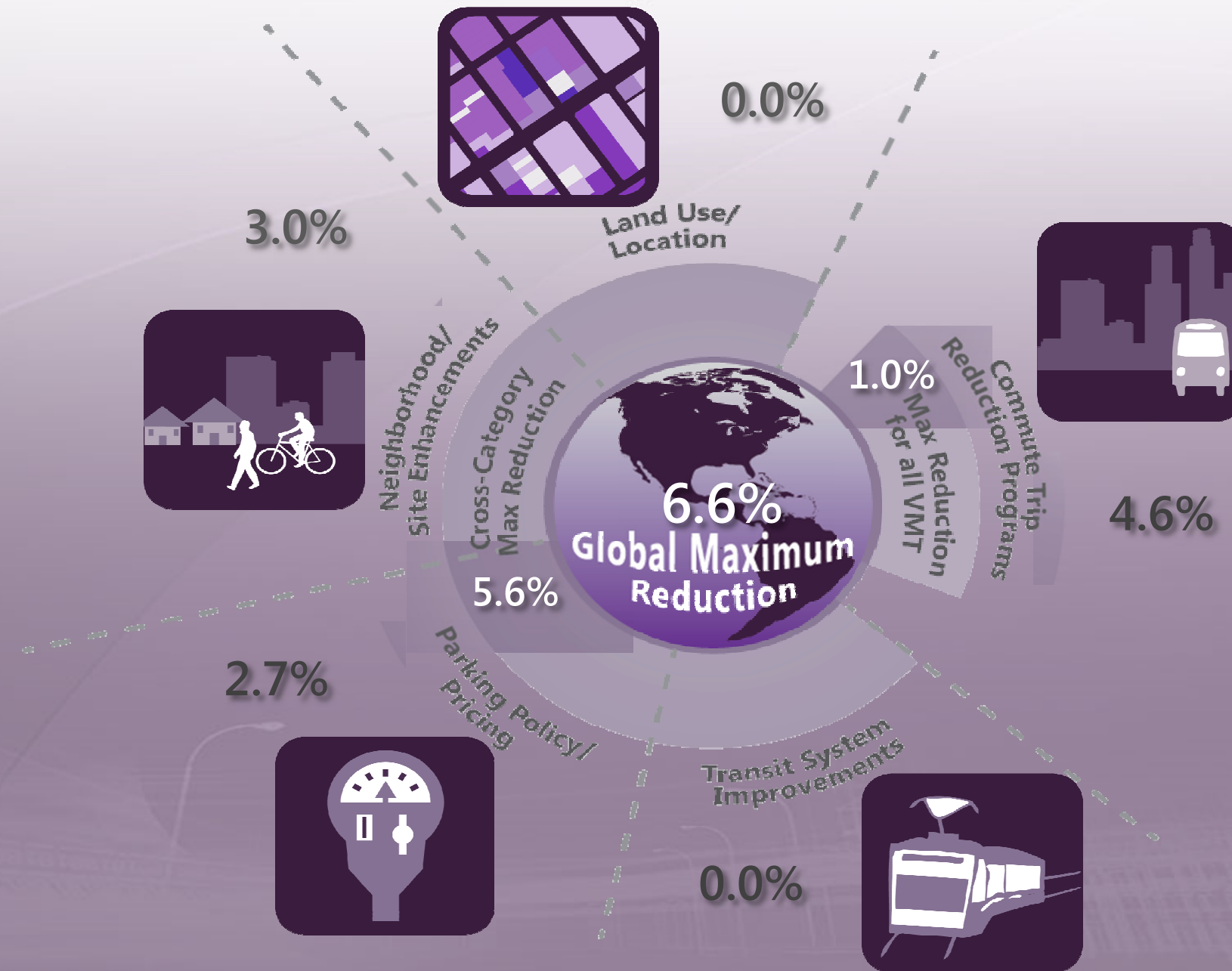
Project Location
Percentage of work related VMT

<input type="checkbox"/> CTR Program - Required *	<input type="text" value="100"/>	percentage of employees eligible
<input type="checkbox"/> CTR Program - Voluntary *	<input type="text" value="100"/>	percentage of employees eligible
<input checked="" type="checkbox"/> Transit Fare Subsidy *	<input type="text" value="1"/>	percentage of employees eligible
	<input type="text" value="1.49"/>	amount of transit subsidy per passenger (daily equivalent)
<input type="checkbox"/> Employee Parking Cash-Out *	<input type="text" value="50"/>	percentage of employees eligible
<input type="checkbox"/> Workplace Parking Pricing *	<input type="text" value="2"/>	daily parking charge
	<input type="text" value="100"/>	percentage of employees subject to priced parking
<input type="checkbox"/> Alternative Work Schedules and Telecommute Program *	<input type="text" value="1"/>	percentage of employees participating
	<input type="text" value="1.5"/>	days of telecommuting strategy implemented
<input type="checkbox"/> CTR Marketing *	<input type="text" value="23"/>	percentage of employees eligible
<input type="checkbox"/> Employer Sponsored Vanpool/Shuttle *	<input type="text" value="low"/>	degree of implementation
	<input type="text" value="50"/>	percentage of employees eligible
<input checked="" type="checkbox"/> Ride-Share Program *	<input type="text" value="30"/>	percentage of employees eligible

<input type="checkbox"/> School Pool *	<input type="text" value="med"/>	degree of implementation
<input type="checkbox"/> School Bus *	<input type="text" value="50"/>	percent of families expected to use school bus program

TDM+ Global Reduction Summary

FEHR PEERS



APPENDIX H:
PARKING UTILIZATION COUNTS

Parking Study

Project #: 16-5206
City: Los Angeles,CA

Day: Tuesday
Date: 4/5/2016

3600 WILSHIRE BLVD

TIME	Level 1				Level 2									TOTAL
	Regular	Reserved	Compact Reserved	SUBTOTAL	Regular	Reserved (Gated)	Reserved (Chained off)	Reserved (For Contractors Only)	Avis	BBCN Bank (15 minute)	HC	Zip Cars	SUBTOTAL	
Spaces	269	134	6	409	232	84	4	4	56	10	15	2	407	816
7:00	20	11	0	31	27	3	0	0	45	0	0	0	75	106
8:00	51	16	1	68	47	8	0	0	47	0	0	0	102	170
9:00	109	30	1	140	148	28	0	0	43	0	2	0	221	361
10:00	178	54	1	233	188	37	0	2	44	0	3	0	274	507
11:00	182	57	2	241	189	41	0	2	44	5	4	1	286	527
12:00	181	53	2	236	175	37	0	2	42	4	4	0	264	500
13:00	186	51	2	239	174	37	0	2	43	2	5	0	263	502
14:00	200	55	1	256	190	42	0	2	43	3	7	0	287	543
15:00	198	56	1	255	196	42	0	2	41	5	7	1	294	549
16:00	180	54	1	235	174	38	0	1	42	5	4	1	265	500
17:00	175	50	2	227	160	32	0	1	41	2	4	1	241	468
18:00	121	31	2	154	119	23	0	0	41	6	2	1	192	346
19:00	83	18	2	103	86	10	0	0	41	5	0	1	143	246
20:00	67	12	1	80	95	6	0	0	41	5	1	1	149	229