

ATTACHMENT NO. 5

TRIANGLE SQUARE MIXED-USE PROJECT TRANSPORTATION STUDY City of Culver City, California

Prepared for:

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Table of Contents

Section	Page
1.0 Executive Summary	1-1
1.1 Purpose of Report and Study Objectives	1-1
1.2 Site Location & Project Description	1-1
1.3 Scope of Analysis	1-3
1.4 Summary of Results	1-5
2.0 Introduction.....	2-1
2.1 Purpose of Report & Study Objectives	2-1
2.2 Site Location & Project Description	2-1
2.3 Level of Service Study Area & Analysis Scenarios	2-3
3.0 Analysis Methodology	3-1
3.1 CEQA Vehicle Miles Traveled (VMT) Analysis Methodology	3-1
3.2 Study Intersection Peak Hour Level of Service Analysis Methodology	3-1
3.3 Highway Capacity Manual (HCM) Methodology	3-2
3.4 Highway Capacity Manual (HCM) Methodology 95 th Percentile Vehicular Queue Methodology for Evaluation of Project Access Driveways	3-3
4.0 CEQA Vehicle Miles Traveled (VMT) Analysis.....	4-1
5.0 Existing Traffic Volumes & Circulation System	5-1
5.1 Existing Traffic Controls and Intersection Geometrics	5-1
5.2 Existing Traffic Volumes	5-1
6.0 Projected Traffic Volumes	6-1
6.1 Project Traffic Conditions	6-1
6.1.1 Trip Generation	6-1
6.1.2 Trip Distribution	6-4
6.1.3 Project Traffic Volumes	6-5
6.2 Background Traffic	6-5
6.2.1 Related Projects Traffic	6-5
6.3 Existing Plus Project Conditions Traffic Volumes	6-9
6.4 Opening Year Without Project Conditions Traffic Volumes	6-9
6.5 Opening Year With Project Conditions Traffic Volumes	6-9

Table of Contents (continued)

Section		Page
7.0	Signalized Study Intersection Peak Hour LOS Analysis	7-1
7.1	Existing Conditions Signalized Study Intersection LOS	7-1
7.2	Existing Plus Project Conditions Signalized Study Intersection LOS	7-2
7.3	Opening Year Without Project Conditions Signalized Study Intersection LOS	7-2
7.4	Opening Year With Project Conditions Signalized Study Intersection LOS	7-3
8.0	Unsignalized Study Intersection Peak Hour LOS Analysis	8-1
8.1	Existing Conditions Unsignalized Study Intersection LOS	8-1
8.2	Existing Plus Project Conditions Unsignalized Study Intersection LOS	8-2
8.3	Opening Year Without Project Conditions Unsignalized Study Intersection LOS	8-3
8.4	Opening Year With Project Conditions Unsignalized Study Intersection LOS	8-4
9.0	Project Access Inbound Left-Turn Queue Analysis	9-1
10.0	Site Access & Circulation Evaluation	10-1
11.0	Transit Evaluation	11-1
12.0	Traffic Demand Management	12-1
13.0	Findings & Conclusions	13-1

List of Attachments

Exhibits

Location Map.....	1-1
Site Plan (Ground Level).....	1-2
Site Plan (Subterranean Level 1).....	1-3
Site Plan (Subterranean Level 2).....	1-4
Existing Lane Geometry & Traffic Controls.....	5-1
Existing Traffic Volumes.....	5-2
Retail - Outbound Project Trip Distribution.....	6-1
Retail - Inbound Project Trip Distribution	6-2
Residential - Outbound Project Trip Distribution.....	6-3
Residential - Inbound Project Trip Distribution	6-4
Retail - Project Trip Assignment	6-5
Residential - Project Trip Assignment	6-6
Retail Plus Residential - Project Trip Assignment	6-7
Related Projects Location Map.....	6-8
Related Projects Traffic Volumes	6-9
Existing Plus Project Conditions Traffic Volumes.....	6-10
Opening Year Without Project Conditions Traffic Volumes.....	6-11
Opening Year With Project Conditions Traffic Volumes	6-12
Project Driveway Access Locations Traffic Volumes for Opening Year With Project Conditions.....	9-1
Project Site Access & Circulation – Ground Level	10-1

List of Attachments (Continued)

Exhibits

Project Site Access & Circulation – Subterranean P1 Level.....	10-2
Project Site Access & Circulation – Subterranean P2 Level.....	10-3
Existing Bus Stops.....	11-1
Existing Bikeways.....	11-2
TDM Recommendations – Ground Level	12-1
TDM Recommendations – Subterranean P1 Level.....	12-2
TDM Recommendations – Subterranean P2 Level.....	12-3

List of Attachments (continued)

Tables

Study Intersections Evaluated for Supplemental Transportation Analysis (Level of Service)	1-1
Study Intersections Evaluated for Supplemental Transportation Analysis (Level of Service)	2-1
HCM LOS – Vehicle Delay	3-1
ITE Trip Generation Rates.....	6-1
Existing Land Use Forecast Trip Generation Summary.....	6-2
Proposed Project Forecast Trip Generation Summary.....	6-3
Proposed Project NET Trip Generation Summary	6-4
Related Projects Trip Generation Summary.....	6-5
Existing Conditions Peak Hour LOS Summary of Signalized Study Intersections.....	7-1
Existing Plus Project Conditions Peak Hour LOS Summary of Signalized Study Intersections ...	7-2
Opening Year Without Project Conditions Peak Hour LOS Summary of Signalized Study Intersections.....	7-3
Opening Year With Project Conditions Peak Hour LOS Summary of Signalized Study Intersections.....	7-4
Existing Conditions Peak Hour LOS Summary of Unsignalized Study Intersections.....	8-1
Existing Plus Project Conditions Peak Hour LOS Summary of Unsignalized Study Intersections	8-2
Opening Year Without Project Conditions Peak Hour LOS Summary of Unsignalized Study Intersections.....	8-3
Opening Year With Project Conditions Peak Hour LOS Summary of Unsignalized Study Intersections.....	8-4
Opening Year With Project Conditions Project Access Inbound	
Left-Turn HCM 95 th Percentile Vehicular Queue Analysis Summary	9-1
CMP-Estimated Project Transit User Forecast Summary	11-1

List of Attachments (continued)

Appendices

Approved Scope of Work.....	A
VMT Analysis Tool Inputs & Results.....	B
Existing Traffic Count Worksheets.....	C
Existing Conditions LOS Analysis Worksheets	D
Existing Plus Project Conditions LOS Analysis Worksheets.....	E
Opening Year Without Project Conditions LOS Analysis Worksheets	F
Opening Year With Project Conditions LOS Analysis Worksheets	G
Driveway Access HCM 95 th Percentile Vehicular Queue Analysis Worksheets.....	H
Bus Route Details.....	I
Culver City Code of Ordinance Section 7.05.005.....	J

1.0 Executive Summary

1.1 Purpose of Report & Study Objectives

The purpose of this transportation study is to evaluate the Triangle Square Mixed-Use Project (hereinafter referred to as project) from a traffic and circulation standpoint.

This traffic study has been conducted pursuant to the *Culver City Transportation Study Criteria and Guidelines (July 13, 2020)* and the California Environmental Quality Act (CEQA).

The study has been prepared based on the scope of work approved by the City of Culver City and City of Los Angeles staff. A copy of the approved scope is contained in Appendix A.

1.2 Site Location & Project Description

The project site is located at 12727 Washington Boulevard and is bound by Meier Street on the west, Zanja Street on the northeast and Washington Boulevard on the south.

The southern part of the project site is located within the jurisdiction of Culver City and the northern part of the project site is located within the jurisdiction of the City of Los Angeles.

At the time of preparation of the project scope of work and collection of existing traffic volumes for use in the analysis, the project site consisted of the following land uses:

- 13,800 Square Feet of Variety Store Use;
- 402 Square Feet of Coffee/Donut Shop Without Drive Through Use; and
- 1,526 Square Feet of Retail Use.

Access for the project site is currently provided as follows:

- One full access unsignalized driveway on Meier Street;
- Two full access unsignalized driveways on Zanja Street; and

- Two right-in/right-out unsignalized driveways on Washington Boulevard.

The proposed project, which will displace the existing land use on the project site, consists of the following land uses:

- 144 Dwelling Units of Mid-Rise Multi-Family Residential Use;
- 1,190 Square Feet of Retail Use;
- 12,600 Square Feet of Supermarket Use;
- 1,340 Square Feet of Walk-in Bank Use;
- 2,575 Square Feet of High Turnover Sit-Down Restaurant Use; and
- 1,370 Square Feet of Coffee/Donut Shop Without Drive Through Use.

Access for the proposed project site is planned to be provided as follows:

- Project Access 1: One full access unsignalized driveway on the north end of Meier Street providing access for a subterranean structure facilitating parking for both the residential and retail uses;
- Project Access 2: One full access unsignalized driveway on the south end of Meier Street providing access/parking for the retail uses; and
- Project Access 3: One right-in/right-out/left-out (no left-in) access unsignalized driveway on Zanja Street providing access/parking for the retail uses.

Hence, the proposed project eliminates the existing second access on Zanja Street as well as the two existing access locations on Washington Boulevard which improves walkability and bicycle movement at the project site along Washington Boulevard by eliminating conflicting vehicular movement with pedestrians and bicyclists.

Parking for the proposed project is planned via surface and subterranean parking spaces as follows:

- 28 parking spaces to serve the retail uses on a surface parking lot;
- 38 parking spaces to serve the retail uses in the first level of the subterranean parking structure;
- 61 single and tandem parking spaces located behind an access gate to serve the residential uses in the first level of the subterranean parking structure; and
- 107 single and tandem parking spaces to serve the residential uses in the second level of the subterranean parking structure.

Hence, the proposed project is planned to provide a total of 234 parking spaces (66 spaces for the retail uses and 168 parking spaces for the residential use).

As previously noted, the retail parking spaces are planned to be provided via a mix of surface parking lot spaces as well as the first level of the subterranean parking structure. The residential parking spaces are planned to be provided via the subterranean parking structure. These spaces will be located behind an access gate via a mix of single and tandem parking spaces.

The proposed project is planned to open in 2023.

The project site location map is shown in Exhibit 1-1.

The proposed project site plan is shown in Exhibit 1-2, Exhibit 1-3, and Exhibit 1-4.

1.3 Scope of Analysis

In accordance with the approved scope of work contained in Appendix A, this transportation analysis evaluates the following elements for the proposed project:

1. California Environmental Quality Act (CEQA) Transportation Impact Analysis based on Vehicle Miles Traveled (VMT) utilizing the City of Culver City VMT analysis tool;
2. Supplemental Transportation Analysis evaluating peak hour Level of Service (LOS) at the following signalized and unsignalized study intersections shown in Table 1-1.

**Table 1-1
Study Intersections Evaluated for
Supplemental Transportation Analysis (Level of Service)**

#	Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Jurisdiction
1	Redwood Ave / Washington Blvd	TS	HCM	Culver City
2	Beethoven St / Washington Blvd	TS	HCM	Culver City
3	Meier St / Zanja St	CSS	HCM	Los Angeles
4	Meier St / Washington Blvd	CSS	HCM	Culver City
5	Rosabell St / Washington Blvd	TS	HCM	Culver City
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	Culver City
7	Wade St / Washington Pl	TS	HCM	Culver City
8	Wade St / Washington Blvd	TS	HCM	Culver City
9	Centinela Ave / Washington Pl	TS	HCM	Culver City
10	Centinela Ave / Washington Blvd	TS	HCM	Culver City

Notes:

HCM = Highway Capacity Manual; TS = Traffic Signal; CSS = Cross-Street Stop

Exhibit 1-1 shows the level of service study area for the proposed project.

3. Highway Capacity Manual (HCM) 95th percentile vehicular queue evaluation for inbound vehicles performing a left-turn movement at the project site access locations;
4. Site access review;
5. Transportation Demand Management (TDM) measures; and
6. Public transit evaluation.

1.4 Summary of Results:

Summary of California Environmental Quality Act (CEQA) Transportation Impact Analysis based on Vehicle Miles Traveled (VMT):

Based on the VMT analysis prepared utilizing the City of Culver City adopted VMT analysis tool, the proposed project is screened out from requiring a full VMT analysis and the project VMT impacts are deemed to be less than significant

Summary of Highway Capacity Manual (HCM) 95th percentile vehicular queue evaluation for inbound vehicles performing a left-turn movement at the project site access locations:

Nominal queues are expected for inbound vehicles turning left into the project access driveways for Opening Year With Project Conditions.

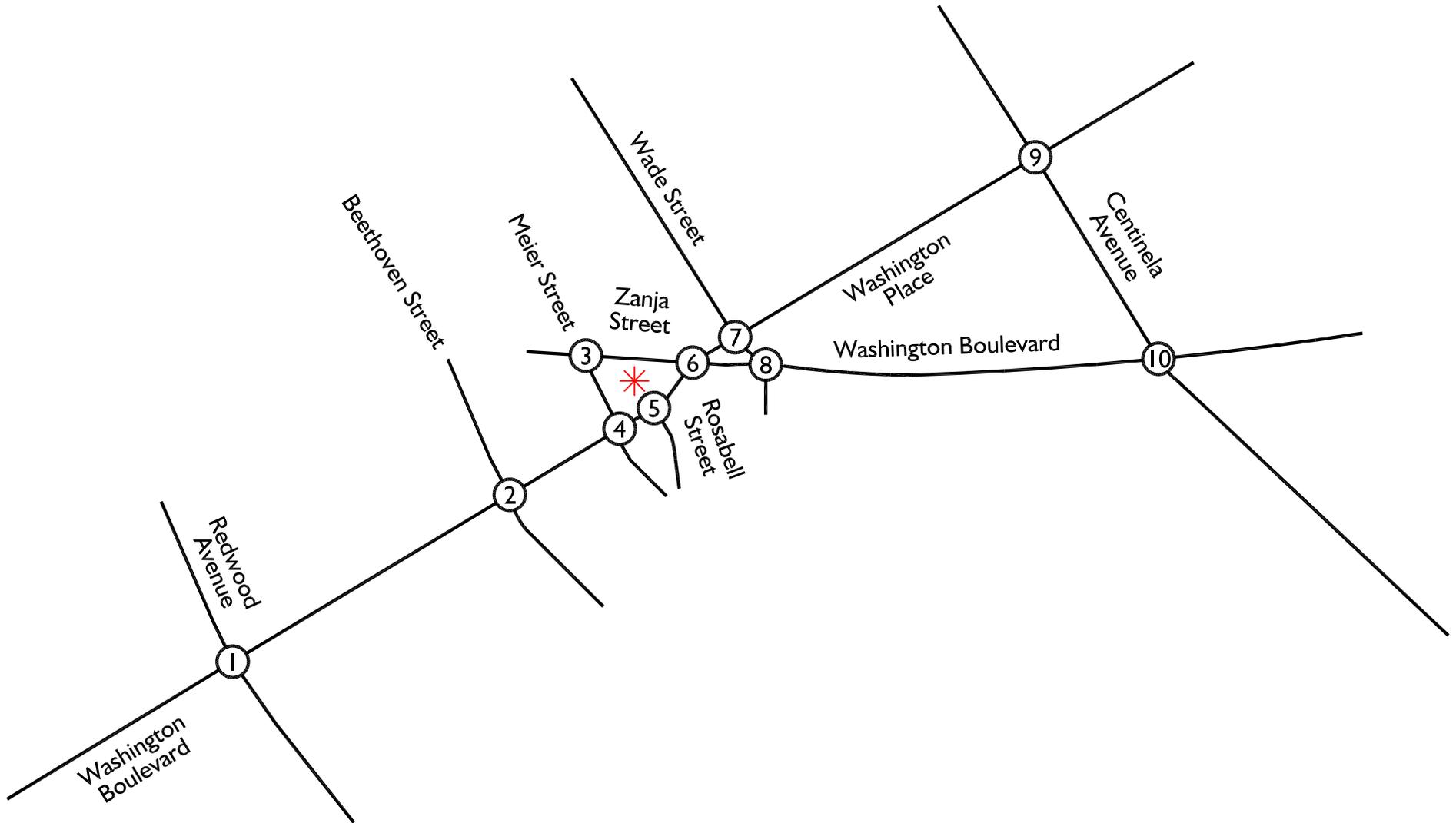
Summary of Site access review:

The proposed project is expected to result in improvements in the multi-modal circulation and access around the project site.

Summary of Public Transit Evaluation:

Based on the Los Angeles County Congestion Management Plan (CMP) methodologies for estimation of transit riders, the proposed project is expected to generate approximately 189 transit riders per day, including approximately 17 transit riders during the AM peak hour and approximately 17 transit riders during the PM peak hour.

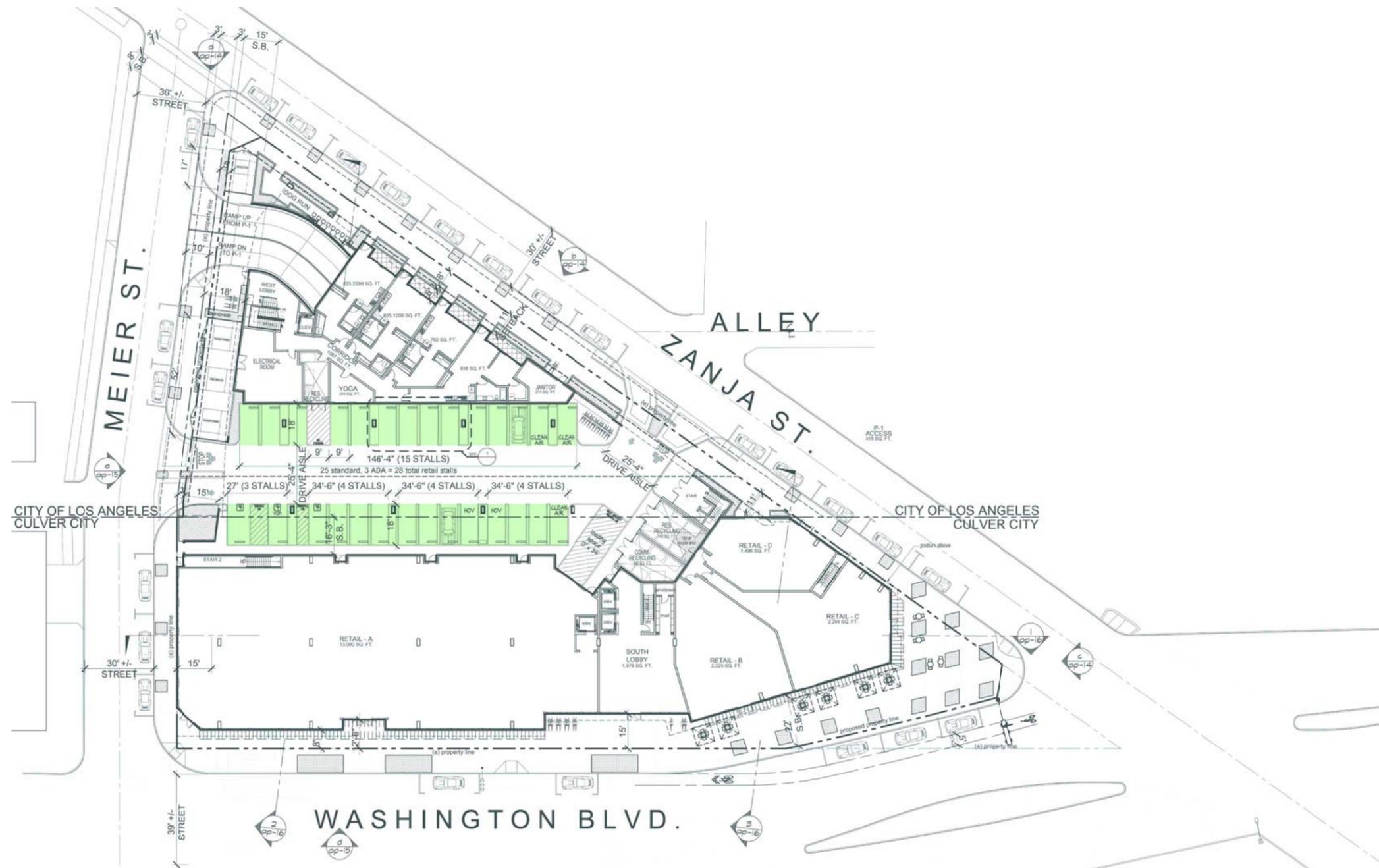
Exhibit I-1 Location Map

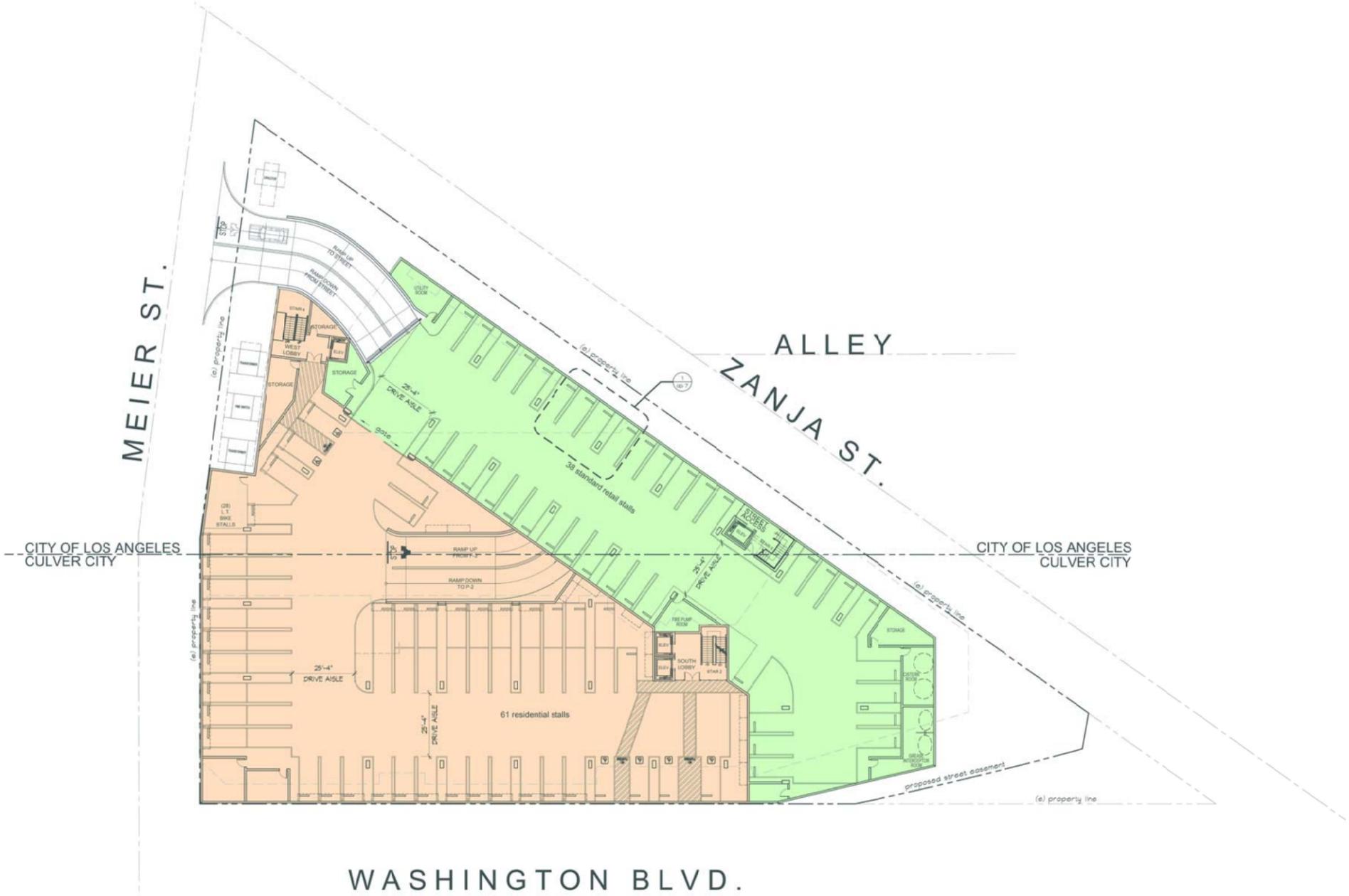


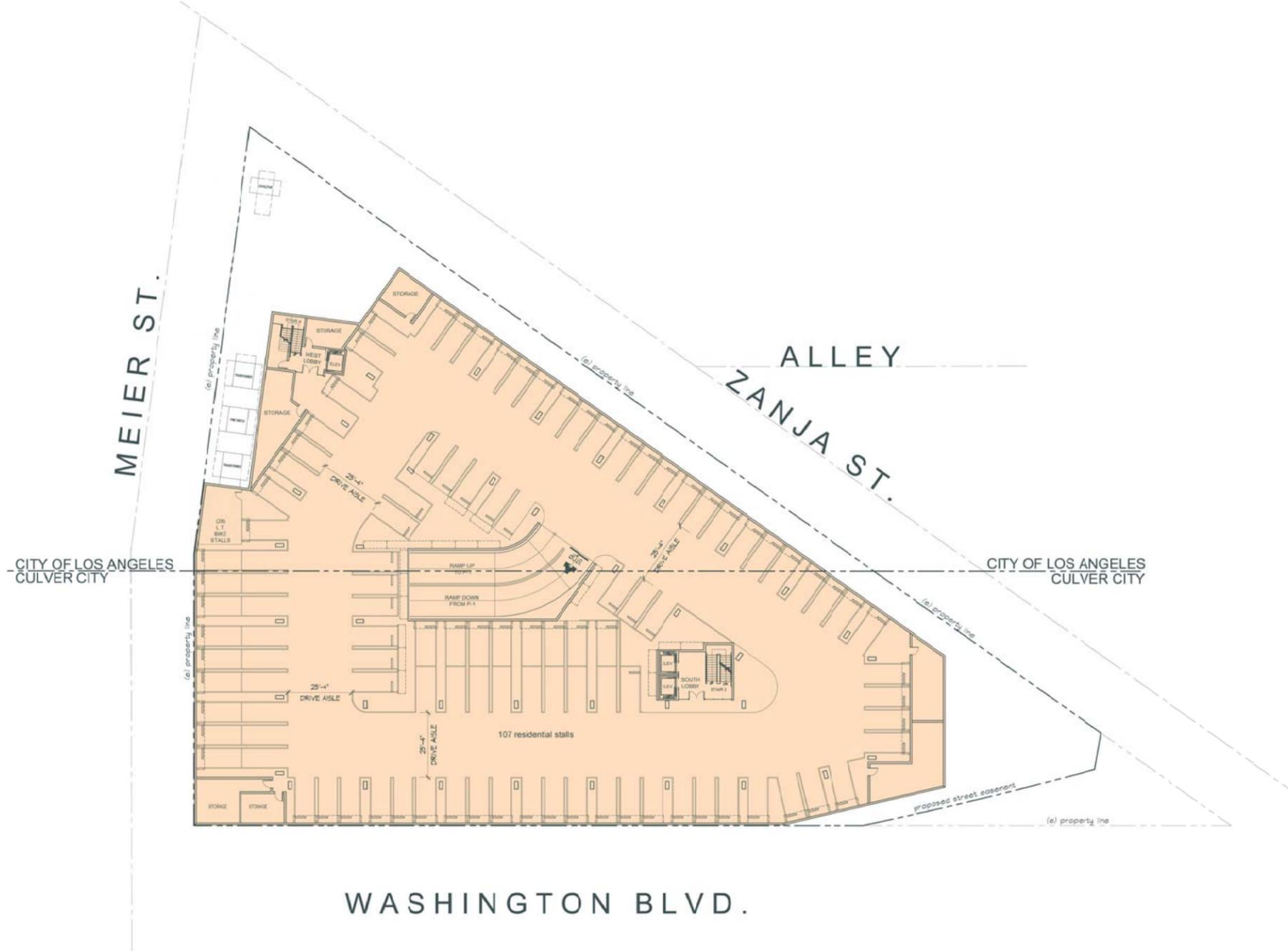
Legend:

- * = Project Site
- ① = Study Area Intersection
- = Project Access Driveway









2.0 Introduction

2.1 Purpose of Report & Study Objectives

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The proposed project is planned to open in 2023.

The project site location map is previously shown in Exhibit 1-1.

The proposed project site plan is previously shown in Exhibit 1-2, Exhibit 1-3, and Exhibit 1-4.

2.3 Level of Service Study Area & Analysis Scenarios

In accordance with the approved scope of work contained in Appendix A, this transportation analysis evaluates level of service (LOS) at the study intersection shown in Table 2-1.

**Table 2-1
Study Intersections Evaluated for
Supplemental Transportation Analysis (Level of Service)**

#	Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Jurisdiction
1	Redwood Ave / Washington Blvd	TS	HCM	Culver City
2	Beethoven St / Washington Blvd	TS	HCM	Culver City
3	Meier St / Zanja St	CSS	HCM	Los Angeles
4	Meier St / Washington Blvd	CSS	HCM	Culver City
5	Rosabell St / Washington Blvd	TS	HCM	Culver City
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	Culver City
7	Wade St / Washington Pl	TS	HCM	Culver City
8	Wade St / Washington Blvd	TS	HCM	Culver City
9	Centinela Ave / Washington Pl	TS	HCM	Culver City
10	Centinela Ave / Washington Blvd	TS	HCM	Culver City

Notes:

HCM = Highway Capacity Manual; TS = Traffic Signal; CSS = Cross-Street Stop

Exhibit 1-1 shows the level of service study area for the proposed project.

In accordance with the Culver City Transportation Study Criteria and Guidelines (July 13, 2020), the analysis evaluates traffic conditions for the following study scenarios during the weekday AM (7:00 AM to 9:00 AM) and weekday PM (4:00 PM to 6:00 PM) peak periods:

- Existing Conditions;
- Existing Plus Project Conditions;
- Future Background Horizon Conditions (Opening Year With Ambient Growth and Related Projects, hereinafter referred to as Opening Year Without Project Conditions);

- Future Background Horizon With Project Conditions (Opening Year With Ambient Growth and Related Projects and Proposed Project, hereinafter referred to as Opening Year With Project Conditions).

3.0 Analysis Methodology

This section of the report presents the analysis study area and the methodologies used to perform the traffic analyses summarized in this report in accordance with the City of Culver City requirements and CEQA.

3.1 CEQA Vehicle Miles Traveled (VMT) Analysis Methodology

In response to Senate Bill (SB) 743, the California Natural Resource Agency certified and adopted new CEQA Guidelines in December 2018 which now identify Vehicle Miles Traveled (VMT) as the most appropriate metric to evaluate a project's transportation impact under CEQA (§ 15064.3).

Effective July 1, 2020, the previous CEQA metric of LOS, typically measured in terms of automobile delay, roadway capacity and congestion, generally will no longer constitute a significant environmental impact.

The City of Culver City has updated their transportation impact guidelines *Culver City Transportation Study Criteria and Guidelines (July 13, 2020)* to provide recommendations in the form of thresholds of significance and methodology for identifying VMT related impacts.

The CEQA VMT impact analysis for the proposed project has been prepared utilizing the City of Culver City adopted VMT analysis tool.

3.2 Study Intersection Peak Hour Level of Service Analysis Methodology

Level of Service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS A: Operations with very low delay occurring with favorable progressions and/or short cycle lengths.
- LOS B: Operations with low delay occurring with good progression and/or short cycle lengths

- LOS C: Operations with average delays resulting from fair progressions and/or longer cycle lengths. Individual cycle failures begin to appear.
- LOS D: Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and a high volume-to-capacity (V/C) ratios. Many vehicles Stop and individual cycle failures are noticeable.
- LOS E: Operations with high delays indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
- LOS F: Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression.

3.3 Highway Capacity Manual (HCM) Methodology

In accordance with the *Culver City Transportation Study Criteria and Guidelines (July 13, 2020)* the Highway Capacity Manual (HCM) methodology has been utilized to determine the level of service (LOS) of the study area intersections.

The Highway Capacity Manual (HCM) defines level of service (LOS) as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

For signalized intersections, average control delay per vehicle is used to determine the LOS. For all-way stop controlled intersections, the LOS is also determined based on the average control delay per vehicle. For intersections with stop control on the minor street only, the calculation of LOS is dependent on the occurrence of gaps in the traffic flow of the main street, and the LOS is determined based on the worst individual movement or movements sharing a single lane of the stop-controlled movement.

The Highway Capacity Manual 6th Edition (HCM 6) methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding ranges of stopped delay experienced per vehicle for signalized and unsignalized intersections.

Table 3-1 below shows the LOS criteria based on the HCM methodology and the *Culver City Transportation Study Criteria and Guidelines (July 13, 2020)*.

**Table 3-1
HCM LOS - Vehicle Delay**

Level of Service (LOS)	Average Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	0.00 - 10.00	0.00 - 10.00
B	10.10 - 20.00	10.01 - 15.00
C	20.10 - 35.00	15.01 - 25.00
D	35.10 - 55.00	25.01 - 35.00
E	55.10 - 80.00	35.01 - 50.00
F	>80.00	>50.00

3.4 Highway Capacity Manual (HCM) 95th Percentile Vehicular Queue Methodology for Evaluation of Project Access Driveways

The Highway Capacity Manual (HCM) 95th percentile vehicular queue methodology has been utilized to evaluate the forecast vehicular queue during the AM and PM peak hours for the inbound vehicles performing a left-turn movement at the project site access locations.

The 95th-percentile queue is defined to be the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the analysis time period.

4.0 CEQA Vehicle Miles Traveled (VMT) Analysis

In response to Senate Bill (SB) 743, the California Natural Resource Agency certified and adopted new CEQA Guidelines in December 2018 which now identify Vehicle Miles Traveled (VMT) as the most appropriate metric to evaluate a project's transportation impact under CEQA (§ 15064.3).

Effective July 1, 2020, the previous CEQA metric of LOS, typically measured in terms of automobile delay, roadway capacity and congestion, generally will no longer constitute a significant environmental impact.

The City of Culver City has updated their transportation impact guidelines *Culver City Transportation Study Criteria and Guidelines (July 13, 2020)* to provide recommendations in the form of thresholds of significance and methodology for identifying VMT related impacts.

The CEQA VMT impact analysis for the proposed project has been prepared utilizing the City of Culver City adopted VMT analysis tool.

Based on the VMT analysis prepared utilizing the City of Culver City adopted VMT analysis tool, the proposed project is screened out from requiring a full VMT analysis and the project VMT impacts are deemed to be less than significant.

Detailed VMT analysis tool inputs and results are contained in Appendix B.

5.0 Existing Traffic Volumes & Circulation System

This section provides a discussion of existing study area conditions and traffic volumes.

5.1 Existing Traffic Controls and Intersection Geometrics

Exhibit 5-1 identifies the existing roadway conditions within the study area. The number of through traffic lanes for existing roadways and the existing intersection controls are identified. The type of traffic control and number of lanes at an intersection are key inputs for the calculation of LOS.

5.2 Existing Traffic Volumes

Existing traffic volumes at the study intersections are based upon manual AM and PM peak hour turning movement counts compiled in May 2018 during typical traffic conditions and when schools were in session.

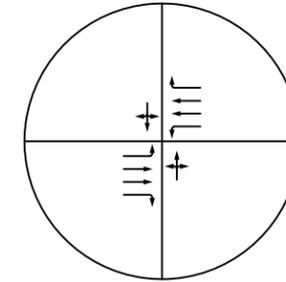
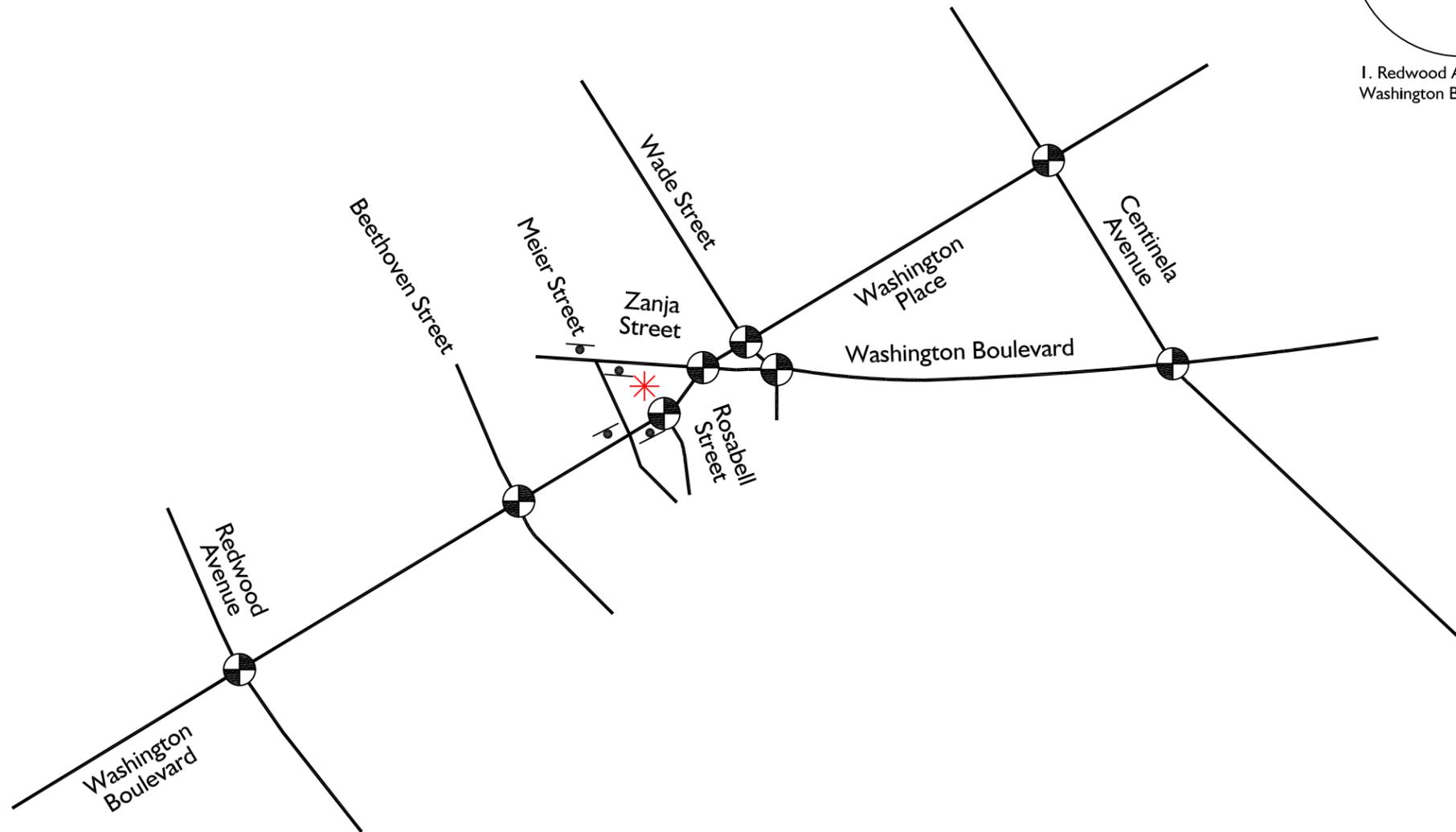
As directed by City staff, Existing (2022) traffic volumes have been derived by applying an annual growth factor of one percent per year to the 2018 traffic volumes over a three-year period.

The AM peak period of traffic was counted from 7:00 AM to 10:00 AM and the extended PM peak hour of traffic was counted from 3:00 PM to 6:00 PM; this study utilizes the hour of highest traffic volumes collected within each peak period.

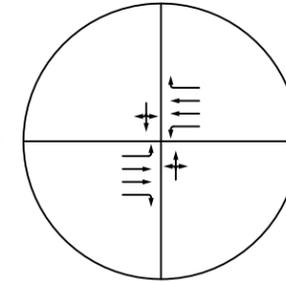
Existing (2022) traffic volumes within the study area are shown in Exhibit 5-2.

The traffic count worksheets are included in Appendix C.

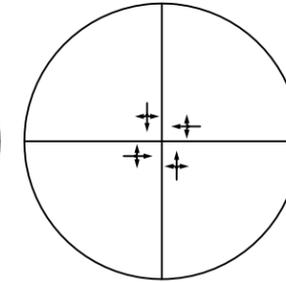
Existing Lane Geometry & Traffic Controls



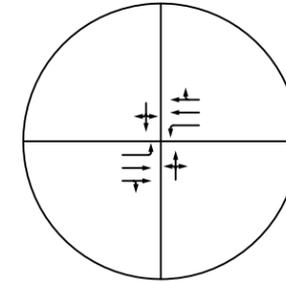
1. Redwood Avenue (NS) & Washington Boulevard (EW)



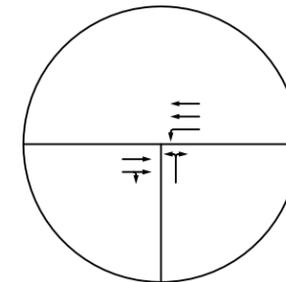
2. Beethoven Street (NS) & Washington Boulevard (EW)



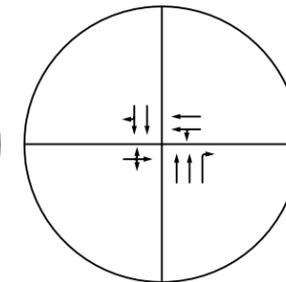
3. Meier Street (NS) & Zanja Street (EW)



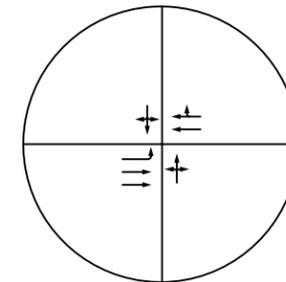
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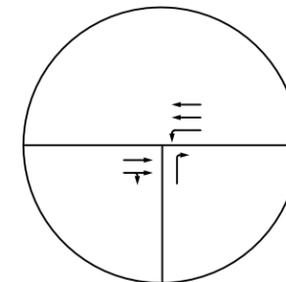
5. Rosabell Street (NS) & Washington Boulevard (EW)



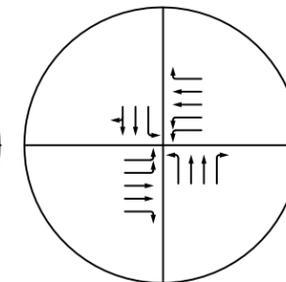
6. Washington Place - Washinton Boulevard (NS) & Zanja Street - Washington Boulevard (EW)



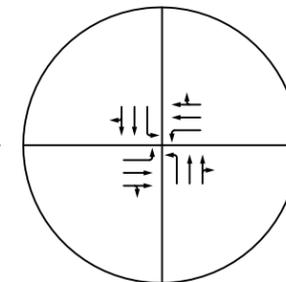
7. Wade Street (NS) & Washington Place (EW)



8. Wade Street (NS) & Washington Boulevard (EW)



9. Centinela Avenue (NS) & Washington Place (EW)

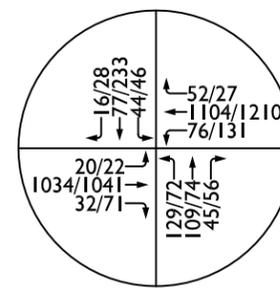
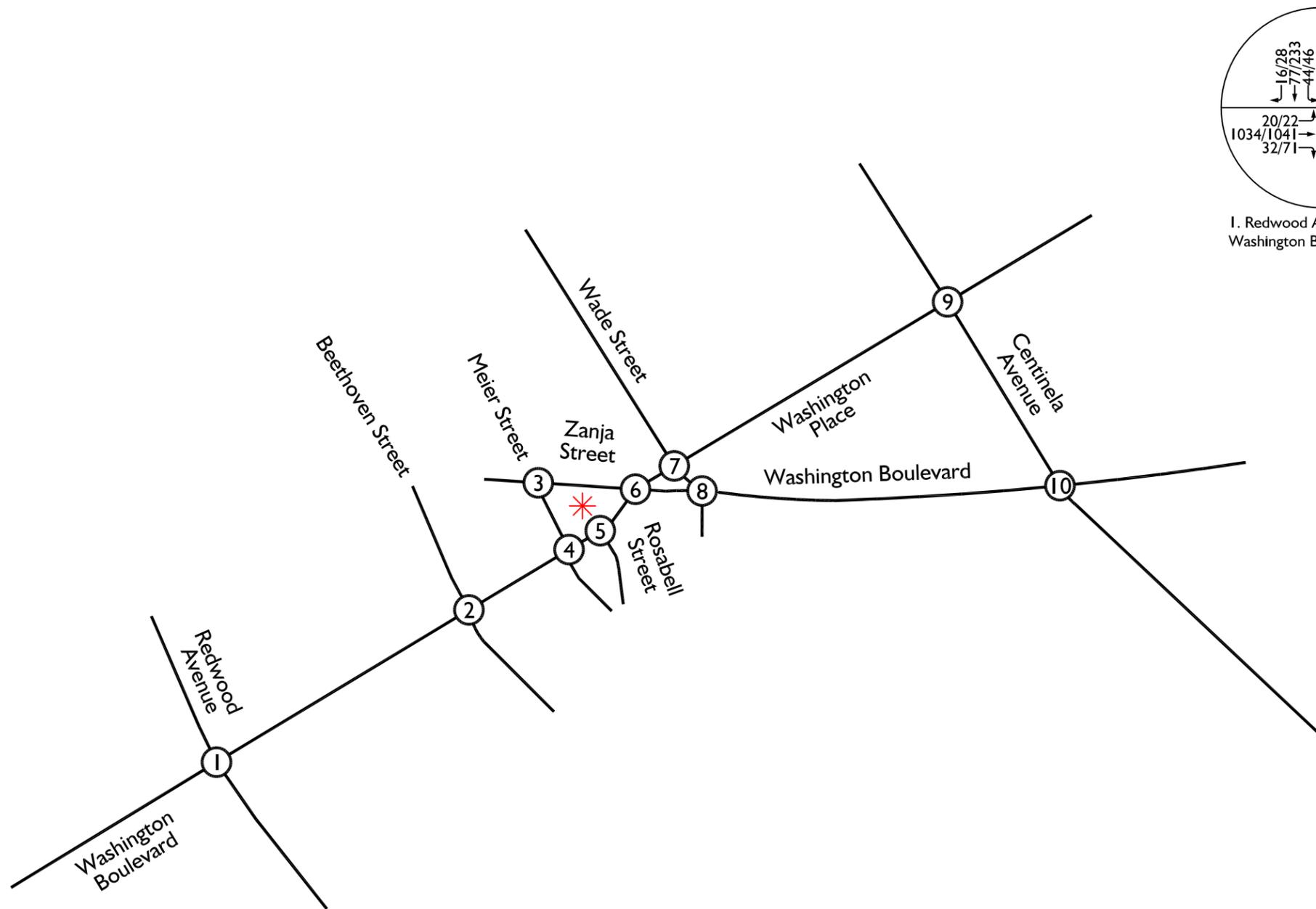


10. Centinela Avenue (NS) & Washington Boulevard (EW)

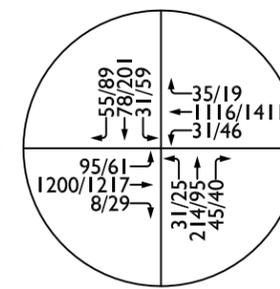
Legend:

- = Traffic Signal
- = Stop Sign

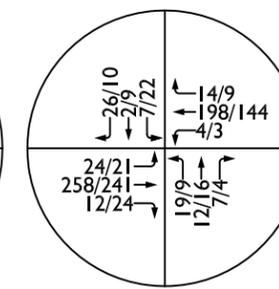




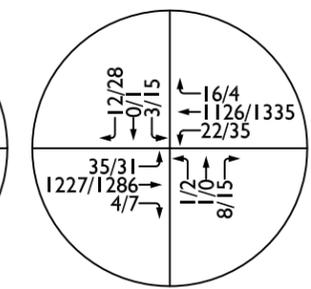
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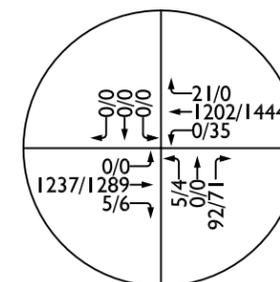
2. Beethoven Street (NS) & Washington Boulevard (EW)



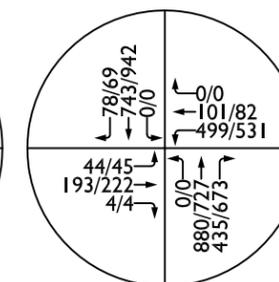
3. Meier Street (NS) & Zanja Street (EW)



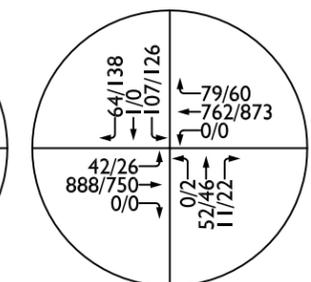
4. Meier Street (NS) & Washington Boulevard (EW)



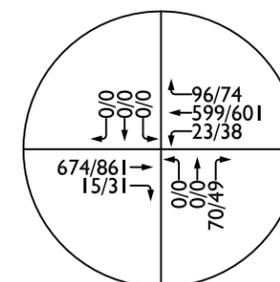
5. Rosabell Street (NS) & Washington Boulevard (EW)



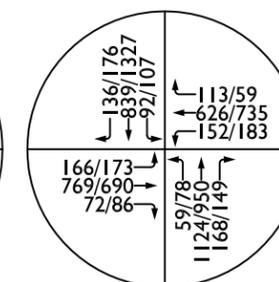
6. Washington Place - Washinton Boulevard (NS) & Zanja Street - Washington Boulevard (EW)



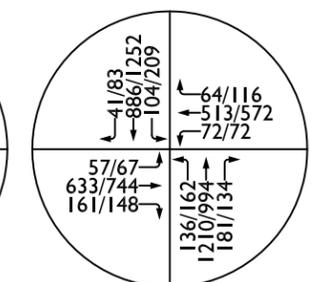
7. Wade Street (NS) & Washington Place (EW)



8. Wade Street (NS) & Washington Boulevard (EW)



9. Centinela Avenue (NS) & Washington Place (EW)



10. Centinela Avenue (NS) & Washington Boulevard (EW)

Legend:

10/20 = AM/PM Peak Hour Volumes



6.0 Projected Traffic Volumes

This section of the report provides a discussion on methodologies utilized to derive projected traffic volumes for the study area.

6.1 Project Traffic Conditions

6.1.1 Trip Generation

Trip generation represents the amount of trips attracted and produced by land use. The trip generation for the project is based upon the specific land uses that have been planned for this project.

Table 6-1 shows the *Institute of Transportation Engineers (ITE) Trip Generation Manual* trip generation rates reviewed and approved by City staff for utilization in the trip generation analysis of the proposed land uses as well as the existing land uses.

Table 6-1
ITE Trip Generation Rates

Land Use	ITE Code	Units	Peak Hour						Daily
			AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Multi-Family Residential - Mid-Rise	221	DU	0.09	0.27	0.36	0.27	0.17	0.44	5.44
Variety Store	814	TSF	1.81	1.37	3.18	3.56	3.28	6.84	63.47
Retail	820	TSF	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Supermarket	850	TSF	2.29	1.53	3.82	4.71	4.53	9.24	106.78
Walk-in Bank	911	TSF	11.72	10.82	22.54	5.34	6.79	12.13	121.30
High Turnover Sit-Down Restaurant	932	TSF	5.47	4.47	9.94	6.06	3.71	9.77	112.18
Coffee/Donut Shop w/o Drive Thru	936	TSF	51.58	49.56	101.14	18.16	18.16	36.32	363.10

Notes:

Source: 2017 ITE 10th Edition Trip Generation Manual.

TSF = thousand square feet; DU = dwelling unit

Utilizing the trip generation rates shown in Table 6-1, Table 6-2 shows the calculated trip generation associated with the existing land uses which will be displaced by the proposed project.

**Table 6-2
Existing Land Use Trip Generation Summary**

Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Variety Store	13.800	TSF	814	25	19	44	49	45	94	876
Pass-by Adjustment (25% AM & PM Peak Hour)				-6	-5	-11	-12	-11	-23	-34
<i>Variety Store Subtotal</i>				<i>19</i>	<i>14</i>	<i>33</i>	<i>37</i>	<i>34</i>	<i>71</i>	<i>842</i>
Coffee/Donut Shop Without Drive Thru	0.402	TSF	936	21	20	41	7	7	14	140
Pass-by Adjustment (25% AM & PM Peak Hour)				-5	-5	-10	-2	-2	-4	-14
<i>Coffee/Donut Shop Without Drive Through Subtotal</i>				<i>16</i>	<i>15</i>	<i>31</i>	<i>5</i>	<i>5</i>	<i>10</i>	<i>126</i>
Retail	1.526	TSF	820	1	1	2	3	3	6	58
Pass-by Adjustment (25% AM & PM Peak Hour)				0	0	0	-1	-1	-2	-2
<i>Retail Subtotal</i>				<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>4</i>	<i>56</i>
Subtotal				36	30	66	44	41	85	1,024
5% Adjustment for Walk/Bike/Transit				-2	-2	-4	-2	-2	-4	-51
Total (Without Pass-by Adjustment)				45	38	83	57	53	110	1,023
Total With Pass-by Adjustment				34	28	62	42	39	81	973

Notes: Trip Generation Source: 2017 ITE 10th Edition Trip Generation Manual; TSF = thousand square feet.

As shown in Table 6-2, based on the ITE trip generation rates, the existing uses generate approximately 973 daily trips which include approximately 62 AM peak hour trips and approximately 81 PM peak hour trips.

Utilizing the trip generation rates shown in Table 6-1, Table 6-3 shows the forecast trip generation associated with the proposed land uses assuming no credit for the existing land uses on the project that will be displaced by the proposed project.

**Table 6-3
Proposed Project Forecast Trip Generation Summary (No Credit For Project Site Existing Land Use)**

Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Residential Component										
Multi-Family Residential – Mid-Rise	144	DU	221	13	38	51	39	25	64	783
5% Adjustment for Walk/Bike/Transit				-1	-2	-3	-2	-1	-3	-39
Project Residential				12	36	48	37	24	61	744
Retail Components										
Retail	1.190	TSF	820	1	0	1	2	2	4	45
Pass-by Adjustment (25% AM & PM Peak Hour)				0	0	0	-1	-1	-2	-2
<i>Retail Subtotal</i>				<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>43</i>
Super Market	12.600	TSF	850	29	19	48	59	57	116	1,345
Pass-by Adjustment (25% AM & PM Peak Hour)				-7	-5	-12	-15	-14	-29	-41
<i>Super Market Subtotal</i>				<i>22</i>	<i>14</i>	<i>36</i>	<i>44</i>	<i>43</i>	<i>87</i>	<i>1,304</i>
Walk-in Bank	1.340	TSF	911	16	14	30	7	9	16	160
High Turnover Sit-Down Restaurant	2.575	TSF	932	14	12	26	16	10	26	289
Pass-by Adjustment (25% AM & PM Peak Hour)				-4	-3	-7	-4	-3	-7	-14
<i>High Turnover Sit-Down Restaurant Subtotal</i>				<i>10</i>	<i>9</i>	<i>19</i>	<i>12</i>	<i>7</i>	<i>19</i>	<i>275</i>
Coffee/Donut Shop Without Drive Through	1.370	TSF	936	71	68	139	25	25	50	500
Pass-by Adjustment (25% AM & PM Peak Hour)				-18	-17	-35	-6	-6	-12	-47
<i>Coffee/Donut Shop Without Drive Through Subtotal</i>				<i>53</i>	<i>51</i>	<i>104</i>	<i>19</i>	<i>19</i>	<i>38</i>	<i>453</i>
Retail Component Subtotal				102	88	190	83	79	162	2,235
5% Adjustment for Walk/Bike/Transit				-5	-4	-9	-4	-4	-8	-112
Project Retail				97	84	181	79	75	154	2,123
Total (Without Pass-by Adjustment)				138	145	283	142	123	265	2,971
Total (With Pass-by Adjustment)				109	120	229	116	99	215	2,867

Notes: Trip Generation Source: 2017 ITE 10th Edition Trip Generation Manual.; TSF = thousand square feet; DU = dwelling units

As shown in Table 6-3, assuming no credit for the existing land uses on the project that will be displaced by the proposed project, the proposed uses can be expected to generate approximately 2,867 daily trips which include approximately 229 AM peak hour trips and approximately 215 PM peak hour trips.

Table 6-4 shows the proposed project forecast NET trip generation after accounting for the displaced existing land uses on the project site.

**Table 6-4
Proposed Project NET Trip Generation Summary**

Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Proposed Project (Retail Component)				97	84	181	79	75	154	2,123
Existing Land Use (Retail)				-34	-28	-62	-42	-39	-81	-973
			<i>Net Retail</i>	<i>63</i>	<i>56</i>	<i>119</i>	<i>37</i>	<i>36</i>	<i>73</i>	<i>1,150</i>
Proposed Project (Residential Component)				12	36	48	37	24	61	744
			Total Net Trip Generation	75	92	167	74	60	134	1,894

As shown in Table 6-4, based on the ITE trip generation rates, after accounting for the displacement of the existing land uses on the project site, the proposed project can be expected to generate approximately 1,894 daily trips which include approximately 167 AM peak hour trips and approximately 134 PM peak hour trips.

6.1.2 Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of retail, employment, and recreational opportunities, and the proximity to the regional highway and freeway system. The directional orientation of traffic was determined by evaluating existing and land uses and highways within the study area.

The project trip distribution assumptions have been reviewed and approved by City staff during the scoping phase of the transportation study.

Exhibit 6-1 shows the outbound trip distribution for the proposed project retail uses.

Exhibit 6-2 shows the inbound trip distribution for the proposed project retail uses.

Exhibit 6-3 shows the outbound trip distribution for the proposed project residential use.

Exhibit 6-4 shows the inbound trip distribution for the proposed project residential use.

6.1.3 Project Traffic Volumes

The assignment of project trips on the adjoining roadway system is based upon the project's trip generation, trip distribution, and arterial highway and local street systems in the vicinity of the project site.

Project trips generated by the proposed retail uses are shown in Exhibit 6-5. Project trips generated by the proposed residential use are shown in Exhibit 6-6. Project total trips (residential and retail uses) are shown in Exhibit 6-7.

6.2 Background Traffic

Project opening year (2023) background traffic volumes are derived by applying an annual growth rate of one percent per year to the existing (2022) traffic volumes previously shown in Exhibit 5-2.

6.2.1 Related Projects Traffic

Information on related projects in the vicinity of the study area has been provided by City of Culver City staff for inclusion in this analysis. In accordance with the Culver City Transportation Study Criteria and Guidelines (July 13, 2020), the related projects include approved and pending projects within a 1.5-mile radius of the project site, including the Paseo Marina project located in Marina del Rey.

Exhibit 6-8 shows the location of the related projects. Table 6-5 shows the trip generation of the related projects based on corresponding ITE trip generation rates.

**Table 6-5
Related Projects Trip Generation Summary**

Project No.	Project Name	Address	Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
							AM Peak Hour			PM Peak Hour			
							In	Out	Total	In	Out	Total	
1	Globe Affordable Housing Project	4044-4068 Globe Avenue, Culver City,	Single Family Residential	10	DU	210	2	5	7	6	4	10	94
2	Baldwin Site	12803 Washington Boulevard, Culver City, CA	Multi-Family Residential - Low Rise	37	DU	220	4	13	17	13	8	21	271
			Retail	7.206	TSF	820	4	3	7	13	14	27	272
			Total						8	16	24	26	22
3	4-Unit Townhome Development	4118 Wade Street, Culver City, CA	Single Family Residential	4	DU	210	1	2	3	2	2	4	38
4	The Haven Mixed-Use	11924 Washington Boulevard, Culver City, CA	Fast Food With Drive Through Restaurant	3.750	TSF	934	77	74	151	64	59	123	1,766
			Retail	11.250	TSF	820	7	4	11	21	22	43	425
			Multi-Family Residential - Low Rise	98	DU	220	10	35	45	35	20	55	717
			Retail (Displaced)	26.445	TSF	820	-15	-10	-25	-48	-53	-101	-998
			Total						79	103	182	72	48
5	3906 Sawtelle Boulevard, Culver	3906 Sawtelle Boulevard, Culver	Single Family Residential	1	DU	210	0	1	1	1	0	1	9
6	New 3-Unit Condo	4234 Sawtelle Boulevard, Culver	Multi-Family Residential - Low Rise	3	DU	220	0	1	1	1	1	2	22
7	Motel Mixed-Use	12654 Washington Boulevard, Culver City, CA	Retail	6.836	TSF	820	4	2	6	13	13	26	258
			Multi-Family Residential - Low Rise	1	DU	220	0	0	0	0	1	1	7
			Total						4	2	6	13	14
8	Market Hall	12403 Washington Boulevard, Culver	Retail	26.835	TSF	820	16	9	25	49	53	102	1,013

Project No.	Project Name	Address	Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
							AM Peak Hour			PM Peak Hour			
							In	Out	Total	In	Out	Total	
9	Office Building	11259 Washington Boulevard, Culver	Office	4.022	TSF	710	4	1	5	1	4	5	39
10	Essence	12450 Washington Boulevard, Culver City, CA	Marijuana Dispensary	4.950	TSF	882	29	23	52	54	54	108	1,251
			Retail (Displaced)	4.950	TSF	820	-3	-2	-5	-9	-10	-19	-187
			Total						26	21	47	45	44
11	4-Unit Sawtelle Condos	4041 Sawtelle Boulevard, Culver	Multi-Family Residential - Low Rise	4	DU	220	0	2	2	1	1	2	29
12	Sawtelle 4-Unit Condos	4095 Sawtelle Boulevard, Culver	Multi-Family Residential - Low Rise	4	DU	220	0	2	2	1	1	2	29
13	Costco Fueling Station	13431 Washington Boulevard, Culver City, CA	Gasoline / Service Station	30	VFP	944	154	154	308	210	211	421	5,160
			Retail (Displaced)	8.520	TSF	820	-5	-3	-8	-16	-16	-32	-322
			Gasoline / Service Station (Displaced)	20	VFP	944	-103	-103	-206	-140	-141	-281	-3,440
			Total						46	48	94	54	54
14	12300 Washington Boulevard, Culver City, CA	12300 Washington Boulevard, Culver City, CA	Office	11.200	TSF	710	11	2	13	2	11	13	109
			Retail (Displaced)	2.000	TSF	820	-1	-1	-2	-4	-4	-8	-76
			Total						10	1	11	-2	7
15	East Condos	4233 East Boulevard, Culver City, CA	Multi-Family Residential - Low Rise	3	DU	220	0	1	1	1	1	2	22
16	Mixed-Use Development with Affordable Housing	11281 Washington Place, Culver City, CA	Retail	3.609	TSF	820	2	1	3	7	7	14	136
			Multi-Family Residential - Mid Rise	33	DU	221	3	9	12	9	6	15	180
			Total						5	10	15	16	13

Project No.	Project Name	Address	Land Use	Quantity	Units	ITE Code	Peak Hour						Daily
							AM Peak Hour			PM Peak Hour			
							In	Out	Total	In	Out	Total	
17	11828 Washington Boulevard, Culver City, CA	11828 Washington Boulevard, Culver City, CA	Multi-Family Residential - Mid Rise	101	DU	221	9	27	36	27	17	44	549
			Office	10.100	TSF	710	10	2	12	2	10	12	98
			Total						19	29	48	29	27
18	Culver Gateway	4114 Sepulveda Boulevard, Culver City, CA	Multi-Family Residential - Mid Rise	10	DU	221	1	3	4	3	1	4	54
			Retail	21.391	TSF	820	12	8	20	39	42	81	808
			Total						13	11	24	42	43
19	Paseo Marina	Maxella & Glencoe Avenue, Marina del Rey, CA	Multi-Family Residential - Mid Rise	425	DU	221	38	115	153	115	72	187	2,312
			Retail	130	TSF	820	75	47	122	238	257	495	4,908
			Retail (Displaced)	100.791	TSF	820	-58	-37	-95	-184	-200	-384	-3,805
			Total						55	125	180	169	129
Total Trip Generation of Related Projects							288	390	678	527	468	995	11,748

Notes: Trip Generation Source: 2017 ITE 10th Edition Trip Generation Manual.; TSF = thousand square feet; DU = dwelling units; VFP = vehicle fueling position

Related projects trip generation volumes are shown in Exhibit 6-9.

In reality, some of the related projects may change in scope and/or may not be open and generating trips by the opening year (2023) of the proposed project. In addition, many of the related projects will be subject to a variety of mitigation measures that will reduce the potential trip generation associated with those projects. However, those mitigation measures have not been taken into account in projecting the trip generation of the related projects.

6.3 Existing Plus Project Conditions Traffic Volumes

Existing Plus Project Conditions traffic volumes consist of the summation of the existing (2022) traffic volumes shown in Exhibit 5-2 and the project traffic volumes shown in Exhibit 6-7.

Existing Plus Related Projects Conditions traffic volumes are shown in Exhibit 6-10.

6.4 Opening Year Without Project Conditions Traffic Volumes

Opening Year Without Project Conditions traffic volumes consists of the summation of the existing (2022) traffic volume shown in Exhibit 5-2 after application of an annual growth rate of one percent per year over a one-year period and the traffic generated by the related projects shown in Exhibit 6-9.

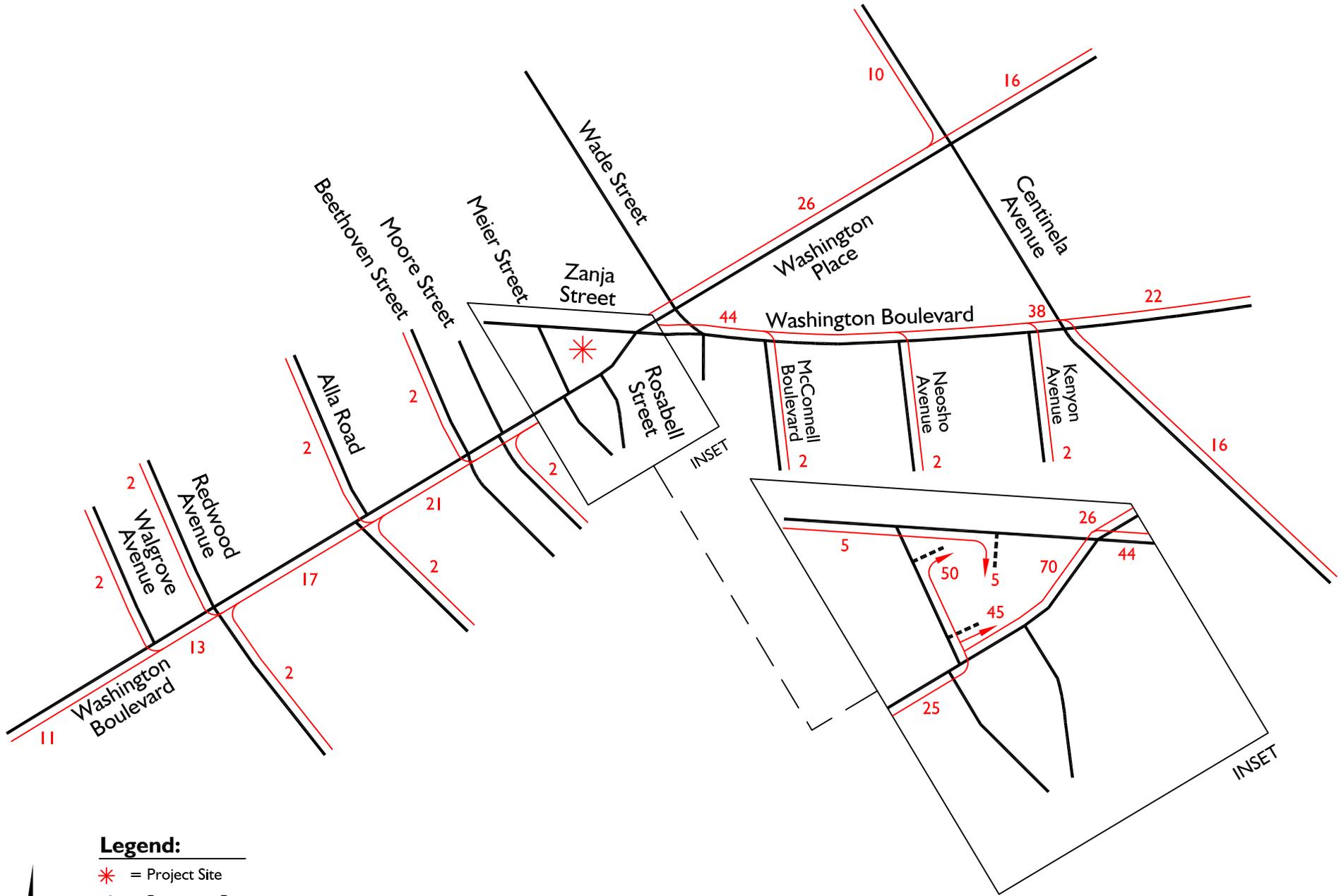
Opening Year Without Project Conditions traffic volumes are shown in Exhibit 6-11.

6.5 Opening Year With Project Conditions Traffic Volumes

Opening Year With Project Conditions traffic volumes consists of the summation of the existing (2022) traffic volume shown in Exhibit 5-2 after application of an annual growth rate of one percent per year over a one-year period and the traffic generated by the related projects shown in Exhibit 6-9 plus the project-generated traffic shown in Exhibit 6-7.

Opening Year With Project Conditions traffic volumes are shown in Exhibit 6-12.

Retail - Inbound Project Trip Distribution

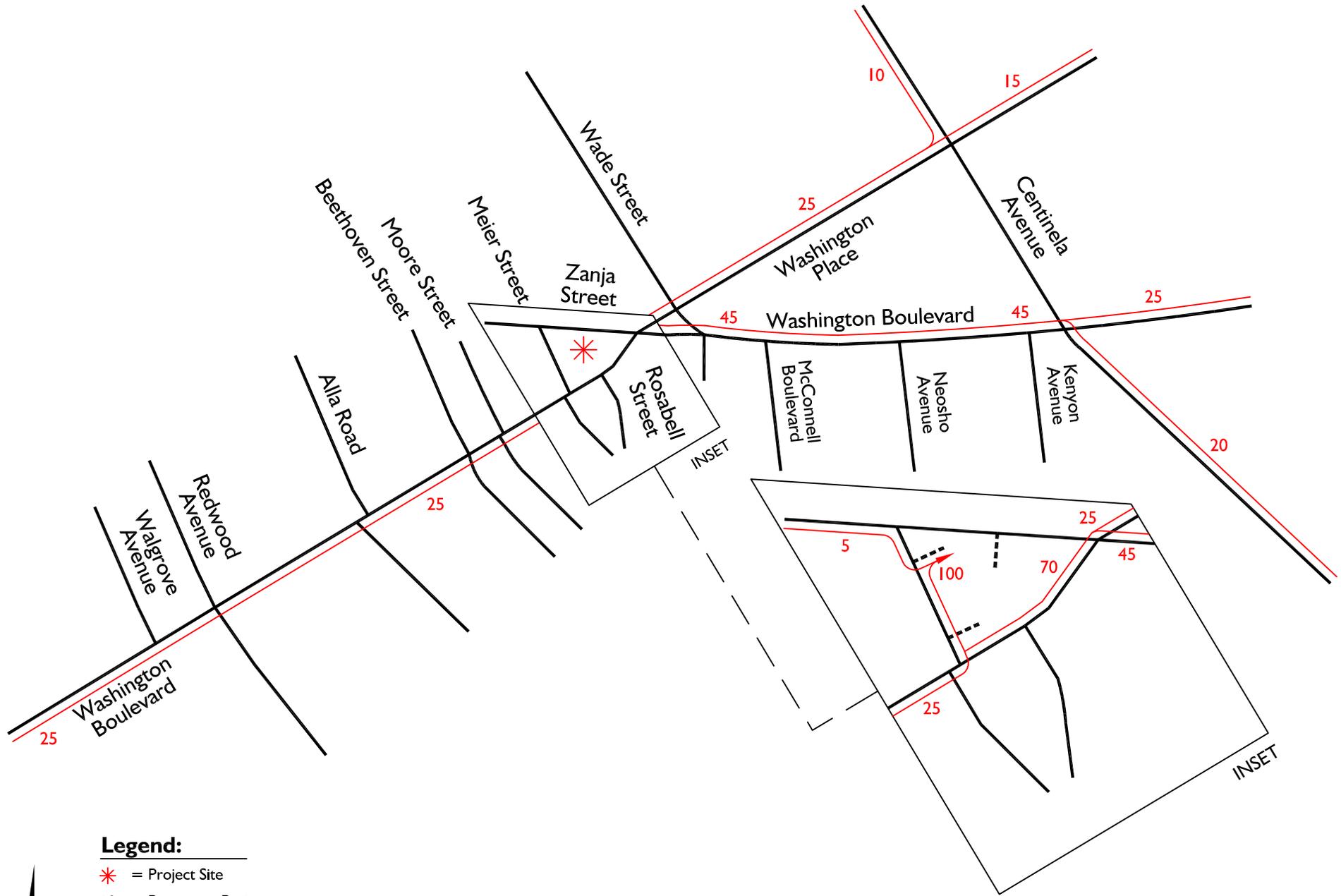


Legend:

- * = Project Site
- 10 = Percent to Project



Residential - Inbound Project Trip Distribution

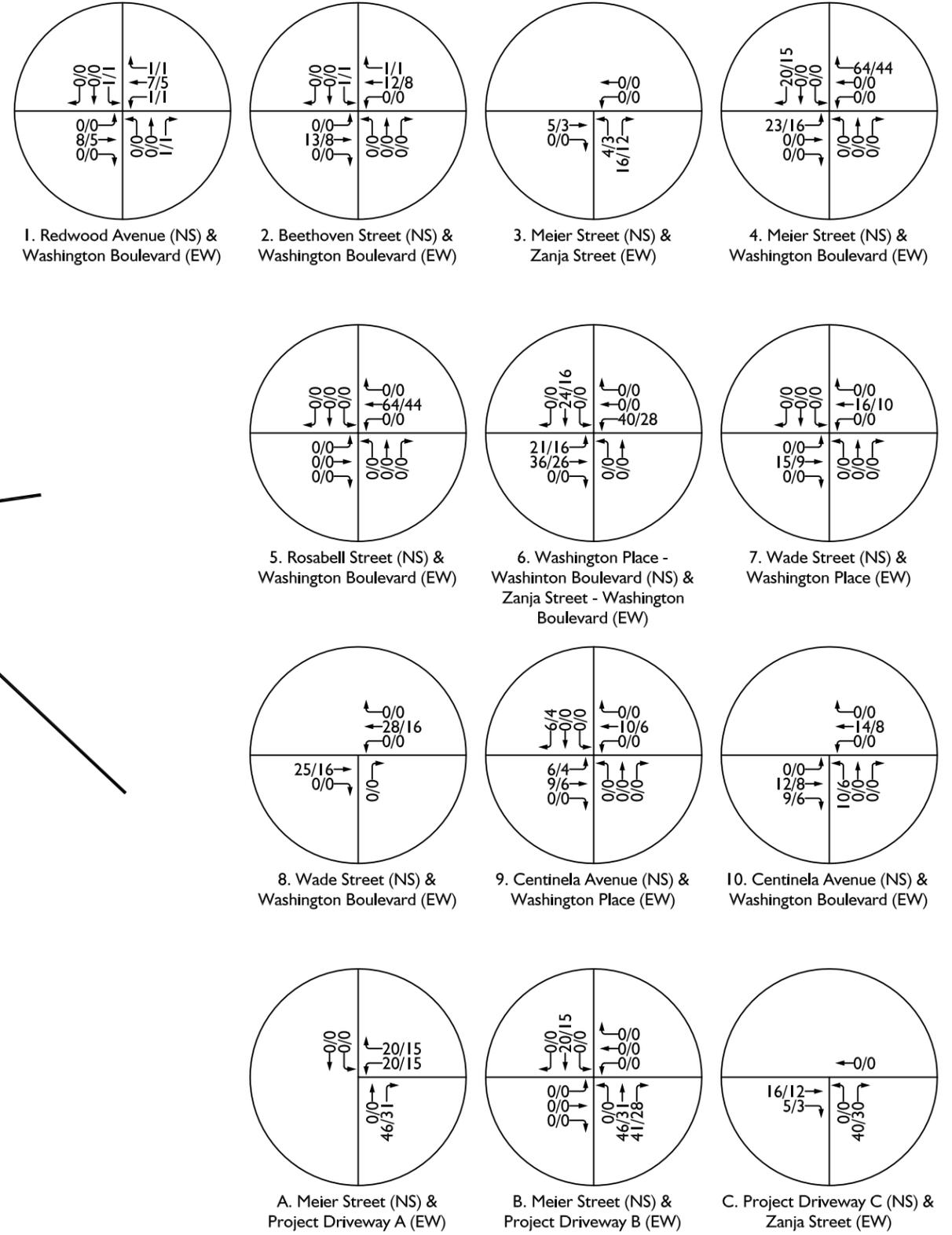
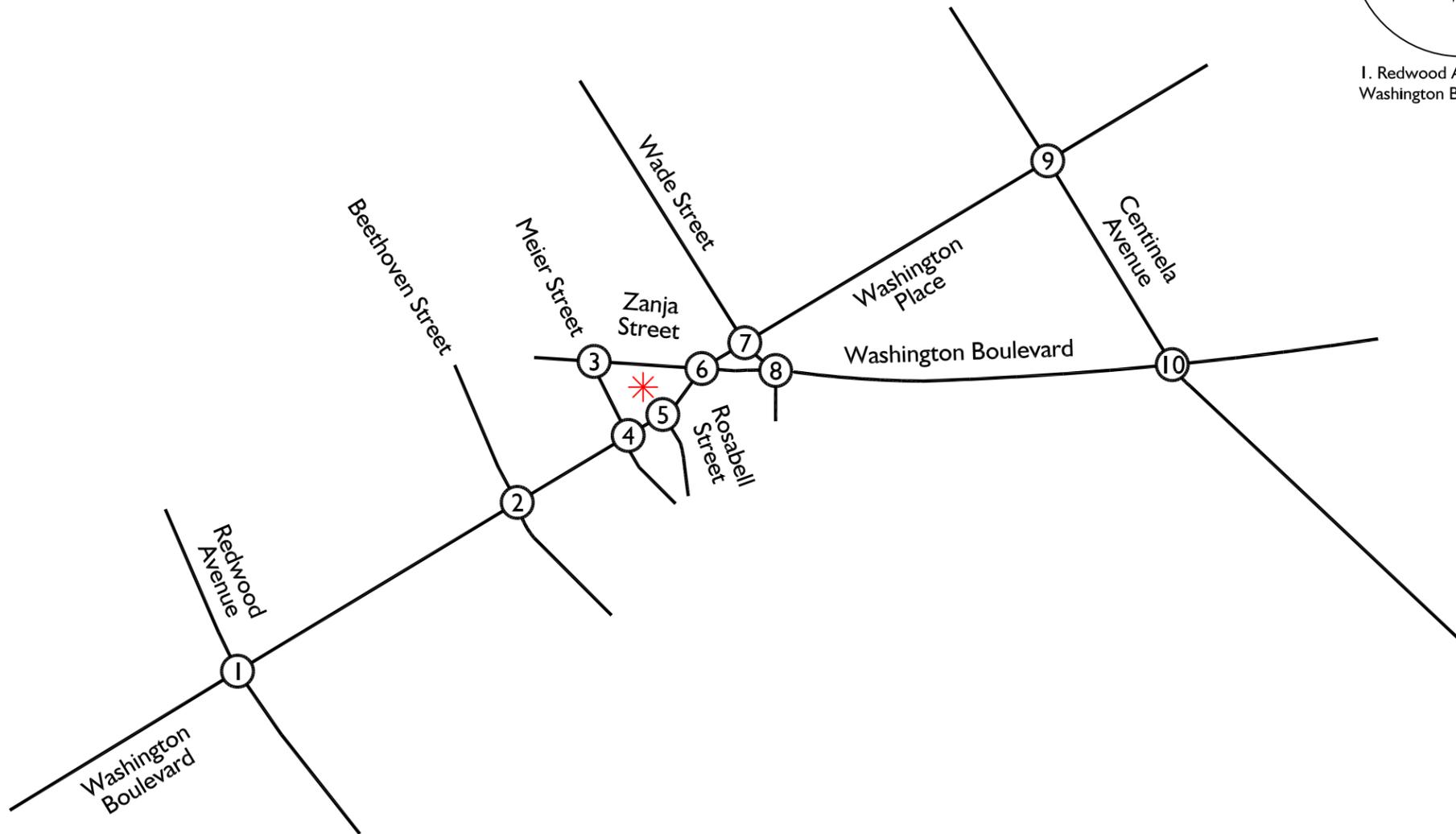


Legend:

- * = Project Site
- 10 = Percent to Project



Retail - Project Trip Assignment

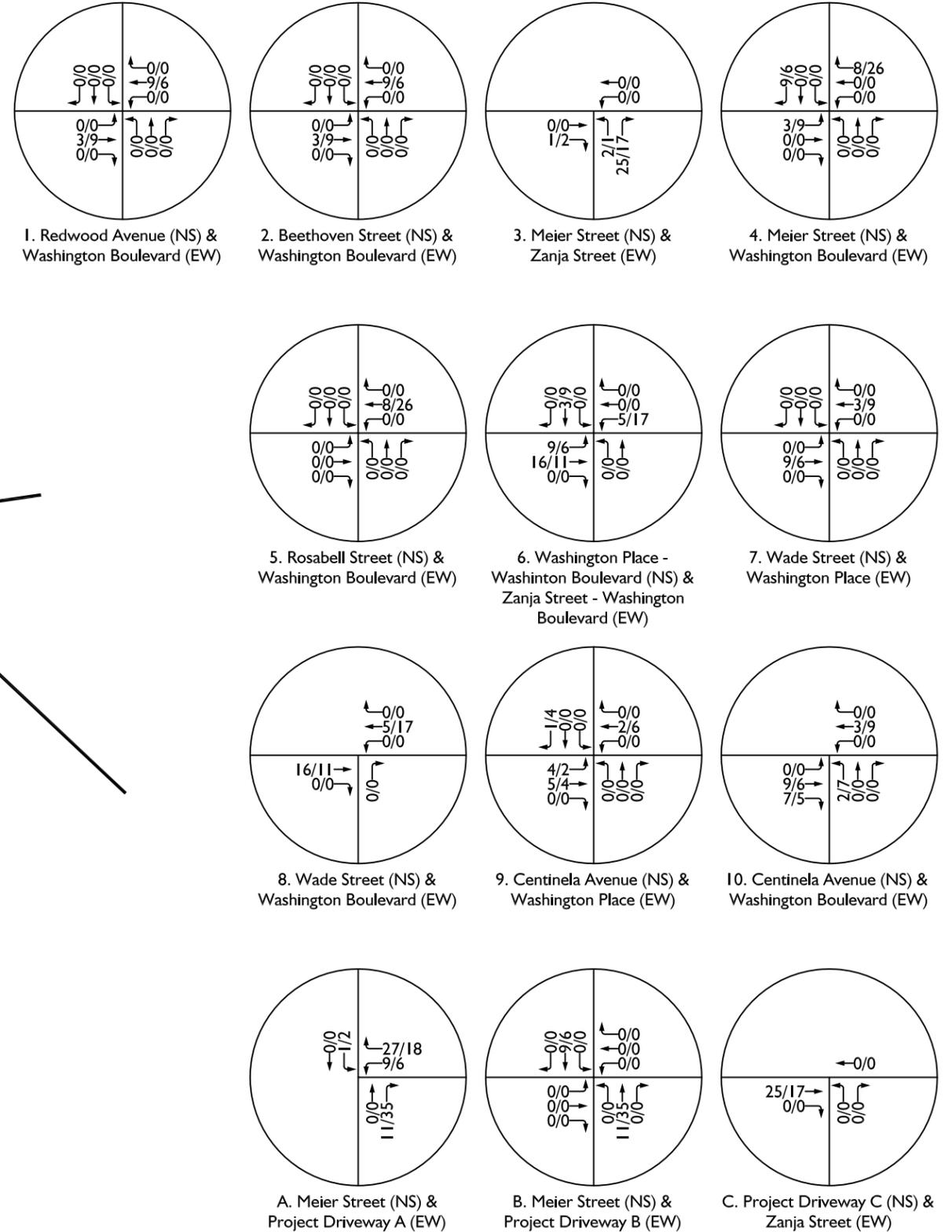
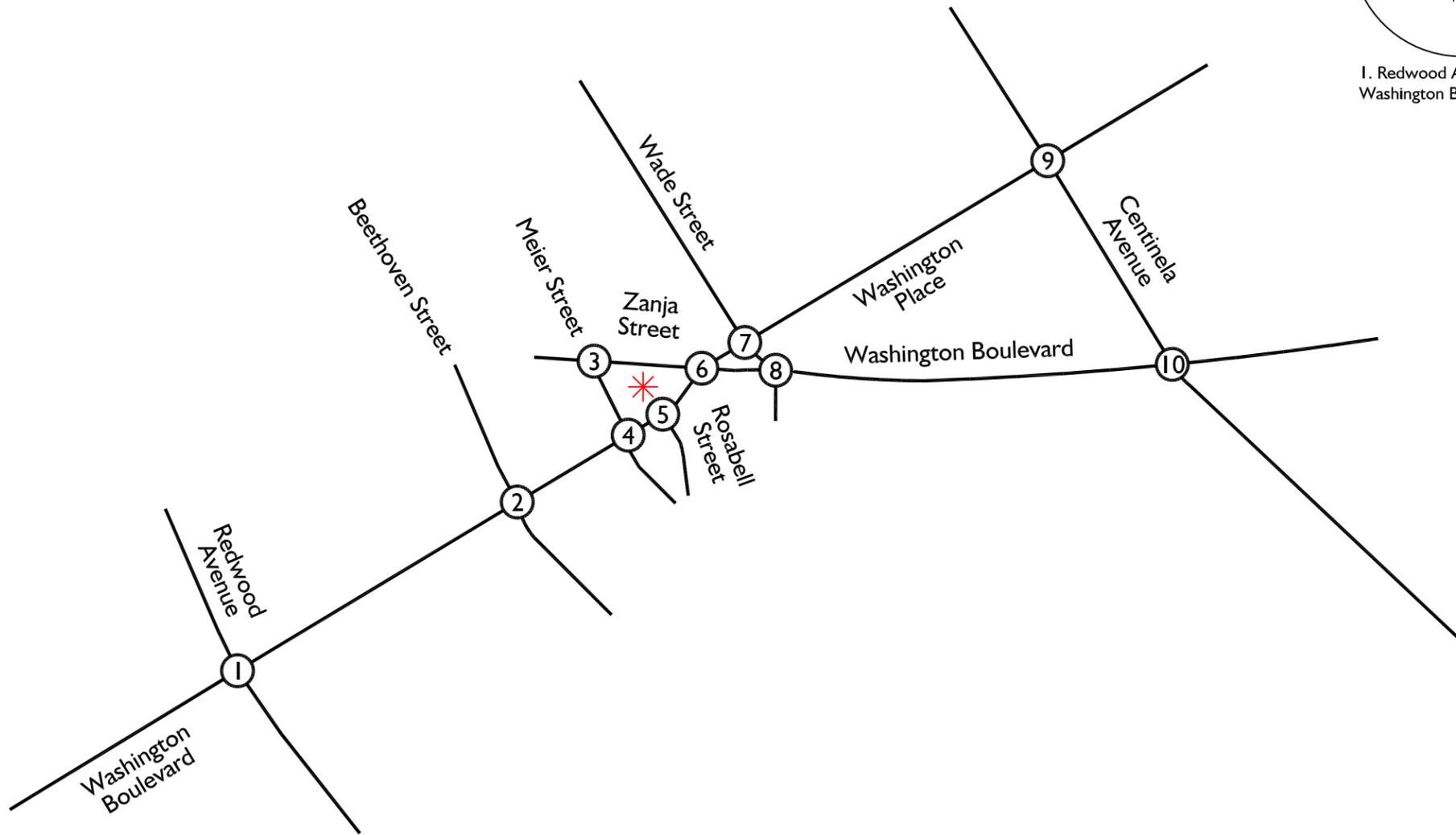


Legend:

10/20 = AM/PM Peak Hour Volumes



Residential - Project Trip Assignment

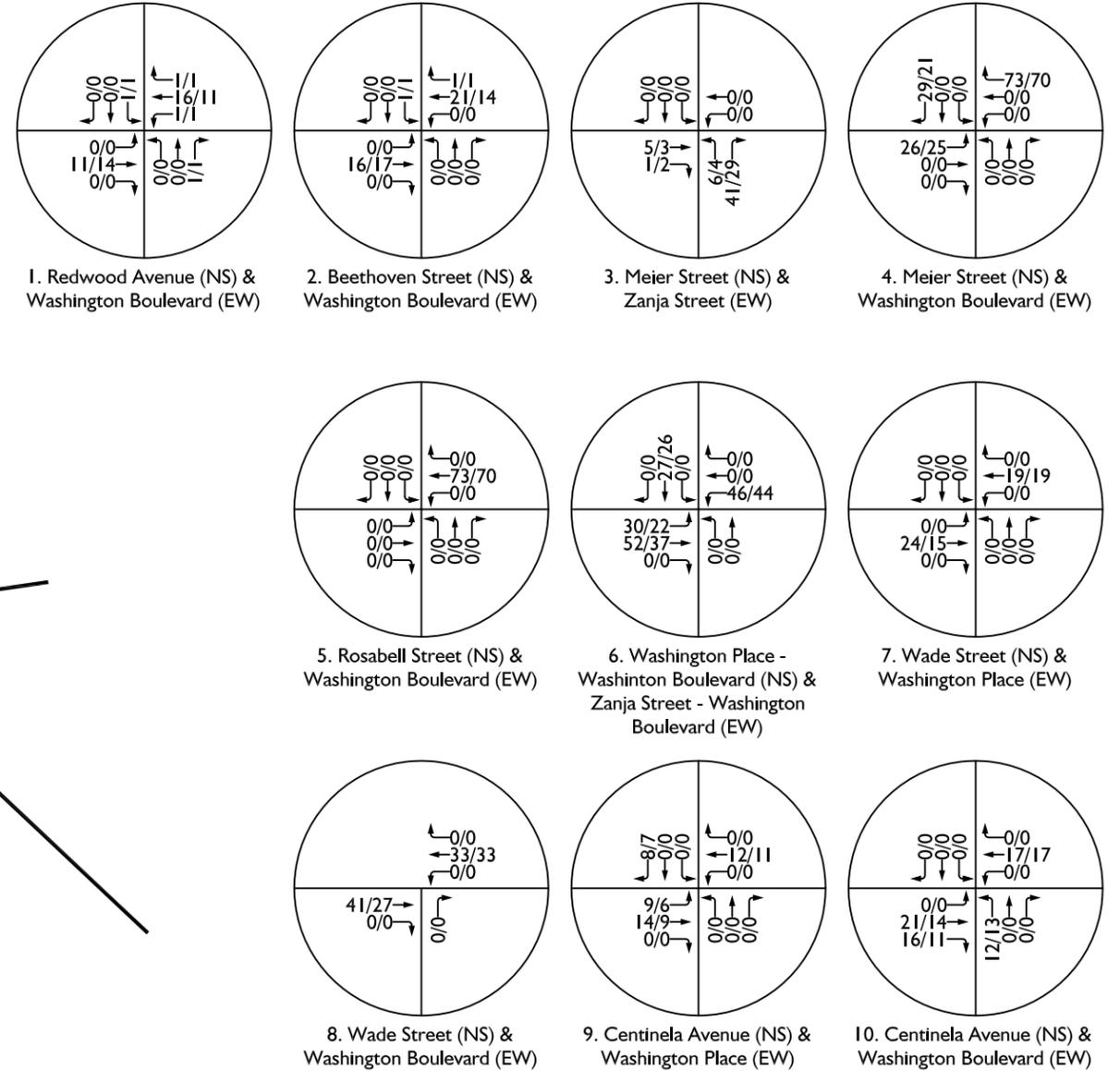
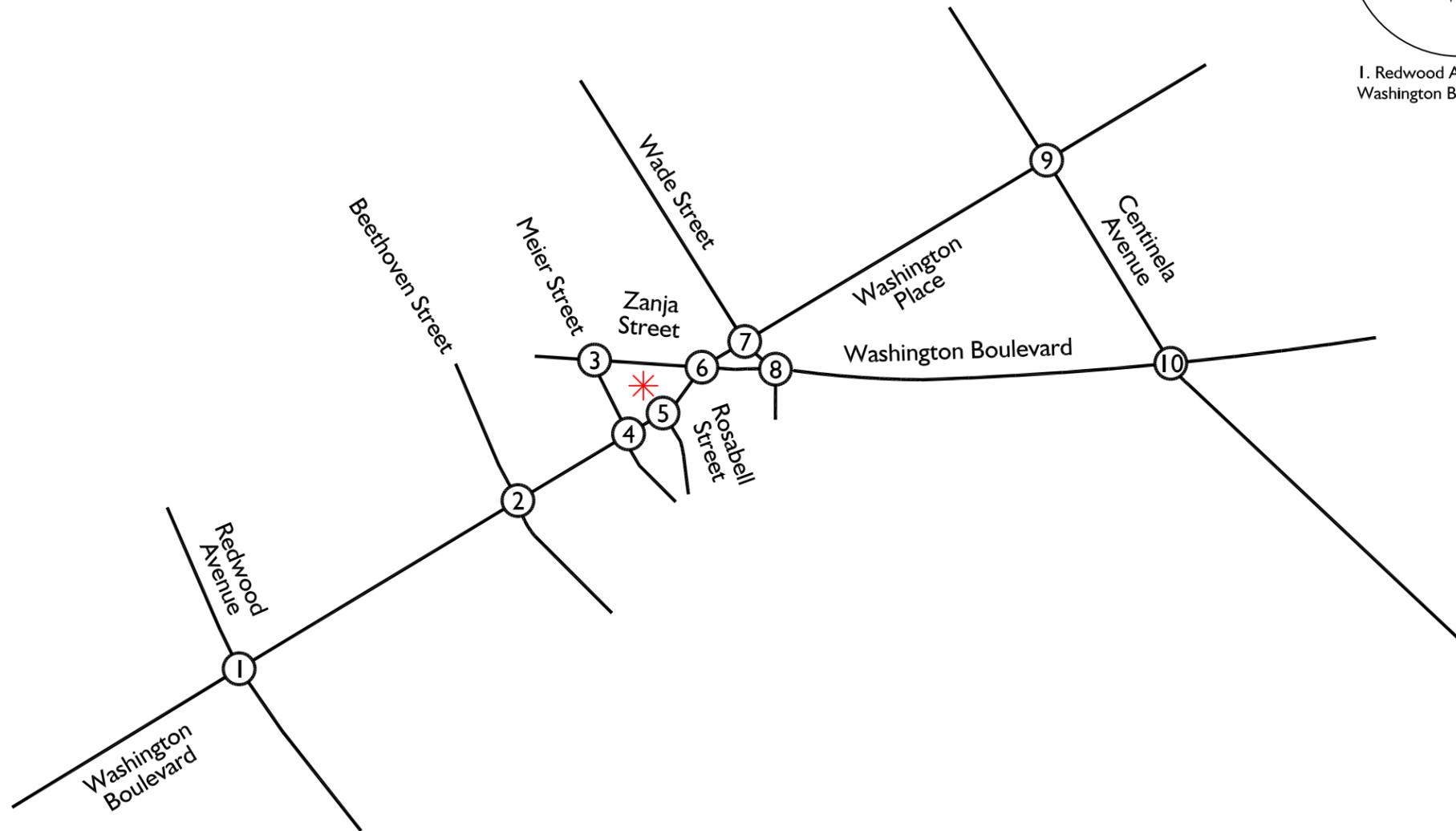


Legend:

10/20 = AM/PM Peak Hour Volumes



Retail Plus Residential - Project Trip Assignment

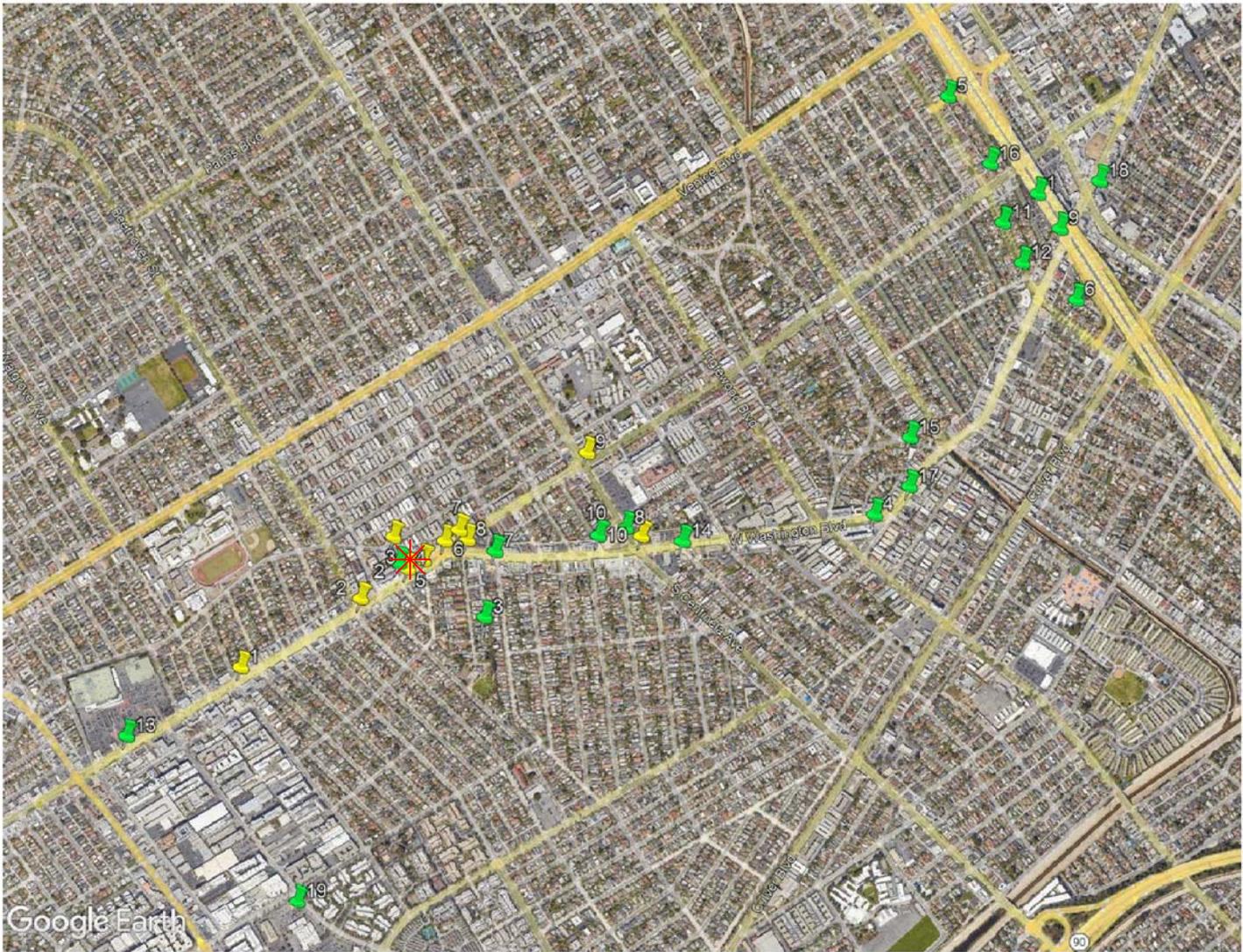


Legend:

10/20 = AM/PM Peak Hour Volumes



Exhibit 6-8
Related Projects Location Map

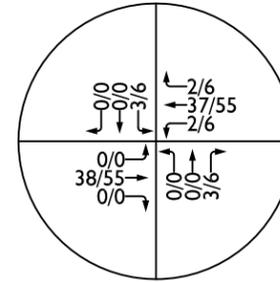
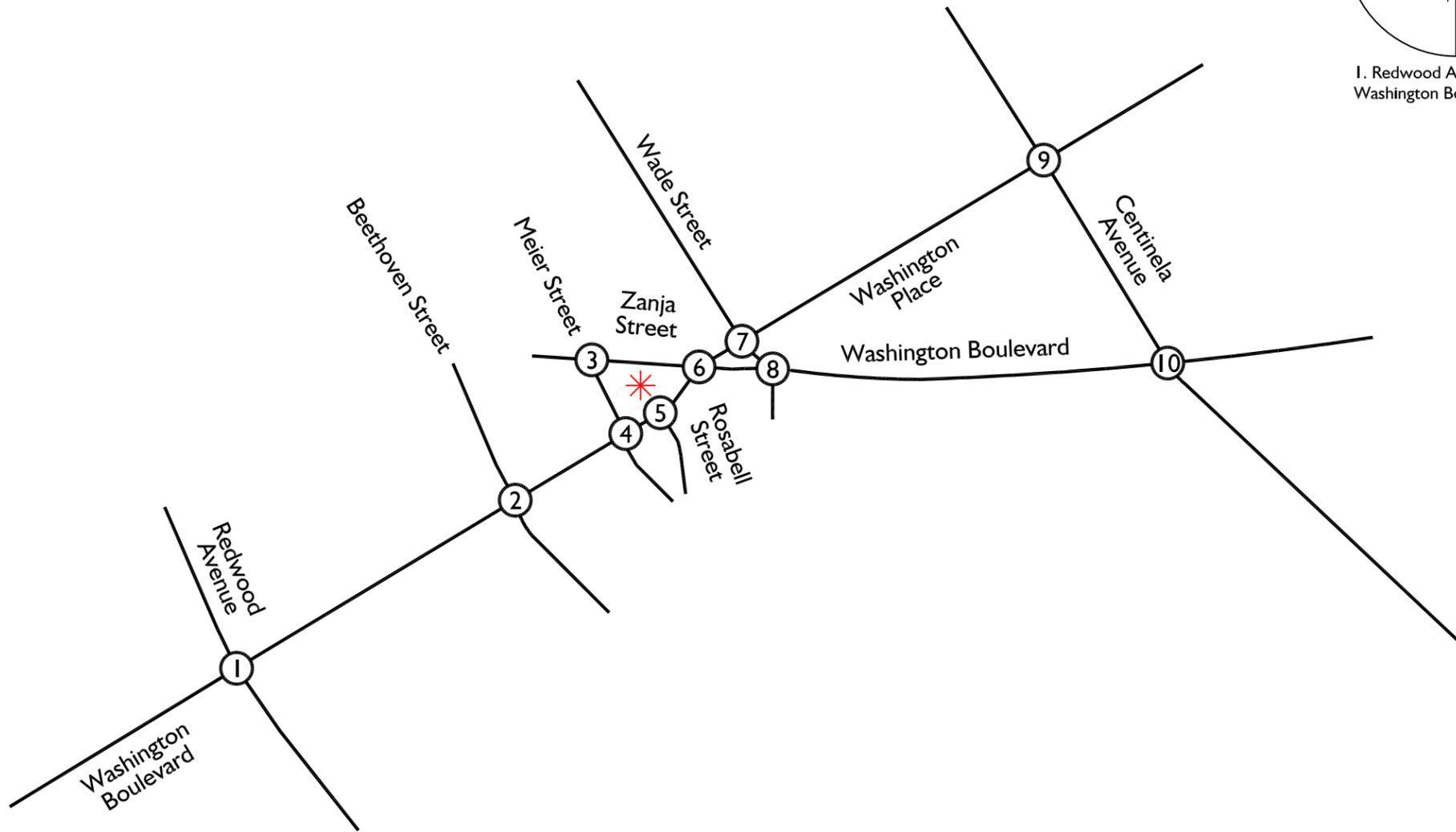


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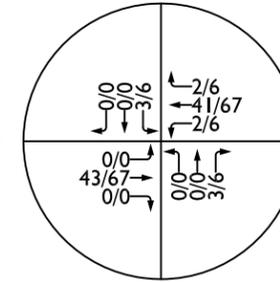
-  = Project Site
-  = Cumulative Projects
-  = Project Study Intersections



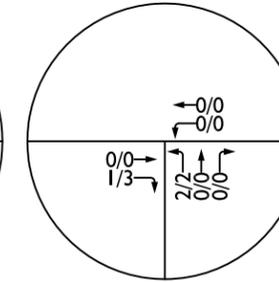
Related Projects Traffic Volumes



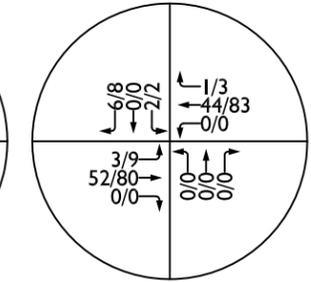
1. Redwood Avenue (NS) & Washington Boulevard (EW)



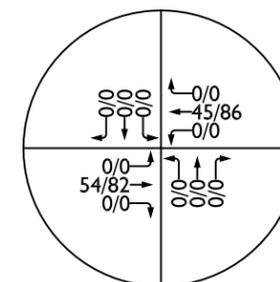
2. Beethoven Street (NS) & Washington Boulevard (EW)



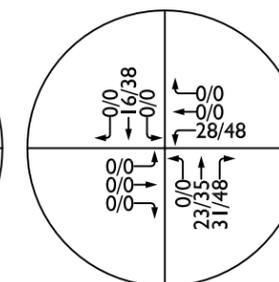
3. Meier Street (NS) & Zanja Street (EW)



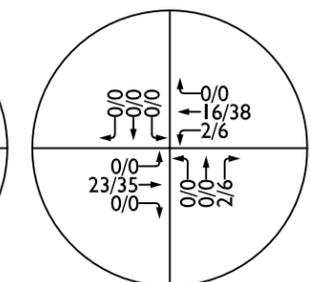
4. Meier Street (NS) & Washington Boulevard (EW)



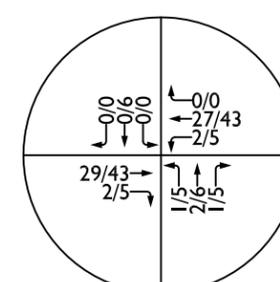
5. Rosabell Street (NS) & Washington Boulevard (EW)



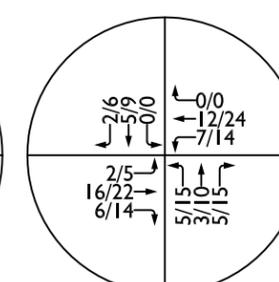
6. Washington Place - Washinton Boulevard (NS) & Zanja Street - Washington Boulevard (EW)



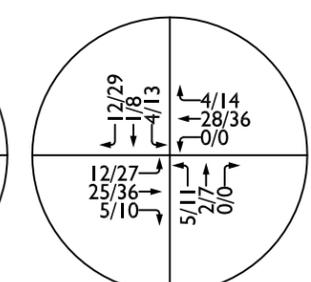
7. Wade Street (NS) & Washington Place (EW)



8. Wade Street (NS) & Washington Boulevard (EW)



9. Centinela Avenue (NS) & Washington Place (EW)



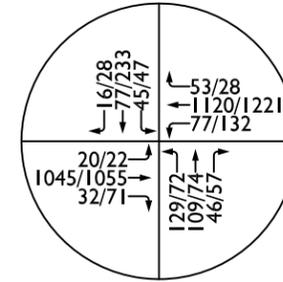
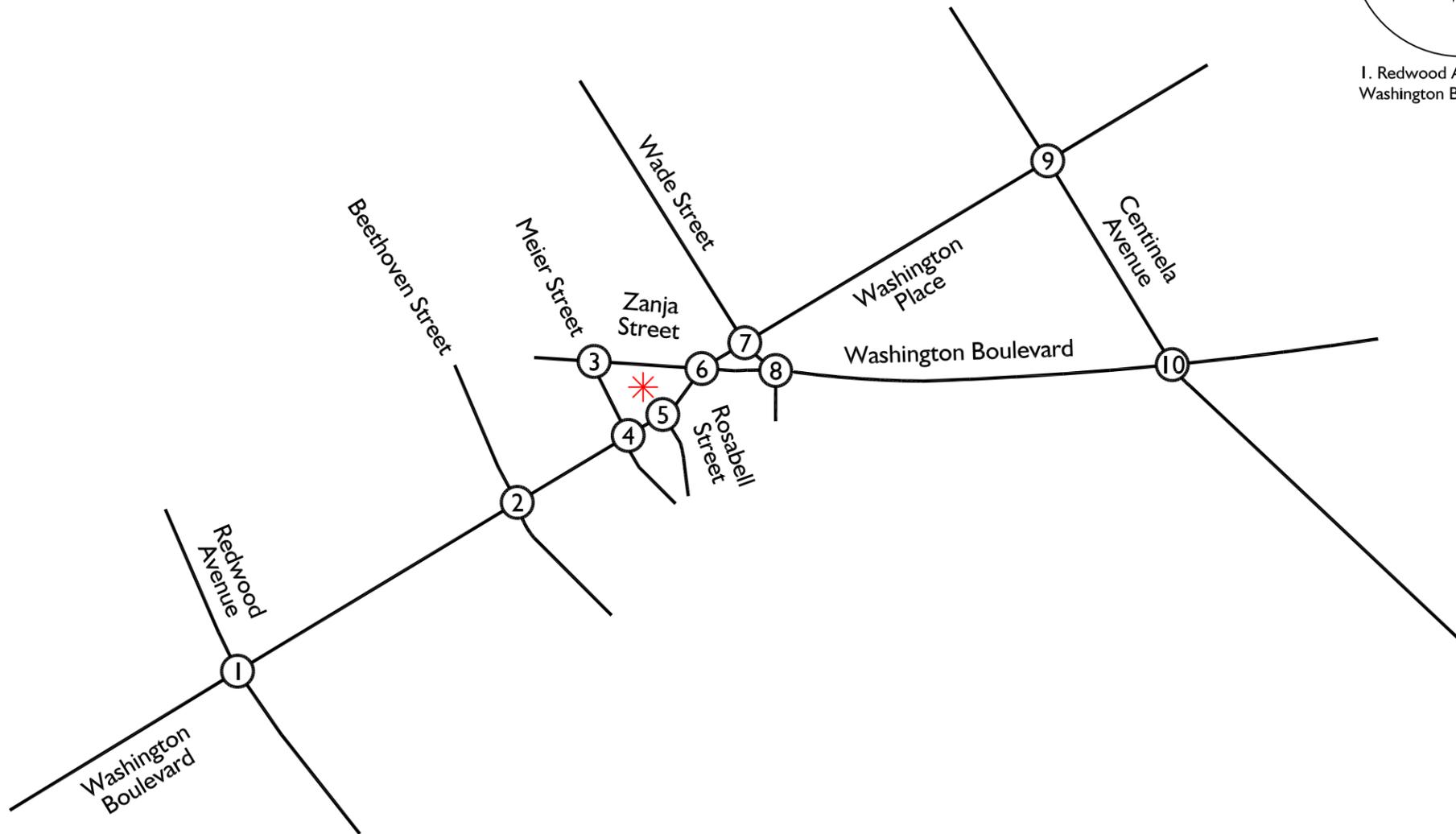
10. Centinela Avenue (NS) & Washington Boulevard (EW)

Legend:

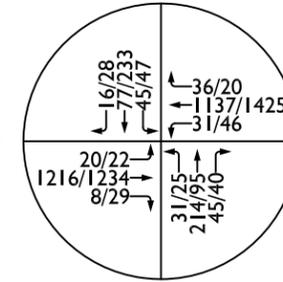
10/20 = AM/PM Peak Hour Volumes



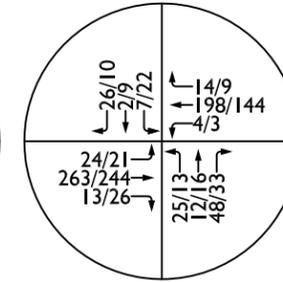
Existing Plus Project Conditions Traffic Volumes



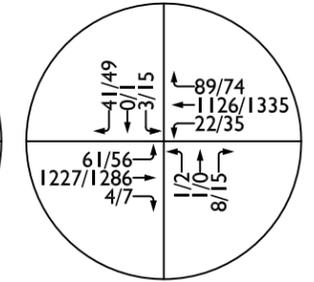
1. Redwood Avenue (NS) & Washington Boulevard (EW)



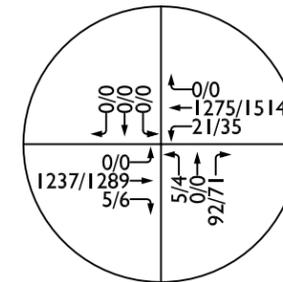
2. Beethoven Street (NS) & Washington Boulevard (EW)



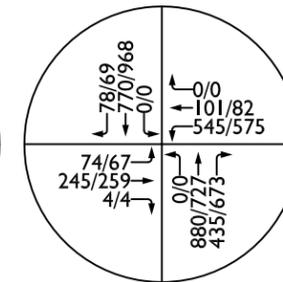
3. Meier Street (NS) & Zanja Street (EW)



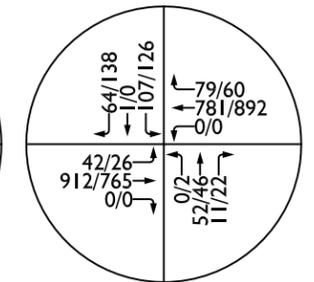
4. Meier Street (NS) & Washington Boulevard (EW)



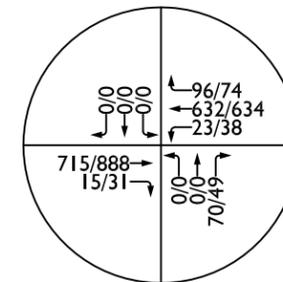
5. Rosabell Street (NS) & Washington Boulevard (EW)



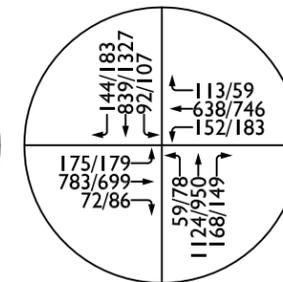
6. Washington Place - Washinton Boulevard (NS) & Zanja Street - Washington Boulevard (EW)



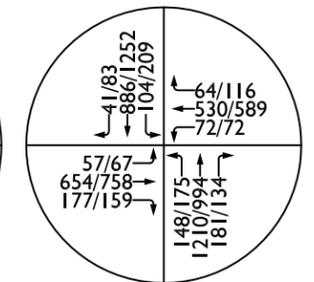
7. Wade Street (NS) & Washington Place (EW)



8. Wade Street (NS) & Washington Boulevard (EW)



9. Centinela Avenue (NS) & Washington Place (EW)



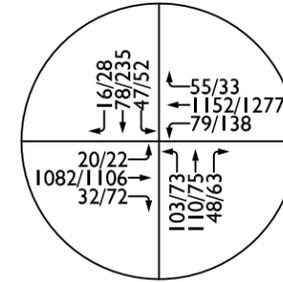
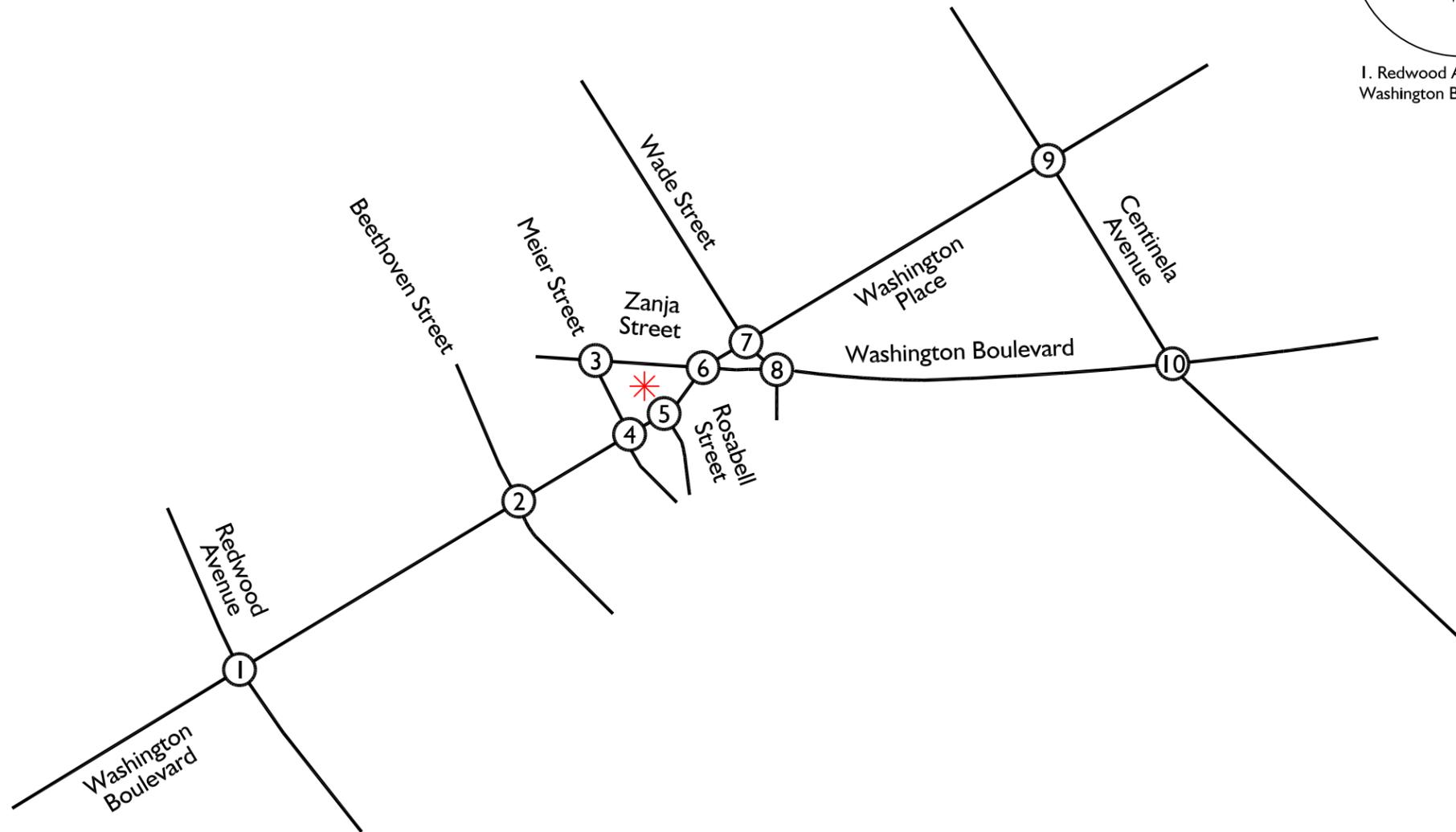
10. Centinela Avenue (NS) & Washington Boulevard (EW)

Legend:

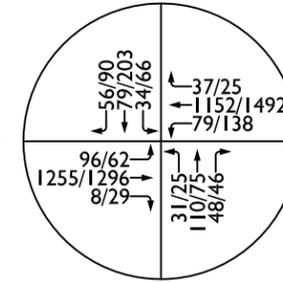
10/20 = AM/PM Peak Hour Volumes



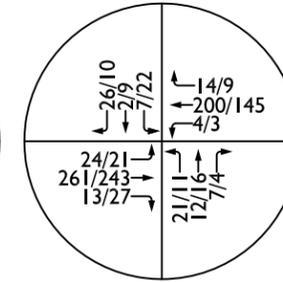
Opening Year Without Project Conditions Traffic Volumes



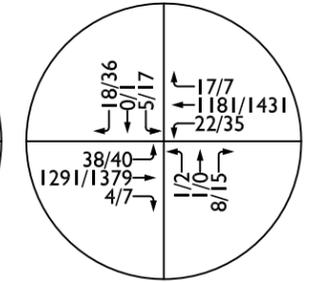
1. Redwood Avenue (NS) & Washington Boulevard (EW)



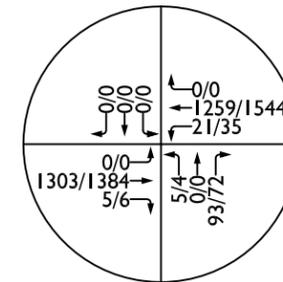
2. Beethoven Street (NS) & Washington Boulevard (EW)



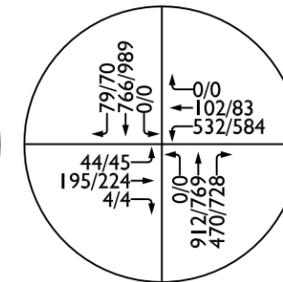
3. Meier Street (NS) & Zanja Street (EW)



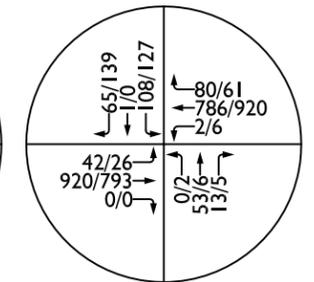
4. Meier Street (NS) & Washington Boulevard (EW)



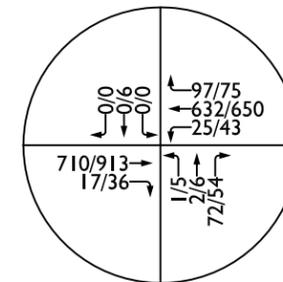
5. Rosabell Street (NS) & Washington Boulevard (EW)



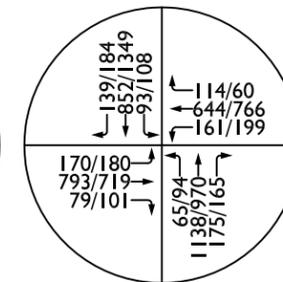
6. Washington Place - Washinton Boulevard (NS) & Zanja Street - Washington Boulevard (EW)



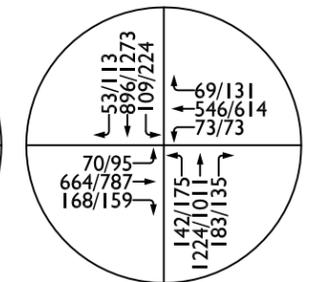
7. Wade Street (NS) & Washington Place (EW)



8. Wade Street (NS) & Washington Boulevard (EW)



9. Centinela Avenue (NS) & Washington Place (EW)



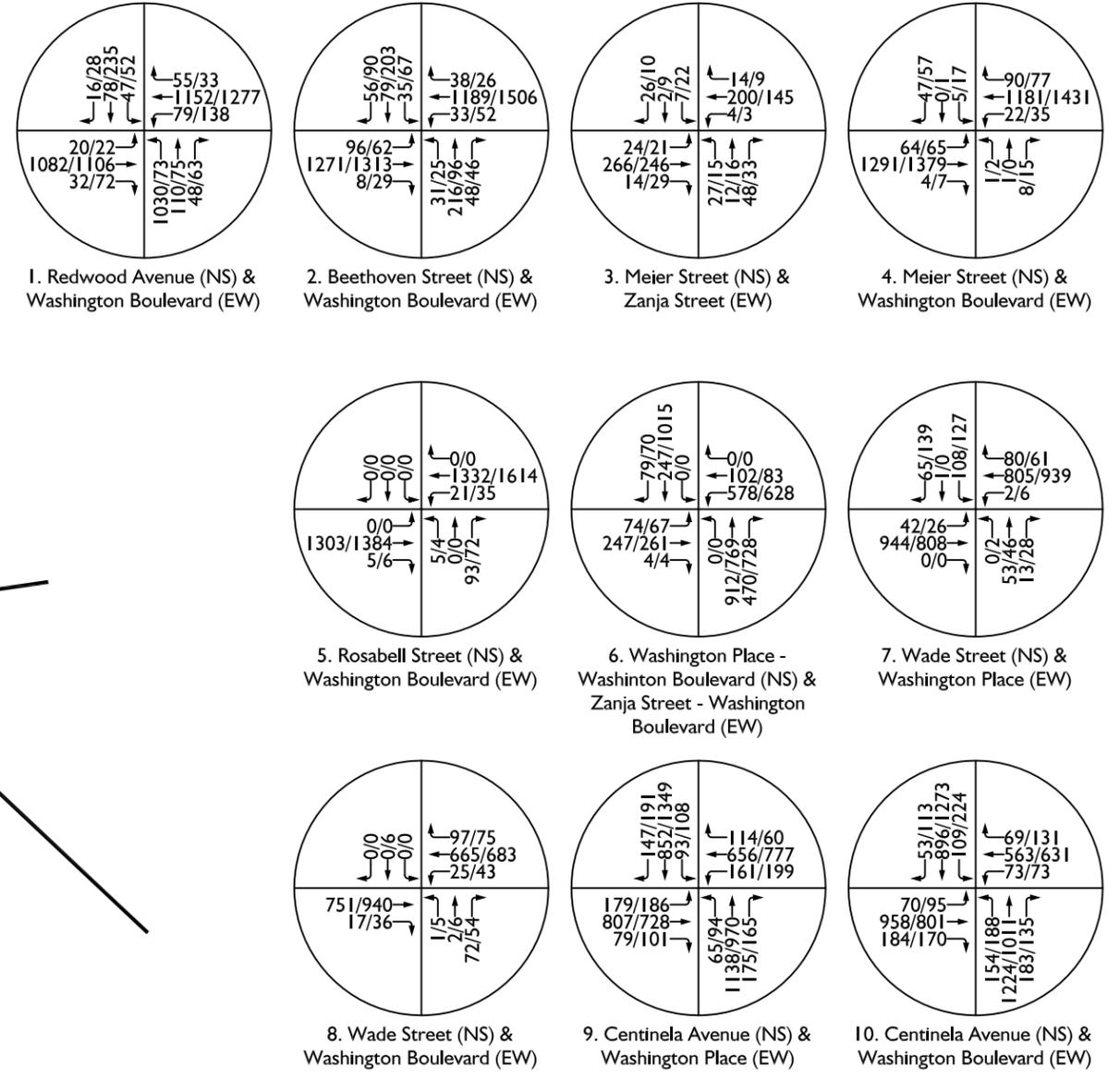
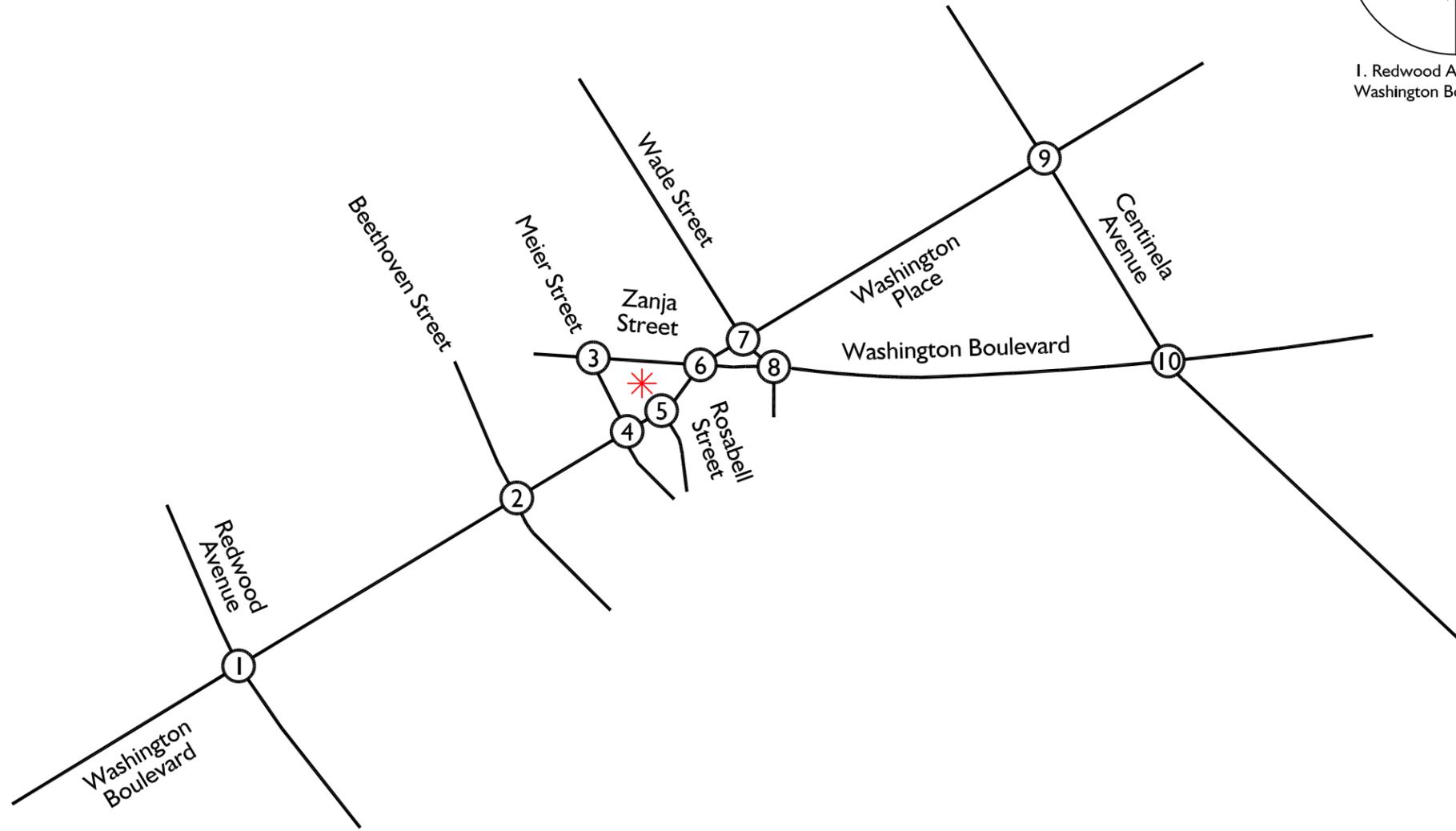
10. Centinela Avenue (NS) & Washington Boulevard (EW)

Legend:

10/20 = AM/PM Peak Hour Volumes



Opening Year With Project Conditions Traffic Volumes



Legend:

10/20 = AM/PM Peak Hour Volumes



7.0 Signalized Study Intersection Peak Hour LOS Analysis

This section of the report provides a discussion on the peak hour LOS analysis and findings for the signalized study intersections.

7.1 Existing Conditions Signalized Study Intersection LOS

Existing Conditions LOS calculations for the signalized study intersections are shown in Table 7-1 and are based upon the existing (2022) traffic volumes shown in Exhibit 5-2, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Existing Conditions are contained in Appendix D.

**Table 7-1
Existing Conditions Peak Hour LOS Summary of Signalized
Study Intersections**

#	Signalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Existing Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Redwood Ave / Washington Blvd	TS	HCM	12.6	B	12.0	B
2	Beethoven St / Washington Blvd	TS	HCM	12.3	B	14.3	B
5	Rosabell St / Washington Blvd	TS	HCM	12.2	B	13.3	B
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	36.1	D	39.2	D
7	Wade St / Washington Pl	TS	HCM	12.6	B	13.2	B
8	Wade St / Washington Blvd	TS	HCM	2.4	A	2.7	A
9	Centinela Ave / Washington Pl	TS	HCM	30.8	C	40.6	D
10	Centinela Ave / Washington Blvd	TS	HCM	28.6	C	34.1	C

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

TS = Traffic Signal

7.2 Existing Plus Project Conditions Signalized Study Intersection LOS

Existing Plus Project Conditions LOS calculations for the signalized study intersections are shown in Table 7-2 and are based upon the Existing Plus Project Conditions traffic volumes shown in Exhibit 6-10, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Existing Plus Project Conditions are contained in Appendix E.

**Table 7-2
Existing Plus Project Conditions Peak Hour LOS Summary of Signalized
Study Intersections**

#	Signalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Existing Plus Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Redwood Ave / Washington Blvd	TS	HCM	12.7	B	12.1	B
2	Beethoven St / Washington Blvd	TS	HCM	12.4	B	14.4	B
5	Rosabell St / Washington Blvd	TS	HCM	12.5	B	13.7	B
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	48.2	D	51.5	D
7	Wade St / Washington Pl	TS	HCM	12.6	B	13.2	B
8	Wade St / Washington Blvd	TS	HCM	2.4	A	2.7	A
9	Centinela Ave / Washington Pl	TS	HCM	31.3	C	41.7	D
10	Centinela Ave / Washington Blvd	TS	HCM	30.0	C	35.6	D

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

TS = Traffic Signal

7.3 Opening Year Without Project Conditions Signalized Study Intersection LOS

Opening Year Without Project Conditions LOS calculations for the signalized study intersections are shown in Table 7-3 and are based upon the Opening Year Without Project Conditions traffic volumes shown in Exhibit 6-11, and the existing geometry shown in

Exhibit 5-1. Detailed LOS analysis worksheets for Opening Year Without Project Conditions are contained in Appendix F.

**Table 7-3
Opening Year Without Project Conditions Peak Hour LOS Summary of Signalized Study Intersections**

#	Signalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Opening Year Without Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Redwood Ave / Washington Blvd	TS	HCM	12.9	B	12.5	B
2	Beethoven St / Washington Blvd	TS	HCM	12.7	B	15.4	B
5	Rosabell St / Washington Blvd	TS	HCM	12.7	B	14.5	B
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	39.3	D	46.4	D
7	Wade St / Washington Pl	TS	HCM	12.6	B	13.4	B
8	Wade St / Washington Blvd	TS	HCM	14.7	B	17.1	B
9	Centinela Ave / Washington Pl	TS	HCM	32.0	C	44.5	D
10	Centinela Ave / Washington Blvd	TS	HCM	30.5	C	39.2	D

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

TS = Traffic Signal

7.4 Opening Year With Project Conditions Signalized Study Intersection LOS

Opening Year With Project Conditions LOS calculations for the signalized study intersections are shown in Table 7-4 and are based upon the Opening Year With Project Conditions traffic volumes shown in Exhibit 6-12, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Opening Year With Project Conditions are contained in Appendix G.

**Table 7-4
Opening Year With Project Conditions Peak Hour LOS Summary of Signalized
Study Intersections**

#	Signalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Opening Year With Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Redwood Ave / Washington Blvd	TS	HCM	13.0	B	12.6	B
2	Beethoven St / Washington Blvd	TS	HCM	12.8	B	15.6	B
5	Rosabell St / Washington Blvd	TS	HCM	13.0	B	15.3	B
6	Zanja St – Washington Blvd / Washington Blvd – Washington Pl	TS	HCM	53.0	D	60.5	E
7	Wade St / Washington Pl	TS	HCM	12.7	B	13.5	B
8	Wade St / Washington Blvd	TS	HCM	15.0	B	17.5	B
9	Centinela Ave / Washington Pl	TS	HCM	32.5	C	45.8	D
10	Centinela Ave / Washington Blvd	TS	HCM	32.4	C	41.1	D

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

TS = Traffic Signal

8.0 Unsignalized Study Intersection Peak Hour LOS Analysis

This section of the report provides a discussion on the peak hour LOS analysis and findings for the unsignalized study intersections.

8.1 Existing Conditions Unsignalized Study Intersection Stop-Controlled Movement LOS

Existing Conditions LOS calculations for the stop-controlled movement of the unsignalized study intersections are shown in Table 8-1 and are based upon the existing (2022) traffic volumes shown in Exhibit 5-2, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Existing Conditions are contained in Appendix D.

**Table 8-1
Existing Conditions Peak Hour Stop-Controlled Movement LOS Summary of Unsignalized Study Intersections**

#	Stop-Controlled Movement at Unsignalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Existing Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
3	Meier St (stop) at Zanja St (free-flow)	CSS	HCM	14.7	B	12.6	B
4	Meier St (stop) at Washington Bl (free-flow)	CSS	HCM	41.8	E	198.4	F

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

CSS = Cross-Street Stop

It should be noted in accordance with the Highway Capacity Manual (HCM) methodology, for intersections with stop control on the minor street only, the calculation of LOS is for the stop-controlled movement only and is dependent on the occurrence of gaps in the free-flow traffic of the main street, and the LOS is determined based on the worst individual movement or movements sharing a single lane of the stop-controlled movement.

Hence, the level of service E and F shown for the stop-controlled Meier Street approach at the unsignalized Meier Street / Washington Boulevard study intersection is associated with the left-turn movement delay for vehicles making a left-turn maneuver to enter Washington Boulevard from Meier Street. The traffic on the major roadway (Washington

Boulevard) is free flow and experiences minimal to no delay and the intersection as a whole operates at LOS A during both peak hours for Existing Conditions.

Additionally, signalization of this intersection which would reduce the delay associated with the left-turn movements from Meier Street onto Washington Boulevard is considered infeasible due to the close proximity of this intersection with the existing signalized intersection of Rosabell Street / Washington Boulevard.

8.2 Existing Plus Project Conditions Unsignalized Study Intersection LOS

Existing Plus Project Conditions LOS calculations for the stop-controlled movement of the unsignalized study intersections are shown in Table 8-2 and are based upon the Existing Plus Project Conditions traffic volumes shown in Exhibit 6-10, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Existing Plus Project Conditions are contained in Appendix E.

**Table 8-2
Existing Plus Project Conditions Peak Hour Stop-Controlled Movement LOS Summary
of Unsignalized Study Intersections**

#	Stop-Controlled Movement at Unsignalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Existing Plus Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
3	Meier St (stop) at Zanja St (free-flow)	CSS	HCM	13.6	B	12.7	B
4	Meier St (stop) at Washington Bl (free-flow)	CSS	HCM	50.1	F	250.3	F

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

CSS = Cross-Street Stop

It should be noted in accordance with the Highway Capacity Manual (HCM) methodology, for intersections with stop control on the minor street only, the calculation of LOS is for the stop-controlled movement only and is dependent on the occurrence of gaps in the free-flow traffic of the main street, and the LOS is determined based on the worst individual movement or movements sharing a single lane of the stop-controlled movement.

Hence, the level of service F shown for the stop-controlled Meier Street approach at the unsignalized Meier Street / Washington Boulevard study intersection is associated with the left-turn movement delay for vehicles making a left-turn maneuver to enter Washington

Boulevard from Meier Street. The traffic on the major roadway (Washington Boulevard) is free flow and experiences minimal to no delay and the intersection as a whole operates at LOS A during both peak hours for Existing Plus Project Conditions.

Additionally, signalization of this intersection which would reduce the delay associated with the left-turn movements from Meier Street onto Washington Boulevard is considered infeasible due to the close proximity of this intersection with the existing signalized intersection of Rosabell Street / Washington Boulevard.

8.3 Opening Year Without Project Conditions Unsignalized Study Intersection LOS

Opening Year Without Project Conditions LOS calculations for the stop-controlled movement of the unsignalized study intersections are shown in Table 8-3 and are based upon the Opening Year Without Project Conditions traffic volumes shown in Exhibit 6-11, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Opening Year Without Project Conditions are contained in Appendix F.

**Table 8-3
Opening Year Without Project Conditions Peak Hour Stop-Controlled Movement LOS
Summary of Unsignalized Study Intersections**

#	Stop-Controlled Movement at Unsignalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Opening Year Without Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
3	Meier St (stop) at Zanja St (free-flow)	CSS	HCM	14.9	B	12.7	B
4	Meier St (stop) at Washington Bl (free-flow)	CSS	HCM	49.6	E	385.6	F

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

CSS = Cross-Street Stop

It should be noted in accordance with the Highway Capacity Manual (HCM) methodology, for intersections with stop control on the minor street only, the calculation of LOS is for the stop-controlled movement only and is dependent on the occurrence of gaps in the free-flow traffic of the main street, and the LOS is determined based on the worst individual movement or movements sharing a single lane of the stop-controlled movement.

Hence, the level of service E and F shown for the stop-controlled Meier Street approach at the unsignalized Meier Street / Washington Boulevard study intersection is associated with the left-turn movement delay for vehicles making a left-turn maneuver to enter Washington Boulevard from Meier Street. The traffic on the major roadway (Washington Boulevard) is free flow and experiences minimal to no delay and the intersection as a whole operates at LOS A during both peak hours for Opening Year With Project Conditions.

Additionally, signalization of this intersection which would reduce the delay associated with the left-turn movements from Meier Street onto Washington Boulevard is considered infeasible due to the close proximity of this intersection with the existing signalized intersection of Rosabell Street / Washington Boulevard.

8.4 Opening Year With Project Conditions Unsignalized Study Intersection LOS

Opening Year With Project Conditions LOS calculations for the stop-controlled movement of the unsignalized study intersections are shown in Table 8-4 and are based upon the Opening Year With Project Conditions traffic volumes shown in Exhibit 6-12, and the existing geometry shown in Exhibit 5-1. Detailed LOS analysis worksheets for Opening Year With Project Conditions are contained in Appendix G.

**Table 8-4
Opening Year With Project Conditions Peak Hour Stop-Controlled Movement LOS
Summary of Unsignalized Study Intersections**

#	Stop-Controlled Movement at Unsignalized Study Intersection (North-South / East-West Roadway)	Traffic Control Type	Analysis Methodology	Opening Year With Project Conditions			
				AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
3	Meier St (stop) at Zanja St (free-flow)	CSS	HCM	13.9	B	12.7	B
4	Meier St (stop) at Washington Bl (free-flow)	CSS	HCM	59.7	F	505.6	F

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology based on delay (shown and reported in seconds) utilizing Synchro Version 11 analysis software.

CSS = Cross-Street Stop

It should be noted in accordance with the Highway Capacity Manual (HCM) methodology, for intersections with stop control on the minor street only, the calculation of LOS is for the stop-controlled movement only and is dependent on the occurrence of gaps in the free-

flow traffic of the main street, and the LOS is determined based on the worst individual movement or movements sharing a single lane of the stop-controlled movement.

Hence, the level of service F shown for the stop-controlled Meier Street approach at the unsignalized Meier Street / Washington Boulevard study intersection is associated with the left-turn movement delay for vehicles making a left-turn maneuver to enter Washington Boulevard from Meier Street. The traffic on the major roadway (Washington Boulevard) is free flow and experiences minimal to no delay and the intersection as a whole operates at LOS A during both peak hours for Opening Year With Project Conditions.

Additionally, signalization of this intersection which would reduce the delay associated with the left-turn movements from Meier Street onto Washington Boulevard is considered infeasible due to the close proximity of this intersection with the existing signalized intersection of Rosabell Street / Washington Boulevard.

9.0 Project Access Inbound Left-Turn Queue Analysis

For Opening Year With Project Conditions, an analysis of the left-turn vehicular queues for inbound vehicles turning left into the project site has been performed utilizing the HCM 95th percentile queue methodology.

Access for the proposed project site is planned to be provided as follows:

- Project Access 1: One full access unsignalized driveway on the north end of Meier Street providing access for a subterranean structure facilitating parking for both the residential and retail use;
- Project Access 2: One full access unsignalized driveway on the south end of Meier Street providing access/parking for the retail uses; and
- Project Access 3: One right-in/right-out/left-out (no left-in) access unsignalized driveway on Zanja Street providing access/parking for the retail uses.

Exhibit 9-1 shows the forecast traffic volumes at the project site access driveways for Opening Year With Project Conditions. It should be noted the traffic volumes shown in Exhibit 9-1 consist of the project full trip generation including pass-by trips.

Table 9-1 shows the results of the left-turn queue analysis. Detailed queue analysis sheets are contained in Appendix H.

**Table 9-1
Opening Year With Project Conditions Project Access Inbound Left-Turn
HCM 95th Percentile Vehicular Queue Analysis Summary**

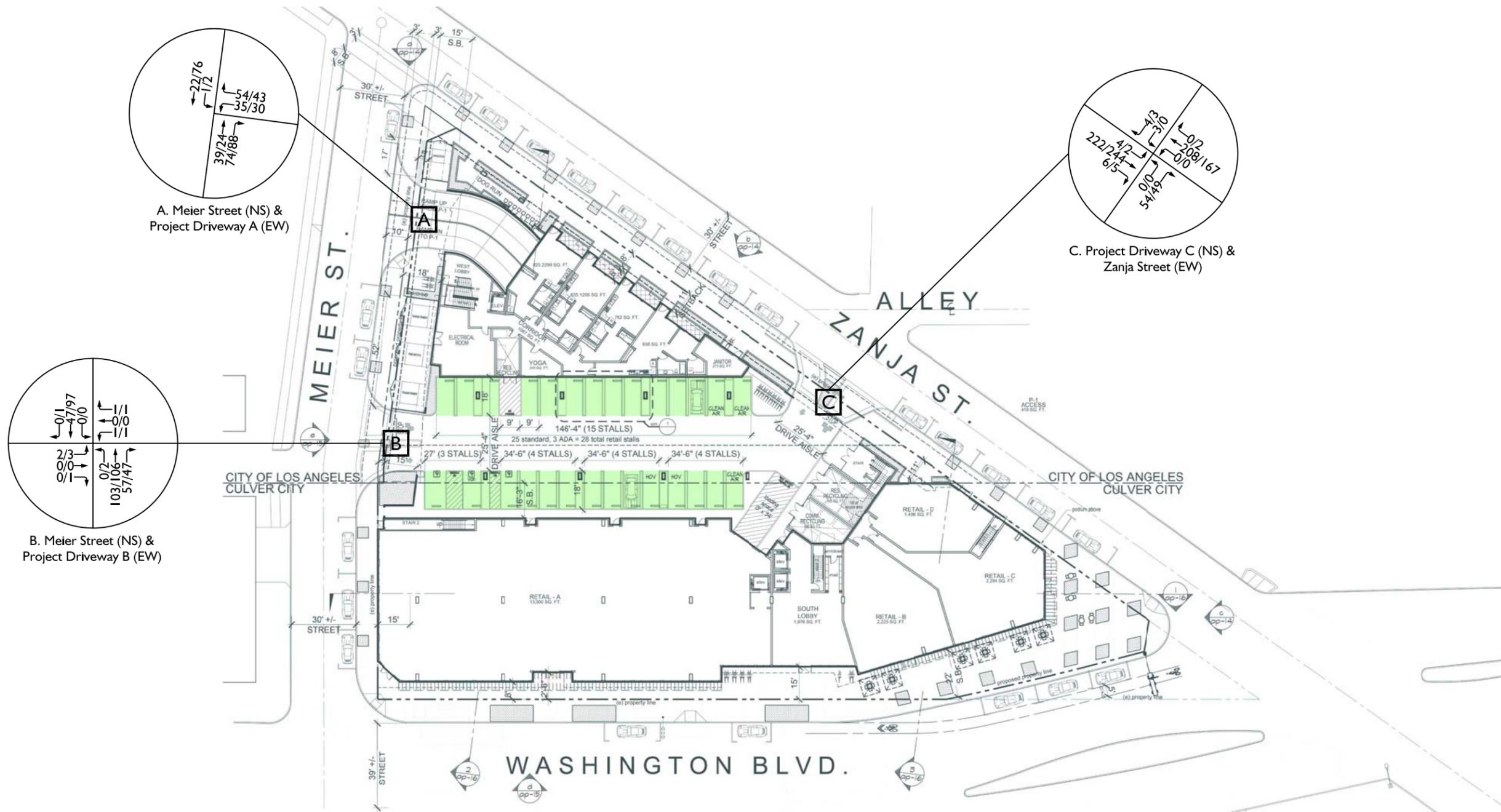
Project Access Driveway (North-South / East-West Roadway) & Movement	Opening Year With Project Conditions			
	AM Peak Hour		PM Peak Hour	
	Traffic Volume	Queue (feet)	Traffic Volume	Queue (feet)
<i>Project Access 1 (North Access) / Meier St</i>				
Southbound Meier Street Left-Turn Movement	1	Nominal	2	Nominal
<i>Project Access 2 (South Access) / Meier St</i>				
Southbound Meier Street Left-Turn Movement	0	Nominal	0	Nominal
<i>Project Access 3 / Zanja St</i>				
Westbound Zanja Street Left-Turn Movement	Not Applicable - Movement Restricted			

Notes:

Methodology: HCM (Highway Capacity Manual) 6th Edition methodology utilizing Synchro Version 11 analysis software.

As shown in Table 9-1, nominal queues are expected for inbound vehicles turning left into the project access driveways for Opening Year With Project Conditions.

Project Driveway Access Traffic Volumes for Opening Year With Project Conditions



10.0 Site Access & Circulation Evaluation

This section provides an evaluation of the project site access.

Access for the project site is currently provided as follows:

- One full access unsignalized driveway on Meier Street;
- Two full access unsignalized driveways on Zanja Street; and
- Two right-in/right-out unsignalized driveways on Washington Boulevard.

Access for the proposed project site is planned to be provided as follows:

- Project Access 1: One full access unsignalized driveway on the north end of Meier Street providing access for a subterranean structure facilitating parking for both the residential and retail uses;
- Project Access 2: One full access unsignalized driveway on the south end of Meier Street providing access/parking for the retail uses; and
- Project Access 3: One right-in/right-out/left-out (no left-in) access unsignalized driveway on Zanja Street providing access/parking for the retail uses..

Hence, the proposed project eliminates the existing second access on Zanja Street as well as the two existing access locations on Washington Boulevard which improves walkability and bicycle movement at the project site along Washington Boulevard by eliminating conflicting vehicular movement with pedestrians and bicyclists.

Exhibits 10-1 shows the site access and circulation elements for the project ground level.

Exhibits 10-2 shows the site access and circulation elements for the project subterranean parking level 1 (P1).

Exhibits 10-3 shows the site access and circulation elements for the project subterranean parking level 2 (P2).

As shown in Exhibit 10-1, Exhibit 10-2 and Exhibit 10-3:

Ground Level Vehicular Access: Access for the proposed project site is planned to be provided as follows:

- Project Access 1: One full access unsignalized driveway on the north end of Meier Street providing access for a subterranean structure facilitating parking for both the residential and retail uses;
- Project Access 2: One full access unsignalized driveway on the south end of Meier Street providing access/parking for the retail uses; and
- Project Access 3: One right-in/right-out/left-out (no left-in) access unsignalized driveway on Zanja Street providing access/parking for the retail uses.

Ground Level Bicycle Parking: The proposed project is planned to provide bicycle parking in three locations on the ground level including one location on Meier Street; one location on Washington Boulevard; and one location on Zanja Street to encourage and accommodate bicycle users.

The bike racks/parking spaces are provided near various entryways of the retail buildings and within the property line so as to not obstruct the sidewalk and impede pedestrian traffic. With the proposed design, bicyclists would not have to go through the surface parking lot and risk potential collision with vehicles backing out of a parking space.

Subterranean Parking Level Bicycle Parking: The proposed project is planned to provide bicycle parking in two locations in each of the two subterranean parking levels.

A number of the resident bicycle parking storage/spaces are directly connected to the elevator by a small corridor, separating bicyclists from moving vehicles.

Elevators and Stairs: The proposed project is planned to provide stairs and elevators at three locations through the site to accommodate resident as well as retail patrons parking in the subterranean parking structure.

Ground Level On-Street Parking: The proposed project is planned to maintain a number of on-street parking on all three project frontages along Meier Street, Washington Boulevard and Zanja Street increasing the number of existing on-street spaces parking surrounding the project site by one parking space on Zanja Street as a result of the elimination of existing project site driveway on Zanja Street southerly of Meier Street. The on-street parking surrounding the project site is not counted towards satisfying the required parking for the project and is provided in addition to the project's required off-street parking spaces.

Ground Level Vehicular Access & Pedestrian Flow: As previously noted, the access to the project site is planned via driveways on Zanja Street and Meier Street. Since the proposed project eliminates the existing second access on Zanja Street as well as the two existing access locations on Washington Boulevard, the proposed project both improves walkability and bicycle movement at the project site along Washington Boulevard by eliminating conflicting vehicular movement with pedestrians and bicyclists.

Sidewalks surrounding the project site facilitate pedestrian circulation around the project site. A signalized crosswalk across Washington Boulevard is provided directly at the project site on the south leg of the intersection of Rosabell Street.

Ground Level Bicycle Lane on Washington Boulevard: The project is planned to provide a Class 2 (on-street designated) bike lane on the Washington Boulevard project frontage from Zanja Street, transitioning to a Class 3 bike lane (shared with vehicular traffic) where Washington Boulevard narrows along the project frontage approaching the Rosabell Street intersection.

Ground Level Bus Stop on Washington Boulevard: The project is planned to relocate the existing bus stop on Washington Boulevard to a new location on Washington Boulevard along the project frontage near Meier Street.

On-Site Vehicular Parking: Parking for the proposed project is planned via surface and subterranean parking spaces as follows:

- 28 parking spaces to serve the retail uses on a surface parking lot;
- 38 parking spaces to serve the retail uses in the first level of the subterranean parking structure;

- 61 single and tandem parking spaces located behind an access gate to serve the residential uses in the first level of the subterranean parking structure; and
- 107 single and tandem parking spaces to serve the residential uses in the second level of the subterranean parking structure.

Hence, the proposed project is planned to provide a total of 234 parking spaces (66 spaces for the retail uses and 168 parking spaces for the residential use).

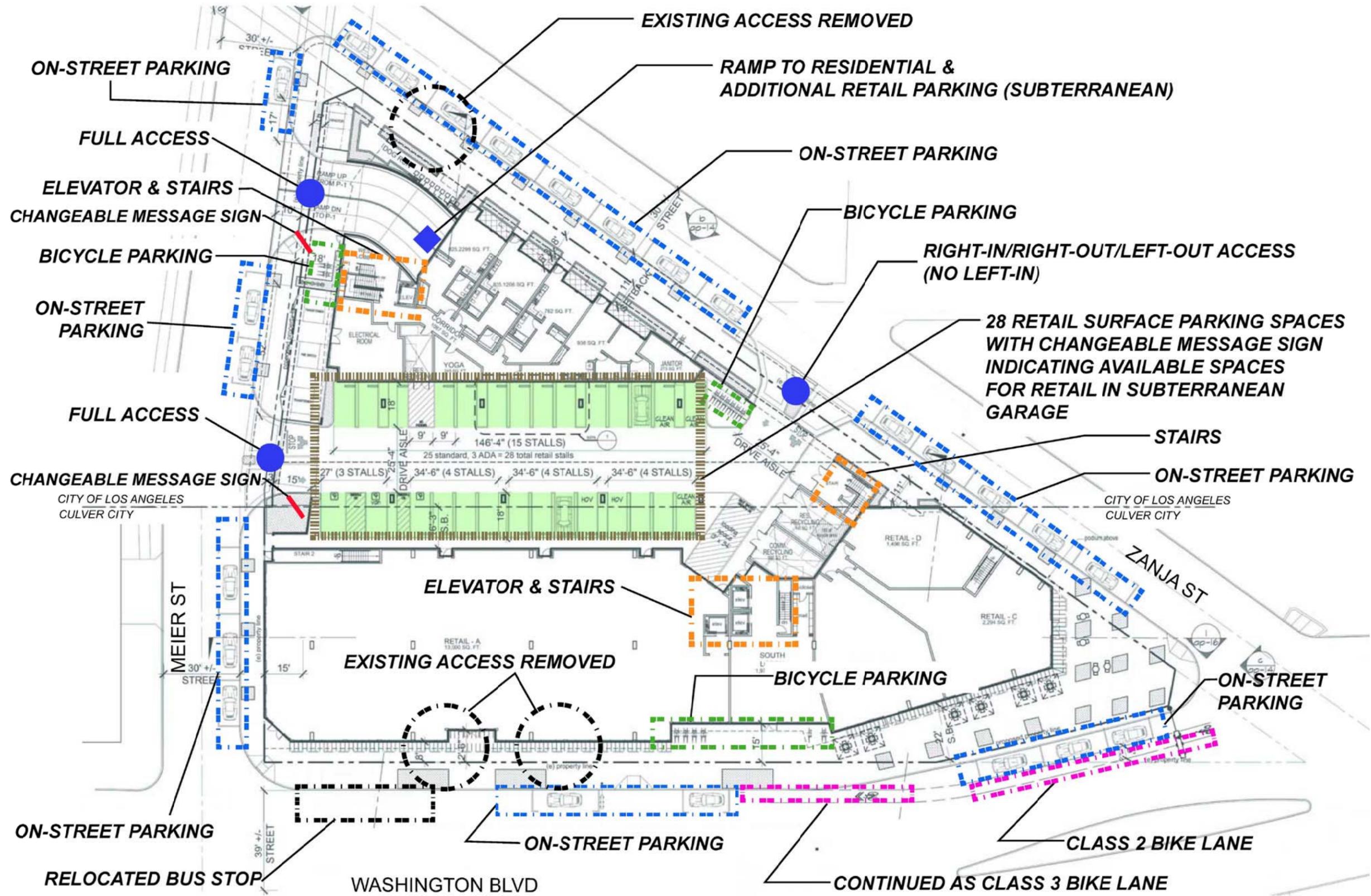
The retail parking spaces are planned to be provided via a mix of surface parking lot spaces as well as the first level of the subterranean parking structure. The residential parking spaces are planned to be provided via the subterranean parking structure. These spaces will be located behind an access gate via a mix of single and tandem parking spaces.

The project is also planned to install changeable message signs (CMS) to inform retail patrons of available parking.

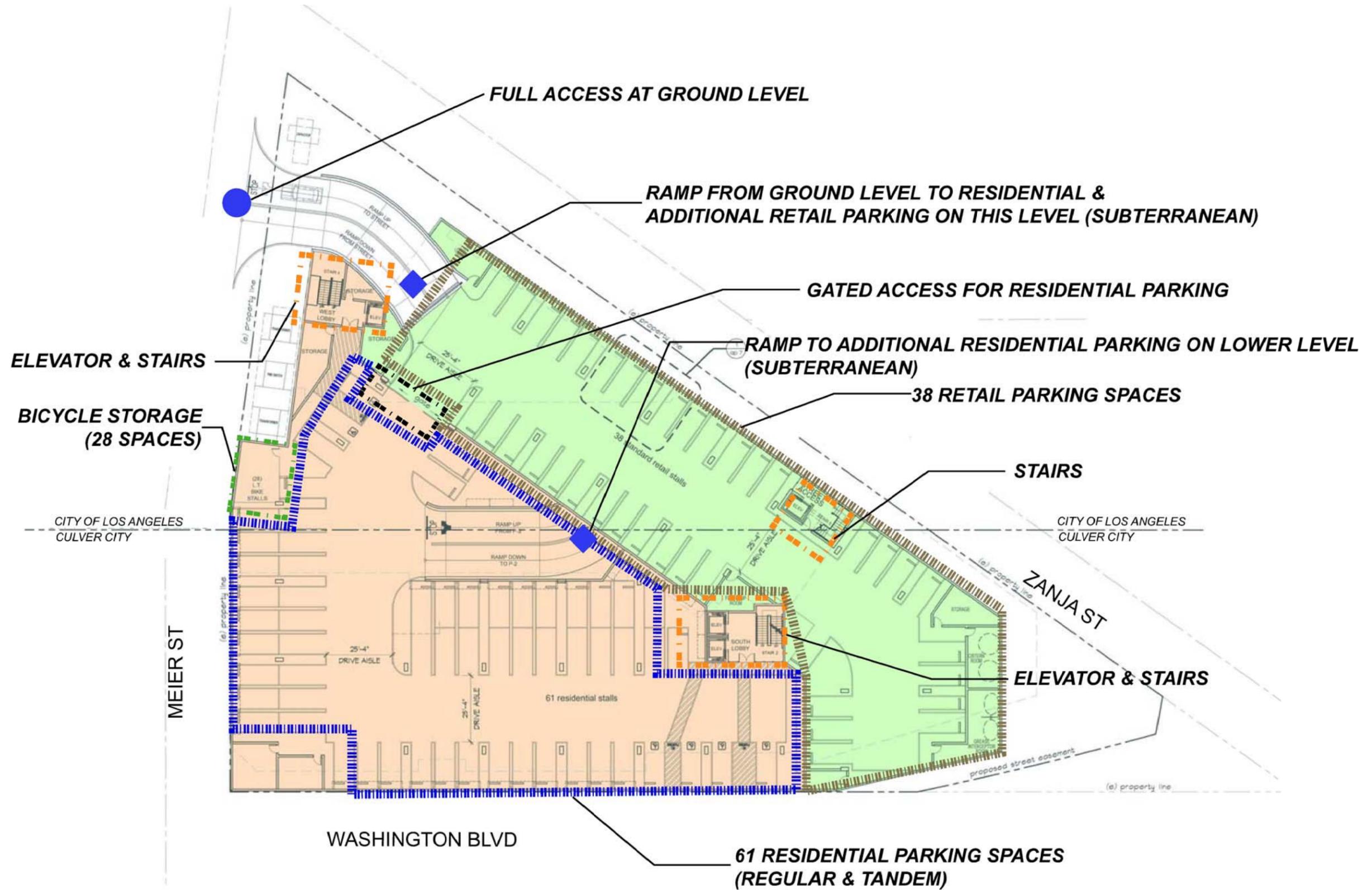
A changeable message sign will be located at Project Access 2 to inform retail patrons of available parking at this location as well as additional retail parking available at Project Access 1.

A changeable message sign will be located at Project Access 1 to inform retail patrons of available parking at this location.

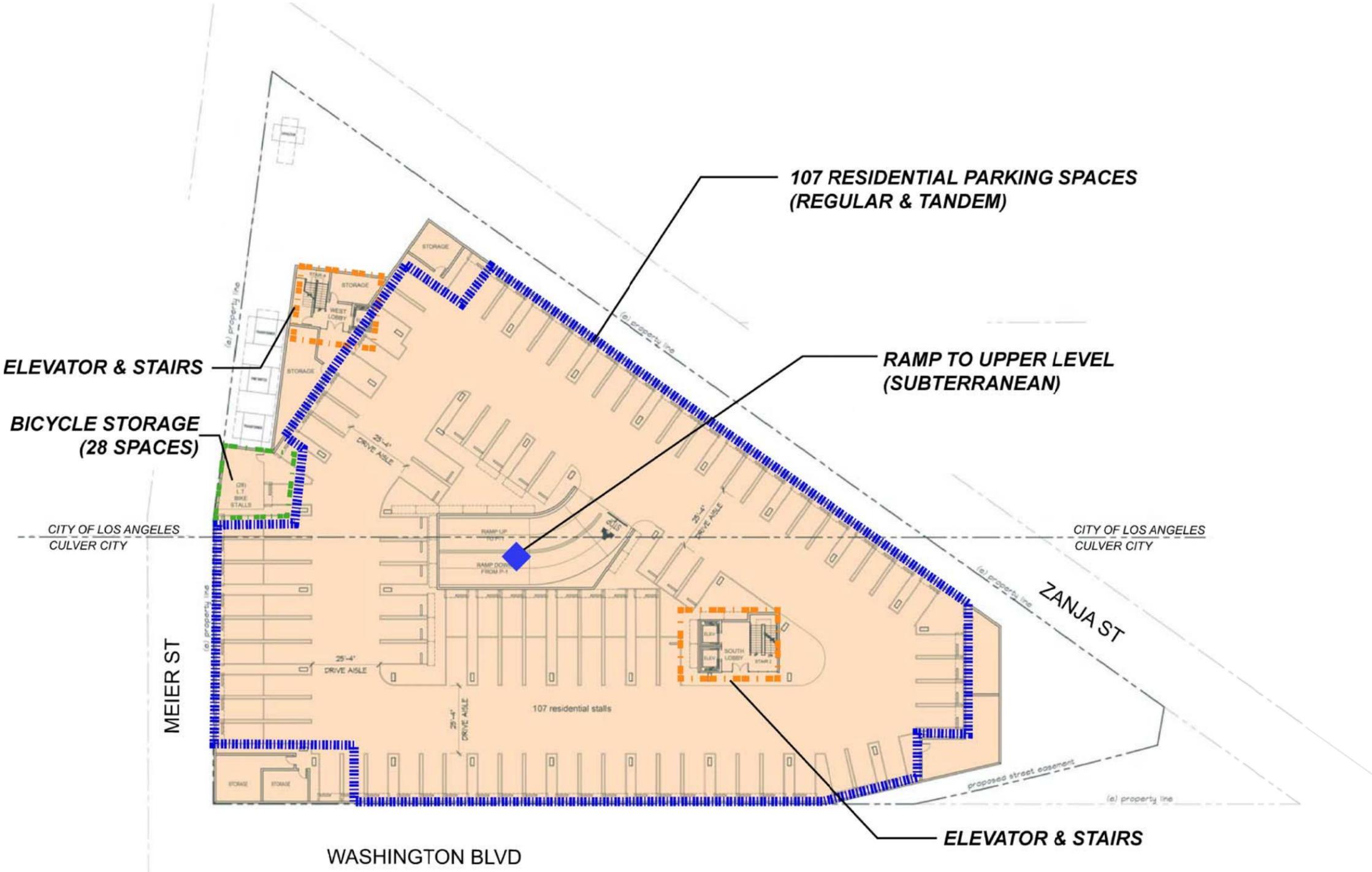
Project Site Access & Circulation - Ground Level



Project Site Access & Circulation - Level I



Project Site Access & Circulation - Level 2



11.0 Transit Evaluation

This section provides a qualitative analysis and discussion of the project transit trips and the transit system in the project site vicinity. Table 11-1 shows the project's estimated level of transit users based on methodologies established by the Los Angeles County Congestion Management Plan (CMP).

**Table 11-1
Los Angeles County CMP-Estimated Project Transit User Forecast Summary**

Transit User Calculation Item	Peak Hour						Daily
	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Residential Component							
Residential Total Vehicular Trip Generation	12	36	48	37	24	61	744
Residential Multi-Modal Trip Generation	1	2	3	2	1	3	39
Residential Total Trips (Including Multi-Modal Trips)	13	38	51	39	25	64	783
Retail Component							
Retail Total Trip Generation (Without Pass-by Adjustment)	138	145	283	142	123	265	2,971
Retail Multi-Modal Trip Generation	5	4	9	4	4	8	112
Retail Total Trips (Including Multi-Modal Trips)	143	149	292	146	127	273	3,083
Project Total							
Project Total (Including Multi-Modal Trips)	156	187	343	185	152	337	3,866
Conversion Factor for Person Trips ¹	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Project Forecast Person Trips Generated	218	262	480	259	213	472	5,412
Percent Transit Trips ¹	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
CMP-Estimated Project Forecast Transit Users Generated	8	9	17	9	7	17	189

Notes:

1 = Source: Los Angeles County Congestion Management Plan (CMP) Appendix D.8.4.

As shown in Table 11-1, based on the Los Angeles County Congestion Management Plan (CMP) methodologies for estimation of transit riders, the proposed project is expected to generate approximately 189 transit riders per day, including approximately 17 transit riders during the AM peak hour and approximately 17 transit riders during the PM peak hour.

Public transit allows for the total removal of a vehicle trip from the roadways and the need for a parking space, rather than merely shifting the time of a vehicle trip. Additionally, the availability of public transit services could reduce parking demand and traffic congestion.

Using public transit also results in financial savings for the users.

Various modes of public transit options within a ¼ mile of the project site were examined for its accessibilities to residents and retail customers alike. The project site is in close proximity to and has easy access to the following modes of transportation:

1. Bus Transit
2. Bikeways
3. Micro-Mobility

Public transit bus service in the City of Culver City is mainly provided by Culver Citybus, a public transport agency; but it is also serviced by Santa Monica's Big Blue Bus.

Exhibit 11-1 shows the bus stops that are located within ¼ mile of the proposed project site.

Bus routes and bus times for Culver CityBus Line 1 and Line 2, and Big Blue Bus Route 16 are provided in Appendix I.

Culver CityBus:

The Culver CityBus fleet is comprised of 54 compressed natural gas (CNG) buses. Culver CityBus operates seven regular routes and one BRT route, serving approximately 5 million passengers annually with a 33 square mile service area, which includes the Westside communities of Venice, Westchester, Westwood, West Los Angeles, Palms, Marina Del Rey, Rancho Park, Mar Vista, Century City, Playa Vista and Culver City.

The following (2) Culver CityBus lines operate within a quarter of a mile of the proposed project site, as shown on Exhibit 11-1:

1. Line 1: Washington Boulevard

- Service provided from approximately 6:00 am – 11:03 pm at approximately 20-minute intervals westbound and eastbound Monday - Friday
- Service provided from approximately 6:00 am – 11:55 pm at approximately 20-minute intervals westbound and eastbound Saturday, Sunday, and Holidays.
- Points of interest include Culver City City Hall, La Cienega & Rodeo, Culver City Schools, Washington & Inglewood, and Venice Beach.

2. Line 2: Inglewood Boulevard

- Service provided from approximately 6:00 am – 6:00 pm at approximately 10-minute intervals northbound and southbound Monday – Friday.
- Points of interest include Westfield Culver City Mall, Washington & Inglewood, Washington & Lincoln, and Venice High School.

Big Blue Bus:

The Big Blue Bus is a municipal bus service serving the City of Santa Monica and the greater Westside region of the Los Angeles County. Big Blue But operates 14 local routes, 4 rapid routes, and 1 express route. Of these routes, one (1) Big Blue Bus route operate within a ¼ mile of the proposed project site, as shown on Exhibit 11-1:

1. Route 16: Marina Del Rey – Wilshire Boulevard / Bundy Drive

- Service provided from approximately 6:20 am – 7:04 pm at approximately 25 minute intervals westbound and southbound Monday – Friday.

Bus Stops:

Culver CityBus Line 1, Line 2, and/or Big Blue Bus Route 16 have seven (7) bus stops within walking distance from the proposed project site, as shown in Exhibit 11-1 and as described below:

1. Bus Stop #114 is located near the south west corner of the Rosabell Street and Washington Boulevard intersection. Service is provided eastbound along Washington Boulevard.
2. Bus Stop #115 is located near the south east corner of the Mildred Avenue and Washington Boulevard intersection. Service is provided eastbound along Washington Boulevard.
3. Bus Stop #166 is located near the south east corner of Washington Place and Washington Boulevard intersection. Service is provided westbound along Washington Boulevard.
4. Bus Stop #167 is located near the north east corner of Meier Street and Washington Boulevard intersection. Service is provided westbound along Washington Boulevard.
5. Bus Stop #168 is located near the north east corner of the Beethoven Street and West Washington Boulevard intersection. Service is provided westbound along Washington Boulevard.
6. Bus Stop # 2890 is located near the north east corner of Mitchell Avenue and Wade Street. Service is provided traveling north bound along Wade Street.
7. Bus Stop # 2920 is located near the south west corner of Mitchell Avenue and Wade Street. Service is provided traveling south bound along Wade Street.

Bikeways

The Culver CityBus fleet is equipped with bike racks that can carry up to three bicycles. Foldable bikes are also allowed inside the bus.

Bikeways have also been implemented throughout the city, which allows for a safer and more convenient bicycle commute. Class III bicycle routes are also conveniently provided at the project site frontage on Washington Boulevard, west of the intersection of Washington Boulevard and Washington Place. On the east leg of said intersection, class II bicycle lanes are planned to be provided.

Exhibit 11-2 illustrates the map of existing bikeways in Culver City.

Micro-Mobility

Bike and scooter share, which are micro-mobility programs, are ideal for half mile to three mile trips, which are too long to walk but too short to drive. Nearly half of the trips that most commuters take on a normal day consists of the short trips to local destinations. Micro-mobility provides an alternative mode of transportation to do these short trips without the need for a personal vehicle. Hence, the availability of micro-mobility programs allows for the reduction of short-trip car use, emissions, traffic congestion, and parking demand.

The City of Culver City is in partnership with third-party vendors to provide rental scooters to the residents of Culver City. The current third-party vendors providing scooters for the City of Culver City are Wheels as well as Bird.

The City of Culver City has partnered with Metro to install twelve (12) Bike Share Stations throughout the City. Bike share is a regional system of both docked and dockless shared bikes that can be rented by the minute for a fee, or with an annual pass. Said shared bikes can be returned at any bike share station, not just the station at the point of origin.

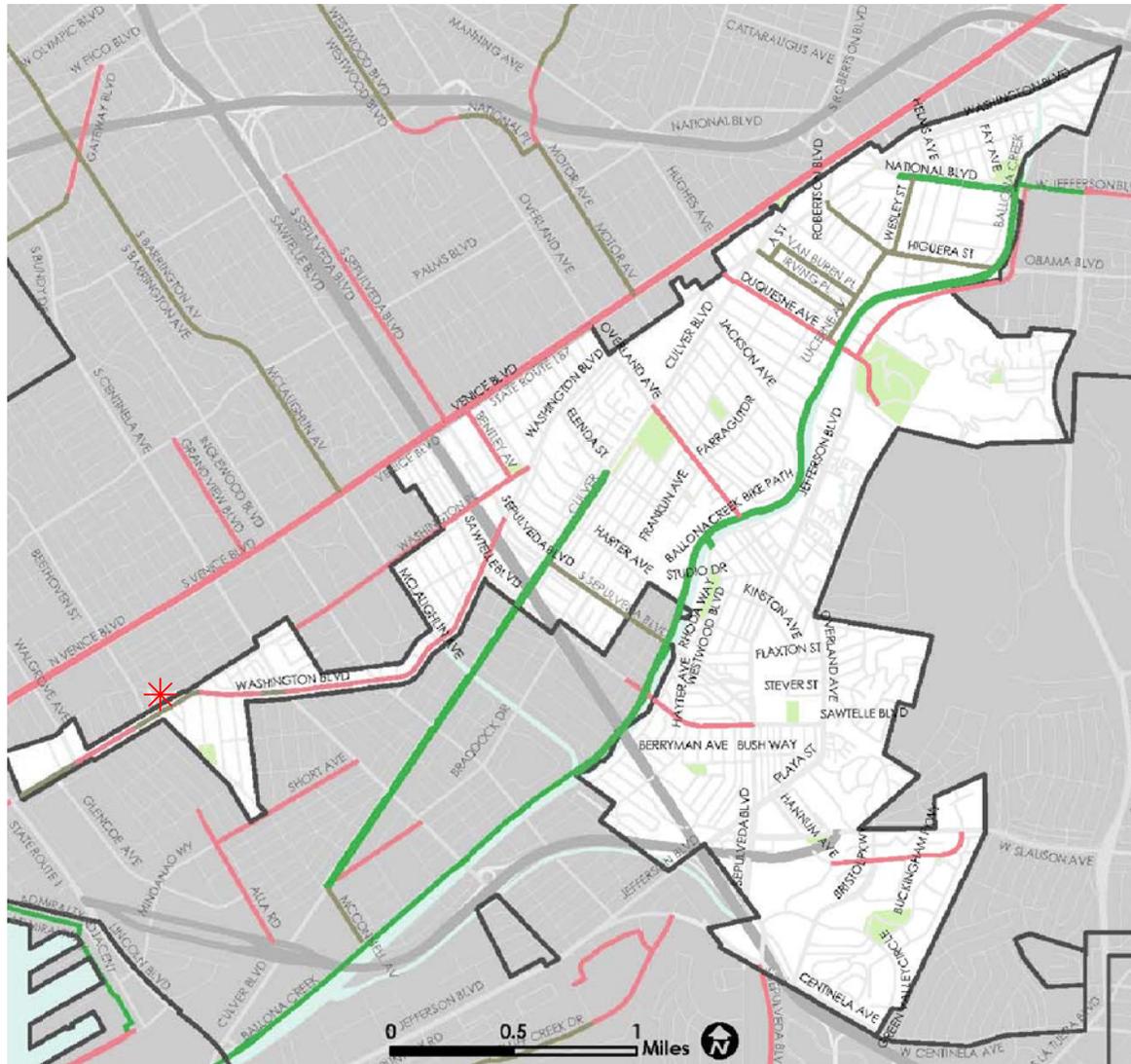
More information on the Metro Bike Share system is available at **bikeshare.metro.net**.



Legend:

- * = Project Site
- = Project Site Boundary





Legend:

- * = Project Site
- = Class I Shared-Use Path
- = Class II Bicycle Lane
- = Class III Bicycle Route/Boulevard



12.0 Traffic Demand Management

This section provides a qualitative analysis and discussion of the potential Traffic Demand Management (TDM) strategies for the proposed project.

TDM refers to the alteration of travel behavior through programs of incentives, services, and policies as alternatives to single occupant vehicles (SOV). The primary objective of a TDM is to reduce the amount of SOV trips to and from the project site. To reduce the amount of vehicular traffic, the quantity of people commuting alone to the project site can be reduced by diverting a portion of employees to alternative modes of transportation.

RK utilized the City of Culver City's Code of Ordinances Section 7.05.005 as a reference for the City approved TDM strategies within this section. The City of Culver City's Code of Ordinances Section 7.05.005 is provided in Appendix J.

The TDM strategies utilized in this project are outlined as follows:

1. HOV Parking
2. Bicycle Parking
3. Carsharing
4. Information and Outreach

Exhibit 12-1, Exhibit 12-2, and Exhibit 12-3 shows the TDM recommendations for the surface level parking lot, subterranean parking level 1, and subterranean parking level 2, respectively. Each exhibit details the designation of each space and the related signage and stencils.

1. HOV Parking (Exhibit 12-1)

As shown in Exhibit 12-1, the project might want to consider reserving two (2) parking spaces for high occupancy vehicles (HOV) use only located near the entryways of the retail buildings. As such, these parking spaces are intended for retail use only. The prioritization of said parking spaces for vehicles with multiple riders would reduce the traffic demand as it would promote and encourage ridesharing.

2. Bicycle Parking (Exhibit 12-1, Exhibit 12-2, & Exhibit 12-3)

Bicycle racks or parking facilities are planned to be provided in a secure location for residents, customers, and employees who commute to the site by bicycle. A bicycle parking facility or rack should be a stationary object to which the user can lock the bicycle frame and both wheels with a user-provided cable, chain, and/or lock. Said facility should support bicycles in a stable position with no damage to wheels, frames, or components.

As shown in Exhibit 12-1, multiple bike racks can be provided for short-term retail use. A total of twelve (12) bicycles can be stored at these short-term retail use bicycle racks. Said bicycle racks should be located near a building's entrance(s) or other high visibility locations.

As shown in Exhibit 12-2 and Exhibit 12-3 the project is planned to provide two (2) bicycle storage rooms on each level of the subterranean parking garage located beyond the residential gate for resident-only use.

3. Carsharing

The proposed project is planned to provide a carsharing program for the residents.

Carsharing services allow individuals to use cars on a short-term (hourly or daily), as-needed basis, paying only for the time they use and the mileage they drive. The operators of the service provide vehicle maintenance, repair, and insurance. Carsharing allows individuals to gain the benefits of using a private car without the costs and responsibilities of owning a car. After reserving a vehicle, program members can pick-up and return a car at designated locations. When the person is done using the car, they return it to its home parking space, lock it, and leave it for the next user.

4. Information and Outreach (Exhibit 12-1 & Exhibit 12-2)

Installation of a bulletin board, display case, or kiosk displaying transportation information in a prominent area accessible to the greatest number of people is recommended. Such required information could include, but is not limited to, the following:

- Current maps, routes, and schedules for public transit routes serving the site;
- Telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency, transportation management association, and local transit operators;

- Ridesharing promotional material supplied by commuter-oriented organizations; Bicycle route and facility information, including regional/local bicycle maps and bicycle safety information; and
- A listing of any other facilities and resources that may be available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.

For Resident-Only Parking

0020

Install Parking Space
Number Stencils

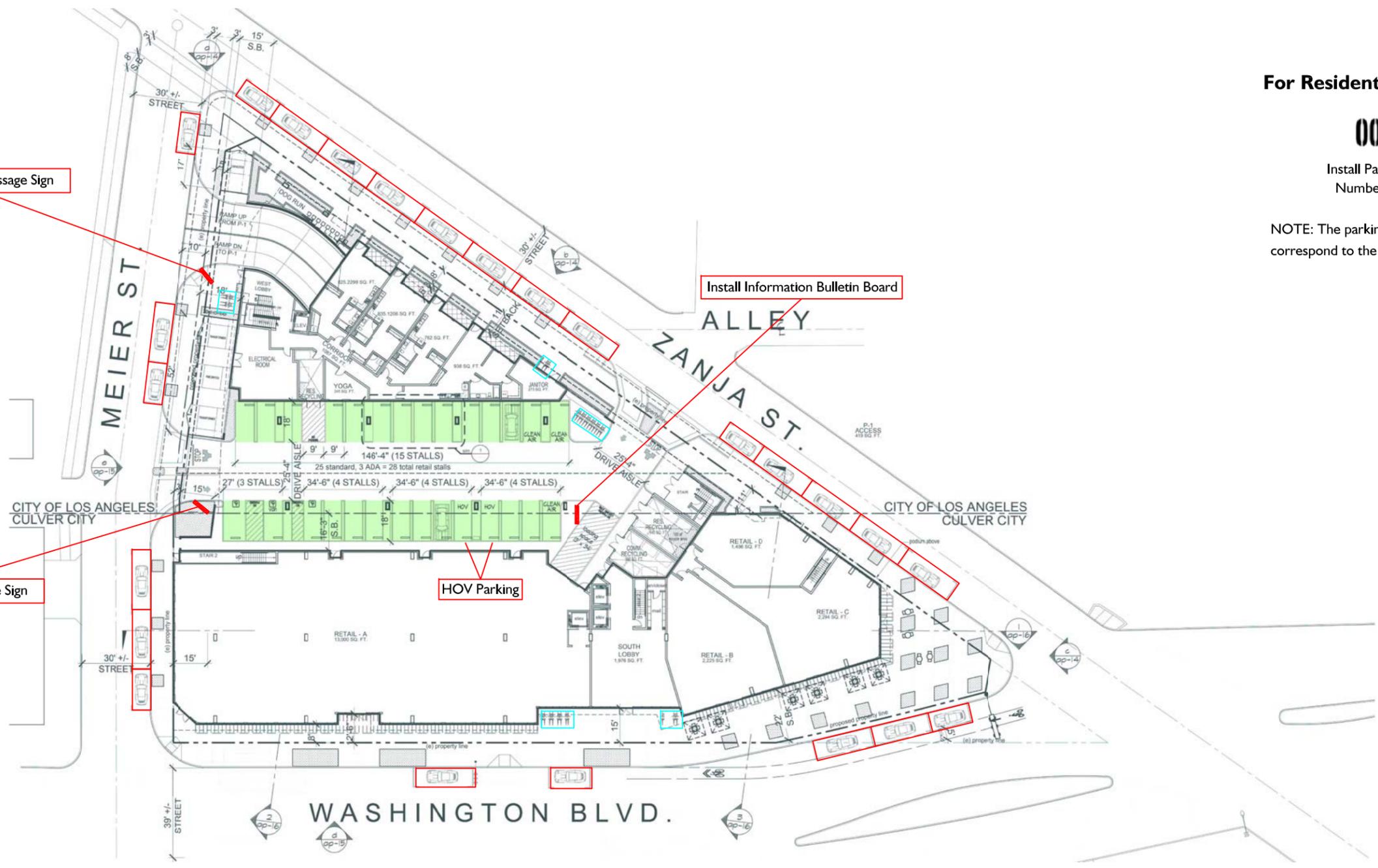
NOTE: The parking space number shall
correspond to the dwelling unit number

Changeable Message Sign

Install Information Bulletin Board

Changeable Message Sign

HOV Parking



Legend:

- = Bicycle Racks
- = Street Parking



TDM Recommendations - Subterranean PI Level

For Resident-Only Parking

0020

Install Parking Space
Number Stencils

NOTE: The parking space number shall correspond to the dwelling unit number

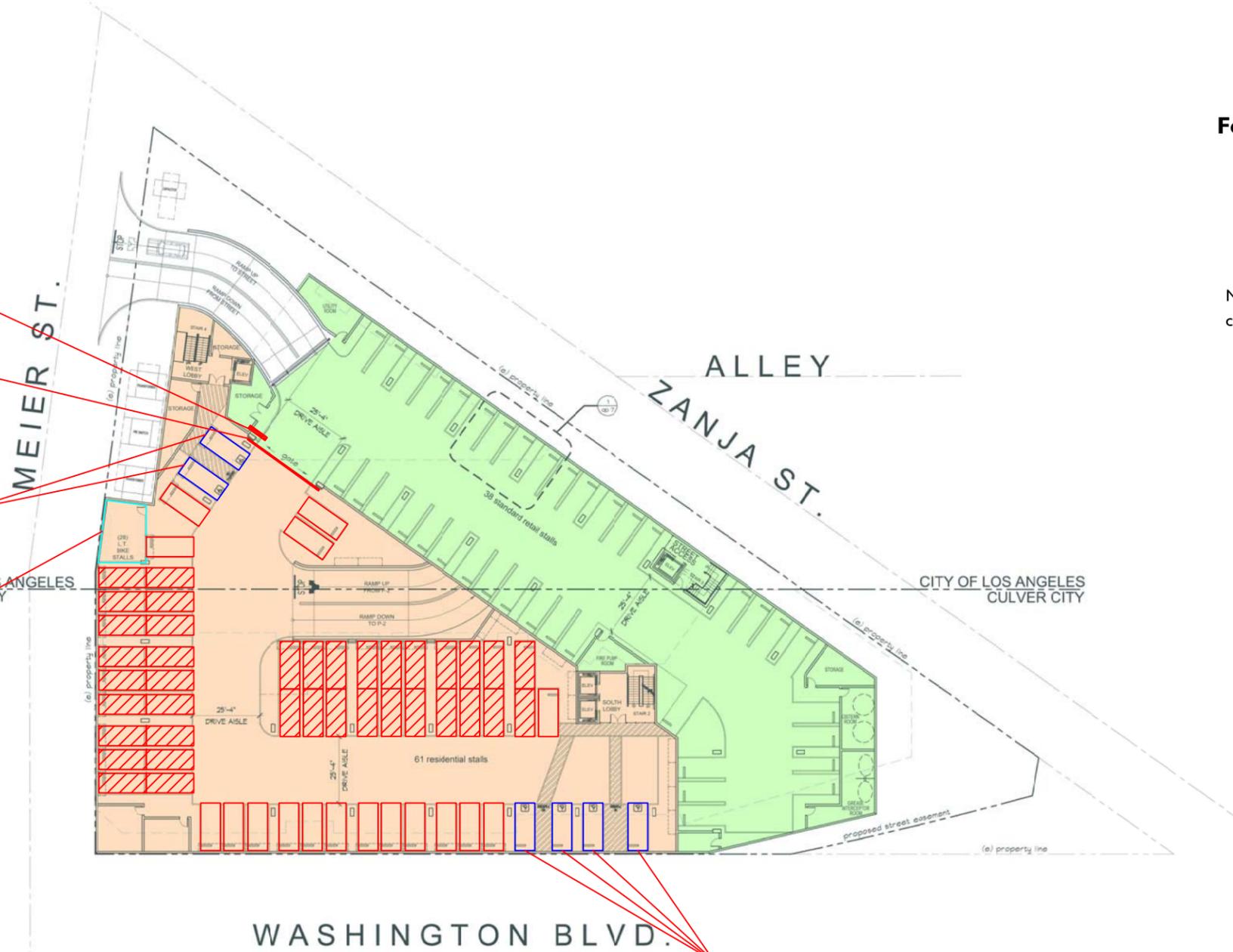


Install Gate Security Sign

Residential Gate
Only opens with resident-owned remote.

ADA parking spaces should not be reserved for specific residents in order to be compliant with ADA requirements. Only residents with an ADA placard is allowed to park at an ADA parking space.

Bike Storage Room provides storage for 28 bicycles



ADA parking spaces should not be reserved for specific residents in order to be compliant with ADA requirements. Only residents with an ADA placard is allowed to park at an ADA parking space.

Legend:

- = Bicycle Storage Rooms
- = Resident-Only Parking
- = Resident Tandem Parking
- = Residential ADA Parking

NOTE: Tandem parking spaces shall be utilized by residents of the same dwelling unit in order to avoid blockage of vehicles.

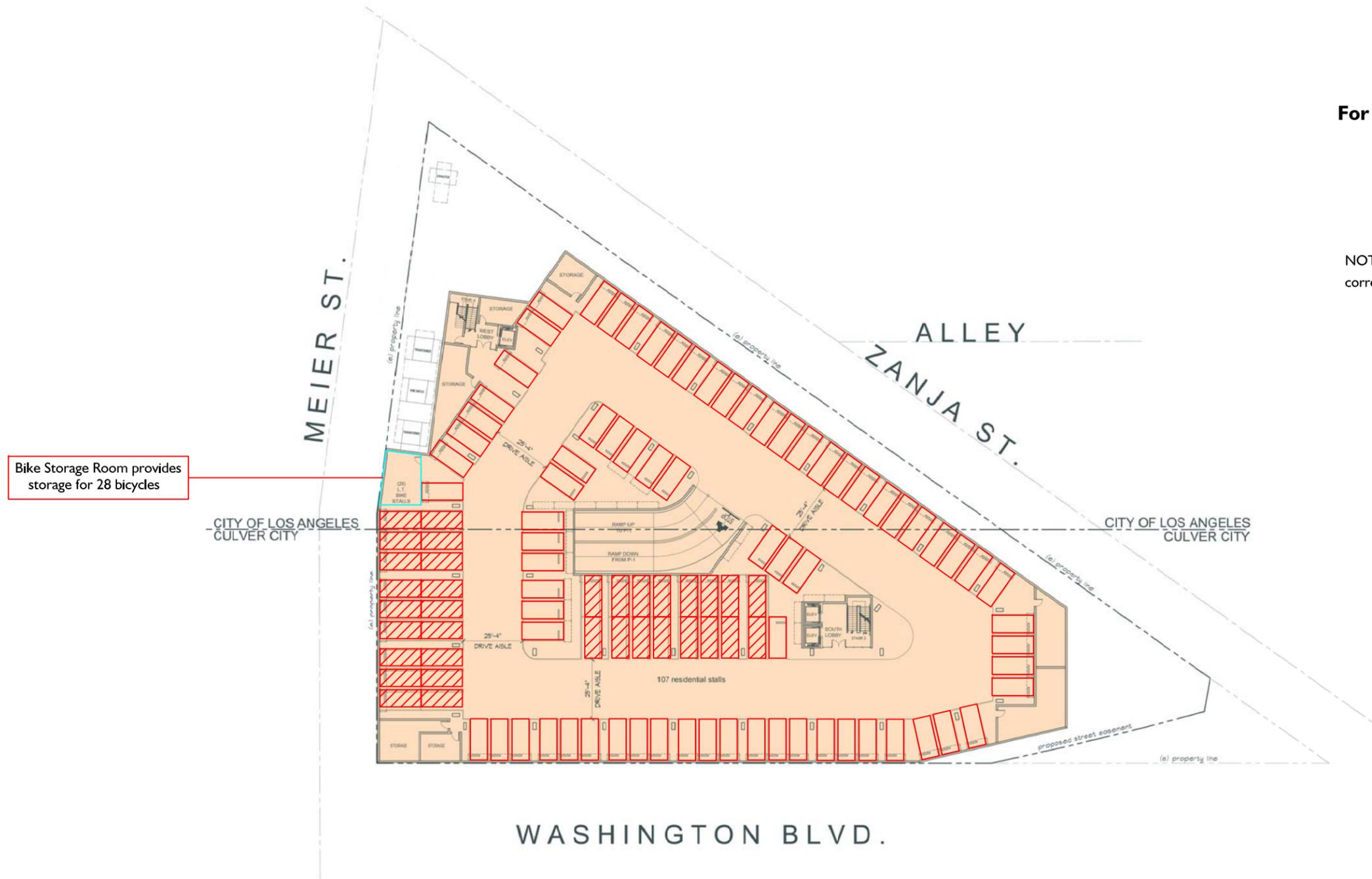
TDM Recommendations - Subterranean P2 Level

For Resident-Only Parking

0020

Install Parking Space
Number Stencils

NOTE: The parking space number shall correspond to the dwelling unit number



Legend:

- = Resident Parking Only
- ▨ = Resident Tandem Parking

NOTE: Tandem parking spaces shall be utilized by residents of the same dwelling unit in order to avoid blockage of vehicles.



13.0 Findings & Conclusions

Summary of California Environmental Quality Act (CEQA) Transportation Impact Analysis based on Vehicle Miles Traveled (VMT):

Based on the VMT analysis prepared utilizing the City of Culver City adopted VMT analysis tool, the proposed project is screened out from requiring a full VMT analysis and the project VMT impacts are deemed to be less than significant

Summary of Highway Capacity Manual (HCM) 95th percentile vehicular queue evaluation for inbound vehicles performing a left-turn movement at the project site access locations:

Nominal queues are expected for inbound vehicles turning left into the project access driveways for Opening Year With Project Conditions.

Summary of Site access review:

The proposed project is expected to result in improvements in the multi-modal circulation and access around the project site.

Summary of Public Transit Evaluation:

Based on the Los Angeles County Congestion Management Plan (CMP) methodologies for estimation of transit riders, the proposed project is expected to generate approximately 189 transit riders per day, including approximately 17 transit riders during the AM peak hour and approximately 17 transit riders during the PM peak hour.

Appendices

Appendix A

Approved Scope of Work

Memorandum of Understanding for Transportation Study

This Memorandum of Understanding (MOU) acknowledges and agrees to all the City of Culver City requirements and fees for the review of a transportation study for the following project.

Date Submitted: 09-28-2021 **MOU Version #** _____
Project Name: Proposed Culver City Triangle Centre Project
Project Address: 12727 Washington Boulevard, Culver City, CA, 90066
Project Description: Multifamily Residential Development Plus Retail Use

Land Use	Gross Floor Area (sq. ft.) <i>Defined per latest ITE publication</i>	Residential Units (#)
<u>Multi-family Residential</u>	_____	<u>144 Dwelling Units</u>
<u>Retail</u>	<u>1,190 sq.ft.</u>	_____
<u>Supermarket Walk - in Bank</u>	<u>12,600 sq.ft. 1,340 sq.ft.</u>	_____
<u>High Turnover Sit Down Restaurant </u>	_____	_____
<u>Coffee/ Donut Shop Without Drive Through</u>	<u>2,575 sq.ft 1,370 sq.ft.</u>	_____

Project Horizon Year: 2023 **Ambient Growth Rate**
(% per year): 1% per year
Directional Distribution (%): N:- S:- E:- W:-

* Please see Exhibits B-1, B-2, C-1, C-2 for Retail and Residential Trip Distributions.

Trip Generation Rates: Show AM, PM and daily trip generation rates for each land use and attach total daily trips generation calculations. Indicate ITE Latest Edition/Other _____

Land Use	ITE Code#	AM Trips		PM Trips		Daily Totals	
		In	Out	In	Out	In	Out

* Please see Tables 2-4 for Existing, Proposed, and Proposed Net Trip Generation.

Study Intersections: Show all study intersections, intersections subject to capacity analysis credit for advanced traffic signal control synchronization, whether intersections are signalized or non-signalized, and use the same numbering system for all lists of intersections and figures in the study.

No.	Intersection	Signalized/Non-Signalized	Jurisdiction

Residential Streets: Show all residential streets to be studied.

No.	Street Name	Limits	Jurisdiction

* Please see Table 5 for list of all Study Intersections.

Trip Credits: Indicate trip credits to be requested (subject to City approval)

	Trip Credits	Yes/No
Existing Uses		Yes
Pass-By Trips	Retail, Super Market, High Turnover Sit-Down Restaurant, Donut/Coffee Shop Without Drive Through - 25%	Yes
Internal Trip Capture		No
Transit-Oriented Development (TOD)	Multifamily Residential and Retail Components: 5% for Walk/Bike/Transit Adjustment	Yes
Transportation Demand Management (TDM)		No

Related Projects: Before the start of any proposed project analysis, consultants shall:

1. Obtain a list of related projects from the Culver City Current Planning Division and other affected jurisdictions.
2. Prepare a draft list of "related projects specific to the proposed project."
3. Obtain written approval from the City of the "related projects specific to the proposed project."

Maps: The following maps shall be attached to the MOU:

1. A map showing the study intersections and street segments to be analyzed, including City limit lines where applicable. * Please see Exhibit A.
2. A map showing the project's trip distribution percentages for each land use (inbound and outbound) on the area's road network. * Please see Exhibit's B-1, B-2, C-1, C-2 for Project Trip Distribution.
3. A map showing the project's trip assignments at the study intersections and project driveways, as well as road segments when applicable. * Please see Exhibits D-F for Project Trip Assignment.
4. A site plan of the project showing property lines, alleys, project's driveways and nearby driveways and intersections on both sides of the street including dimensions.
* Please see Exhibit G for Site Plan.

Proposed Mitigation and Transportation Improvements: Any proposed transportation improvement(s) or mitigation measure(s) shall be listed and accompanied by plans of the existing and proposed improvements, including city limit lines and existing and proposed property lines. . The City may initially accept conceptual plans to be included in the Transportation Study. Detailed design of such improvements will be part of the project's plans submittals.

Post-Occupancy Traffic Counts: By signing below, the Property Owner/ Developer/Applicant hereby agrees to pay for and submit to the City a post-occupancy traffic count analysis of the development to the satisfaction of the City. The analysis shall determine the amount of actual traffic (motor vehicle, bicycle, and pedestrian) generated by the development compared to the ITE trip generation rates. The analysis shall include a traffic count of all onsite driveways taken upon reaching eighty-five percent (85%) occupancy of the total building gross floor area or within one (1) year of the issuance of the first Temporary Certificate of Occupancy (TCO), as determined by the City. The data shall be used to confirm the findings in the approved study and not result in any additional traffic mitigation measures and/or conditions of approval on the subject project.

Fees: Payment of a fee to the City's PWD for the City's processing of the MOU shall be required before the City approves the MOU. Payment for review of the Transportation Study shall be paid before the City's PWD completes its review of the Transportation Study. Said fees shall be per the most recent Fee Schedule as approved by the City Council.

* Please see Attachment A for additional analyses.

Applicant Information:

	Property Owner/Applicant	Developer/Applicant	Traffic Consultant
Name	Kevin Read	Kevin Read	Alex Tabrizi, P.E.
Title	Manager	Manager	Principal
Company	Triangle Centre LP	Bastion Development Corp.	RK Engineering Group INC.
Street Address	11955 West Washington Boulevard	11955 West Washington Boulevard	4009 Westlark Place, Suite 280
City, State, Zip	Culver City, CA, 90056	Culver City, CA, 90066	Newport Beach, CA, 92660
Office	(424) 526-1001	(424) 526-1001	(949) 474-0809
Cell	(310) 701-0282	(310) 701-0282	(949) 344-1828
Fax	(310)-545-989	(310)-545-989	(949) 474-0902
Email	kpr@oceanhold.com	kpr@oceanhold.com	at@rkengineer.com

Public Agency Information: If any of the intersection(s) to be studied as part of this study are located within the City of Los Angeles, the unincorporated areas of Los Angeles County and/or impact any other public agency (i.e., Caltrans), then this MOU shall also be approved by the reviewing staff representative from each agency:

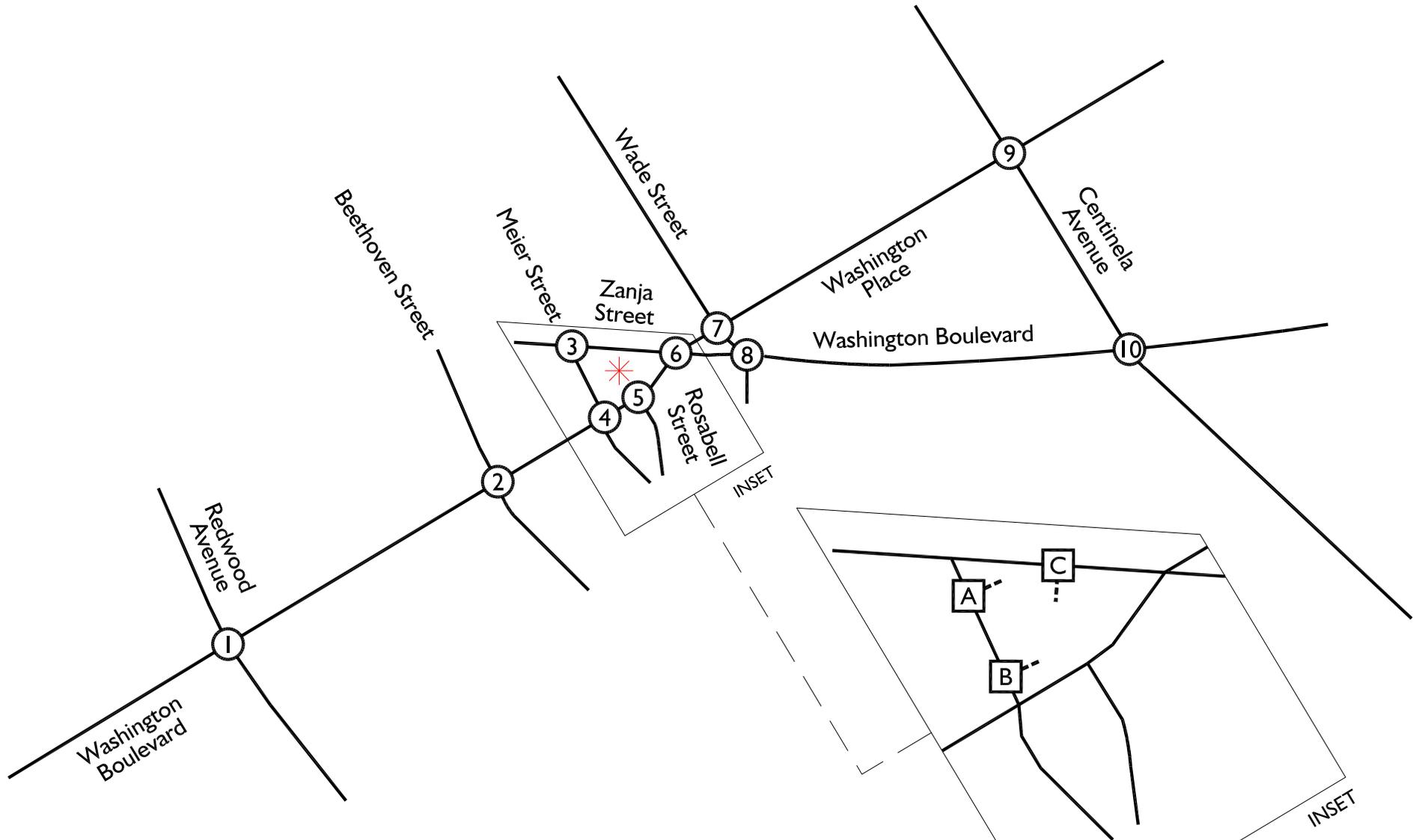
	City of Los Angeles	County of Los Angeles	Other Public Agency
Name			
Title			
Company			
Street Address			
City, State, Zip			
Office			
Cell			
Fax			
Email			

Signatures/Expiration: This MOU shall become valid as of the date of the City's signature and expire one year thereafter. If the administrative draft of the study has not been filed with the City by the expiration date, the MOU shall expire and a new MOU filing, fee, review, and approval process shall be required.

Approved By: 
 Property Owner/Applicant: 
 Developer/Applicant: 
 Traffic Consultant:  Alex Tabrizi
 City of Culver City:  Gianni Demitri

Date: 9-28-2021
 9-28-2021
 9/28/2021
 11/29/2021

Exhibit A Study Area



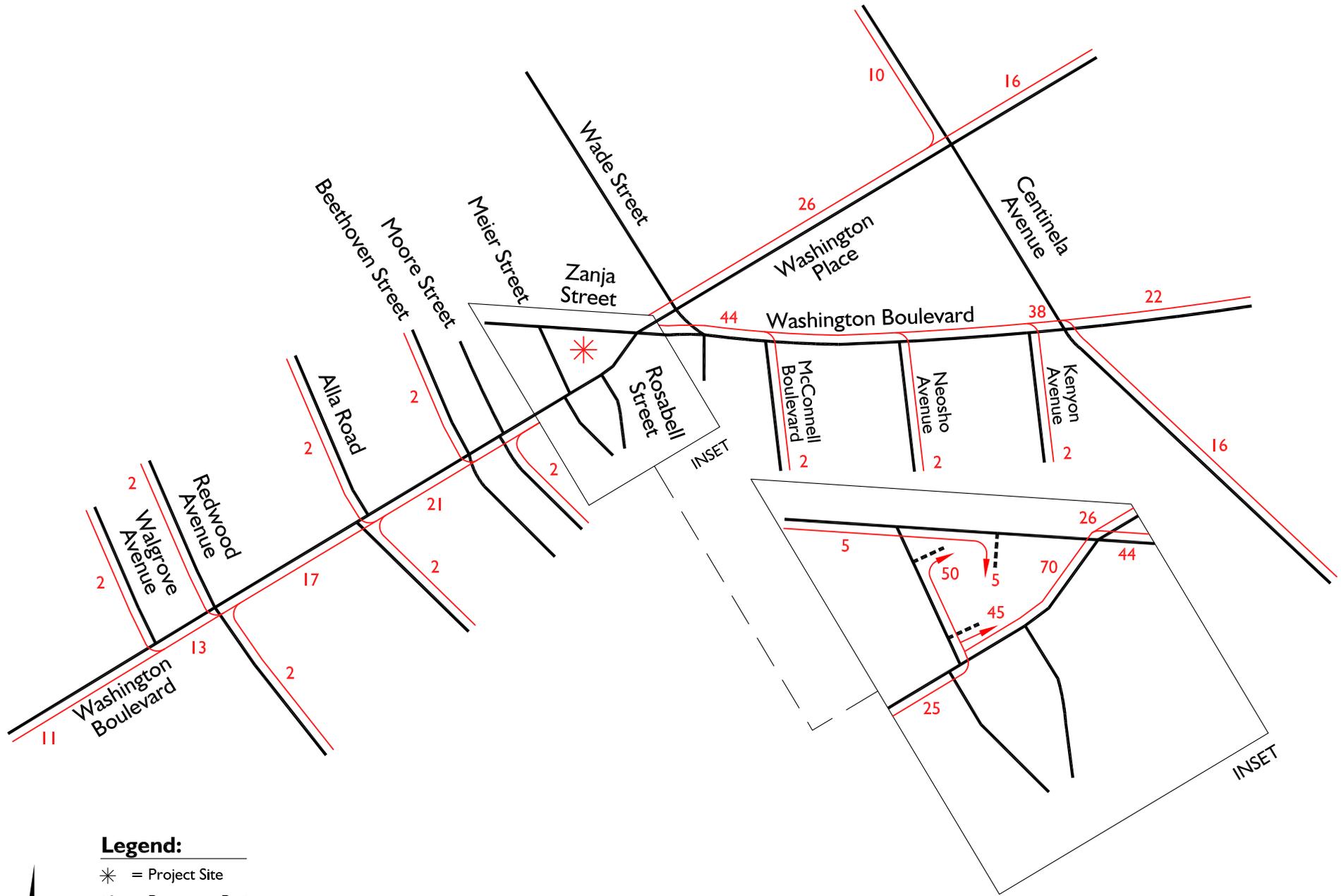
Legend:

- * = Project Site
- Ⓛ = Study Area Intersection
- ⓐ = Driveway Intersection
- = Project Access Driveway

Notes:

- I. See Table 5 for List of Signalized and Unsignalized Study Intersections.

Retail - Inbound Project Trip Distribution

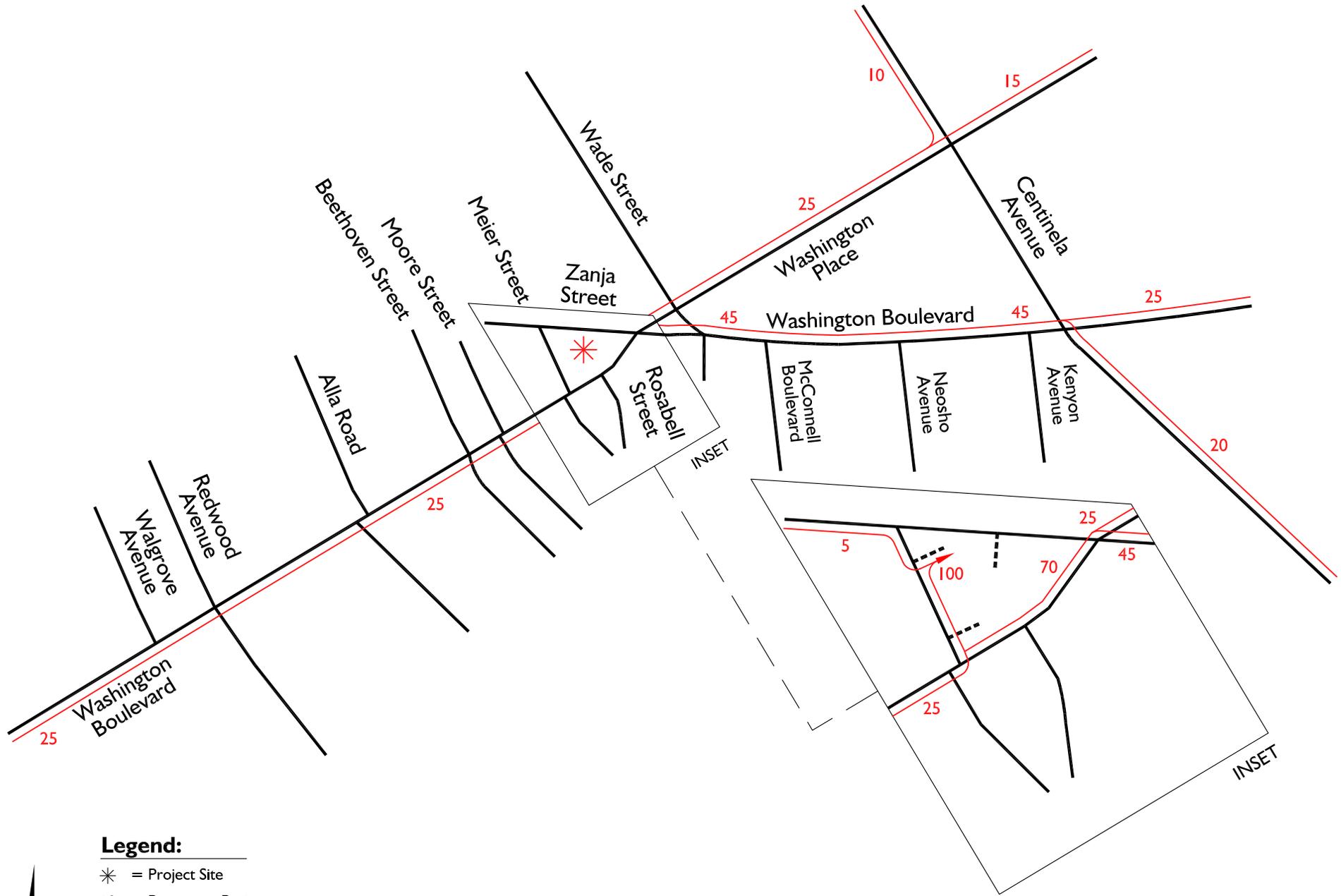


Legend:

- * = Project Site
- 10 = Percent to Project



Residential - Inbound Project Trip Distribution

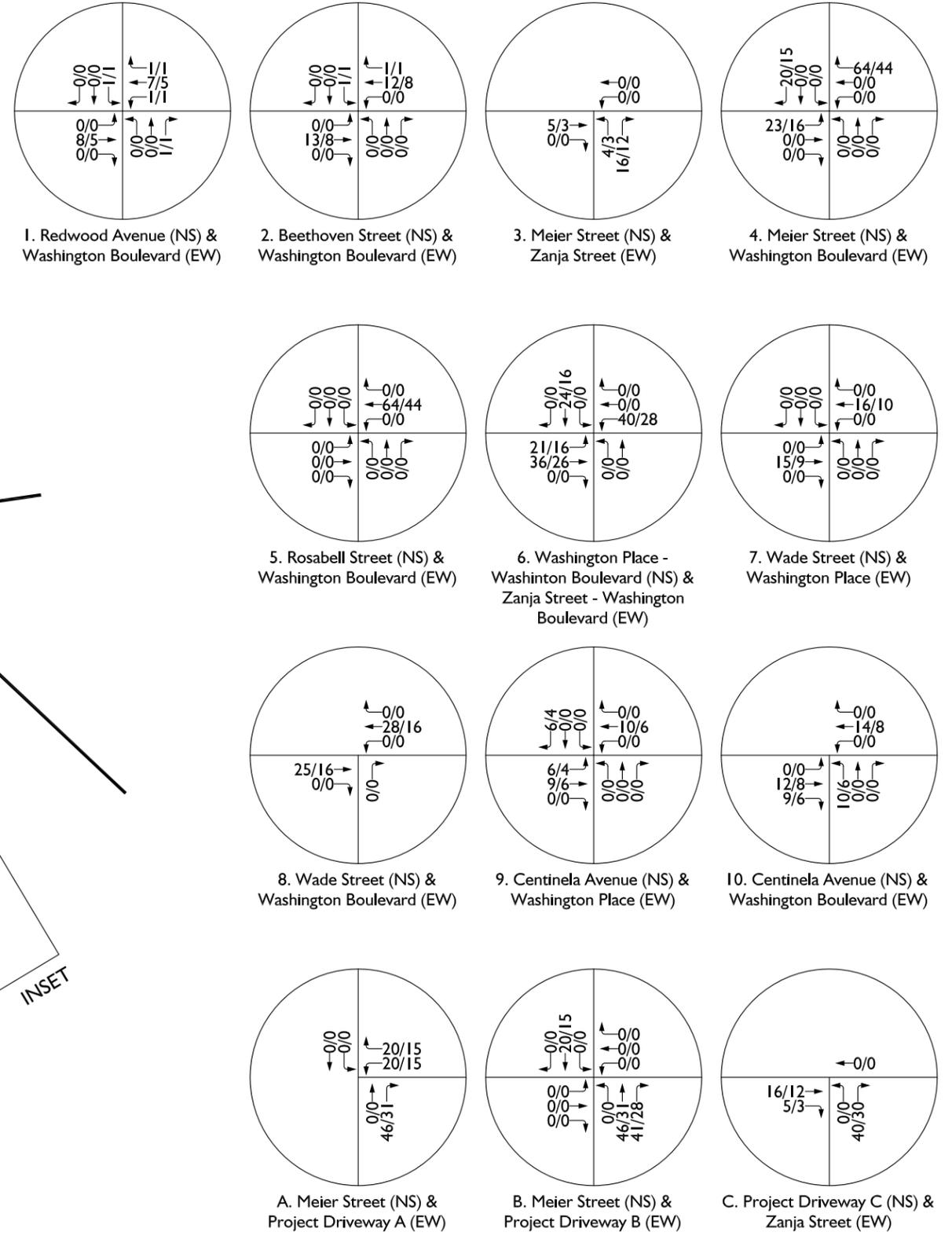
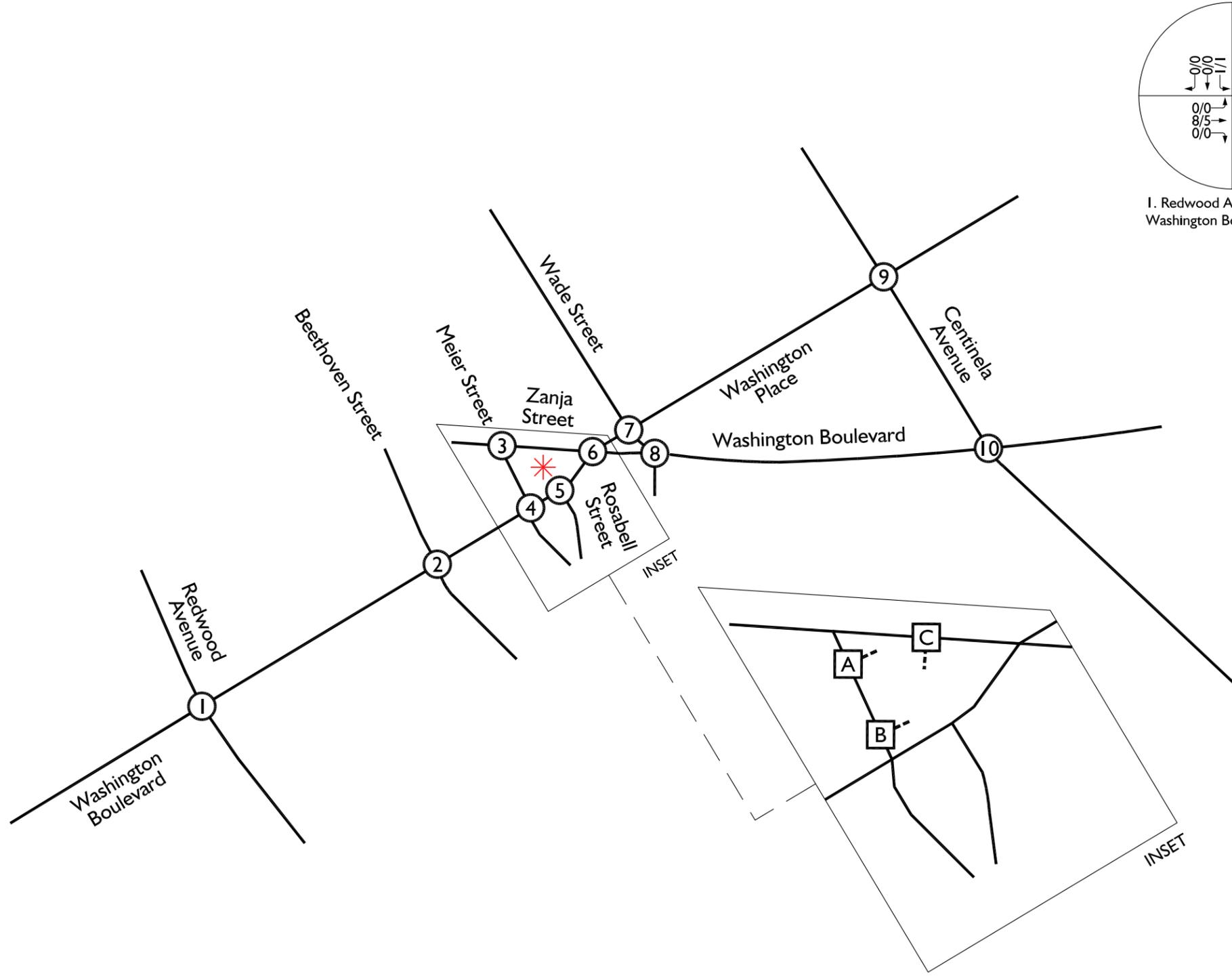


Legend:

- * = Project Site
- 10 = Percent to Project



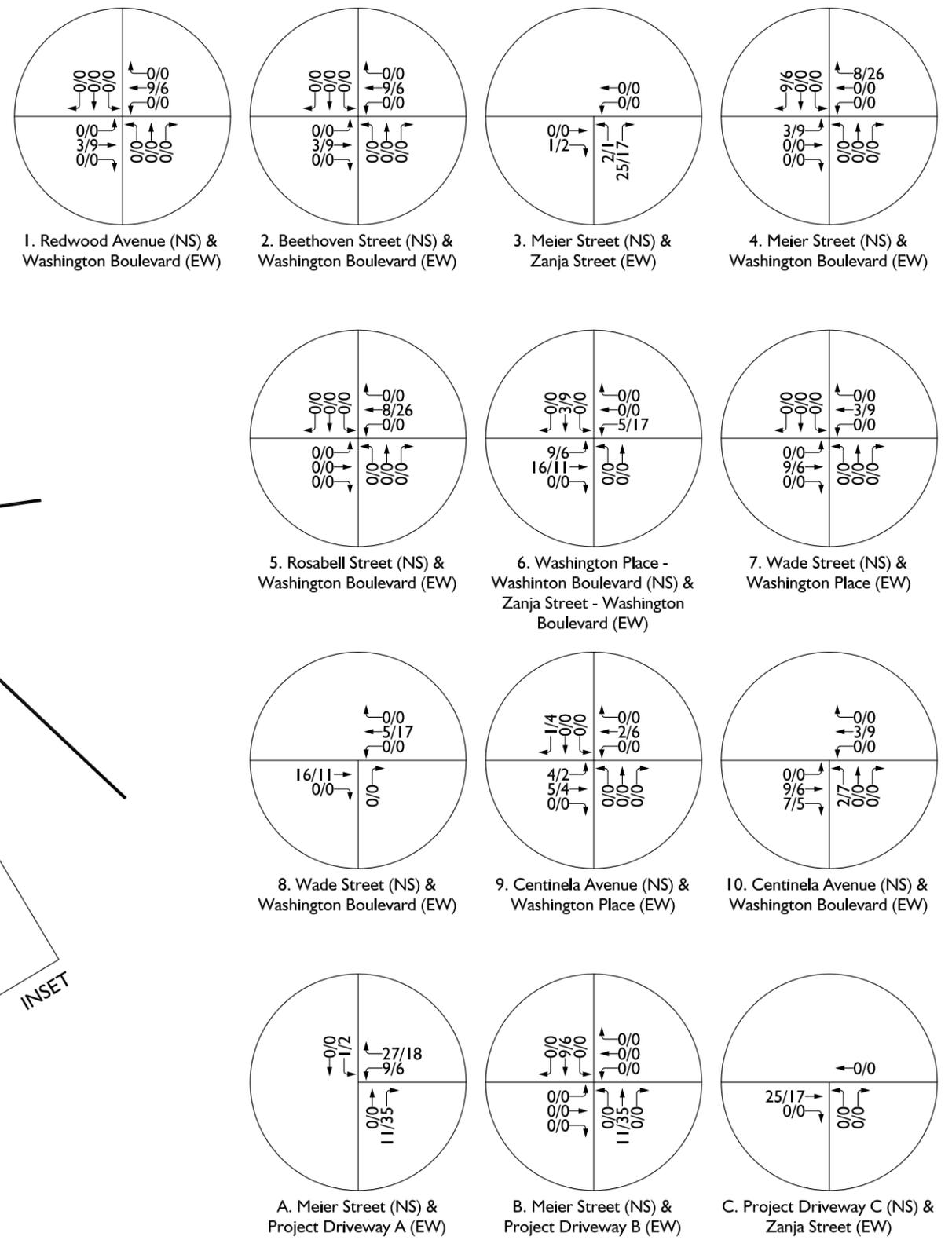
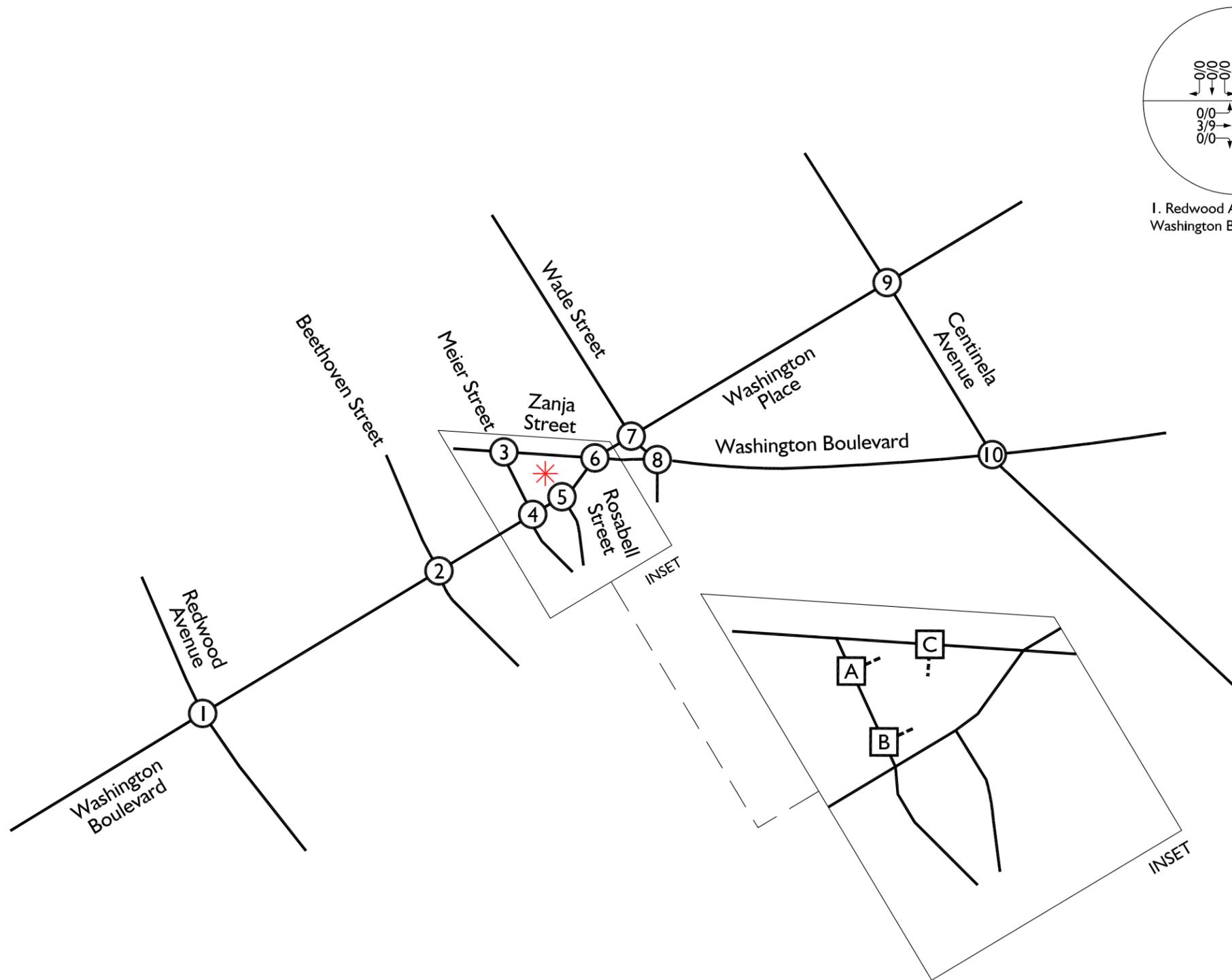
Retail - Project Trip Assignment



Legend:

- * = Project Site
- ① = Study Area Intersection
- A = Driveway Intersection
- = Project Access Driveway

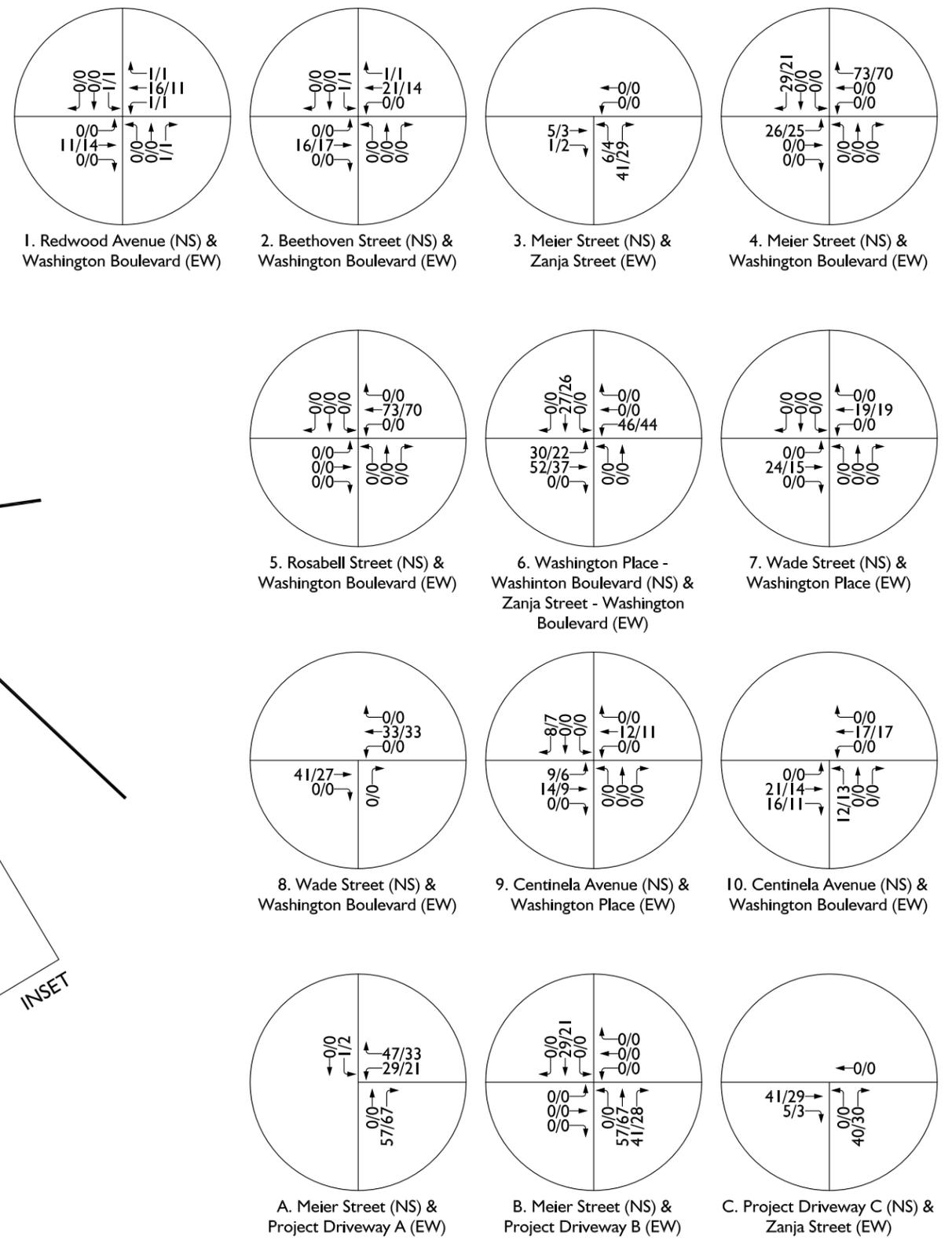
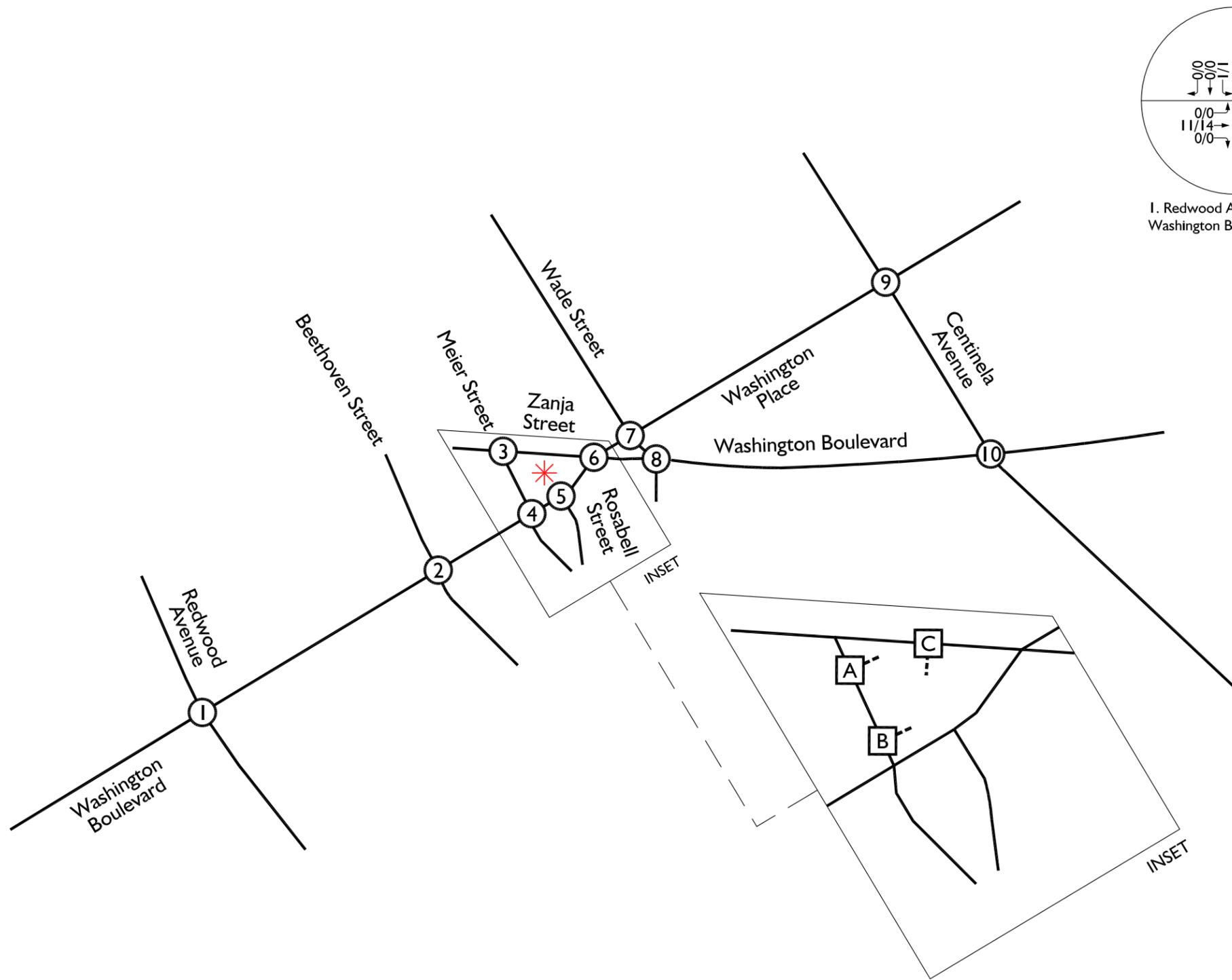
Residential - Project Trip Assignment



Legend:

- * = Project Site
- ① = Study Area Intersection
- A = Driveway Intersection
- = Project Access Driveway

Retail Plus Residential - Project Trip Assignment



Legend:

- * = Project Site
- ① = Study Area Intersection
- A = Driveway Intersection
- = Project Access Driveway

Exhibit G Site Plan

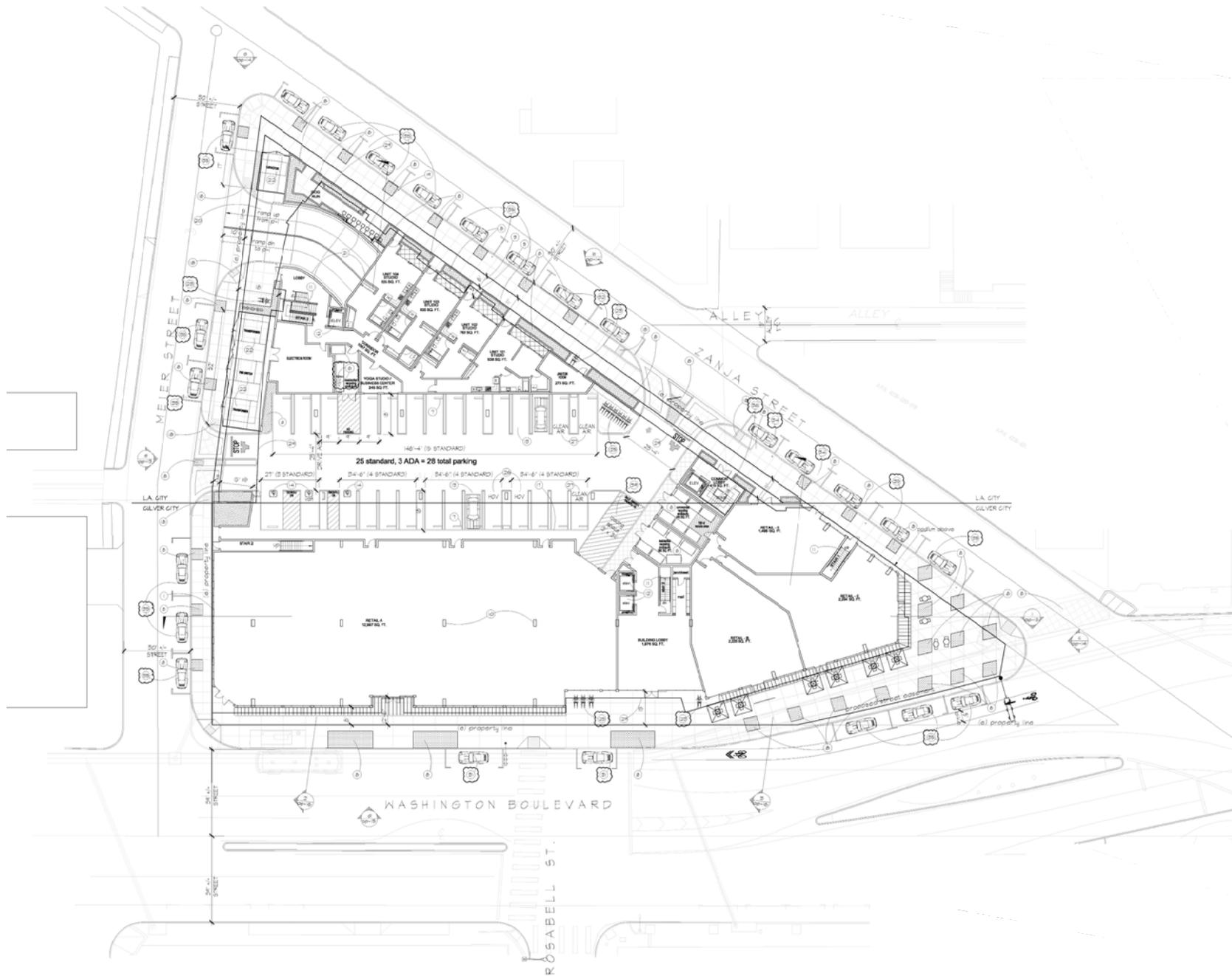


Table 1
ITE Trip Generation Rates¹

Land Use	Units ²	ITE Code	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Multi-Family Residential - Mid-Rise	DU	221	0.09	0.27	0.36	0.27	0.17	0.44	5.44
Variety Store	TSF	814	1.81	1.37	3.18	3.56	3.28	6.84	63.47
Retail	TSF	820	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Supermarket	TSF	850	2.29	1.53	3.82	4.71	4.53	9.24	106.78
Walk-in Bank	TSF	911	11.72	10.82	22.54	5.34	6.79	12.13	121.30
High Turnover Sit-Down Restaurant	TSF	932	5.47	4.47	9.94	6.06	3.71	9.77	112.18
Coffee/Donut Shop Without Drive Through	TSF	936	51.58	49.56	101.14	18.16	18.16	36.31	363.10

¹ Source: 2017 ITE Trip Generation Manual (10th Edition).

² DU = Dwelling Units

TSF = Thousand Square Feet.

Table 2
Existing Land Use Trip Generation¹

Land Use (ITE Code)	Quantity	Units ²	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Variety Store (814)	13.800	TSF	25	19	44	49	45	94	876
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			-6	-5	-11	-12	-11	-23	-34
Variety Store Subtotal			19	14	33	37	34	71	842
Donut/Coffee Shop Without Drive Through (936)	0.402	TSF	21	20	41	7	7	14	140
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			-5	-5	-10	-2	-2	-4	-14
Donut/Coffee Shop Without Drive Through Subtotal			16	15	31	5	5	10	126
Retail (820)	1.526	TSF	1	1	2	3	3	6	58
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			0	0	0	-1	-1	-2	-2
Retail Subtotal			1	1	2	2	2	4	56
Subtotal			36	30	66	44	41	85	1,024
<i>5% Adjustment for Walk/Bike/Transit</i>			-2	-2	-4	-2	-2	-4	-51
Total			34	28	62	42	39	81	973

¹ Source: 2017 ITE Trip Generation Manual (10th Edition).

² TSF = Thousand Square Feet.

**Table 3
Proposed Project Trip Generation¹**

Land Use (ITE Code)	Quantity	Units ²	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Residential Component									
Multi-Family Residential - Mid-Rise (221)	144	DU	13	38	51	39	25	64	783
<i>5% Adjustment for Walk/Bike/Transit</i>			-1	-2	-3	-2	-1	-3	-39
Project Residential			12	36	48	37	24	61	744
Retail Components									
Retail (820)	1.190	TSF	1	0	1	2	2	4	45
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			0	0	0	-1	-1	-2	-2
Retail Subtotal			1	0	1	1	1	2	43
Super Market (850)	12.600	TSF	29	19	48	59	57	116	1,345
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			-7	-5	-12	-15	-14	-29	-41
Supermarket Subtotal			22	14	36	44	43	87	1,304
Walk-in Bank (911)	1.340	TSF	16	14	30	7	9	16	160
High Turnover Sit-Down Restaurant (932)	2.575	TSF	14	12	26	16	10	26	289
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			-4	-3	-7	-4	-3	-7	-14
High Turnover Sit-Down Restaurant Subtotal			10	9	19	12	7	19	275
Donut/Coffee Shop Without Drive Through (936)	1.370	TSF	71	68	139	25	25	50	500
<i>Pass-by Adjustment (25% AM & PM Peak Hour)</i>			-18	-17	-35	-6	-6	-12	-47
Donut/Coffee Shop Without Drive Through Subtotal			53	51	104	19	19	38	453
Retail Component Subtotal			102	88	190	83	79	162	2,235
<i>5% Adjustment for Walk/Bike/Transit</i>			-5	-4	-9	-4	-4	-8	-112
Project Retail			97	84	181	79	75	154	2,123
Project Total			109	120	229	116	99	215	2,867

¹ Source: 2017 ITE Trip Generation Manual (10th Edition).

² DU = Dwelling Units; TSF = Thousand Square Feet.

Table 4
Proposed Project Net Trip Generation

Land Use	AM			PM			Daily
	In	Out	Total	In	Out	Total	
Proposed Project (Retail Component)	97	84	181	79	75	154	2,123
Existing Land Use (Retail)	-34	-28	-62	-42	-39	-81	-973
<i>NET Retail</i>	<i>63</i>	<i>56</i>	<i>119</i>	<i>37</i>	<i>36</i>	<i>73</i>	<i>1,150</i>
Proposed Project (Residential Component)	12	36	48	37	24	61	744
Total Net Trip Generation	75	92	167	74	60	134	1,894

Table 5
Study Intersections

Intersection		Signalized/ Non-Signalized	Jurisdiction
1.	Redwood Avenue (NS) / Washington Boulevard (EW)	Signalized	Culver City
2.	Beethoven Street (NS) / Washington Boulevard (EW)	Signalized	Culver City
3.	Meier Street (NS) / Zanja Street (EW)	Non-Signalized	Los Angeles
4.	Meier Street (NS) / Washington Boulevard (EW)	Non-Signalized	Culver City
5.	Rosabell Street (NS) / Washinton Boulevard (EW)	Signalized	Culver City
6.	Zanja Street-Washington Boulevard (NS) / Washington Boulevard-Washington Place (EW)	Signalized	Culver City
7.	Wade Street (NS) / Washington Place (EW)	Signalized	Culver City
8.	Wade Street (NS) / Washingto Boulevard (EW)	Signalized	Culver City
9.	Centinela Avenue (NS) / Washington Place (EW)	Signalized	Culver City
10.	Centinela Avenue (NS) / Washington Boulevard (EW)	Signalized	Culver City

ATTACHMENT A – ADDITIONAL ANALYSES

In addition to the Intersection Level of Service (LOS) analysis, which will follow the City of Culver City updated Transportation Study Criteria and Guidelines for existing and future traffic analysis scenarios, the following analyses will also be prepared for the proposed project:

CEQA Vehicle Miles Traveled (VMT) Analysis to analyze whether the proposed project is or is not screened out of a VMT analysis per the City's screening criteria to determine whether the project is forecast to determine significant impact under City VMT thresholds; mitigation measures will be identified to address identified significant impacts.

Site Access Analysis focusing on vehicular, pedestrian and bicycle access, addressing potential conflicts, as well as the potential of queuing/stacking of vehicles on the surface streets at the project driveways.

Transportation Demand Management (TDM) Analysis reviewing the opportunities to potentially reduce transportation demand of the proposed mixed-use project.

Transit Analysis addressing the potential of the proposed project to affect the surrounding transit local and regional facilities/service.

Shared Parking Analysis will be prepared for the proposed mixed use residential and retail project.

Appendix B

VMT Analysis Tool Inputs & Results



Project Name
TRIANGLE SQUARE

Project Parcel(s)
4236020006

Project Screening		Yes/No	Yes/No
Is this project within 1/2 mile of one of the following transit hubs? - Culver City Expo Station - La Cienega/Jefferson Expo Station - Westfield-Culver City Transit Center - Sepulveda/Venice intersection		No	Does this project generate fewer than 250 daily trips? N/A
Is the project located within any TPA and are at least 15% of the on-site residential units are affordable?		Yes	Is the retail component of project fewer than 50,000 square feet in size at every store? Yes
			Is this residential component of the project 100% affordable housing? N/A

No analysis required. This project meets the screening criteria. No separate analysis is required for retail.

Project Land Use			
Residential	Value (du)	<i>The following land uses will require separate impact analysis (outside of this tool) if not screened out. Please leave the land uses in the table below if they are part of a mixed use project.</i>	
Single Family	0	Retail	Value (ksf)
Multi-Family	88	General	1,190,000
Affordable Housing		Supermarket	12,600,000
Family	16	Bank	1,340,000
Senior	0	Health Club	0,000
Special Needs	0	Gas Station	0,000
Permanent Supportive	0	Auto Repair	0,000
Office	Value (ksf)	Home Improvement Superstore	0,000
Standard	0.000	Free-Standing Discount	0,000
Medical	Value (ksf)	Restaurant Non-fast-food	2,575,000
Medical Office	0.000	Restaurant Fast-food	1,370,000
Hospital	0.000	Value (seats)	0.000
Industrial	Value (ksf)	Theater w/ Matinee	
Light Industrial	0.000	Hotel	Value (rooms)
Manufacturing	0.000	Hotel	0
Warehousing / Self-Storage	0.000	Motel	0
Movie Studio	Value (ksf)	School	Value (students)
Office	0.000	University	0
Post Production	0.000	High School	0
Stage	0.000	Middle School	0
Support	0.000	Elementary	0

Proposed Project Summary										
	Total Daily		Household VMT				Work VMT			
	Trips	VMT	City VMT per capita	Project VMT per capita	Project vs. City		City VMT per employee	Project VMT per employee	Project vs. City	
					Difference (%)	Significant VMT Impact?*			Difference (%)	Significant VMT Impact?*
Proposed Project	N/A	N/A	8.3	N/A	N/A	N/A	10.1	N/A	N/A	N/A
Proposed Project w/ Mitigation	N/A	N/A	8.3	N/A	N/A	N/A	10.1	N/A	N/A	N/A

* A significant impact occurs unless the project metric is 15% or more below the City metric. For VMT per capita, the project metric must be below 7.1 for VMT per employee the project must be below 8.6.



Transportation Demand Management Strategies

TDM VMT Adjustments Summary *

	Residential	Office/Retail/Other	Combined Total
Proposed Project	0.0%	0.0%	0.0%
Proposed Project w/ Mitigation	0.0%	0.0%	0.0%

* The TDM Adjustments Summary shows the combined total effect of all selected TDM strategies by land use. These reductions are fully reflected in the Total VMT above, but only those strategies and land uses that are relevant to each efficiency metric are reflected in the Household VMT and Work VMT efficiency metrics.

MEASURE TYPE	TDM MEASURE INPUT	TDM VMT Adjustments
--------------	-------------------	---------------------

Parking

<input type="checkbox"/> Off-Street Parking Pricing <input type="checkbox"/> proposed project		<table border="0"> <tr> <td>Employees</td> <td>Residents</td> <td>Visitors</td> <td></td> </tr> <tr> <td>\$ 0</td> <td>\$ 0</td> <td>\$ 0</td> <td>Baseline Off-Street Cost (\$/space)</td> </tr> <tr> <td>\$ 0</td> <td>\$ 0</td> <td>\$ 0</td> <td>Proposed Off-Street Cost (\$/space)</td> </tr> </table>	Employees	Residents	Visitors		\$ 0	\$ 0	\$ 0	Baseline Off-Street Cost (\$/space)	\$ 0	\$ 0	\$ 0	Proposed Off-Street Cost (\$/space)	Residential Office/Retail/Other	<input type="text"/> <input type="text"/>
Employees	Residents	Visitors														
\$ 0	\$ 0	\$ 0	Baseline Off-Street Cost (\$/space)													
\$ 0	\$ 0	\$ 0	Proposed Off-Street Cost (\$/space)													
<input type="checkbox"/> On-Street Parking Pricing <input type="checkbox"/> proposed project		<table border="0"> <tr> <td>Employees</td> <td>Residents</td> <td>Visitors</td> <td></td> </tr> <tr> <td>\$ 0</td> <td>\$ 0</td> <td>\$ 0</td> <td>Baseline On-Street Cost (\$/space)</td> </tr> <tr> <td>\$ 0</td> <td>\$ 0</td> <td>\$ 0</td> <td>Proposed On-Street Cost (\$/space)</td> </tr> </table>	Employees	Residents	Visitors		\$ 0	\$ 0	\$ 0	Baseline On-Street Cost (\$/space)	\$ 0	\$ 0	\$ 0	Proposed On-Street Cost (\$/space)	Residential Office/Retail/Other	<input type="text"/> <input type="text"/>
Employees	Residents	Visitors														
\$ 0	\$ 0	\$ 0	Baseline On-Street Cost (\$/space)													
\$ 0	\$ 0	\$ 0	Proposed On-Street Cost (\$/space)													
<input type="checkbox"/> Parking Supply <input type="checkbox"/> proposed project		<table border="0"> <tr> <td>0</td> <td>Required Number of Spaces (for resident)</td> </tr> <tr> <td>0</td> <td>Proposed Number of Spaces (for resident)</td> </tr> </table>	0	Required Number of Spaces (for resident)	0	Proposed Number of Spaces (for resident)	Residential	<input type="text"/>								
0	Required Number of Spaces (for resident)															
0	Proposed Number of Spaces (for resident)															

Transit

<input type="checkbox"/> Transit Frequency <input type="checkbox"/> proposed project		<table border="0"> <tr> <td>0</td> <td>Baseline Frequency (minutes)</td> </tr> <tr> <td>0</td> <td>Proposed Frequency (minutes)</td> </tr> </table>	0	Baseline Frequency (minutes)	0	Proposed Frequency (minutes)	Residential Office/Retail/Other	<input type="text"/> <input type="text"/>
0	Baseline Frequency (minutes)							
0	Proposed Frequency (minutes)							
<input type="checkbox"/> Point-to-point Shuttles <input type="checkbox"/> proposed project		Select to include in the project.	Office/Retail/Other	<input type="text"/>				
<input type="checkbox"/> Last Mile Shuttles <input type="checkbox"/> proposed project		Select to include in the project.	Office/Retail/Other	<input type="text"/>				

Commute Trip Reductions

<input type="checkbox"/> Commute Marketing Program <input type="checkbox"/> proposed project		<input type="checkbox"/> Employees <input type="checkbox"/> Residents	Residential Office/Retail/Other	<input type="text"/> <input type="text"/>							
<input type="checkbox"/> Financial Commuter Incentives <input type="checkbox"/> proposed project		You may choose only one Financial Commuter Strategy, Commuter Incentives or Transit Sub:		<input type="text"/> <input type="text"/>							
<input type="checkbox"/> Commuter Incentives		<table border="0"> <tr> <td>\$ 0</td> <td>per</td> <td>0</td> <td>Financial Incentive (\$/day or \$/month)</td> </tr> <tr> <td>\$ 0</td> <td>per</td> <td>0</td> <td>Average Baseline Commute Cost (\$/day or \$/month)</td> </tr> </table>	\$ 0	per	0	Financial Incentive (\$/day or \$/month)	\$ 0	per	0	Average Baseline Commute Cost (\$/day or \$/month)	<input type="text"/> <input type="text"/>
\$ 0	per	0	Financial Incentive (\$/day or \$/month)								
\$ 0	per	0	Average Baseline Commute Cost (\$/day or \$/month)								
<input type="checkbox"/> Transit Subsidies		<input type="checkbox"/> Employees <input type="checkbox"/> Residents	0% Percentage of Cost Subsidized 0% Percentage of Cost Subsidized								

Site Design

<input type="checkbox"/> Pedestrian-Oriented Design <input type="checkbox"/> proposed project		Select to include in the project.	Residential Office/Retail/Other	<input type="text"/> <input type="text"/>
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Appendix C

Existing Traffic Count Worksheets

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

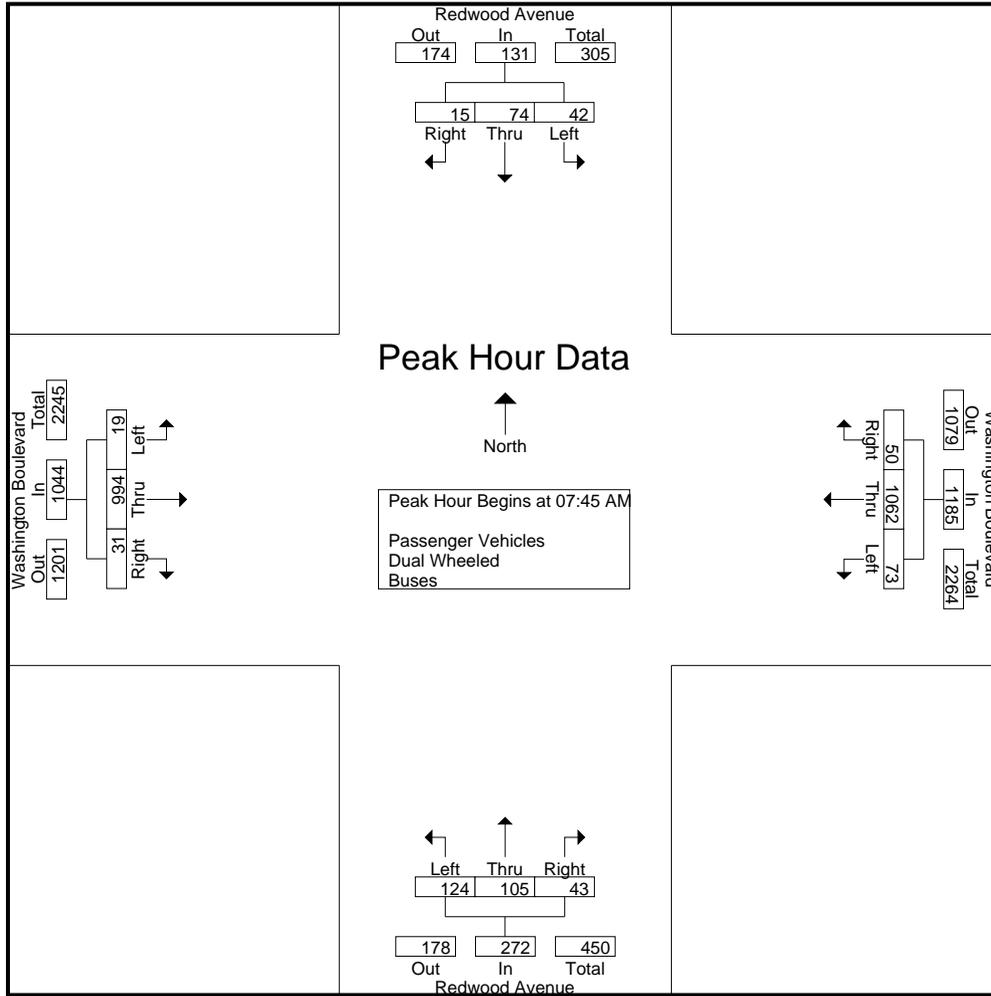
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	7	1	11	11	162	4	177	22	17	9	48	1	138	7	146	382
07:15 AM	8	15	4	27	12	165	14	191	24	24	15	63	4	193	7	204	485
07:30 AM	9	15	5	29	10	241	26	277	31	33	14	78	11	218	8	237	621
07:45 AM	18	26	5	49	16	277	30	323	32	29	5	66	8	244	7	259	697
Total	38	63	15	116	49	845	74	968	109	103	43	255	24	793	29	846	2185
08:00 AM	11	20	3	34	23	284	13	320	25	22	12	59	6	238	6	250	663
08:15 AM	4	12	4	20	13	236	5	254	38	35	9	82	2	216	11	229	585
08:30 AM	9	16	3	28	21	265	2	288	29	19	17	65	3	296	7	306	687
08:45 AM	4	15	7	26	27	298	4	329	41	19	13	73	6	241	10	257	685
Total	28	63	17	108	84	1083	24	1191	133	95	51	279	17	991	34	1042	2620
09:00 AM	9	14	6	29	20	295	9	324	25	25	9	59	5	211	12	228	640
09:15 AM	12	19	2	33	8	212	5	225	32	24	11	67	1	164	7	172	497
09:30 AM	5	22	2	29	33	291	6	330	21	23	15	59	3	211	8	222	640
09:45 AM	5	22	4	31	20	262	4	286	33	28	12	73	4	232	11	247	637
Total	31	77	14	122	81	1060	24	1165	111	100	47	258	13	818	38	869	2414
Grand Total	97	203	46	346	214	2988	122	3324	353	298	141	792	54	2602	101	2757	7219
Apprch %	28	58.7	13.3		6.4	89.9	3.7		44.6	37.6	17.8		2	94.4	3.7		
Total %	1.3	2.8	0.6	4.8	3	41.4	1.7	46	4.9	4.1	2	11	0.7	36	1.4	38.2	
Passenger Vehicles	95	202	44	341	210	2905	121	3236	350	295	140	785	52	2518	95	2665	7027
% Passenger Vehicles	97.9	99.5	95.7	98.6	98.1	97.2	99.2	97.4	99.2	99	99.3	99.1	96.3	96.8	94.1	96.7	97.3
Dual Wheeled	2	1	2	5	4	55	1	60	3	3	1	7	1	66	6	73	145
% Dual Wheeled	2.1	0.5	4.3	1.4	1.9	1.8	0.8	1.8	0.8	1	0.7	0.9	1.9	2.5	5.9	2.6	2
Buses	0	0	0	0	0	28	0	28	0	0	0	0	1	18	0	19	47
% Buses	0	0	0	0	0	0.9	0	0.8	0	0	0	0	1.9	0.7	0	0.7	0.7

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	18	26	5	49	16	277	30	323	32	29	5	66	8	244	7	259	697
08:00 AM	11	20	3	34	23	284	13	320	25	22	12	59	6	238	6	250	663
08:15 AM	4	12	4	20	13	236	5	254	38	35	9	82	2	216	11	229	585
08:30 AM	9	16	3	28	21	265	2	288	29	19	17	65	3	296	7	306	687
Total Volume	42	74	15	131	73	1062	50	1185	124	105	43	272	19	994	31	1044	2632
% App. Total	32.1	56.5	11.5		6.2	89.6	4.2		45.6	38.6	15.8		1.8	95.2	3		
PHF	.583	.712	.750	.668	.793	.935	.417	.917	.816	.750	.632	.829	.594	.840	.705	.853	.944

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				08:45 AM				07:30 AM				07:45 AM			
+0 mins.	8	15	4	27	27	298	4	329	31	33	14	78	8	244	7	259
+15 mins.	9	15	5	29	20	295	9	324	32	29	5	66	6	238	6	250
+30 mins.	18	26	5	49	8	212	5	225	25	22	12	59	2	216	11	229
+45 mins.	11	20	3	34	33	291	6	330	38	35	9	82	3	296	7	306
Total Volume	46	76	17	139	88	1096	24	1208	126	119	40	285	19	994	31	1044
% App. Total	33.1	54.7	12.2		7.3	90.7	2		44.2	41.8	14		1.8	95.2	3	
PHF	.639	.731	.850	.709	.667	.919	.667	.915	.829	.850	.714	.869	.594	.840	.705	.853

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

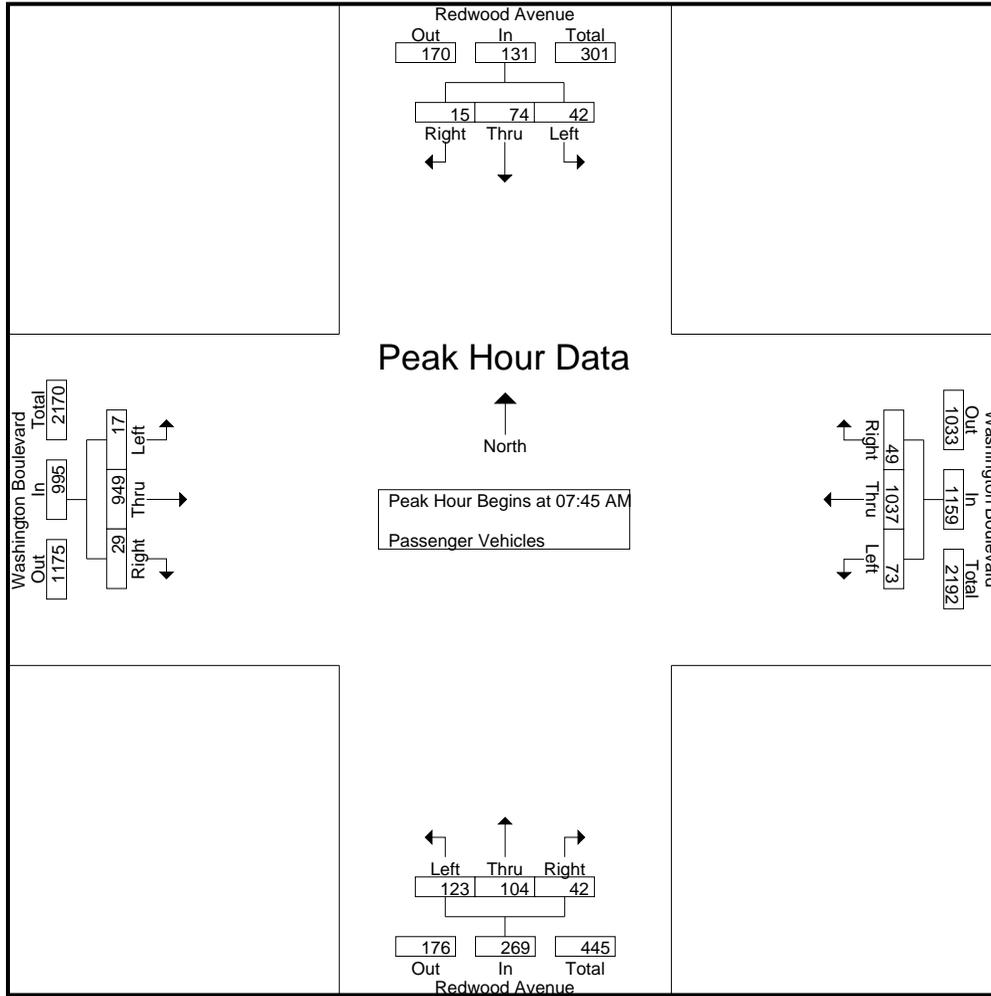
Groups Printed- Passenger Vehicles

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	7	1	11	11	156	4	171	22	17	9	48	1	135	7	143	373
07:15 AM	8	15	4	27	10	154	14	178	24	24	15	63	4	189	7	200	468
07:30 AM	8	15	4	27	10	235	26	271	31	33	14	78	11	213	7	231	607
07:45 AM	18	26	5	49	16	270	29	315	32	29	5	66	7	236	7	250	680
Total	37	63	14	114	47	815	73	935	109	103	43	255	23	773	28	824	2128
08:00 AM	11	20	3	34	23	279	13	315	25	22	12	59	6	234	6	246	654
08:15 AM	4	12	4	20	13	229	5	247	38	34	9	81	2	201	10	213	561
08:30 AM	9	16	3	28	21	259	2	282	28	19	16	63	2	278	6	286	659
08:45 AM	4	15	7	26	26	292	4	322	41	19	13	73	6	237	9	252	673
Total	28	63	17	108	83	1059	24	1166	132	94	50	276	16	950	31	997	2547
09:00 AM	9	14	6	29	20	288	9	317	25	25	9	59	5	207	11	223	628
09:15 AM	11	19	2	32	8	206	5	219	32	23	11	66	1	157	6	164	481
09:30 AM	5	22	2	29	32	282	6	320	21	23	15	59	3	205	8	216	624
09:45 AM	5	21	3	29	20	255	4	279	31	27	12	70	4	226	11	241	619
Total	30	76	13	119	80	1031	24	1135	109	98	47	254	13	795	36	844	2352
Grand Total	95	202	44	341	210	2905	121	3236	350	295	140	785	52	2518	95	2665	7027
Apprch %	27.9	59.2	12.9		6.5	89.8	3.7		44.6	37.6	17.8		2	94.5	3.6		
Total %	1.4	2.9	0.6	4.9	3	41.3	1.7	46.1	5	4.2	2	11.2	0.7	35.8	1.4	37.9	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	18	26	5	49	16	270	29	315	32	29	5	66	7	236	7	250	680
08:00 AM	11	20	3	34	23	279	13	315	25	22	12	59	6	234	6	246	654
08:15 AM	4	12	4	20	13	229	5	247	38	34	9	81	2	201	10	213	561
08:30 AM	9	16	3	28	21	259	2	282	28	19	16	63	2	278	6	286	659
Total Volume	42	74	15	131	73	1037	49	1159	123	104	42	269	17	949	29	995	2554
% App. Total	32.1	56.5	11.5		6.3	89.5	4.2		45.7	38.7	15.6		1.7	95.4	2.9		
PHF	.583	.712	.750	.668	.793	.929	.422	.920	.809	.765	.656	.830	.607	.853	.725	.870	.939

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	18	26	5	49	16	270	29	315	32	29	5	66	7	236	7	250
+15 mins.	11	20	3	34	23	279	13	315	25	22	12	59	6	234	6	246
+30 mins.	4	12	4	20	13	229	5	247	38	34	9	81	2	201	10	213
+45 mins.	9	16	3	28	21	259	2	282	28	19	16	63	2	278	6	286
Total Volume	42	74	15	131	73	1037	49	1159	123	104	42	269	17	949	29	995
% App. Total	32.1	56.5	11.5		6.3	89.5	4.2		45.7	38.7	15.6		1.7	95.4	2.9	
PHF	.583	.712	.750	.668	.793	.929	.422	.920	.809	.765	.656	.830	.607	.853	.725	.870

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

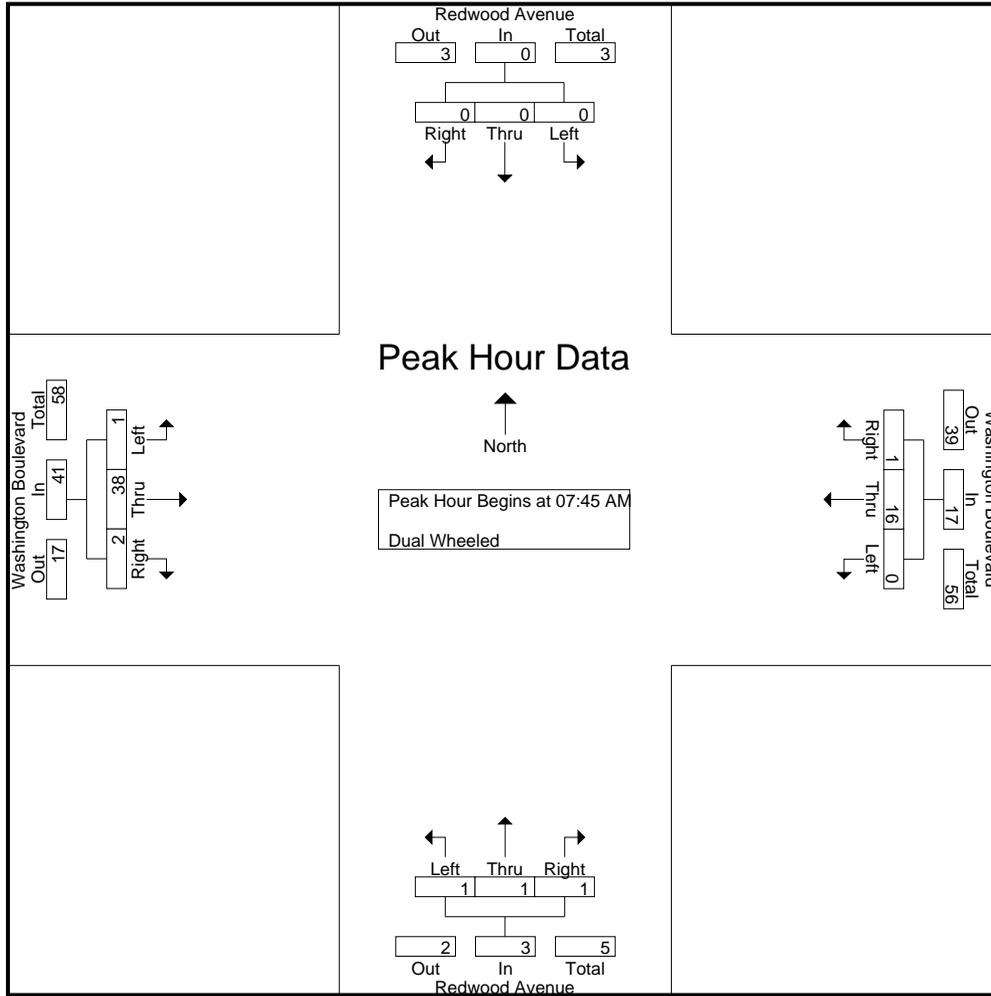
Groups Printed- Dual Wheeled

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
07:15 AM	0	0	0	0	2	5	0	7	0	0	0	0	0	2	0	2	9
07:30 AM	1	0	1	2	0	4	0	4	0	0	0	0	0	4	1	5	11
07:45 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	5	0	5	10
Total	1	0	1	2	2	18	1	21	0	0	0	0	0	13	1	14	37
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
08:15 AM	0	0	0	0	0	4	0	4	0	1	0	1	0	12	1	13	18
08:30 AM	0	0	0	0	0	4	0	4	1	0	1	2	1	18	1	20	26
08:45 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	1	3	7
Total	0	0	0	0	1	15	0	16	1	1	1	3	1	35	3	39	58
09:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	8
09:15 AM	1	0	0	1	0	4	0	4	0	1	0	1	0	6	1	7	13
09:30 AM	0	0	0	0	1	8	0	9	0	0	0	0	0	5	0	5	14
09:45 AM	0	1	1	2	0	6	0	6	2	1	0	3	0	4	0	4	15
Total	1	1	1	3	1	22	0	23	2	2	0	4	0	18	2	20	50
Grand Total	2	1	2	5	4	55	1	60	3	3	1	7	1	66	6	73	145
Apprch %	40	20	40		6.7	91.7	1.7		42.9	42.9	14.3		1.4	90.4	8.2		
Total %	1.4	0.7	1.4	3.4	2.8	37.9	0.7	41.4	2.1	2.1	0.7	4.8	0.7	45.5	4.1	50.3	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	5	0	5	10
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
08:15 AM	0	0	0	0	0	4	0	4	0	1	0	1	0	12	1	13	18
08:30 AM	0	0	0	0	0	4	0	4	1	0	1	2	1	18	1	20	26
Total Volume	0	0	0	0	0	16	1	17	1	1	1	3	1	38	2	41	61
% App. Total	0	0	0		0	94.1	5.9		33.3	33.3	33.3		2.4	92.7	4.9		
PHF	.000	.000	.000	.000	.000	1.00	.250	.850	.250	.250	.250	.375	.250	.528	.500	.513	.587

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	4	1	5	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	4	0	4	0	1	0	1	0	12	1	13
+45 mins.	0	0	0	0	0	4	0	4	1	0	1	2	1	18	1	20
Total Volume	0	0	0	0	0	16	1	17	1	1	1	3	1	38	2	41
% App. Total	0	0	0	0	0	94.1	5.9		33.3	33.3	33.3		2.4	92.7	4.9	
PHF	.000	.000	.000	.000	.000	1.000	.250	.850	.250	.250	.250	.375	.250	.528	.500	.513

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

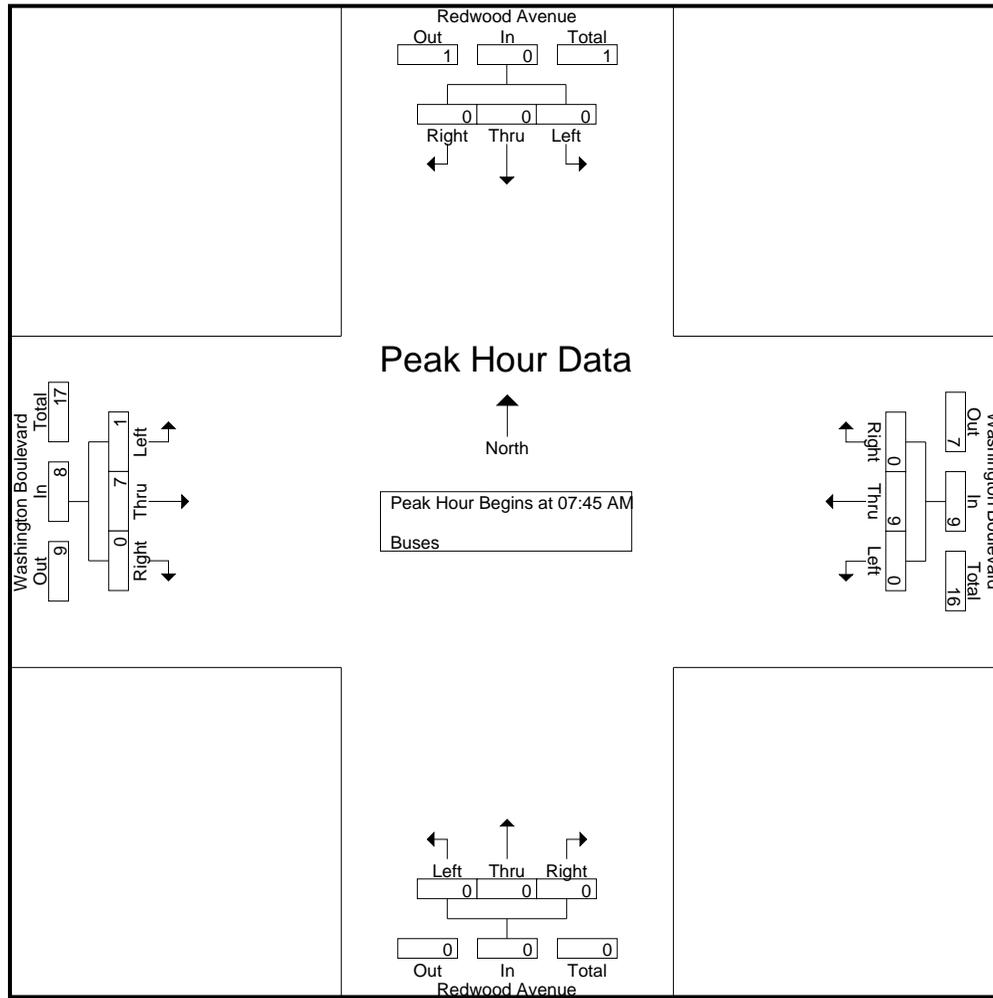
Groups Printed- Buses

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
Total	0	0	0	0	0	12	0	12	0	0	0	0	1	7	0	8	20
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
09:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
09:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
09:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	5	0	5	12
Grand Total	0	0	0	0	0	28	0	28	0	0	0	0	1	18	0	19	47
Apprch %	0	0	0	0	0	100	0	100	0	0	0	0	5.3	94.7	0	100	
Total %	0	0	0	0	0	59.6	0	59.6	0	0	0	0	2.1	38.3	0	40.4	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	9	0	9	0	0	0	0	1	7	0	8	17
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	12.5	87.5	0	100	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.250	.583	.000	.500	.607

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	9	0	9	0	0	0	0	1	7	0	8
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	12.5	87.5	0	0
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.250	.583	.000	.500

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

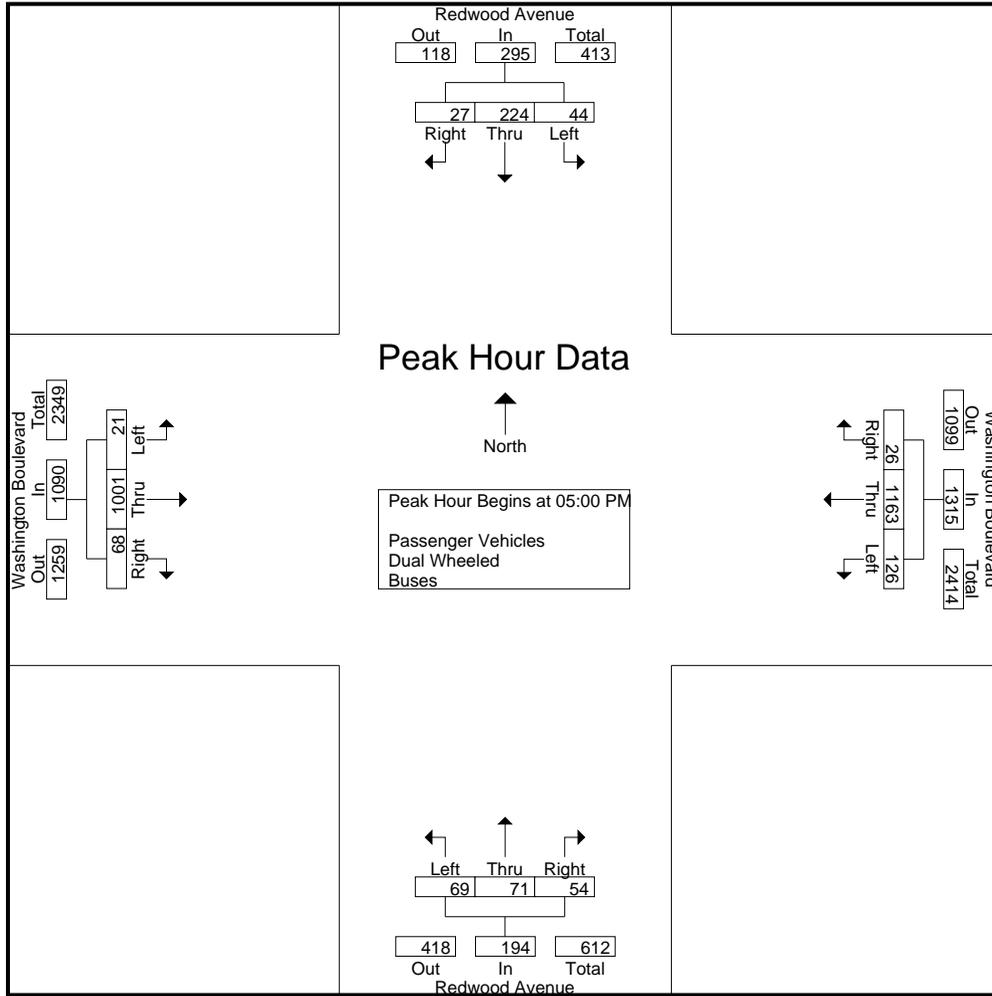
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	9	46	4	59	15	274	8	297	13	22	20	55	6	231	6	243	654
03:15 PM	18	32	3	53	24	281	8	313	17	16	8	41	8	248	9	265	672
03:30 PM	8	58	3	69	22	241	4	267	15	18	13	46	6	245	7	258	640
03:45 PM	6	43	1	50	23	237	11	271	16	23	8	47	6	267	12	285	653
Total	41	179	11	231	84	1033	31	1148	61	79	49	189	26	991	34	1051	2619
04:00 PM	5	58	6	69	21	276	8	305	16	22	13	51	7	230	10	247	672
04:15 PM	11	51	3	65	20	284	5	309	15	14	13	42	7	278	17	302	718
04:30 PM	11	65	7	83	26	261	6	293	15	18	18	51	5	252	13	270	697
04:45 PM	14	57	7	78	31	302	10	343	15	27	11	53	8	231	17	256	730
Total	41	231	23	295	98	1123	29	1250	61	81	55	197	27	991	57	1075	2817
05:00 PM	15	59	5	79	19	281	6	306	17	15	15	47	4	208	14	226	658
05:15 PM	9	41	8	58	27	295	6	328	21	17	11	49	9	271	18	298	733
05:30 PM	11	68	8	87	36	278	4	318	15	16	14	45	2	250	21	273	723
05:45 PM	9	56	6	71	44	309	10	363	16	23	14	53	6	272	15	293	780
Total	44	224	27	295	126	1163	26	1315	69	71	54	194	21	1001	68	1090	2894
Grand Total	126	634	61	821	308	3319	86	3713	191	231	158	580	74	2983	159	3216	8330
Apprch %	15.3	77.2	7.4		8.3	89.4	2.3		32.9	39.8	27.2		2.3	92.8	4.9		
Total %	1.5	7.6	0.7	9.9	3.7	39.8	1	44.6	2.3	2.8	1.9	7	0.9	35.8	1.9	38.6	
Passenger Vehicles	125	630	61	816	300	3271	86	3657	189	231	157	577	72	2930	154	3156	8206
% Passenger Vehicles	99.2	99.4	100	99.4	97.4	98.6	100	98.5	99	100	99.4	99.5	97.3	98.2	96.9	98.1	98.5
Dual Wheeled	1	4	0	5	8	28	0	36	2	0	0	2	2	30	5	37	80
% Dual Wheeled	0.8	0.6	0	0.6	2.6	0.8	0	1	1	0	0	0.3	2.7	1	3.1	1.2	1
Buses	0	0	0	0	0	20	0	20	0	0	1	1	0	23	0	23	44
% Buses	0	0	0	0	0	0.6	0	0.5	0	0	0.6	0.2	0	0.8	0	0.7	0.5

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	15	59	5	79	19	281	6	306	17	15	15	47	4	208	14	226	658
05:15 PM	9	41	8	58	27	295	6	328	21	17	11	49	9	271	18	298	733
05:30 PM	11	68	8	87	36	278	4	318	15	16	14	45	2	250	21	273	723
05:45 PM	9	56	6	71	44	309	10	363	16	23	14	53	6	272	15	293	780
Total Volume	44	224	27	295	126	1163	26	1315	69	71	54	194	21	1001	68	1090	2894
% App. Total	14.9	75.9	9.2		9.6	88.4	2		35.6	36.6	27.8		1.9	91.8	6.2		
PHF	.733	.824	.844	.848	.716	.941	.650	.906	.821	.772	.900	.915	.583	.920	.810	.914	.928

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				03:45 PM			
+0 mins.	11	51	3	65	19	281	6	306	15	18	18	51	6	267	12	285
+15 mins.	11	65	7	83	27	295	6	328	15	27	11	53	7	230	10	247
+30 mins.	14	57	7	78	36	278	4	318	17	15	15	47	7	278	17	302
+45 mins.	15	59	5	79	44	309	10	363	21	17	11	49	5	252	13	270
Total Volume	51	232	22	305	126	1163	26	1315	68	77	55	200	25	1027	52	1104
% App. Total	16.7	76.1	7.2		9.6	88.4	2		34	38.5	27.5		2.3	93	4.7	
PHF	.850	.892	.786	.919	.716	.941	.650	.906	.810	.713	.764	.943	.893	.924	.765	.914

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

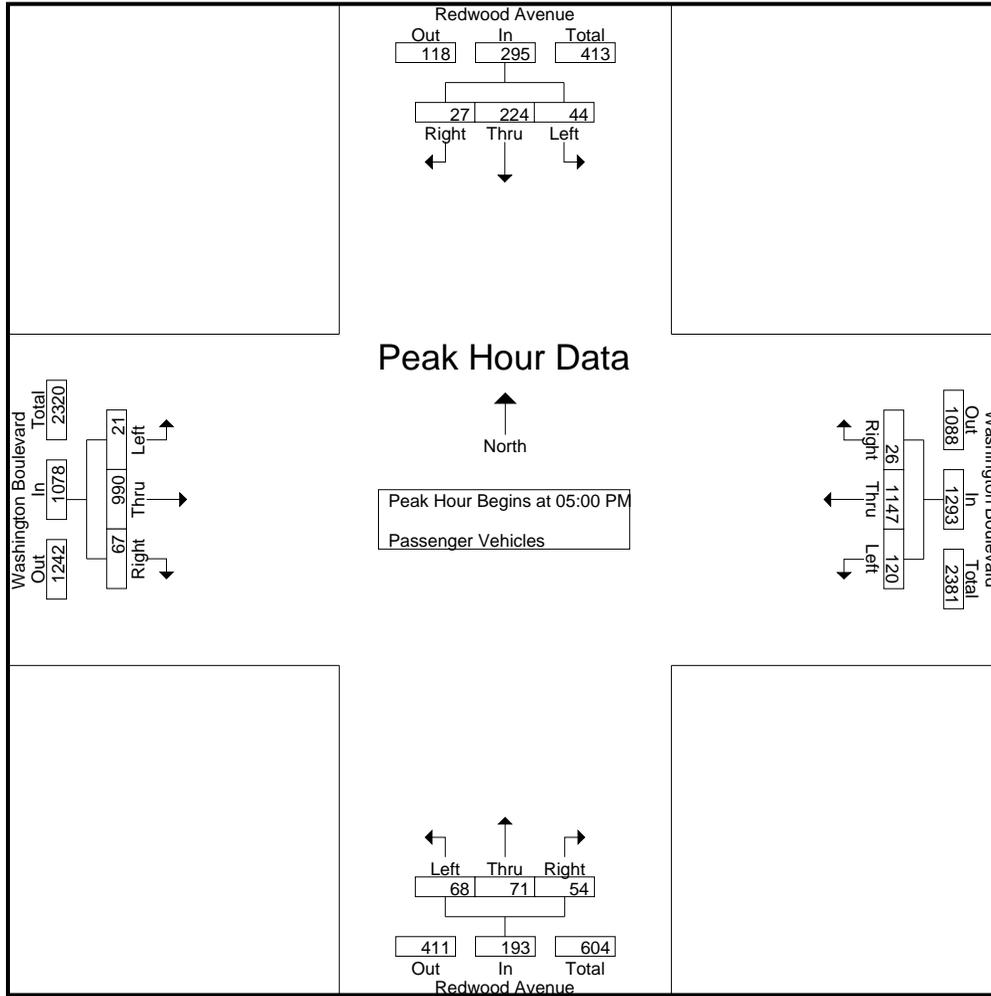
Groups Printed- Passenger Vehicles

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	9	46	4	59	15	269	8	292	13	22	20	55	6	222	6	234	640
03:15 PM	18	31	3	52	24	276	8	308	17	16	8	41	7	239	9	255	656
03:30 PM	8	57	3	68	22	236	4	262	15	18	13	46	5	238	6	249	625
03:45 PM	6	42	1	49	23	230	11	264	16	23	8	47	6	264	12	282	642
Total	41	176	11	228	84	1011	31	1126	61	79	49	189	24	963	33	1020	2563
04:00 PM	5	58	6	69	20	274	8	302	16	22	13	51	7	226	9	242	664
04:15 PM	11	51	3	65	20	282	5	307	15	14	13	42	7	275	17	299	713
04:30 PM	11	65	7	83	25	257	6	288	15	18	17	50	5	247	11	263	684
04:45 PM	13	56	7	76	31	300	10	341	14	27	11	52	8	229	17	254	723
Total	40	230	23	293	96	1113	29	1238	60	81	54	195	27	977	54	1058	2784
05:00 PM	15	59	5	79	18	279	6	303	17	15	15	47	4	206	14	224	653
05:15 PM	9	41	8	58	27	291	6	324	20	17	11	48	9	269	18	296	726
05:30 PM	11	68	8	87	34	273	4	311	15	16	14	45	2	246	20	268	711
05:45 PM	9	56	6	71	41	304	10	355	16	23	14	53	6	269	15	290	769
Total	44	224	27	295	120	1147	26	1293	68	71	54	193	21	990	67	1078	2859
Grand Total	125	630	61	816	300	3271	86	3657	189	231	157	577	72	2930	154	3156	8206
Apprch %	15.3	77.2	7.5		8.2	89.4	2.4		32.8	40	27.2		2.3	92.8	4.9		
Total %	1.5	7.7	0.7	9.9	3.7	39.9	1	44.6	2.3	2.8	1.9	7	0.9	35.7	1.9	38.5	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	15	59	5	79	18	279	6	303	17	15	15	47	4	206	14	224	653
05:15 PM	9	41	8	58	27	291	6	324	20	17	11	48	9	269	18	296	726
05:30 PM	11	68	8	87	34	273	4	311	15	16	14	45	2	246	20	268	711
05:45 PM	9	56	6	71	41	304	10	355	16	23	14	53	6	269	15	290	769
Total Volume	44	224	27	295	120	1147	26	1293	68	71	54	193	21	990	67	1078	2859
% App. Total	14.9	75.9	9.2		9.3	88.7	2		35.2	36.8	28		1.9	91.8	6.2		
PHF	.733	.824	.844	.848	.732	.943	.650	.911	.850	.772	.900	.910	.583	.920	.838	.910	.929

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	15	59	5	79	18	279	6	303	17	15	15	47	4	206	14	224
+15 mins.	9	41	8	58	27	291	6	324	20	17	11	48	9	269	18	296
+30 mins.	11	68	8	87	34	273	4	311	15	16	14	45	2	246	20	268
+45 mins.	9	56	6	71	41	304	10	355	16	23	14	53	6	269	15	290
Total Volume	44	224	27	295	120	1147	26	1293	68	71	54	193	21	990	67	1078
% App. Total	14.9	75.9	9.2		9.3	88.7	2		35.2	36.8	28		1.9	91.8	6.2	
PHF	.733	.824	.844	.848	.732	.943	.650	.911	.850	.772	.900	.910	.583	.920	.838	.910

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

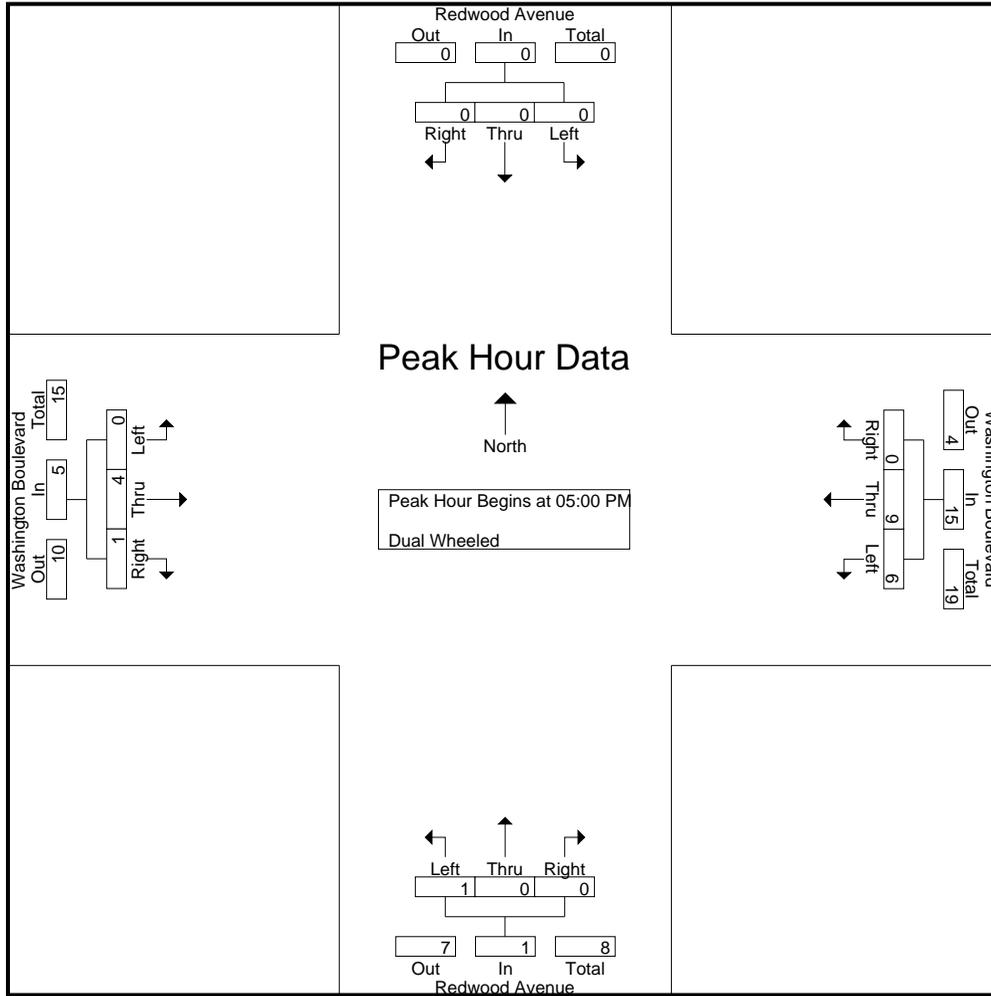
Groups Printed- Dual Wheeled

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
03:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	6	0	7	9
03:30 PM	0	1	0	1	0	4	0	4	0	0	0	0	1	5	1	7	12
03:45 PM	0	1	0	1	0	4	0	4	0	0	0	0	0	2	0	2	7
Total	0	3	0	3	0	13	0	13	0	0	0	0	2	17	1	20	36
04:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	3	1	4	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	4	2	6	10
04:45 PM	1	1	0	2	0	1	0	1	1	0	0	1	0	1	0	1	5
Total	1	1	0	2	2	6	0	8	1	0	0	1	0	9	3	12	23
05:00 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
05:30 PM	0	0	0	0	2	2	0	4	0	0	0	0	0	1	1	2	6
05:45 PM	0	0	0	0	3	4	0	7	0	0	0	0	0	1	0	1	8
Total	0	0	0	0	6	9	0	15	1	0	0	1	0	4	1	5	21
Grand Total	1	4	0	5	8	28	0	36	2	0	0	2	2	30	5	37	80
Apprch %	20	80	0		22.2	77.8	0		100	0	0		5.4	81.1	13.5		
Total %	1.2	5	0	6.2	10	35	0	45	2.5	0	0	2.5	2.5	37.5	6.2	46.2	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
05:30 PM	0	0	0	0	2	2	0	4	0	0	0	0	0	1	1	2	6
05:45 PM	0	0	0	0	3	4	0	7	0	0	0	0	0	1	0	1	8
Total Volume	0	0	0	0	6	9	0	15	1	0	0	1	0	4	1	5	21
% App. Total	0	0	0		40	60	0		100	0	0		0	80	20		
PHF	.000	.000	.000	.000	.500	.563	.000	.536	.250	.000	.000	.250	.000	1.00	.250	.625	.656

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1
+30 mins.	0	0	0	0	2	2	0	4	0	0	0	0	0	1	1	2
+45 mins.	0	0	0	0	3	4	0	7	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	6	9	0	15	1	0	0	1	0	4	1	5
% App. Total	0	0	0	0	40	60	0	100	100	0	0	0	0	80	20	100
PHF	.000	.000	.000	.000	.500	.563	.000	.536	.250	.000	.000	.250	.000	1.000	.250	.625

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

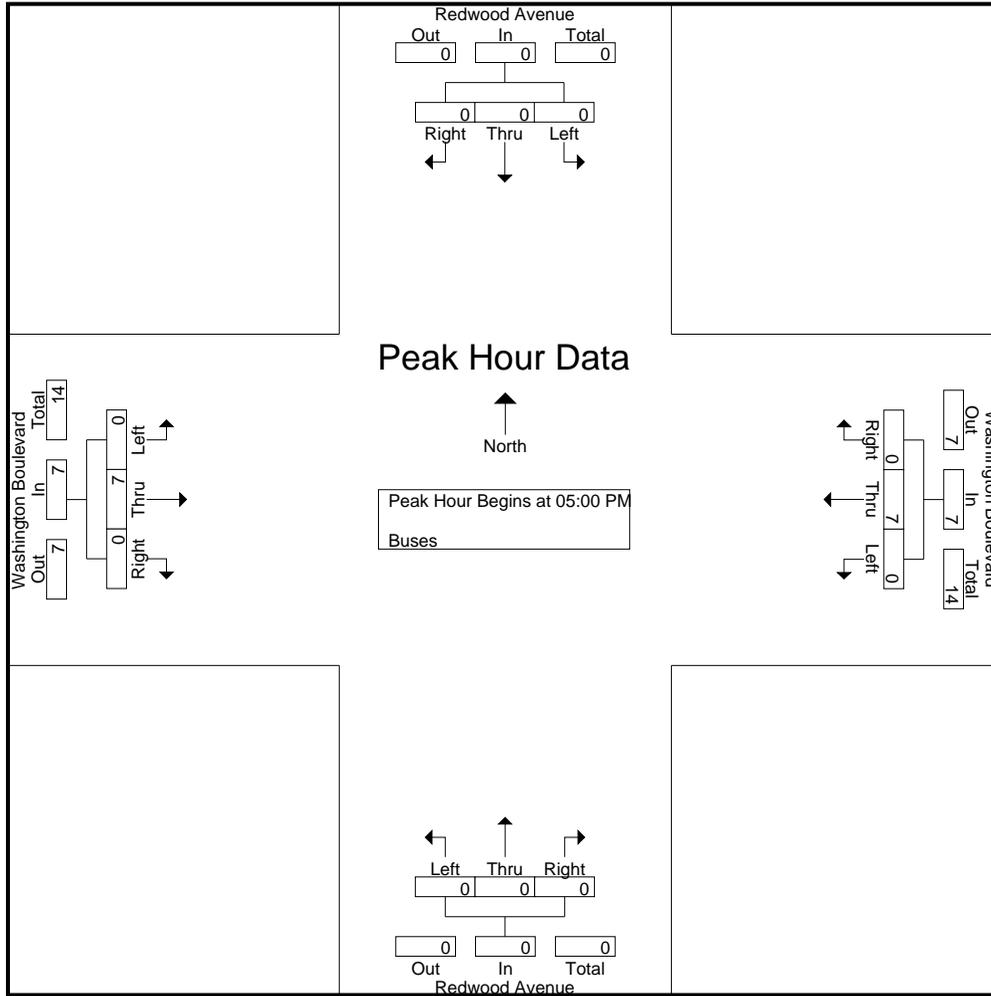
Groups Printed- Buses

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
03:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
03:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
03:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
Total	0	0	0	0	0	9	0	9	0	0	0	0	0	11	0	11	20
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	3
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	4	0	4	0	0	1	1	0	5	0	5	10
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	14
Grand Total	0	0	0	0	0	20	0	20	0	0	1	1	0	23	0	23	44
Apprch %	0	0	0	0	0	100	0	100	0	0	100	100	0	100	0	100	
Total %	0	0	0	0	0	45.5	0	45.5	0	0	2.3	2.3	0	52.3	0	52.3	

Start Time	Redwood Avenue Southbound				Washington Boulevard Westbound				Redwood Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	14
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.000	.583	.000	.583	.583

City of Culver
 N/S: Redwood Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 02_CVC_Redwood_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.000	.583	.000	.583

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

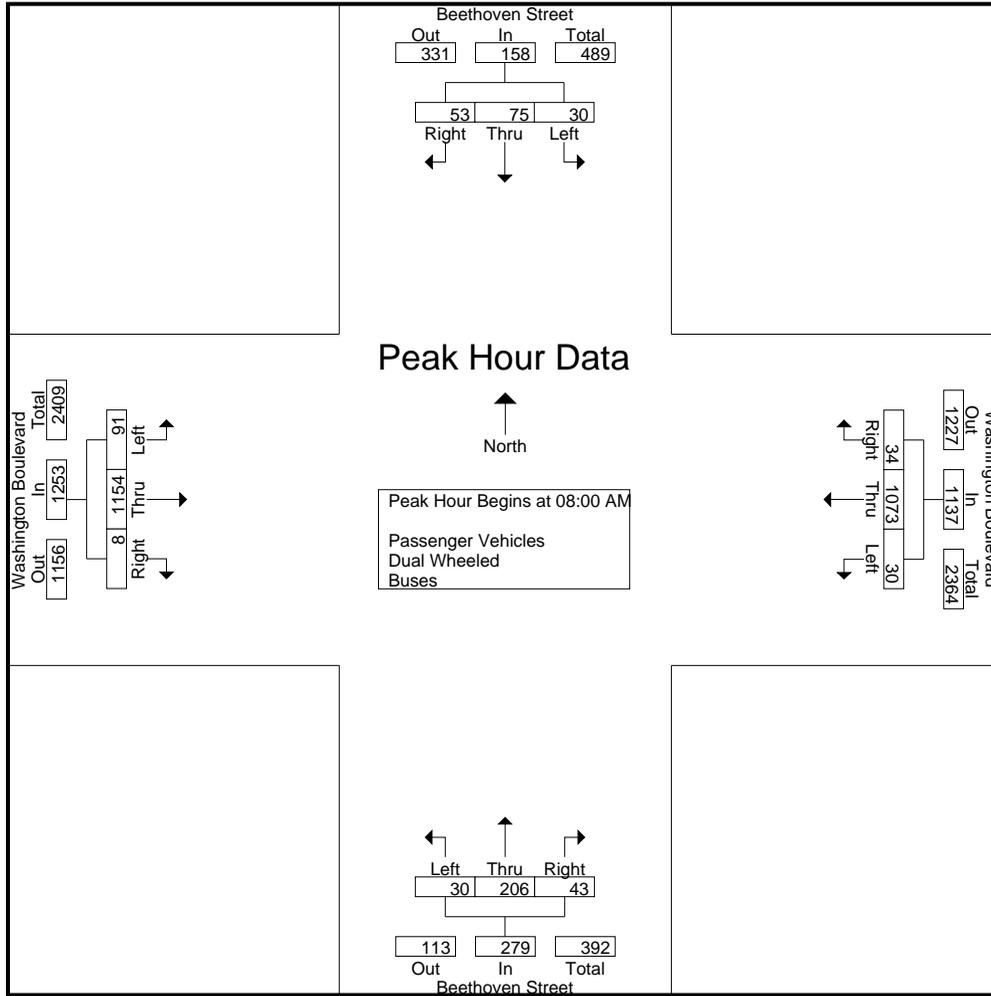
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	6	5	15	2	156	1	159	4	27	2	33	7	154	2	163	370
07:15 AM	3	7	6	16	4	168	5	177	5	34	6	45	17	234	1	252	490
07:30 AM	7	12	16	35	4	214	4	222	16	58	7	81	32	229	3	264	602
07:45 AM	10	19	8	37	7	257	9	273	13	45	13	71	24	308	7	339	720
Total	24	44	35	103	17	795	19	831	38	164	28	230	80	925	13	1018	2182
08:00 AM	7	15	14	36	6	245	6	257	7	53	18	78	21	264	2	287	658
08:15 AM	10	25	13	48	10	259	7	276	5	58	11	74	14	268	5	287	685
08:30 AM	8	19	9	36	4	252	16	272	5	52	7	64	35	311	1	347	719
08:45 AM	5	16	17	38	10	317	5	332	13	43	7	63	21	311	0	332	765
Total	30	75	53	158	30	1073	34	1137	30	206	43	279	91	1154	8	1253	2827
09:00 AM	9	5	14	28	1	282	8	291	5	39	8	52	19	226	1	246	617
09:15 AM	4	13	12	29	4	235	7	246	5	29	7	41	19	202	3	224	540
09:30 AM	4	14	13	31	9	270	7	286	12	55	11	78	20	219	3	242	637
09:45 AM	8	12	11	31	8	289	4	301	6	32	8	46	19	270	2	291	669
Total	25	44	50	119	22	1076	26	1124	28	155	34	217	77	917	9	1003	2463
Grand Total	79	163	138	380	69	2944	79	3092	96	525	105	726	248	2996	30	3274	7472
Apprch %	20.8	42.9	36.3		2.2	95.2	2.6		13.2	72.3	14.5		7.6	91.5	0.9		
Total %	1.1	2.2	1.8	5.1	0.9	39.4	1.1	41.4	1.3	7	1.4	9.7	3.3	40.1	0.4	43.8	
Passenger Vehicles	79	163	132	374	69	2876	78	3023	96	520	100	716	247	2927	30	3204	7317
% Passenger Vehicles	100	100	95.7	98.4	100	97.7	98.7	97.8	100	99	95.2	98.6	99.6	97.7	100	97.9	97.9
Dual Wheeled	0	0	5	5	0	41	1	42	0	5	3	8	1	53	0	54	109
% Dual Wheeled	0	0	3.6	1.3	0	1.4	1.3	1.4	0	1	2.9	1.1	0.4	1.8	0	1.6	1.5
Buses	0	0	1	1	0	27	0	27	0	0	2	2	0	16	0	16	46
% Buses	0	0	0.7	0.3	0	0.9	0	0.9	0	0	1.9	0.3	0	0.5	0	0.5	0.6

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	15	14	36	6	245	6	257	7	53	18	78	21	264	2	287	658
08:15 AM	10	25	13	48	10	259	7	276	5	58	11	74	14	268	5	287	685
08:30 AM	8	19	9	36	4	252	16	272	5	52	7	64	35	311	1	347	719
08:45 AM	5	16	17	38	10	317	5	332	13	43	7	63	21	311	0	332	765
Total Volume	30	75	53	158	30	1073	34	1137	30	206	43	279	91	1154	8	1253	2827
% App. Total	19	47.5	33.5		2.6	94.4	3		10.8	73.8	15.4		7.3	92.1	0.6		
PHF	.750	.750	.779	.823	.750	.846	.531	.856	.577	.888	.597	.894	.650	.928	.400	.903	.924

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:15 AM				07:30 AM				07:45 AM			
+0 mins.	7	15	14	36	10	259	7	276	16	58	7	81	24	308	7	339
+15 mins.	10	25	13	48	4	252	16	272	13	45	13	71	21	264	2	287
+30 mins.	8	19	9	36	10	317	5	332	7	53	18	78	14	268	5	287
+45 mins.	5	16	17	38	1	282	8	291	5	58	11	74	35	311	1	347
Total Volume	30	75	53	158	25	1110	36	1171	41	214	49	304	94	1151	15	1260
% App. Total	19	47.5	33.5		2.1	94.8	3.1		13.5	70.4	16.1		7.5	91.3	1.2	
PHF	.750	.750	.779	.823	.625	.875	.563	.882	.641	.922	.681	.938	.671	.925	.536	.908

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

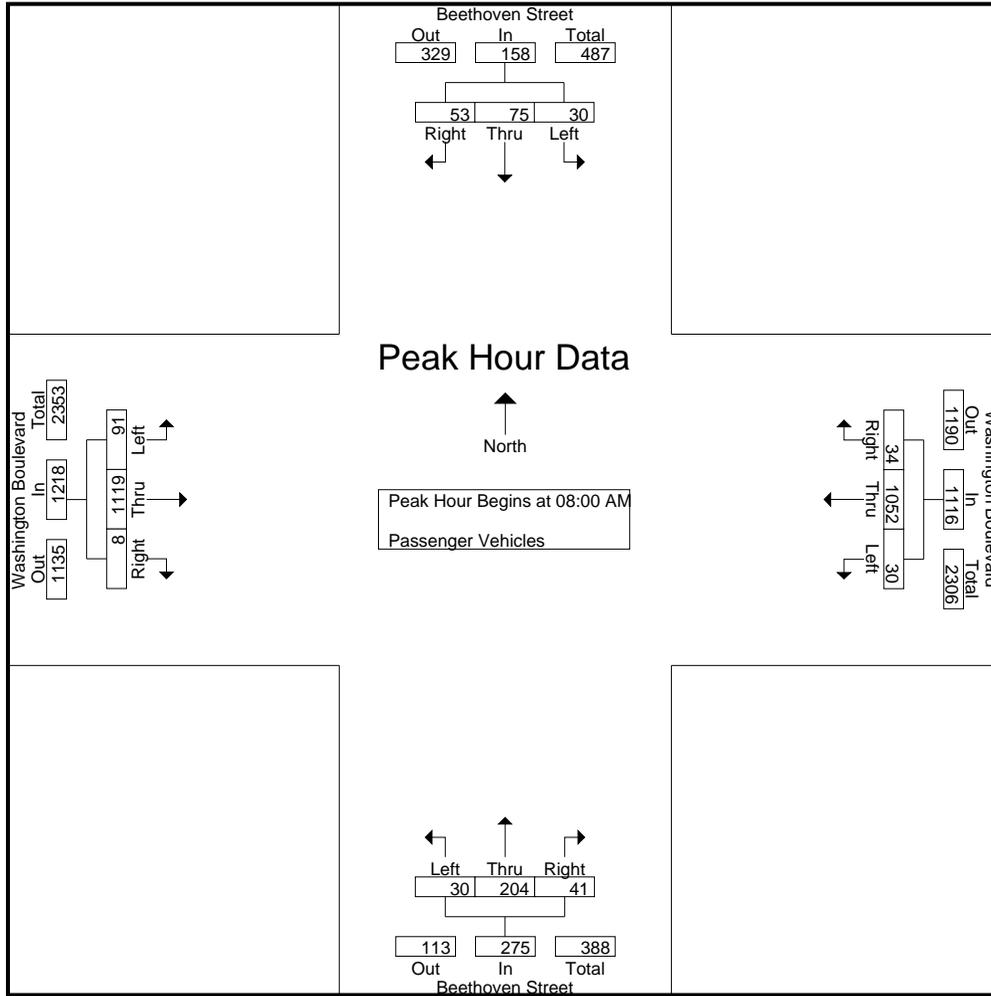
Groups Printed- Passenger Vehicles

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	6	4	14	2	154	1	157	4	27	2	33	7	152	2	161	365
07:15 AM	3	7	5	15	4	158	5	167	5	34	6	45	17	230	1	248	475
07:30 AM	7	12	15	34	4	212	4	220	16	58	5	79	32	225	3	260	593
07:45 AM	10	19	8	37	7	253	9	269	13	45	13	71	24	303	7	334	711
Total	24	44	32	100	17	777	19	813	38	164	26	228	80	910	13	1003	2144
08:00 AM	7	15	14	36	6	240	6	252	7	53	17	77	21	262	2	285	650
08:15 AM	10	25	13	48	10	251	7	268	5	57	10	72	14	258	5	277	665
08:30 AM	8	19	9	36	4	250	16	270	5	51	7	63	35	291	1	327	696
08:45 AM	5	16	17	38	10	311	5	326	13	43	7	63	21	308	0	329	756
Total	30	75	53	158	30	1052	34	1116	30	204	41	275	91	1119	8	1218	2767
09:00 AM	9	5	14	28	1	276	7	284	5	39	8	52	19	223	1	243	607
09:15 AM	4	13	12	29	4	227	7	238	5	28	7	40	18	197	3	218	525
09:30 AM	4	14	11	29	9	261	7	277	12	55	11	78	20	215	3	238	622
09:45 AM	8	12	10	30	8	283	4	295	6	30	7	43	19	263	2	284	652
Total	25	44	47	116	22	1047	25	1094	28	152	33	213	76	898	9	983	2406
Grand Total	79	163	132	374	69	2876	78	3023	96	520	100	716	247	2927	30	3204	7317
Apprch %	21.1	43.6	35.3		2.3	95.1	2.6		13.4	72.6	14		7.7	91.4	0.9		
Total %	1.1	2.2	1.8	5.1	0.9	39.3	1.1	41.3	1.3	7.1	1.4	9.8	3.4	40	0.4	43.8	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	15	14	36	6	240	6	252	7	53	17	77	21	262	2	285	650
08:15 AM	10	25	13	48	10	251	7	268	5	57	10	72	14	258	5	277	665
08:30 AM	8	19	9	36	4	250	16	270	5	51	7	63	35	291	1	327	696
08:45 AM	5	16	17	38	10	311	5	326	13	43	7	63	21	308	0	329	756
Total Volume	30	75	53	158	30	1052	34	1116	30	204	41	275	91	1119	8	1218	2767
% App. Total	19	47.5	33.5		2.7	94.3	3		10.9	74.2	14.9		7.5	91.9	0.7		
PHF	.750	.750	.779	.823	.750	.846	.531	.856	.577	.895	.603	.893	.650	.908	.400	.926	.915

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	7	15	14	36	6	240	6	252	7	53	17	77	21	262	2	285
+15 mins.	10	25	13	48	10	251	7	268	5	57	10	72	14	258	5	277
+30 mins.	8	19	9	36	4	250	16	270	5	51	7	63	35	291	1	327
+45 mins.	5	16	17	38	10	311	5	326	13	43	7	63	21	308	0	329
Total Volume	30	75	53	158	30	1052	34	1116	30	204	41	275	91	1119	8	1218
% App. Total	19	47.5	33.5		2.7	94.3	3		10.9	74.2	14.9		7.5	91.9	0.7	
PHF	.750	.750	.779	.823	.750	.846	.531	.856	.577	.895	.603	.893	.650	.908	.400	.926

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

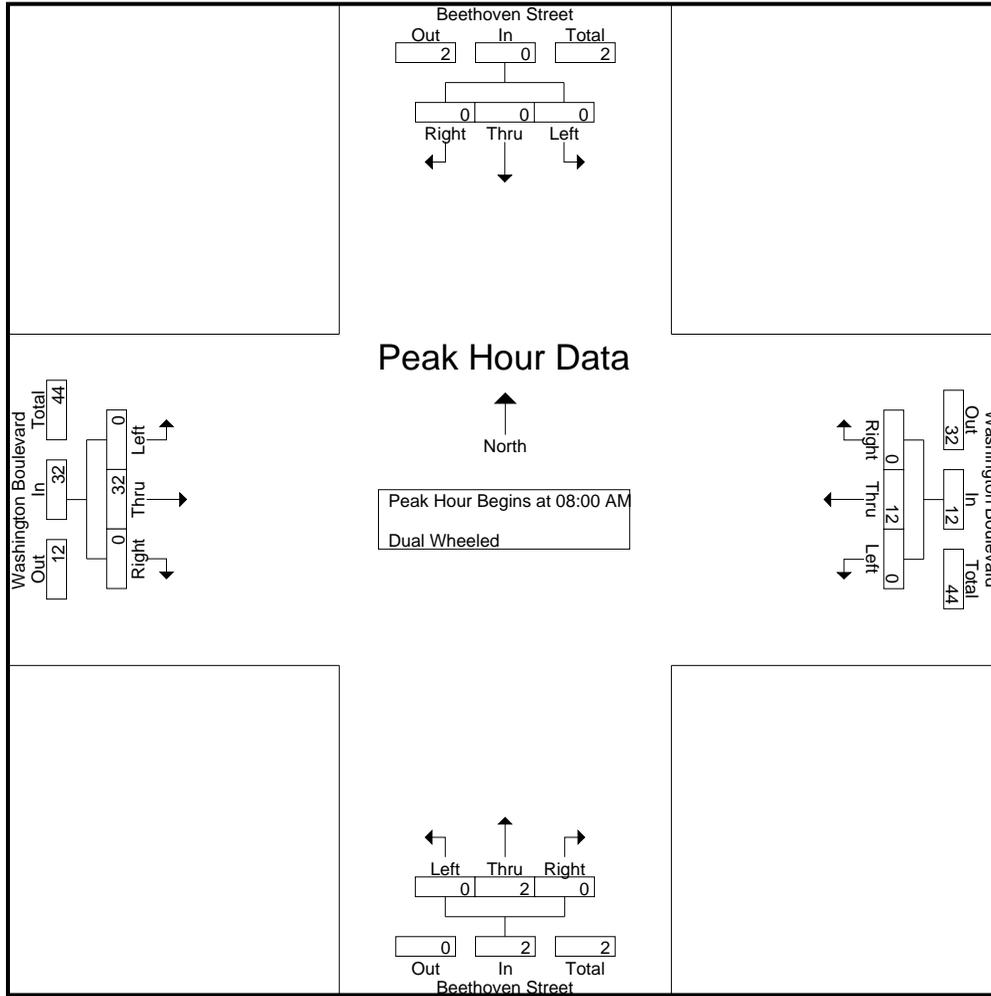
Groups Printed- Dual Wheeled

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	1	1	0	4	0	4	0	0	0	0	0	2	0	2	7
07:30 AM	0	0	1	1	0	1	0	1	0	0	2	2	0	3	0	3	7
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	2	2	0	7	0	7	0	0	2	2	0	8	0	8	19
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	0	0	0	5	0	5	0	1	0	1	0	9	0	9	15
08:30 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	19	0	19	21
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	12	0	12	0	2	0	2	0	32	0	32	46
09:00 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	1	0	1	6
09:15 AM	0	0	0	0	0	6	0	6	0	1	0	1	1	4	0	5	12
09:30 AM	0	0	2	2	0	8	0	8	0	0	0	0	0	2	0	2	12
09:45 AM	0	0	1	1	0	4	0	4	0	2	1	3	0	6	0	6	14
Total	0	0	3	3	0	22	1	23	0	3	1	4	1	13	0	14	44
Grand Total	0	0	5	5	0	41	1	42	0	5	3	8	1	53	0	54	109
Apprch %	0	0	100		0	97.6	2.4		0	62.5	37.5		1.9	98.1	0		
Total %	0	0	4.6	4.6	0	37.6	0.9	38.5	0	4.6	2.8	7.3	0.9	48.6	0	49.5	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	0	0	0	5	0	5	0	1	0	1	0	9	0	9	15
08:30 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	19	0	19	21
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total Volume	0	0	0	0	0	12	0	12	0	2	0	2	0	32	0	32	46
% App. Total	0	0	0		0	100	0		0	100	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.500	.000	.500	.000	.421	.000	.421	.548

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	5	0	5	0	1	0	1	0	9	0	9
+30 mins.	0	0	0	0	0	1	0	1	0	1	0	1	0	19	0	19
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	12	0	12	0	2	0	2	0	32	0	32
% App. Total	0	0	0	0	0	100	0	100	0	100	0	100	0	100	0	100
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.500	.000	.500	.000	.421	.000	.421

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

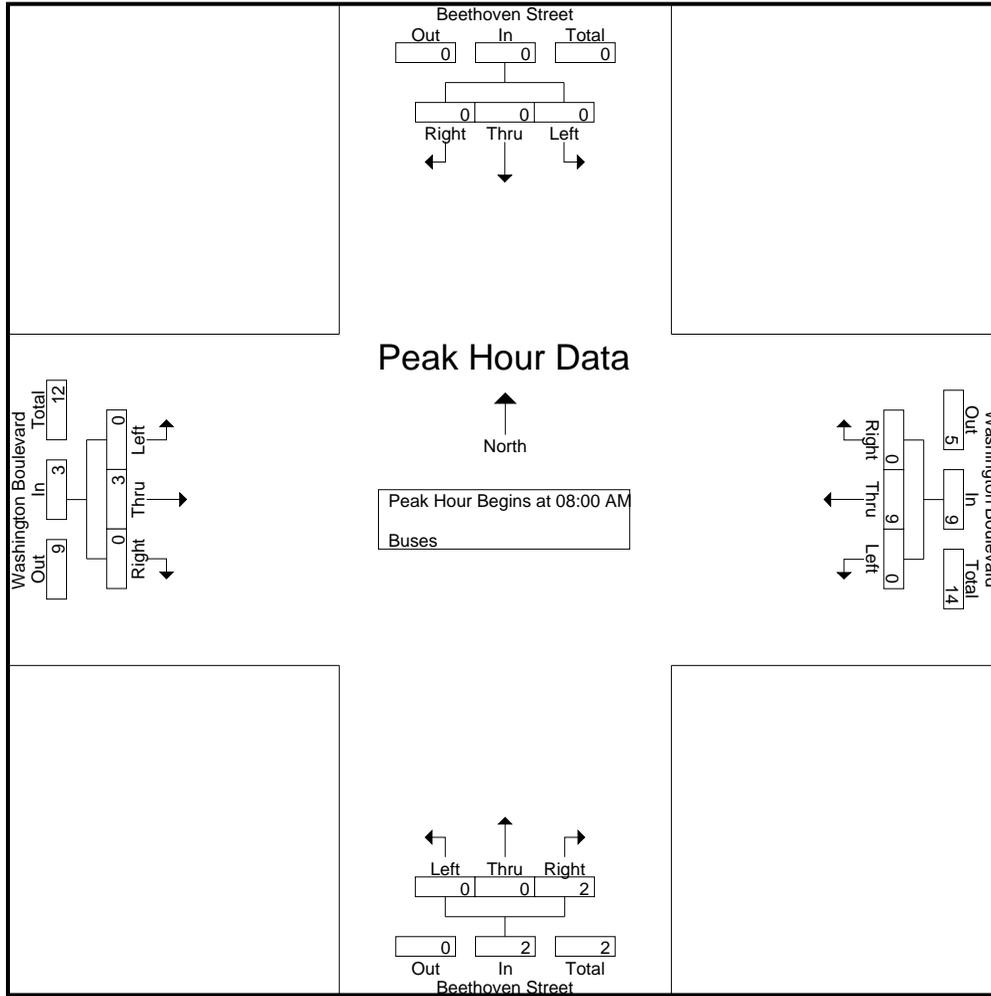
Groups Printed- Buses

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	1	1	0	11	0	11	0	0	0	0	0	7	0	7	19
08:00 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	1	0	1	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total	0	0	0	0	0	9	0	9	0	0	2	2	0	3	0	3	14
09:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
09:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
09:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
Grand Total	0	0	1	1	0	27	0	27	0	0	2	2	0	16	0	16	46
Apprch %	0	0	100		0	100	0		0	0	100		0	100	0		
Total %	0	0	2.2	2.2	0	58.7	0	58.7	0	0	4.3	4.3	0	34.8	0	34.8	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	1	0	1	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total Volume	0	0	0	0	0	9	0	9	0	0	2	2	0	3	0	3	14
% App. Total	0	0	0		0	100	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.500	.500	.000	.750	.000	.750	.700

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	0	3	0	3	0	0	1	1	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	9	0	9	0	0	2	2	0	3	0	3
% App. Total	0	0	0	0	0	100	0	0	0	0	100	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.500	.500	.000	.750	.000	.750

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

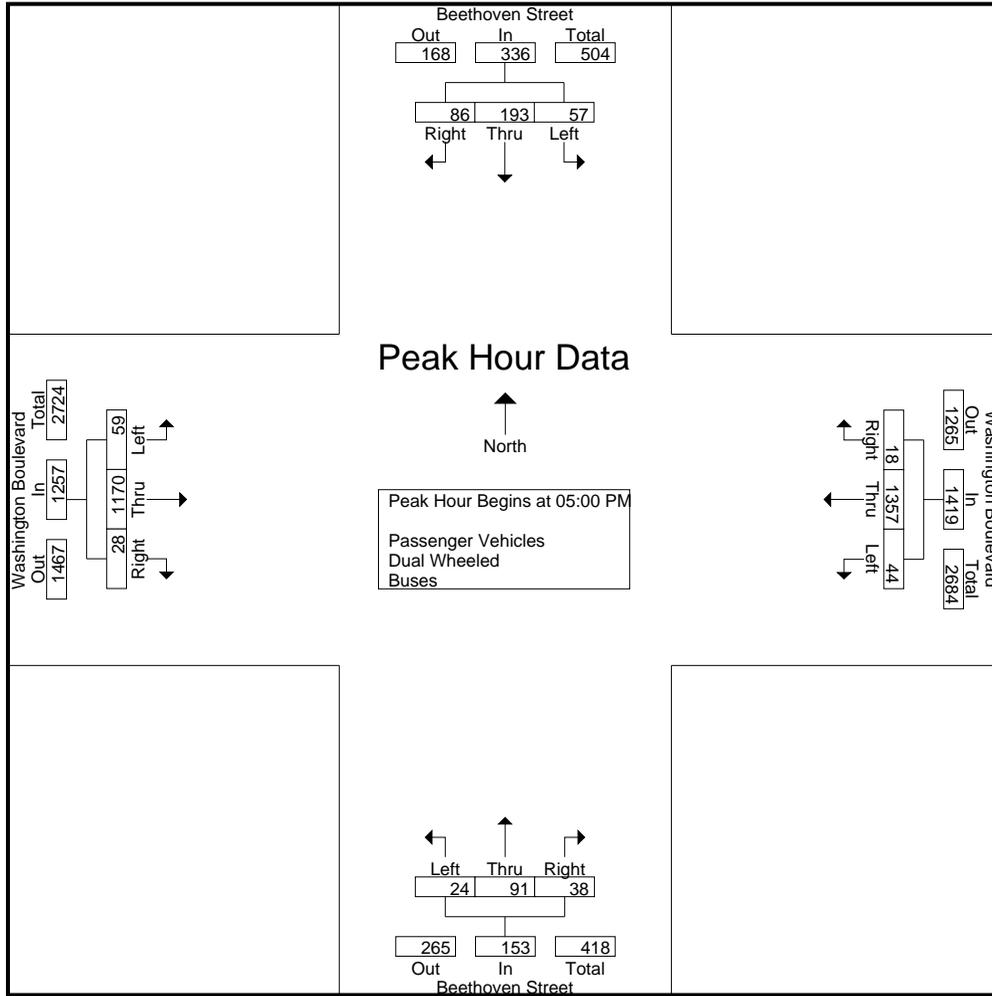
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	15	44	21	80	8	269	10	287	11	28	9	48	13	275	1	289	704
03:15 PM	15	39	17	71	9	305	7	321	6	23	6	35	11	276	6	293	720
03:30 PM	17	50	35	102	8	253	6	267	2	14	8	24	14	285	6	305	698
03:45 PM	10	27	18	55	11	260	6	277	11	11	4	26	12	267	9	288	646
Total	57	160	91	308	36	1087	29	1152	30	76	27	133	50	1103	22	1175	2768
04:00 PM	19	33	28	80	7	298	3	308	8	16	13	37	12	253	3	268	693
04:15 PM	9	48	25	82	11	300	1	312	6	23	13	42	6	293	3	302	738
04:30 PM	15	54	27	96	10	311	6	327	8	25	5	38	9	289	6	304	765
04:45 PM	10	50	25	85	15	325	8	348	7	15	8	30	10	258	4	272	735
Total	53	185	105	343	43	1234	18	1295	29	79	39	147	37	1093	16	1146	2931
05:00 PM	19	39	20	78	10	330	4	344	6	21	10	37	8	274	6	288	747
05:15 PM	15	44	24	83	15	334	5	354	7	23	9	39	13	294	6	313	789
05:30 PM	14	58	24	96	10	319	5	334	7	26	9	42	19	294	8	321	793
05:45 PM	9	52	18	79	9	374	4	387	4	21	10	35	19	308	8	335	836
Total	57	193	86	336	44	1357	18	1419	24	91	38	153	59	1170	28	1257	3165
Grand Total	167	538	282	987	123	3678	65	3866	83	246	104	433	146	3366	66	3578	8864
Apprch %	16.9	54.5	28.6		3.2	95.1	1.7		19.2	56.8	24		4.1	94.1	1.8		
Total %	1.9	6.1	3.2	11.1	1.4	41.5	0.7	43.6	0.9	2.8	1.2	4.9	1.6	38	0.7	40.4	
Passenger Vehicles	165	535	281	981	121	3637	65	3823	83	244	102	429	144	3324	64	3532	8765
% Passenger Vehicles	98.8	99.4	99.6	99.4	98.4	98.9	100	98.9	100	99.2	98.1	99.1	98.6	98.8	97	98.7	98.9
Dual Wheeled	2	3	1	6	1	20	0	21	0	0	2	2	0	20	1	21	50
% Dual Wheeled	1.2	0.6	0.4	0.6	0.8	0.5	0	0.5	0	0	1.9	0.5	0	0.6	1.5	0.6	0.6
Buses	0	0	0	0	1	21	0	22	0	2	0	2	2	22	1	25	49
% Buses	0	0	0	0	0.8	0.6	0	0.6	0	0.8	0	0.5	1.4	0.7	1.5	0.7	0.6

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	39	20	78	10	330	4	344	6	21	10	37	8	274	6	288	747
05:15 PM	15	44	24	83	15	334	5	354	7	23	9	39	13	294	6	313	789
05:30 PM	14	58	24	96	10	319	5	334	7	26	9	42	19	294	8	321	793
05:45 PM	9	52	18	79	9	374	4	387	4	21	10	35	19	308	8	335	836
Total Volume	57	193	86	336	44	1357	18	1419	24	91	38	153	59	1170	28	1257	3165
% App. Total	17	57.4	25.6		3.1	95.6	1.3		15.7	59.5	24.8		4.7	93.1	2.2		
PHF	.750	.832	.896	.875	.733	.907	.900	.917	.857	.875	.950	.911	.776	.950	.875	.938	.946

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	19	33	28	80	10	330	4	344	6	21	10	37	8	274	6	288
+15 mins.	9	48	25	82	15	334	5	354	7	23	9	39	13	294	6	313
+30 mins.	15	54	27	96	10	319	5	334	7	26	9	42	19	294	8	321
+45 mins.	10	50	25	85	9	374	4	387	4	21	10	35	19	308	8	335
Total Volume	53	185	105	343	44	1357	18	1419	24	91	38	153	59	1170	28	1257
% App. Total	15.5	53.9	30.6		3.1	95.6	1.3		15.7	59.5	24.8		4.7	93.1	2.2	
PHF	.697	.856	.938	.893	.733	.907	.900	.917	.857	.875	.950	.911	.776	.950	.875	.938

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

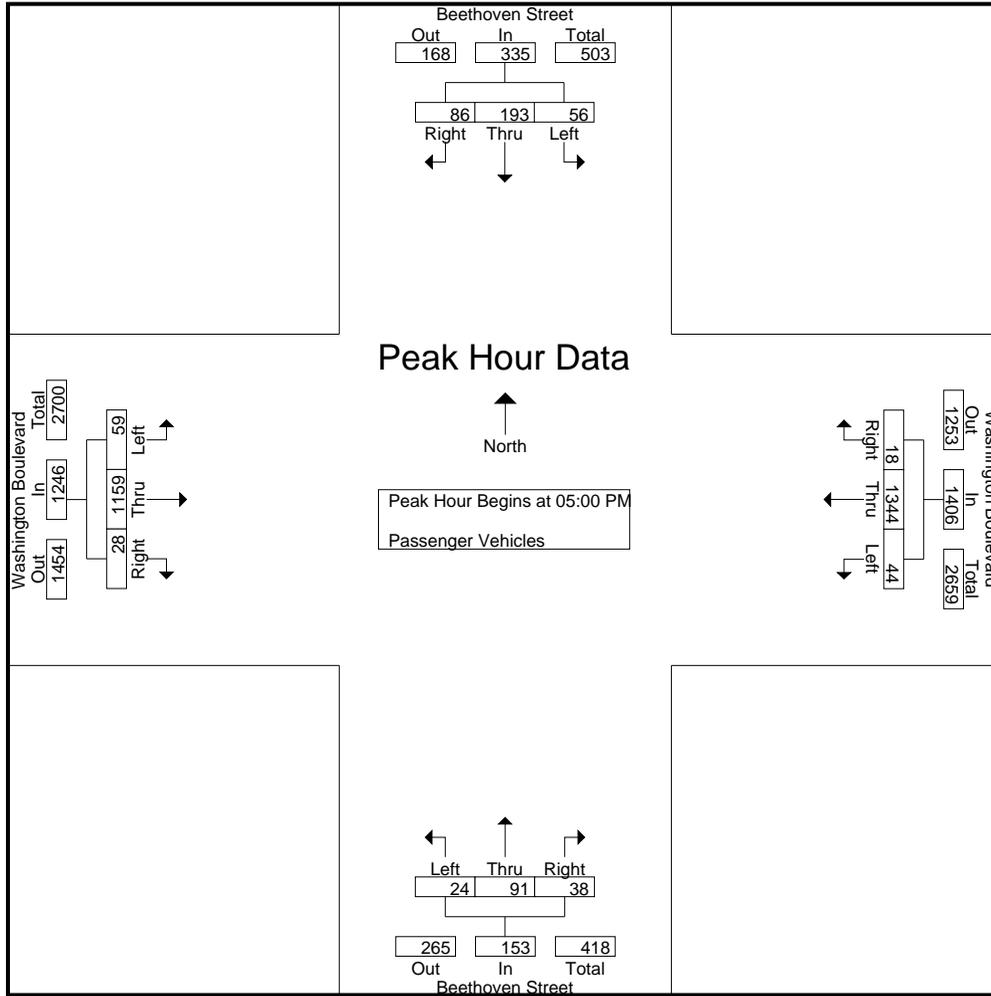
Groups Printed- Passenger Vehicles

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	15	44	21	80	8	266	10	284	11	26	8	45	12	271	1	284	693
03:15 PM	15	39	17	71	8	300	7	315	6	23	6	35	11	269	6	286	707
03:30 PM	17	49	35	101	7	250	6	263	2	14	8	24	14	279	6	299	687
03:45 PM	10	27	17	54	11	255	6	272	11	11	4	26	12	265	9	286	638
Total	57	159	90	306	34	1071	29	1134	30	74	26	130	49	1084	22	1155	2725
04:00 PM	18	33	28	79	7	294	3	304	8	16	12	36	12	251	2	265	684
04:15 PM	9	48	25	82	11	297	1	309	6	23	13	42	6	290	3	299	732
04:30 PM	15	54	27	96	10	309	6	325	8	25	5	38	9	285	5	299	758
04:45 PM	10	48	25	83	15	322	8	345	7	15	8	30	9	255	4	268	726
Total	52	183	105	340	43	1222	18	1283	29	79	38	146	36	1081	14	1131	2900
05:00 PM	19	39	20	78	10	327	4	341	6	21	10	37	8	273	6	287	743
05:15 PM	14	44	24	82	15	332	5	352	7	23	9	39	13	292	6	311	784
05:30 PM	14	58	24	96	10	315	5	330	7	26	9	42	19	289	8	316	784
05:45 PM	9	52	18	79	9	370	4	383	4	21	10	35	19	305	8	332	829
Total	56	193	86	335	44	1344	18	1406	24	91	38	153	59	1159	28	1246	3140
Grand Total	165	535	281	981	121	3637	65	3823	83	244	102	429	144	3324	64	3532	8765
Apprch %	16.8	54.5	28.6		3.2	95.1	1.7		19.3	56.9	23.8		4.1	94.1	1.8		
Total %	1.9	6.1	3.2	11.2	1.4	41.5	0.7	43.6	0.9	2.8	1.2	4.9	1.6	37.9	0.7	40.3	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	39	20	78	10	327	4	341	6	21	10	37	8	273	6	287	743
05:15 PM	14	44	24	82	15	332	5	352	7	23	9	39	13	292	6	311	784
05:30 PM	14	58	24	96	10	315	5	330	7	26	9	42	19	289	8	316	784
05:45 PM	9	52	18	79	9	370	4	383	4	21	10	35	19	305	8	332	829
Total Volume	56	193	86	335	44	1344	18	1406	24	91	38	153	59	1159	28	1246	3140
% App. Total	16.7	57.6	25.7		3.1	95.6	1.3		15.7	59.5	24.8		4.7	93	2.2		
PHF	.737	.832	.896	.872	.733	.908	.900	.918	.857	.875	.950	.911	.776	.950	.875	.938	.947

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	19	39	20	78	10	327	4	341	6	21	10	37	8	273	6	287
+15 mins.	14	44	24	82	15	332	5	352	7	23	9	39	13	292	6	311
+30 mins.	14	58	24	96	10	315	5	330	7	26	9	42	19	289	8	316
+45 mins.	9	52	18	79	9	370	4	383	4	21	10	35	19	305	8	332
Total Volume	56	193	86	335	44	1344	18	1406	24	91	38	153	59	1159	28	1246
% App. Total	16.7	57.6	25.7		3.1	95.6	1.3		15.7	59.5	24.8		4.7	93	2.2	
PHF	.737	.832	.896	.872	.733	.908	.900	.918	.857	.875	.950	.911	.776	.950	.875	.938

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

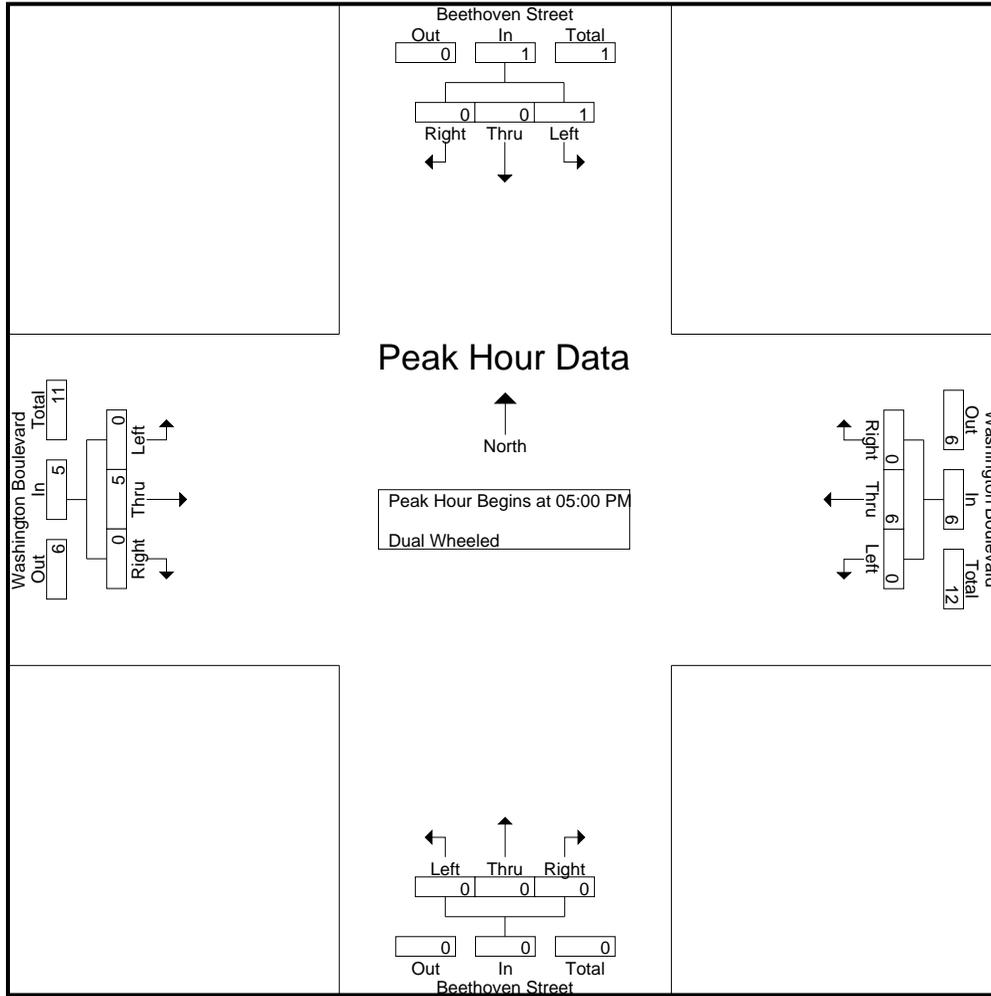
Groups Printed- Dual Wheeled

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
03:30 PM	0	1	0	1	1	3	0	4	0	0	0	0	0	4	0	4	9
03:45 PM	0	0	1	1	0	2	0	2	0	0	0	0	0	1	0	1	4
Total	0	1	1	2	1	8	0	9	0	0	1	1	0	9	0	9	21
04:00 PM	1	0	0	1	0	3	0	3	0	0	1	1	0	1	1	2	7
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
04:45 PM	0	2	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
Total	1	2	0	3	0	6	0	6	0	0	1	1	0	6	1	7	17
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	1	0	0	1	0	6	0	6	0	0	0	0	0	5	0	5	12
Grand Total	2	3	1	6	1	20	0	21	0	0	2	2	0	20	1	21	50
Apprch %	33.3	50	16.7		4.8	95.2	0		0	0	100		0	95.2	4.8		
Total %	4	6	2	12	2	40	0	42	0	0	4	4	0	40	2	42	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total Volume	1	0	0	1	0	6	0	6	0	0	0	0	0	5	0	5	12
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625	.600

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
Total Volume	1	0	0	1	0	6	0	6	0	0	0	0	0	5	0	5
% App. Total	100	0	0	100	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

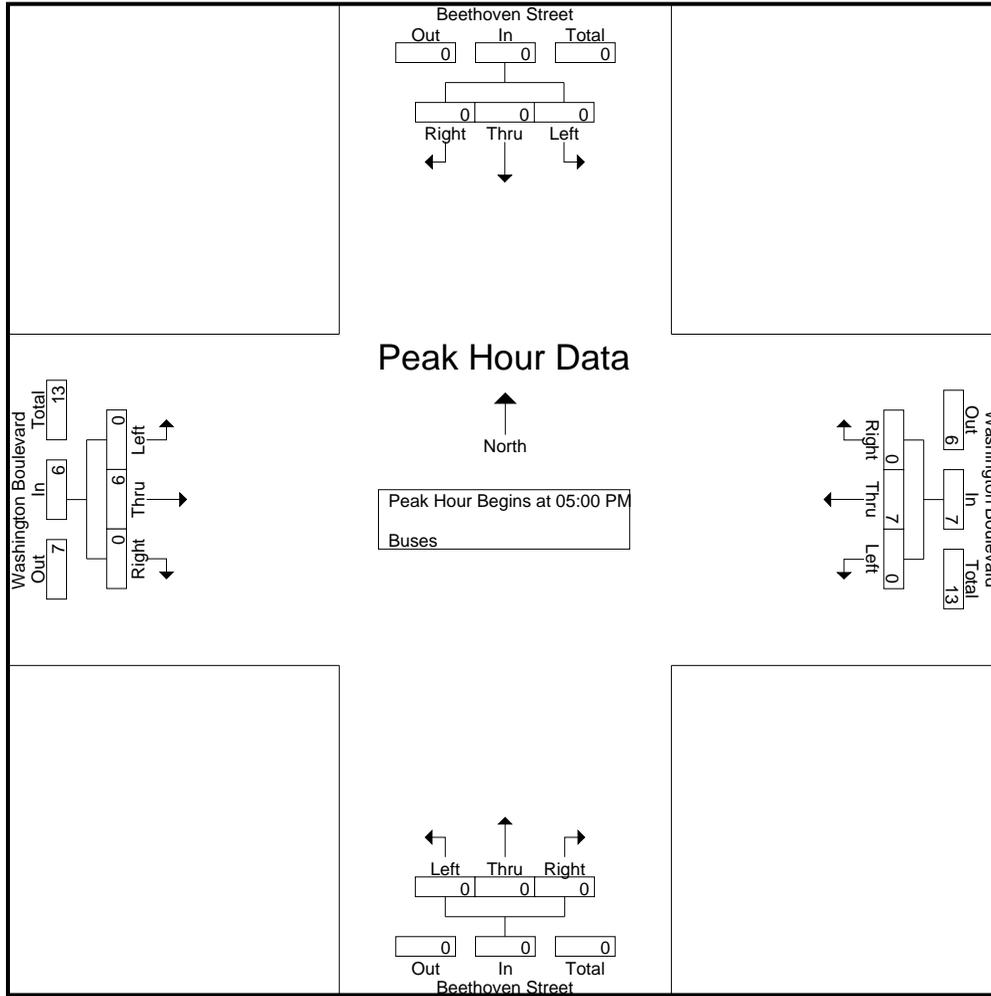
Groups Printed- Buses

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	1	0	1	0	2	0	2	1	4	0	5	8
03:15 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	3	0	3	8
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
03:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
Total	0	0	0	0	1	8	0	9	0	2	0	2	1	10	0	11	22
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
Total	0	0	0	0	0	6	0	6	0	0	0	0	1	6	1	8	14
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
Grand Total	0	0	0	0	1	21	0	22	0	2	0	2	2	22	1	25	49
Apprch %	0	0	0	0	4.5	95.5	0		0	100	0		8	88	4		
Total %	0	0	0	0	2	42.9	0	44.9	0	4.1	0	4.1	4.1	44.9	2	51	

Start Time	Beethoven Street Southbound				Washington Boulevard Westbound				Beethoven Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
% App. Total	0	0	0	0	0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.000	.500	.000	.500	.542

City of Culver
 N/S: Beethoven Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 03_CVC_Beethoven_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.000	.500	.000	.500

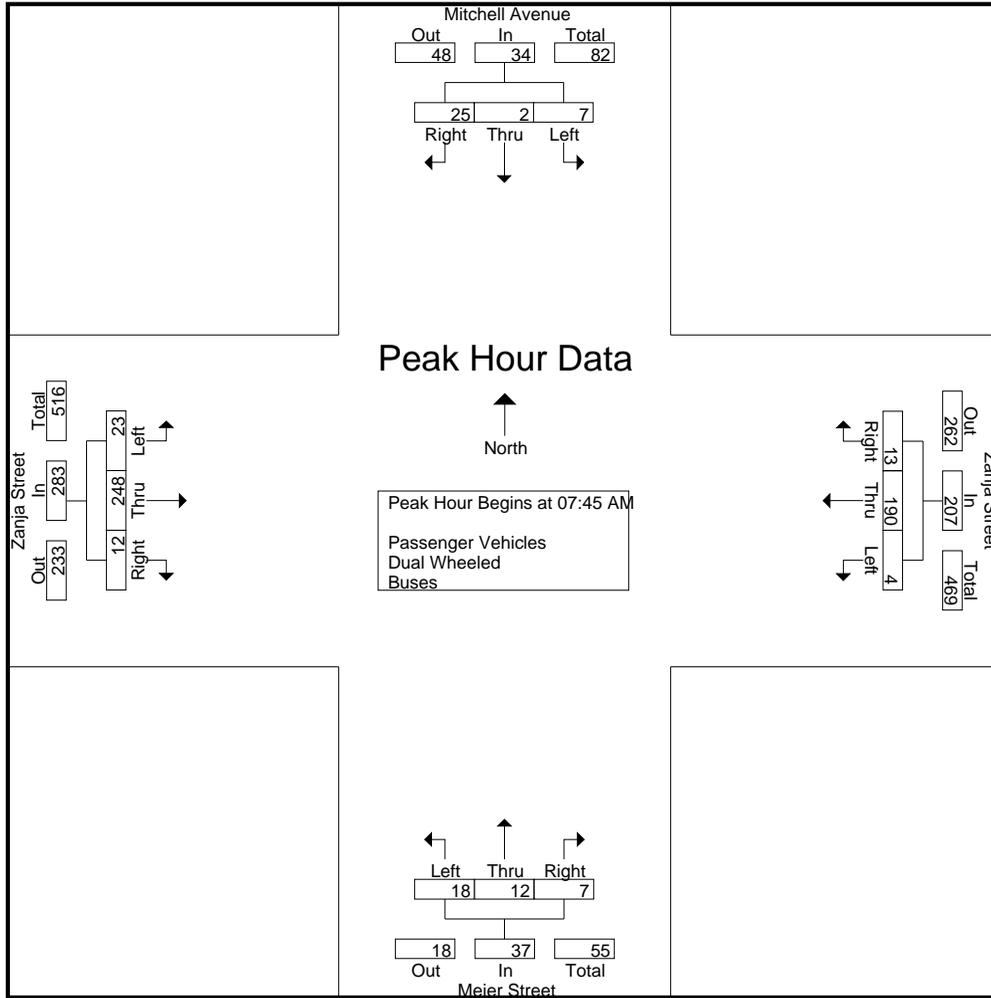
City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	2	3	6	0	32	2	34	1	1	0	2	2	15	1	18	60
07:15 AM	0	0	7	7	0	55	0	55	2	1	1	4	0	30	1	31	97
07:30 AM	0	0	4	4	2	71	1	74	3	1	3	7	0	44	0	44	129
07:45 AM	3	0	5	8	2	69	2	73	2	0	1	3	2	75	2	79	163
Total	4	2	19	25	4	227	5	236	8	3	5	16	4	164	4	172	449
08:00 AM	1	1	4	6	1	40	5	46	10	5	1	16	10	70	8	88	156
08:15 AM	0	1	7	8	1	30	4	35	3	3	3	9	3	54	1	58	110
08:30 AM	3	0	9	12	0	51	2	53	3	4	2	9	8	49	1	58	132
08:45 AM	4	0	6	10	0	40	4	44	2	1	1	4	3	52	1	56	114
Total	8	2	26	36	2	161	15	178	18	13	7	38	24	225	11	260	512
09:00 AM	0	0	10	10	1	36	0	37	3	0	0	3	3	37	4	44	94
09:15 AM	4	0	12	16	0	44	4	48	2	0	0	2	2	45	0	47	113
09:30 AM	1	1	4	6	0	39	1	40	8	4	0	12	3	33	2	38	96
09:45 AM	4	0	6	10	0	44	1	45	1	0	0	1	1	37	2	40	96
Total	9	1	32	42	1	163	6	170	14	4	0	18	9	152	8	169	399
Grand Total	21	5	77	103	7	551	26	584	40	20	12	72	37	541	23	601	1360
Apprch %	20.4	4.9	74.8		1.2	94.3	4.5		55.6	27.8	16.7		6.2	90	3.8		
Total %	1.5	0.4	5.7	7.6	0.5	40.5	1.9	42.9	2.9	1.5	0.9	5.3	2.7	39.8	1.7	44.2	
Passenger Vehicles	20	5	76	101	7	548	26	581	39	20	11	70	36	540	22	598	1350
% Passenger Vehicles	95.2	100	98.7	98.1	100	99.5	100	99.5	97.5	100	91.7	97.2	97.3	99.8	95.7	99.5	99.3
Dual Wheeled	1	0	0	1	0	3	0	3	1	0	1	2	1	1	1	3	9
% Dual Wheeled	4.8	0	0	1	0	0.5	0	0.5	2.5	0	8.3	2.8	2.7	0.2	4.3	0.5	0.7
Buses	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% Buses	0	0	1.3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	0	5	8	2	69	2	73	2	0	1	3	2	75	2	79	163
08:00 AM	1	1	4	6	1	40	5	46	10	5	1	16	10	70	8	88	156
08:15 AM	0	1	7	8	1	30	4	35	3	3	3	9	3	54	1	58	110
08:30 AM	3	0	9	12	0	51	2	53	3	4	2	9	8	49	1	58	132
Total Volume	7	2	25	34	4	190	13	207	18	12	7	37	23	248	12	283	561
% App. Total	20.6	5.9	73.5		1.9	91.8	6.3		48.6	32.4	18.9		8.1	87.6	4.2		
PHF	.583	.500	.694	.708	.500	.688	.650	.709	.450	.600	.583	.578	.575	.827	.375	.804	.860



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:30 AM				07:15 AM				08:00 AM				07:45 AM			
+0 mins.	3	0	9	12	0	55	0	55	10	5	1	16	2	75	2	79
+15 mins.	4	0	6	10	2	71	1	74	3	3	3	9	10	70	8	88
+30 mins.	0	0	10	10	2	69	2	73	3	4	2	9	3	54	1	58
+45 mins.	4	0	12	16	1	40	5	46	2	1	1	4	8	49	1	58
Total Volume	11	0	37	48	5	235	8	248	18	13	7	38	23	248	12	283
% App. Total	22.9	0	77.1		2	94.8	3.2		47.4	34.2	18.4		8.1	87.6	4.2	
PHF	.688	.000	.771	.750	.625	.827	.400	.838	.450	.650	.583	.594	.575	.827	.375	.804

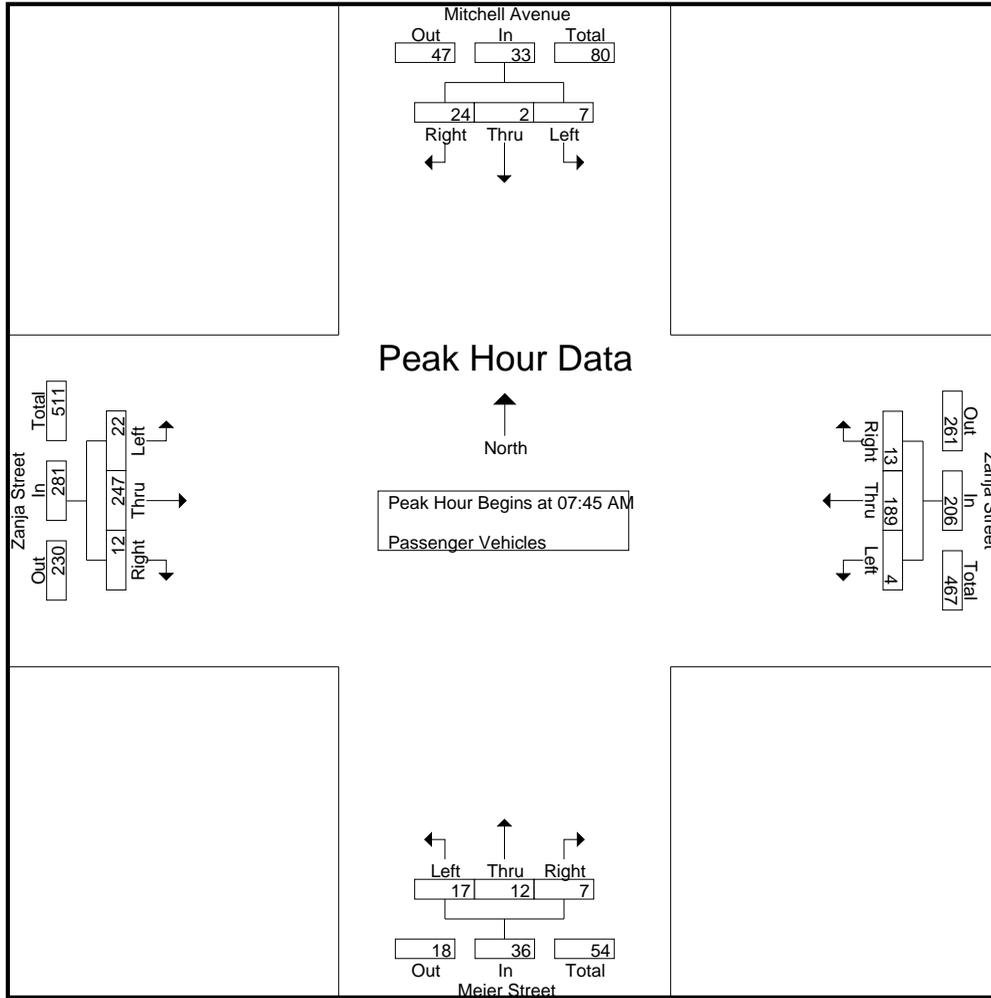
City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	2	3	6	0	32	2	34	1	1	0	2	2	15	1	18	60
07:15 AM	0	0	7	7	0	55	0	55	2	1	1	4	0	30	1	31	97
07:30 AM	0	0	4	4	2	70	1	73	3	1	2	6	0	44	0	44	127
07:45 AM	3	0	5	8	2	69	2	73	1	0	1	2	2	74	2	78	161
Total	4	2	19	25	4	226	5	235	7	3	4	14	4	163	4	171	445
08:00 AM	1	1	4	6	1	40	5	46	10	5	1	16	10	70	8	88	156
08:15 AM	0	1	6	7	1	30	4	35	3	3	3	9	3	54	1	58	109
08:30 AM	3	0	9	12	0	50	2	52	3	4	2	9	7	49	1	57	130
08:45 AM	4	0	6	10	0	40	4	44	2	1	1	4	3	52	0	55	113
Total	8	2	25	35	2	160	15	177	18	13	7	38	23	225	10	258	508
09:00 AM	0	0	10	10	1	35	0	36	3	0	0	3	3	37	4	44	93
09:15 AM	4	0	12	16	0	44	4	48	2	0	0	2	2	45	0	47	113
09:30 AM	1	1	4	6	0	39	1	40	8	4	0	12	3	33	2	38	96
09:45 AM	3	0	6	9	0	44	1	45	1	0	0	1	1	37	2	40	95
Total	8	1	32	41	1	162	6	169	14	4	0	18	9	152	8	169	397
Grand Total	20	5	76	101	7	548	26	581	39	20	11	70	36	540	22	598	1350
Apprch %	19.8	5	75.2		1.2	94.3	4.5		55.7	28.6	15.7		6	90.3	3.7		
Total %	1.5	0.4	5.6	7.5	0.5	40.6	1.9	43	2.9	1.5	0.8	5.2	2.7	40	1.6	44.3	

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	0	5	8	2	69	2	73	1	0	1	2	2	74	2	78	161
08:00 AM	1	1	4	6	1	40	5	46	10	5	1	16	10	70	8	88	156
08:15 AM	0	1	6	7	1	30	4	35	3	3	3	9	3	54	1	58	109
08:30 AM	3	0	9	12	0	50	2	52	3	4	2	9	7	49	1	57	130
Total Volume	7	2	24	33	4	189	13	206	17	12	7	36	22	247	12	281	556
% App. Total	21.2	6.1	72.7		1.9	91.7	6.3		47.2	33.3	19.4		7.8	87.9	4.3		
PHF	.583	.500	.667	.688	.500	.685	.650	.705	.425	.600	.583	.563	.550	.834	.375	.798	.863



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	3	0	5	8	2	69	2	73	1	0	1	2	2	74	2	78
+15 mins.	1	1	4	6	1	40	5	46	10	5	1	16	10	70	8	88
+30 mins.	0	1	6	7	1	30	4	35	3	3	3	9	3	54	1	58
+45 mins.	3	0	9	12	0	50	2	52	3	4	2	9	7	49	1	57
Total Volume	7	2	24	33	4	189	13	206	17	12	7	36	22	247	12	281
% App. Total	21.2	6.1	72.7		1.9	91.7	6.3		47.2	33.3	19.4		7.8	87.9	4.3	
PHF	.583	.500	.667	.688	.500	.685	.650	.705	.425	.600	.583	.563	.550	.834	.375	.798

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

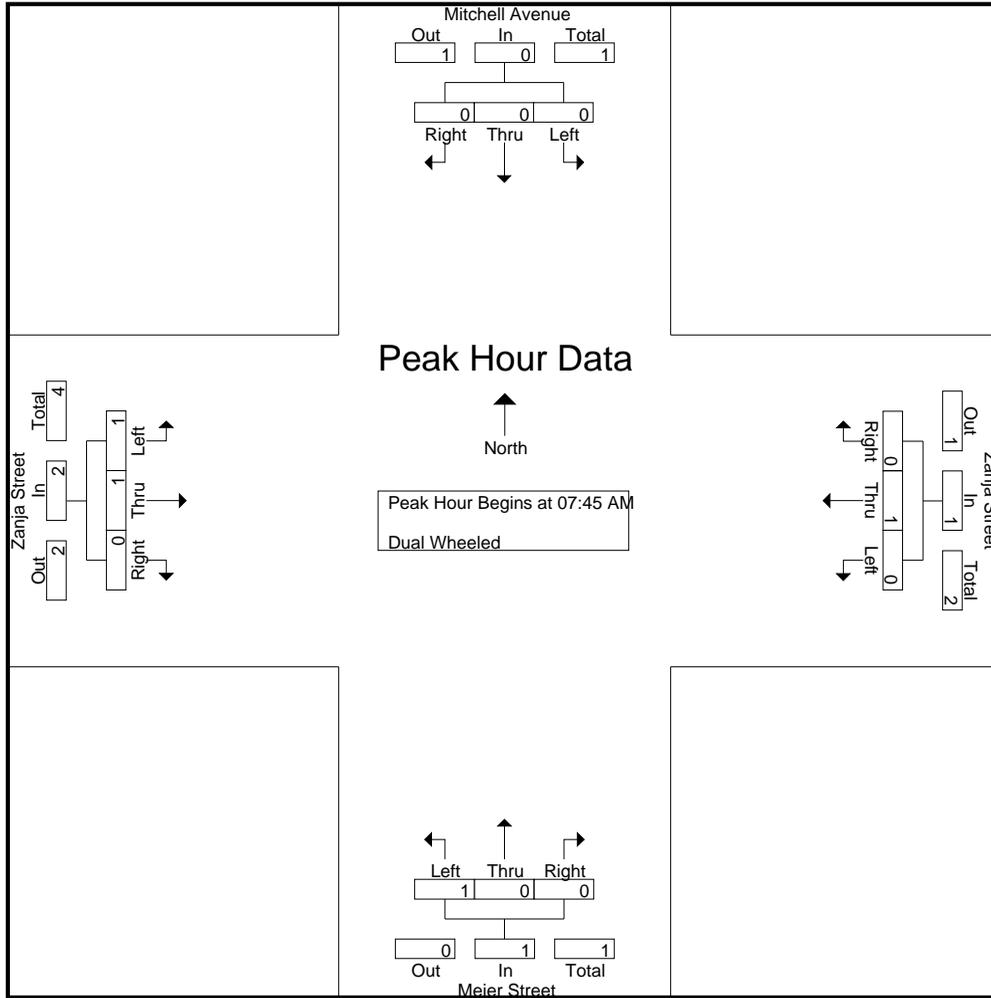
Groups Printed- Dual Wheeled

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
Total	0	0	0	0	0	1	0	1	1	0	1	2	0	1	0	1	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	2	3
09:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Grand Total	1	0	0	1	0	3	0	3	1	0	1	2	1	1	1	3	9
Apprch %	100	0	0		0	100	0		50	0	50		33.3	33.3	33.3		
Total %	11.1	0	0	11.1	0	33.3	0	33.3	11.1	0	11.1	22.2	11.1	11.1	11.1	33.3	

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	1	1	0	2	4
% App. Total	0	0	0		0	100	0		100	0	0		50	50	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.250	.000	.500	.500

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM								
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	1	0	0	0	1	1	0	0	1	1	0	0	2
% App. Total	0	0	0	0	0	100	0	0	100	0	0	0	50	50	0	0	50	50	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.250	.000	.500	.250	.250	.000	.500	

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
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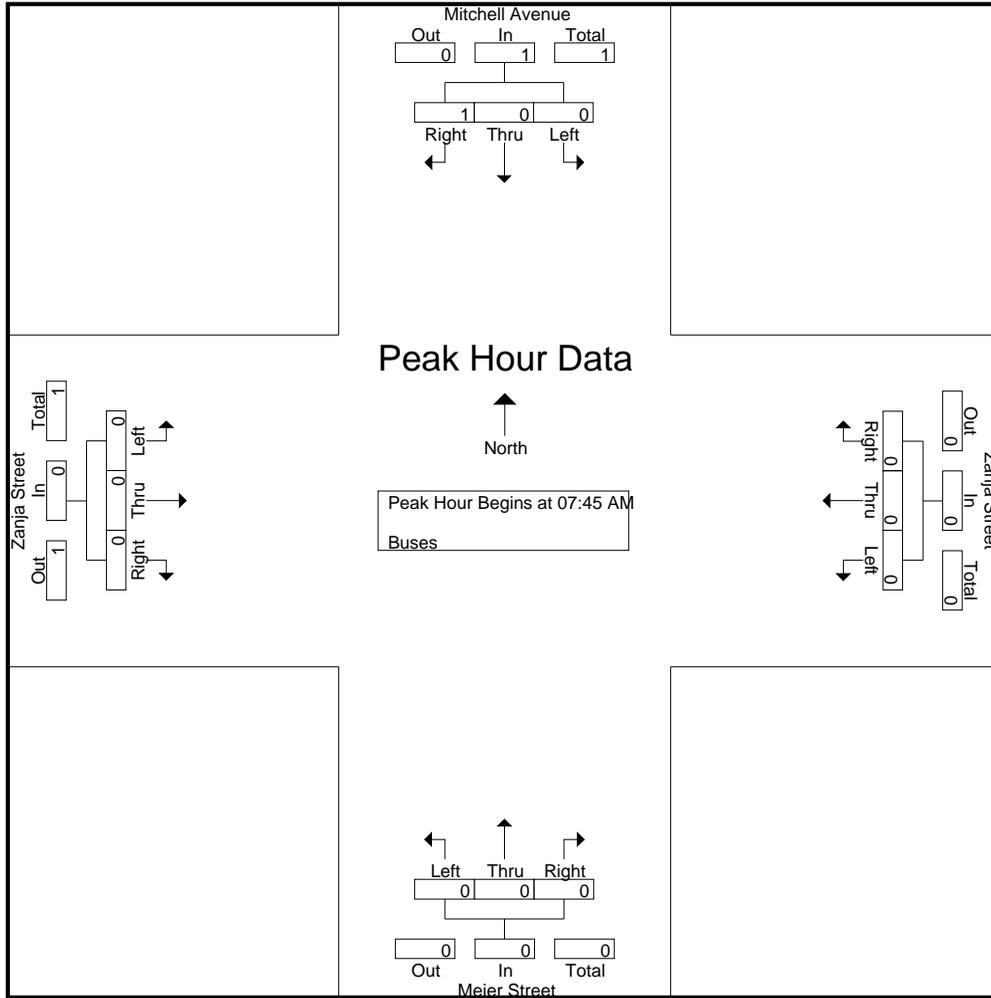
Groups Printed- Buses

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	0	100		0	0	0		0	0	0		0	0	0		
Total %	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

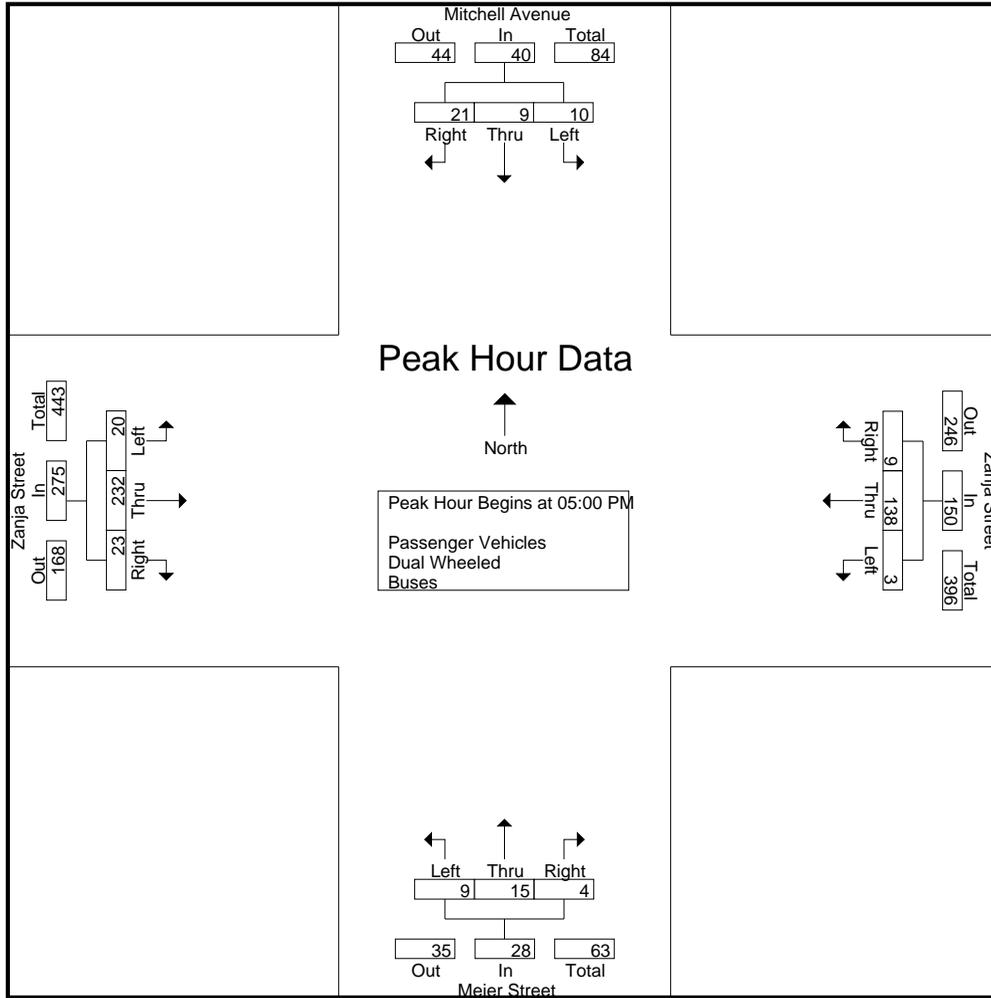
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	3	0	4	7	1	49	1	51	3	1	1	5	2	64	3	69	132
03:15 PM	2	0	7	9	0	39	1	40	4	2	3	9	4	54	4	62	120
03:30 PM	3	2	5	10	1	40	4	45	4	1	1	6	9	45	5	59	120
03:45 PM	2	1	4	7	1	34	3	38	1	0	2	3	2	65	4	71	119
Total	10	3	20	33	3	162	9	174	12	4	7	23	17	228	16	261	491
04:00 PM	1	1	3	5	2	37	2	41	2	2	3	7	3	51	1	55	108
04:15 PM	2	0	2	4	1	38	2	41	2	1	1	4	7	52	6	65	114
04:30 PM	5	3	5	13	1	33	2	36	4	1	7	12	4	50	6	60	121
04:45 PM	4	2	1	7	1	27	3	31	0	0	1	1	5	66	4	75	114
Total	12	6	11	29	5	135	9	149	8	4	12	24	19	219	17	255	457
05:00 PM	2	1	5	8	2	36	4	42	1	3	0	4	5	65	3	73	127
05:15 PM	2	4	4	10	0	35	2	37	3	5	2	10	4	61	6	71	128
05:30 PM	3	1	7	11	0	25	2	27	4	2	2	8	9	56	9	74	120
05:45 PM	3	3	5	11	1	42	1	44	1	5	0	6	2	50	5	57	118
Total	10	9	21	40	3	138	9	150	9	15	4	28	20	232	23	275	493
Grand Total	32	18	52	102	11	435	27	473	29	23	23	75	56	679	56	791	1441
Apprch %	31.4	17.6	51		2.3	92	5.7		38.7	30.7	30.7		7.1	85.8	7.1		
Total %	2.2	1.2	3.6	7.1	0.8	30.2	1.9	32.8	2	1.6	1.6	5.2	3.9	47.1	3.9	54.9	
Passenger Vehicles	29	17	49	95	11	433	27	471	28	22	23	73	53	676	55	784	1423
% Passenger Vehicles	90.6	94.4	94.2	93.1	100	99.5	100	99.6	96.6	95.7	100	97.3	94.6	99.6	98.2	99.1	98.8
Dual Wheeled	3	1	3	7	0	1	0	1	1	1	0	2	3	3	1	7	17
% Dual Wheeled	9.4	5.6	5.8	6.9	0	0.2	0	0.2	3.4	4.3	0	2.7	5.4	0.4	1.8	0.9	1.2
Buses	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% Buses	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0.1

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	1	5	8	2	36	4	42	1	3	0	4	5	65	3	73	127
05:15 PM	2	4	4	10	0	35	2	37	3	5	2	10	4	61	6	71	128
05:30 PM	3	1	7	11	0	25	2	27	4	2	2	8	9	56	9	74	120
05:45 PM	3	3	5	11	1	42	1	44	1	5	0	6	2	50	5	57	118
Total Volume	10	9	21	40	3	138	9	150	9	15	4	28	20	232	23	275	493
% App. Total	25	22.5	52.5		2	92	6		32.1	53.6	14.3		7.3	84.4	8.4		
PHF	.833	.563	.750	.909	.375	.821	.563	.852	.563	.750	.500	.700	.556	.892	.639	.929	.963

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				03:00 PM				05:00 PM				04:45 PM			
+0 mins.	2	1	5	8	1	49	1	51	1	3	0	4	5	66	4	75
+15 mins.	2	4	4	10	0	39	1	40	3	5	2	10	5	65	3	73
+30 mins.	3	1	7	11	1	40	4	45	4	2	2	8	4	61	6	71
+45 mins.	3	3	5	11	1	34	3	38	1	5	0	6	9	56	9	74
Total Volume	10	9	21	40	3	162	9	174	9	15	4	28	23	248	22	293
% App. Total	25	22.5	52.5		1.7	93.1	5.2		32.1	53.6	14.3		7.8	84.6	7.5	
PHF	.833	.563	.750	.909	.750	.827	.563	.853	.563	.750	.500	.700	.639	.939	.611	.977

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

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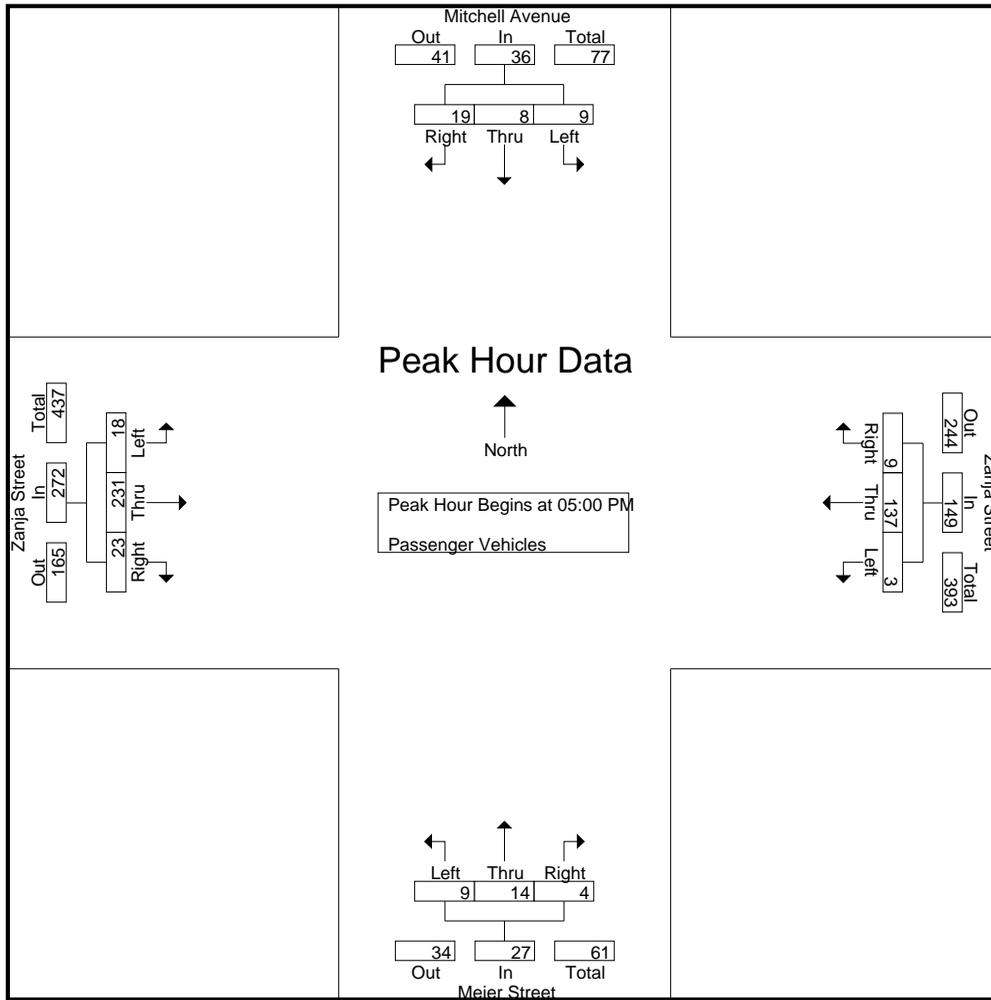
Groups Printed- Passenger Vehicles

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	3	0	4	7	1	49	1	51	3	1	1	5	2	64	3	69	132
03:15 PM	2	0	6	8	0	39	1	40	4	2	3	9	4	54	4	62	119
03:30 PM	2	2	5	9	1	40	4	45	4	1	1	6	9	45	5	59	119
03:45 PM	2	1	4	7	1	34	3	38	1	0	2	3	2	63	4	69	117
Total	9	3	19	31	3	162	9	174	12	4	7	23	17	226	16	259	487
04:00 PM	1	1	3	5	2	37	2	41	2	2	3	7	3	51	1	55	108
04:15 PM	1	0	2	3	1	38	2	41	2	1	1	4	7	52	5	64	112
04:30 PM	5	3	5	13	1	33	2	36	3	1	7	11	4	50	6	60	120
04:45 PM	4	2	1	7	1	26	3	30	0	0	1	1	4	66	4	74	112
Total	11	6	11	28	5	134	9	148	7	4	12	23	18	219	16	253	452
05:00 PM	2	1	4	7	2	36	4	42	1	3	0	4	4	65	3	72	125
05:15 PM	2	4	4	10	0	35	2	37	3	4	2	9	4	61	6	71	127
05:30 PM	3	1	6	10	0	24	2	26	4	2	2	8	8	55	9	72	116
05:45 PM	2	2	5	9	1	42	1	44	1	5	0	6	2	50	5	57	116
Total	9	8	19	36	3	137	9	149	9	14	4	27	18	231	23	272	484
Grand Total	29	17	49	95	11	433	27	471	28	22	23	73	53	676	55	784	1423
Apprch %	30.5	17.9	51.6		2.3	91.9	5.7		38.4	30.1	31.5		6.8	86.2	7		
Total %	2	1.2	3.4	6.7	0.8	30.4	1.9	33.1	2	1.5	1.6	5.1	3.7	47.5	3.9	55.1	

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	1	4	7	2	36	4	42	1	3	0	4	4	65	3	72	125
05:15 PM	2	4	4	10	0	35	2	37	3	4	2	9	4	61	6	71	127
05:30 PM	3	1	6	10	0	24	2	26	4	2	2	8	8	55	9	72	116
05:45 PM	2	2	5	9	1	42	1	44	1	5	0	6	2	50	5	57	116
Total Volume	9	8	19	36	3	137	9	149	9	14	4	27	18	231	23	272	484
% App. Total	25	22.2	52.8		2	91.9	6		33.3	51.9	14.8		6.6	84.9	8.5		
PHF	.750	.500	.792	.900	.375	.815	.563	.847	.563	.700	.500	.750	.563	.888	.639	.944	.953

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	2	1	4	7	2	36	4	42	1	3	0	4	4	65	3	72
+15 mins.	2	4	4	10	0	35	2	37	3	4	2	9	4	61	6	71
+30 mins.	3	1	6	10	0	24	2	26	4	2	2	8	8	55	9	72
+45 mins.	2	2	5	9	1	42	1	44	1	5	0	6	2	50	5	57
Total Volume	9	8	19	36	3	137	9	149	9	14	4	27	18	231	23	272
% App. Total	25	22.2	52.8		2	91.9	6		33.3	51.9	14.8		6.6	84.9	8.5	
PHF	.750	.500	.792	.900	.375	.815	.563	.847	.563	.700	.500	.750	.563	.888	.639	.944

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

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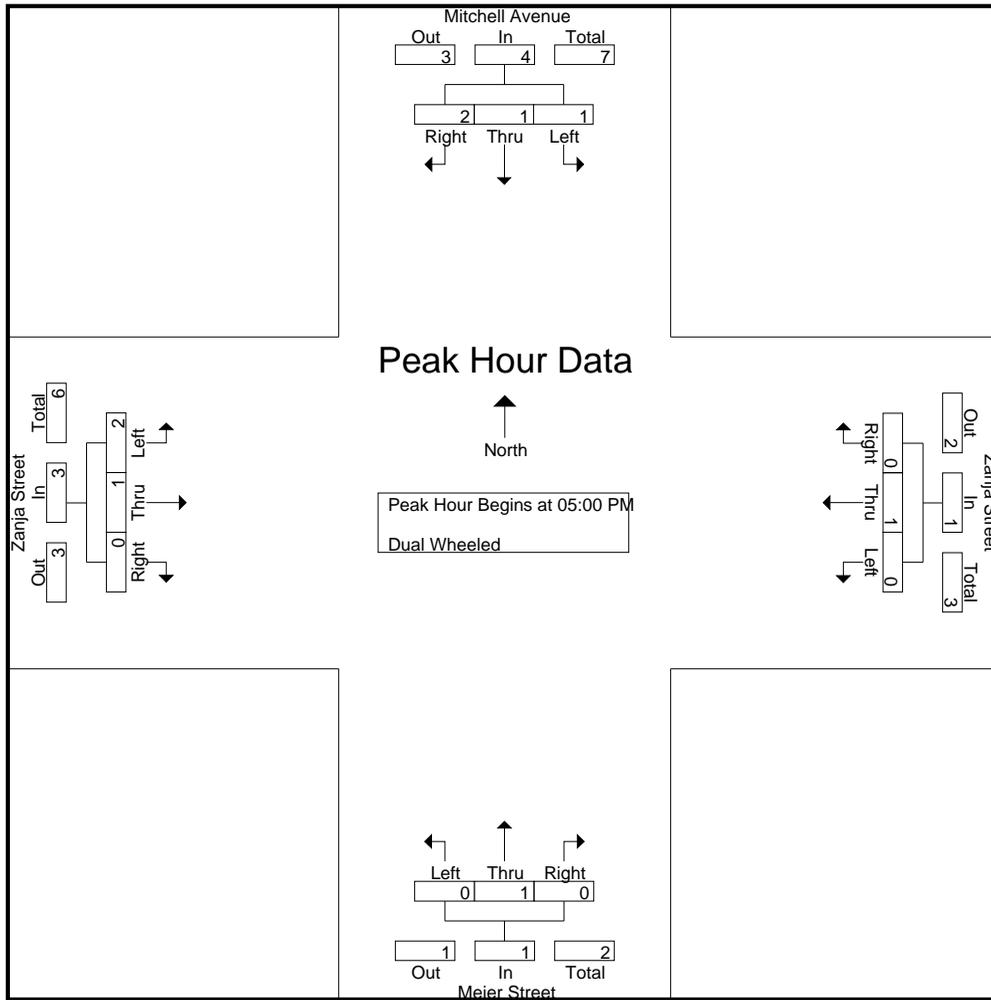
Groups Printed- Dual Wheeled

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	0	1	2	0	0	0	0	0	0	0	0	0	2	0	2	4
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	0	0	1	0	0	0	0	1	0	0	1	1	0	1	2	4
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	1	1	0	2	4
05:45 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	1	2	4	0	1	0	1	0	1	0	1	2	1	0	3	9
Grand Total	3	1	3	7	0	1	0	1	1	1	0	2	3	3	1	7	17
Apprch %	42.9	14.3	42.9		0	100	0		50	50	0		42.9	42.9	14.3		
Total %	17.6	5.9	17.6	41.2	0	5.9	0	5.9	5.9	5.9	0	11.8	17.6	17.6	5.9	41.2	

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	1	1	0	2	4
05:45 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	1	1	2	4	0	1	0	1	0	1	0	1	2	1	0	3	9
% App. Total	25	25	50		0	100	0		0	100	0		66.7	33.3	0		
PHF	.250	.250	.500	.500	.000	.250	.000	.250	.000	.250	.000	.250	.500	.250	.000	.375	.563

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	1	1	0	1	0	1	0	0	0	0	1	1	0	2
+45 mins.	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	1	2	4	0	1	0	1	0	1	0	1	2	1	0	3
% App. Total	25	25	50		0	100	0		0	100	0		66.7	33.3	0	
PHF	.250	.250	.500	.500	.000	.250	.000	.250	.000	.250	.000	.250	.500	.250	.000	.375

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

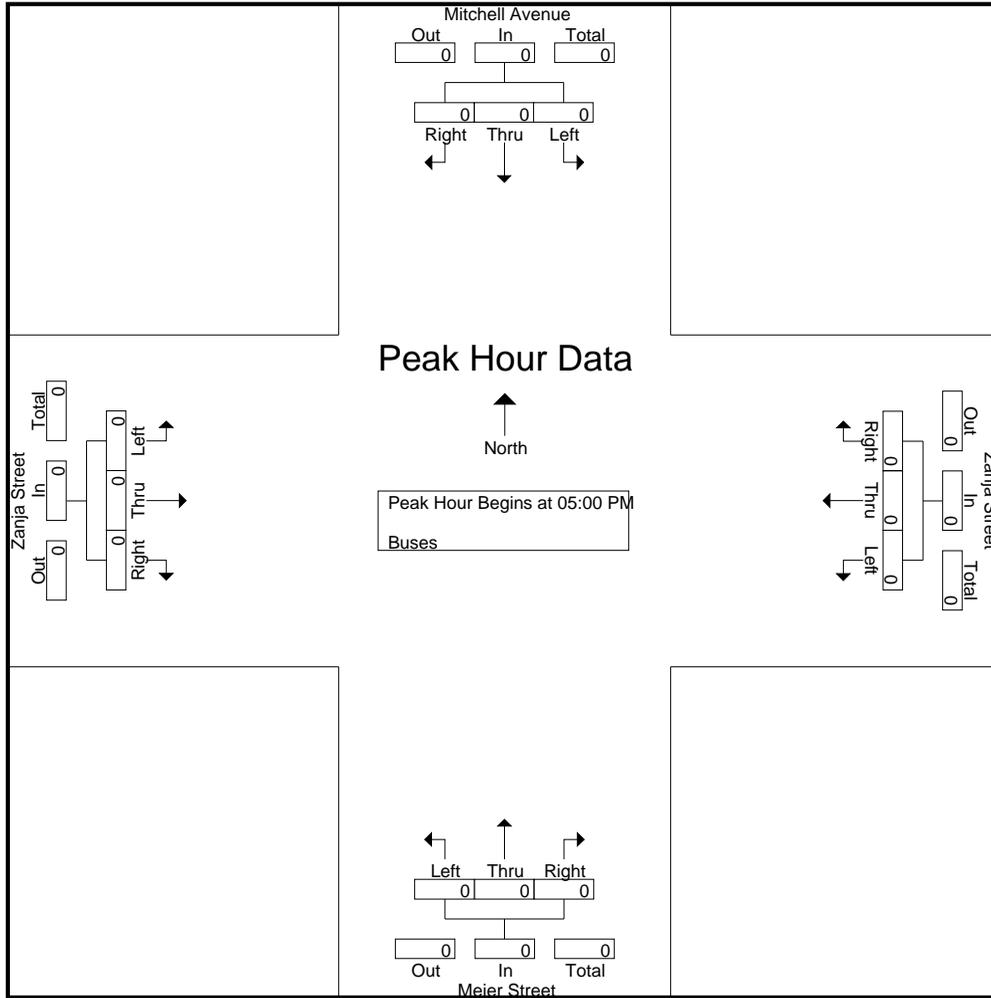
Groups Printed- Buses

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0		0	100	0	100	0	0	0		0	0	0		

Start Time	Mitchell Avenue Southbound				Zanja Street Westbound				Meier Street Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Los Angeles
 N/S: Mitchell Avenue/Meier Street
 E/W: Zanja Street
 Weather: Clear

File Name : 04_LAC_Mitchell_Meier_Zanja PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

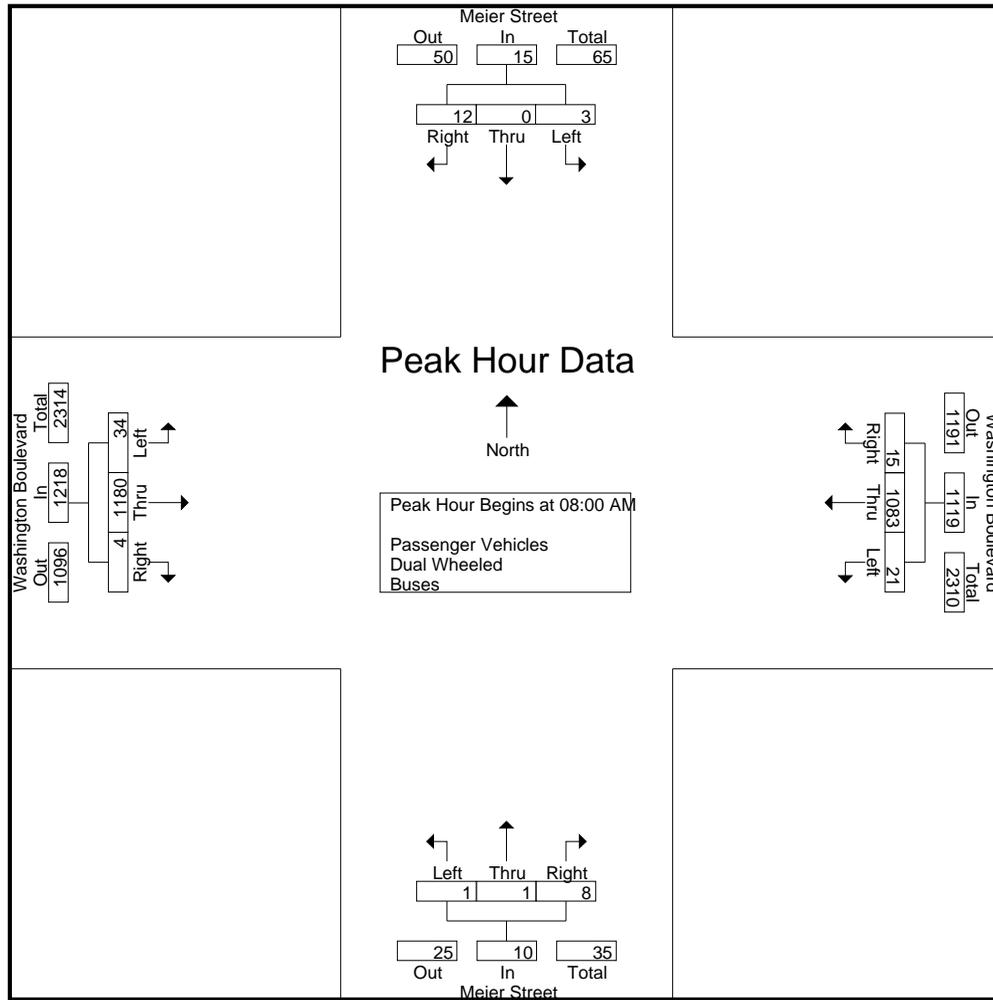
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	2	2	0	149	0	149	0	0	0	0	2	150	1	153	304
07:15 AM	2	0	0	2	2	176	1	179	0	0	1	1	8	247	1	256	438
07:30 AM	3	0	2	5	3	210	3	216	3	0	0	3	3	241	4	248	472
07:45 AM	1	0	2	3	3	248	0	251	2	0	2	4	5	322	0	327	585
Total	6	0	6	12	8	783	4	795	5	0	3	8	18	960	6	984	1799
08:00 AM	3	0	6	9	4	241	7	252	0	0	3	3	18	276	1	295	559
08:15 AM	0	0	4	4	7	278	5	290	0	1	1	2	4	281	1	286	582
08:30 AM	0	0	1	1	6	257	3	266	1	0	1	2	7	333	1	341	610
08:45 AM	0	0	1	1	4	307	0	311	0	0	3	3	5	290	1	296	611
Total	3	0	12	15	21	1083	15	1119	1	1	8	10	34	1180	4	1218	2362
09:00 AM	3	0	2	5	5	255	2	262	0	2	1	3	1	253	1	255	525
09:15 AM	0	0	3	3	1	284	2	287	0	0	3	3	7	211	0	218	511
09:30 AM	0	0	2	2	4	255	2	261	1	0	4	5	10	236	4	250	518
09:45 AM	0	0	1	1	7	290	1	298	1	0	4	5	2	278	5	285	589
Total	3	0	8	11	17	1084	7	1108	2	2	12	16	20	978	10	1008	2143
Grand Total	12	0	26	38	46	2950	26	3022	8	3	23	34	72	3118	20	3210	6304
Apprch %	31.6	0	68.4		1.5	97.6	0.9		23.5	8.8	67.6		2.2	97.1	0.6		
Total %	0.2	0	0.4	0.6	0.7	46.8	0.4	47.9	0.1	0	0.4	0.5	1.1	49.5	0.3	50.9	
Passenger Vehicles	12	0	24	36	44	2874	24	2942	8	3	23	34	71	3048	20	3139	6151
% Passenger Vehicles	100	0	92.3	94.7	95.7	97.4	92.3	97.4	100	100	100	100	98.6	97.8	100	97.8	97.6
Dual Wheeled	0	0	2	2	2	50	2	54	0	0	0	0	1	51	0	52	108
% Dual Wheeled	0	0	7.7	5.3	4.3	1.7	7.7	1.8	0	0	0	0	1.4	1.6	0	1.6	1.7
Buses	0	0	0	0	0	26	0	26	0	0	0	0	0	19	0	19	45
% Buses	0	0	0	0	0	0.9	0	0.9	0	0	0	0	0	0.6	0	0.6	0.7

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	0	6	9	4	241	7	252	0	0	3	3	18	276	1	295	559
08:15 AM	0	0	4	4	7	278	5	290	0	1	1	2	4	281	1	286	582
08:30 AM	0	0	1	1	6	257	3	266	1	0	1	2	7	333	1	341	610
08:45 AM	0	0	1	1	4	307	0	311	0	0	3	3	5	290	1	296	611
Total Volume	3	0	12	15	21	1083	15	1119	1	1	8	10	34	1180	4	1218	2362
% App. Total	20	0	80		1.9	96.8	1.3		10	10	80		2.8	96.9	0.3		
PHF	.250	.000	.500	.417	.750	.882	.536	.900	.250	.250	.667	.833	.472	.886	1.00	.893	.966

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				08:15 AM				09:00 AM				09:45 AM			
+0 mins.	3	0	2	5	7	278	5	290	0	2	1	3	5	322	0	327
+15 mins.	1	0	2	3	6	257	3	266	0	0	3	3	18	276	1	295
+30 mins.	3	0	6	9	4	307	0	311	1	0	4	5	4	281	1	286
+45 mins.	0	0	4	4	5	255	2	262	1	0	4	5	7	333	1	341
Total Volume	7	0	14	21	22	1097	10	1129	2	2	12	16	34	1212	3	1249
% App. Total	33.3	0	66.7		1.9	97.2	0.9		12.5	12.5	75		2.7	97	0.2	
PHF	.583	.000	.583	.583	.786	.893	.500	.908	.500	.250	.750	.800	.472	.910	.750	.916

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

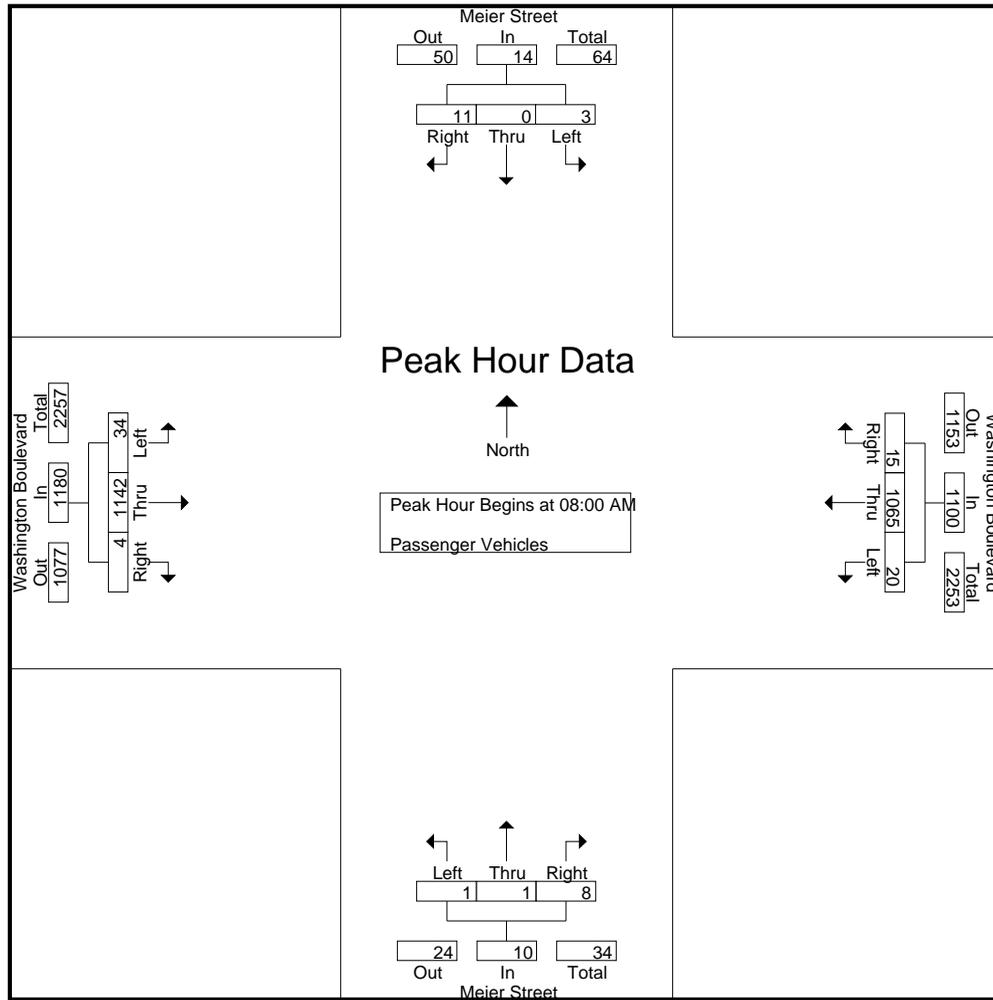
Groups Printed- Passenger Vehicles

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	2	2	0	147	0	147	0	0	0	0	2	147	1	150	299
07:15 AM	2	0	0	2	2	164	1	167	0	0	1	1	8	244	1	253	423
07:30 AM	3	0	2	5	3	204	1	208	3	0	0	3	3	237	4	244	460
07:45 AM	1	0	1	2	3	242	0	245	2	0	2	4	5	316	0	321	572
Total	6	0	5	11	8	757	2	767	5	0	3	8	18	944	6	968	1754
08:00 AM	3	0	6	9	4	237	7	248	0	0	3	3	18	272	1	291	551
08:15 AM	0	0	4	4	7	271	5	283	0	1	1	2	4	269	1	274	563
08:30 AM	0	0	1	1	5	253	3	261	1	0	1	2	7	315	1	323	587
08:45 AM	0	0	0	0	4	304	0	308	0	0	3	3	5	286	1	292	603
Total	3	0	11	14	20	1065	15	1100	1	1	8	10	34	1142	4	1180	2304
09:00 AM	3	0	2	5	5	248	2	255	0	2	1	3	1	251	1	253	516
09:15 AM	0	0	3	3	1	273	2	276	0	0	3	3	6	206	0	212	494
09:30 AM	0	0	2	2	4	247	2	253	1	0	4	5	10	231	4	245	505
09:45 AM	0	0	1	1	6	284	1	291	1	0	4	5	2	274	5	281	578
Total	3	0	8	11	16	1052	7	1075	2	2	12	16	19	962	10	991	2093
Grand Total	12	0	24	36	44	2874	24	2942	8	3	23	34	71	3048	20	3139	6151
Apprch %	33.3	0	66.7		1.5	97.7	0.8		23.5	8.8	67.6		2.3	97.1	0.6		
Total %	0.2	0	0.4	0.6	0.7	46.7	0.4	47.8	0.1	0	0.4	0.6	1.2	49.6	0.3	51	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	0	6	9	4	237	7	248	0	0	3	3	18	272	1	291	551
08:15 AM	0	0	4	4	7	271	5	283	0	1	1	2	4	269	1	274	563
08:30 AM	0	0	1	1	5	253	3	261	1	0	1	2	7	315	1	323	587
08:45 AM	0	0	0	0	4	304	0	308	0	0	3	3	5	286	1	292	603
Total Volume	3	0	11	14	20	1065	15	1100	1	1	8	10	34	1142	4	1180	2304
% App. Total	21.4	0	78.6		1.8	96.8	1.4		10	10	80		2.9	96.8	0.3		
PHF	.250	.000	.458	.389	.714	.876	.536	.893	.250	.250	.667	.833	.472	.906	1.00	.913	.955

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	3	0	6	9	4	237	7	248	0	0	3	3	18	272	1	291
+15 mins.	0	0	4	4	7	271	5	283	0	1	1	2	4	269	1	274
+30 mins.	0	0	1	1	5	253	3	261	1	0	1	2	7	315	1	323
+45 mins.	0	0	0	0	4	304	0	308	0	0	3	3	5	286	1	292
Total Volume	3	0	11	14	20	1065	15	1100	1	1	8	10	34	1142	4	1180
% App. Total	21.4	0	78.6		1.8	96.8	1.4		10	10	80		2.9	96.8	0.3	
PHF	.250	.000	.458	.389	.714	.876	.536	.893	.250	.250	.667	.833	.472	.906	1.000	.913

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

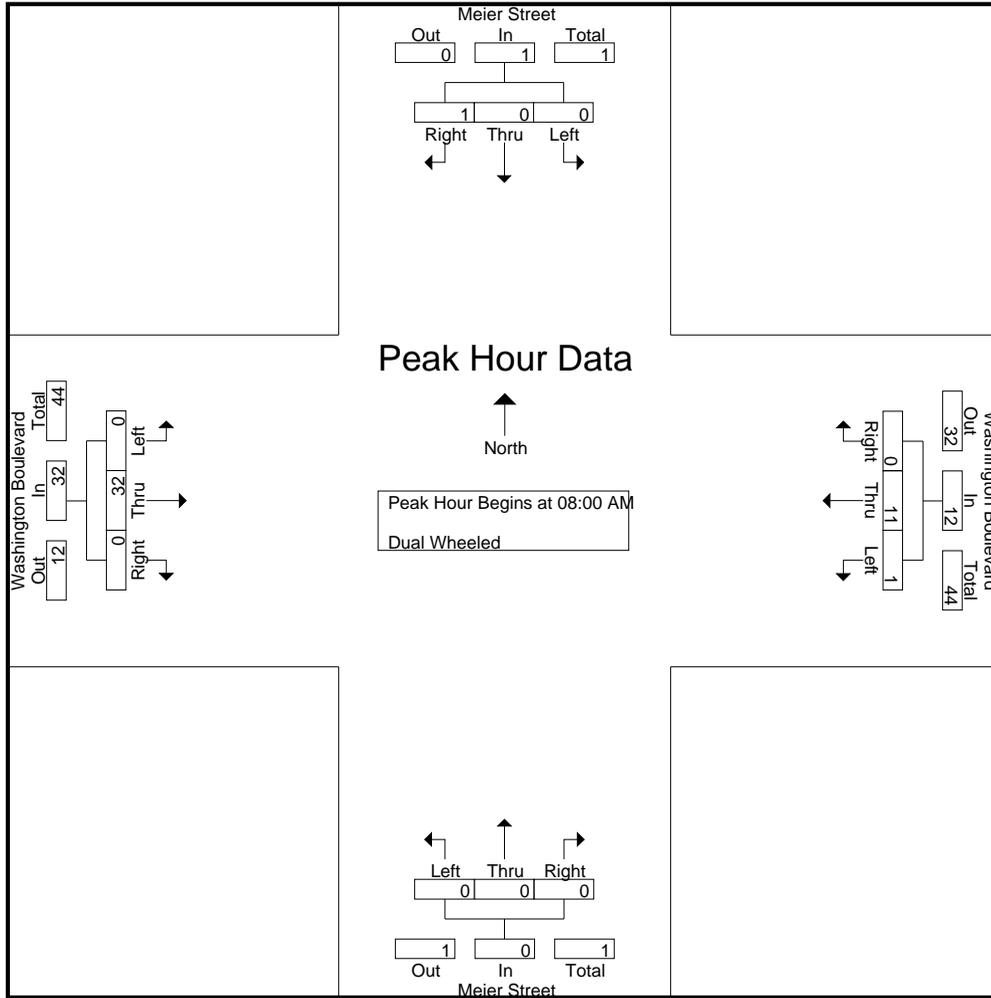
Groups Printed- Dual Wheeled

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
07:30 AM	0	0	0	0	0	4	2	6	0	0	0	0	0	3	0	3	9
07:45 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	3	0	3	7
Total	0	0	1	1	0	14	2	16	0	0	0	0	0	9	0	9	26
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	11	0	11	14
08:30 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	17	0	17	19
08:45 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total	0	0	1	1	1	11	0	12	0	0	0	0	0	32	0	32	45
09:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
09:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	4	0	5	13
09:30 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
09:45 AM	0	0	0	0	1	6	0	7	0	0	0	0	0	2	0	2	9
Total	0	0	0	0	1	25	0	26	0	0	0	0	1	10	0	11	37
Grand Total	0	0	2	2	2	50	2	54	0	0	0	0	1	51	0	52	108
Apprch %	0	0	100		3.7	92.6	3.7		0	0	0		1.9	98.1	0		
Total %	0	0	1.9	1.9	1.9	46.3	1.9	50	0	0	0	0	0.9	47.2	0	48.1	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	11	0	11	14
08:30 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	17	0	17	19
08:45 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total Volume	0	0	1	1	1	11	0	12	0	0	0	0	0	32	0	32	45
% App. Total	0	0	100		8.3	91.7	0		0	0	0		0	100	0		
PHF	.000	.000	.250	.250	.250	.688	.000	.750	.000	.000	.000	.000	.000	.471	.000	.471	.592

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	11	0	11
+30 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	17	0	17
+45 mins.	0	0	1	1	0	3	0	3	0	0	0	0	0	2	0	2
Total Volume	0	0	1	1	1	11	0	12	0	0	0	0	0	32	0	32
% App. Total	0	0	100		8.3	91.7	0		0	0	0		0	100	0	
PHF	.000	.000	.250	.250	.250	.688	.000	.750	.000	.000	.000	.000	.000	.471	.000	.471

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

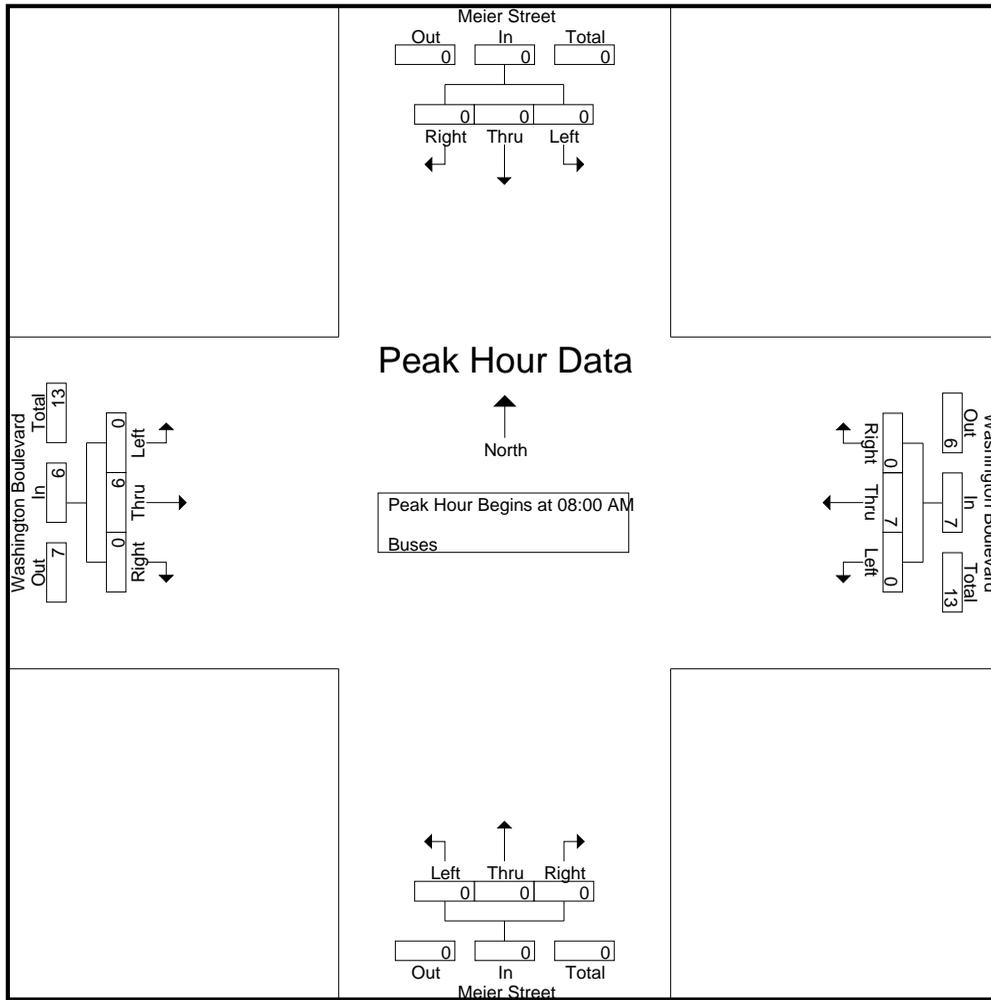
Groups Printed- Buses

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7	19
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
09:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
09:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
Grand Total	0	0	0	0	0	26	0	26	0	0	0	0	0	19	0	19	45
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	57.8	0	57.8	0	0	0	0	0	42.2	0	42.2	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.438	.000	.438	.000	.000	.000	.000	.000	.750	.000	.750	.650

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.438	.000	.438	.000	.000	.000	.000	.000	.750	.000	.750

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

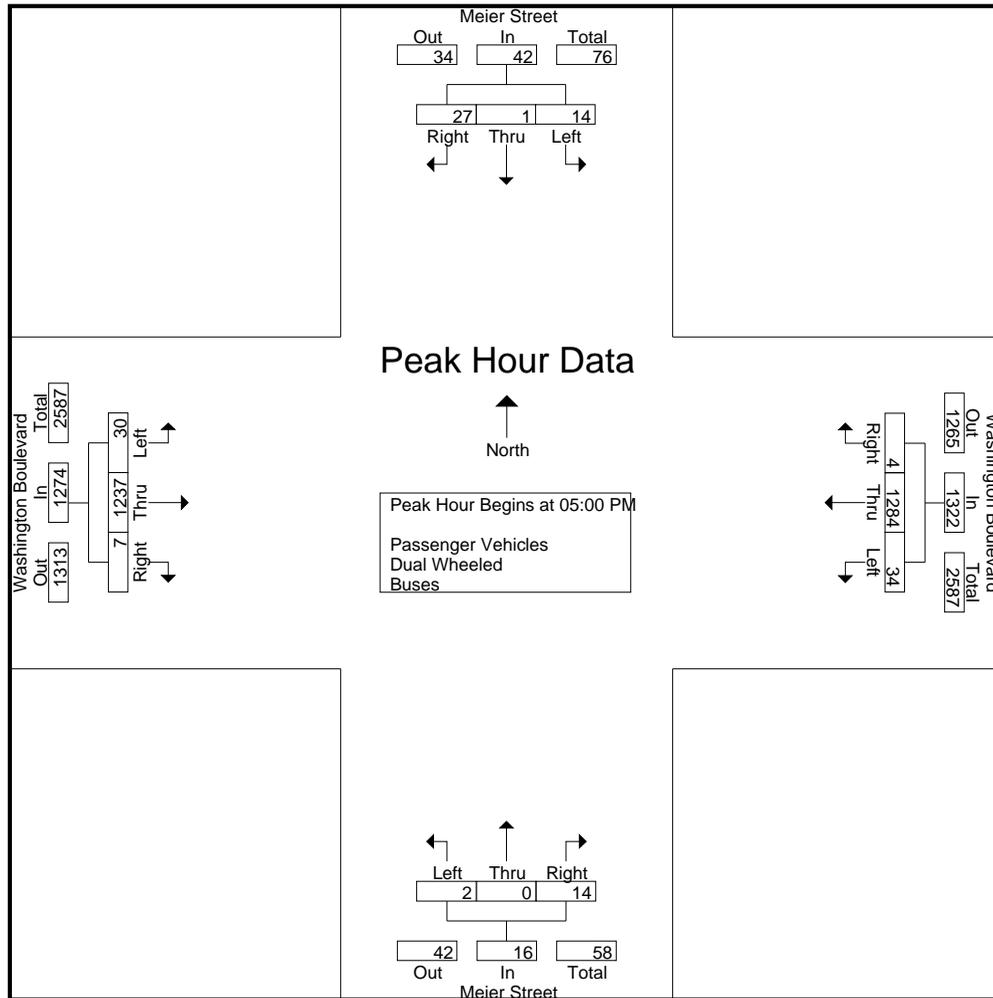
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	1	1	12	273	1	286	0	0	0	0	5	303	2	310	597
03:15 PM	2	0	9	11	7	297	2	306	1	0	2	3	10	288	0	298	618
03:30 PM	2	2	9	13	12	247	1	260	1	0	1	2	4	302	1	307	582
03:45 PM	2	0	1	3	12	277	0	289	0	0	2	2	5	289	0	294	588
Total	6	2	20	28	43	1094	4	1141	2	0	5	7	24	1182	3	1209	2385
04:00 PM	1	0	5	6	10	272	2	284	1	0	4	5	6	276	1	283	578
04:15 PM	2	0	9	11	6	304	2	312	1	1	2	4	12	319	1	332	659
04:30 PM	4	0	5	9	10	309	1	320	3	0	6	9	6	283	2	291	629
04:45 PM	5	0	6	11	6	345	2	353	1	0	1	2	7	269	2	278	644
Total	12	0	25	37	32	1230	7	1269	6	1	13	20	31	1147	6	1184	2510
05:00 PM	1	1	4	6	11	317	0	328	0	0	1	1	4	287	3	294	629
05:15 PM	7	0	7	14	14	310	0	324	0	0	6	6	12	320	2	334	678
05:30 PM	3	0	11	14	6	312	3	321	1	0	4	5	8	316	1	325	665
05:45 PM	3	0	5	8	3	345	1	349	1	0	3	4	6	314	1	321	682
Total	14	1	27	42	34	1284	4	1322	2	0	14	16	30	1237	7	1274	2654
Grand Total	32	3	72	107	109	3608	15	3732	10	1	32	43	85	3566	16	3667	7549
Apprch %	29.9	2.8	67.3		2.9	96.7	0.4		23.3	2.3	74.4		2.3	97.2	0.4		
Total %	0.4	0	1	1.4	1.4	47.8	0.2	49.4	0.1	0	0.4	0.6	1.1	47.2	0.2	48.6	
Passenger Vehicles	32	3	70	105	108	3569	15	3692	9	1	31	41	83	3513	16	3612	7450
% Passenger Vehicles	100	100	97.2	98.1	99.1	98.9	100	98.9	90	100	96.9	95.3	97.6	98.5	100	98.5	98.7
Dual Wheeled	0	0	2	2	1	18	0	19	1	0	1	2	2	30	0	32	55
% Dual Wheeled	0	0	2.8	1.9	0.9	0.5	0	0.5	10	0	3.1	4.7	2.4	0.8	0	0.9	0.7
Buses	0	0	0	0	0	21	0	21	0	0	0	0	0	23	0	23	44
% Buses	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0	0.6	0	0.6	0.6

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	1	4	6	11	317	0	328	0	0	1	1	4	287	3	294	629
05:15 PM	7	0	7	14	14	310	0	324	0	0	6	6	12	320	2	334	678
05:30 PM	3	0	11	14	6	312	3	321	1	0	4	5	8	316	1	325	665
05:45 PM	3	0	5	8	3	345	1	349	1	0	3	4	6	314	1	321	682
Total Volume	14	1	27	42	34	1284	4	1322	2	0	14	16	30	1237	7	1274	2654
% App. Total	33.3	2.4	64.3		2.6	97.1	0.3		12.5	0	87.5		2.4	97.1	0.5		
PHF	.500	.250	.614	.750	.607	.930	.333	.947	.500	.000	.583	.667	.625	.966	.583	.954	.973

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				03:45 PM				05:00 PM			
+0 mins.	5	0	6	11	6	345	2	353	0	0	2	2	4	287	3	294
+15 mins.	1	1	4	6	11	317	0	328	1	0	4	5	12	320	2	334
+30 mins.	7	0	7	14	14	310	0	324	1	1	2	4	8	316	1	325
+45 mins.	3	0	11	14	6	312	3	321	3	0	6	9	6	314	1	321
Total Volume	16	1	28	45	37	1284	5	1326	5	1	14	20	30	1237	7	1274
% App. Total	35.6	2.2	62.2		2.8	96.8	0.4		25	5	70		2.4	97.1	0.5	
PHF	.571	.250	.636	.804	.661	.930	.417	.939	.417	.250	.583	.556	.625	.966	.583	.954

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

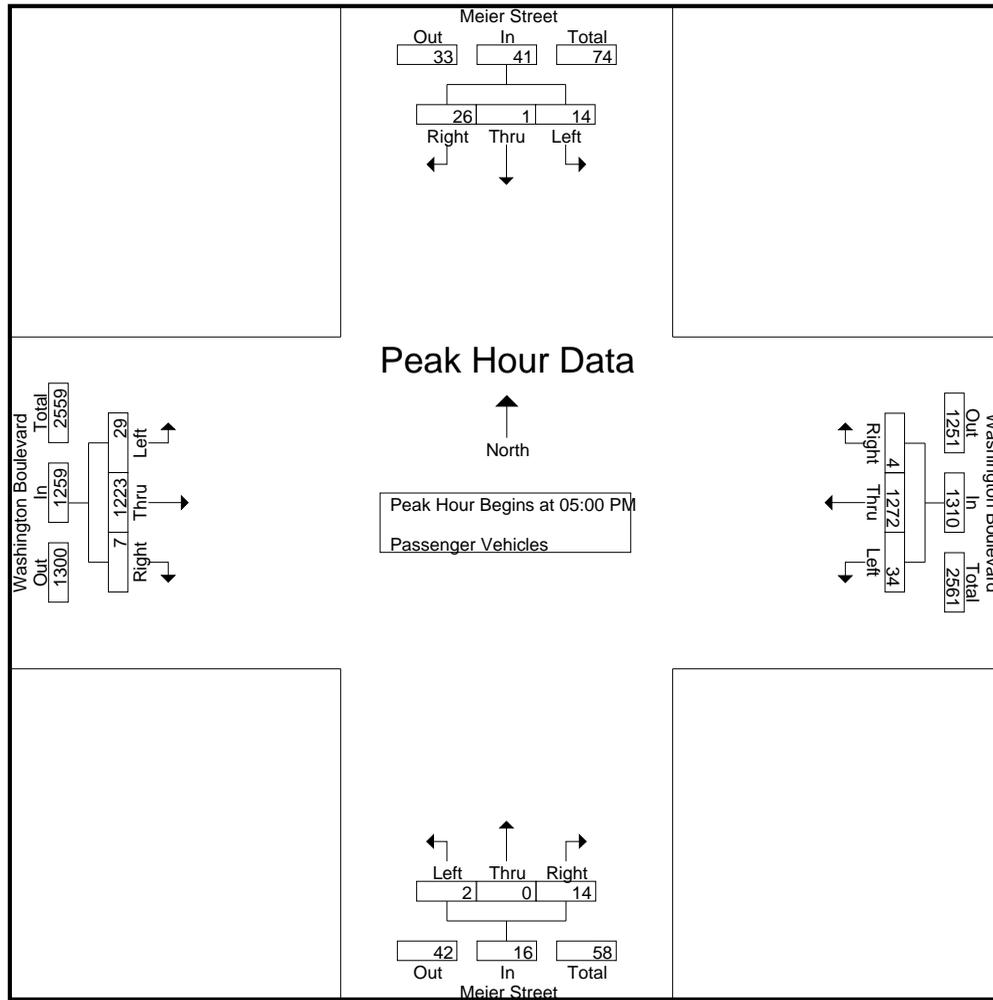
Groups Printed- Passenger Vehicles

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	1	1	12	271	1	284	0	0	0	0	5	298	2	305	590
03:15 PM	2	0	9	11	7	290	2	299	1	0	2	3	10	281	0	291	604
03:30 PM	2	2	9	13	12	246	1	259	0	0	1	1	4	295	1	300	573
03:45 PM	2	0	1	3	12	272	0	284	0	0	2	2	5	285	0	290	579
Total	6	2	20	28	43	1079	4	1126	1	0	5	6	24	1159	3	1186	2346
04:00 PM	1	0	5	6	9	270	2	281	1	0	4	5	6	271	1	278	570
04:15 PM	2	0	9	11	6	300	2	308	1	1	2	4	12	314	1	327	650
04:30 PM	4	0	5	9	10	306	1	317	3	0	5	8	5	281	2	288	622
04:45 PM	5	0	5	10	6	342	2	350	1	0	1	2	7	265	2	274	636
Total	12	0	24	36	31	1218	7	1256	6	1	12	19	30	1131	6	1167	2478
05:00 PM	1	1	4	6	11	313	0	324	0	0	1	1	4	286	3	293	624
05:15 PM	7	0	7	14	14	307	0	321	0	0	6	6	11	317	2	330	671
05:30 PM	3	0	11	14	6	309	3	318	1	0	4	5	8	310	1	319	656
05:45 PM	3	0	4	7	3	343	1	347	1	0	3	4	6	310	1	317	675
Total	14	1	26	41	34	1272	4	1310	2	0	14	16	29	1223	7	1259	2626
Grand Total	32	3	70	105	108	3569	15	3692	9	1	31	41	83	3513	16	3612	7450
Apprch %	30.5	2.9	66.7		2.9	96.7	0.4		22	2.4	75.6		2.3	97.3	0.4		
Total %	0.4	0	0.9	1.4	1.4	47.9	0.2	49.6	0.1	0	0.4	0.6	1.1	47.2	0.2	48.5	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	1	4	6	11	313	0	324	0	0	1	1	4	286	3	293	624
05:15 PM	7	0	7	14	14	307	0	321	0	0	6	6	11	317	2	330	671
05:30 PM	3	0	11	14	6	309	3	318	1	0	4	5	8	310	1	319	656
05:45 PM	3	0	4	7	3	343	1	347	1	0	3	4	6	310	1	317	675
Total Volume	14	1	26	41	34	1272	4	1310	2	0	14	16	29	1223	7	1259	2626
% App. Total	34.1	2.4	63.4		2.6	97.1	0.3		12.5	0	87.5		2.3	97.1	0.6		
PHF	.500	.250	.591	.732	.607	.927	.333	.944	.500	.000	.583	.667	.659	.965	.583	.954	.973

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	1	4	6	11	313	0	324	0	0	1	1	4	286	3	293
+15 mins.	7	0	7	14	14	307	0	321	0	0	6	6	11	317	2	330
+30 mins.	3	0	11	14	6	309	3	318	1	0	4	5	8	310	1	319
+45 mins.	3	0	4	7	3	343	1	347	1	0	3	4	6	310	1	317
Total Volume	14	1	26	41	34	1272	4	1310	2	0	14	16	29	1223	7	1259
% App. Total	34.1	2.4	63.4		2.6	97.1	0.3		12.5	0	87.5		2.3	97.1	0.6	
PHF	.500	.250	.591	.732	.607	.927	.333	.944	.500	.000	.583	.667	.659	.965	.583	.954

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

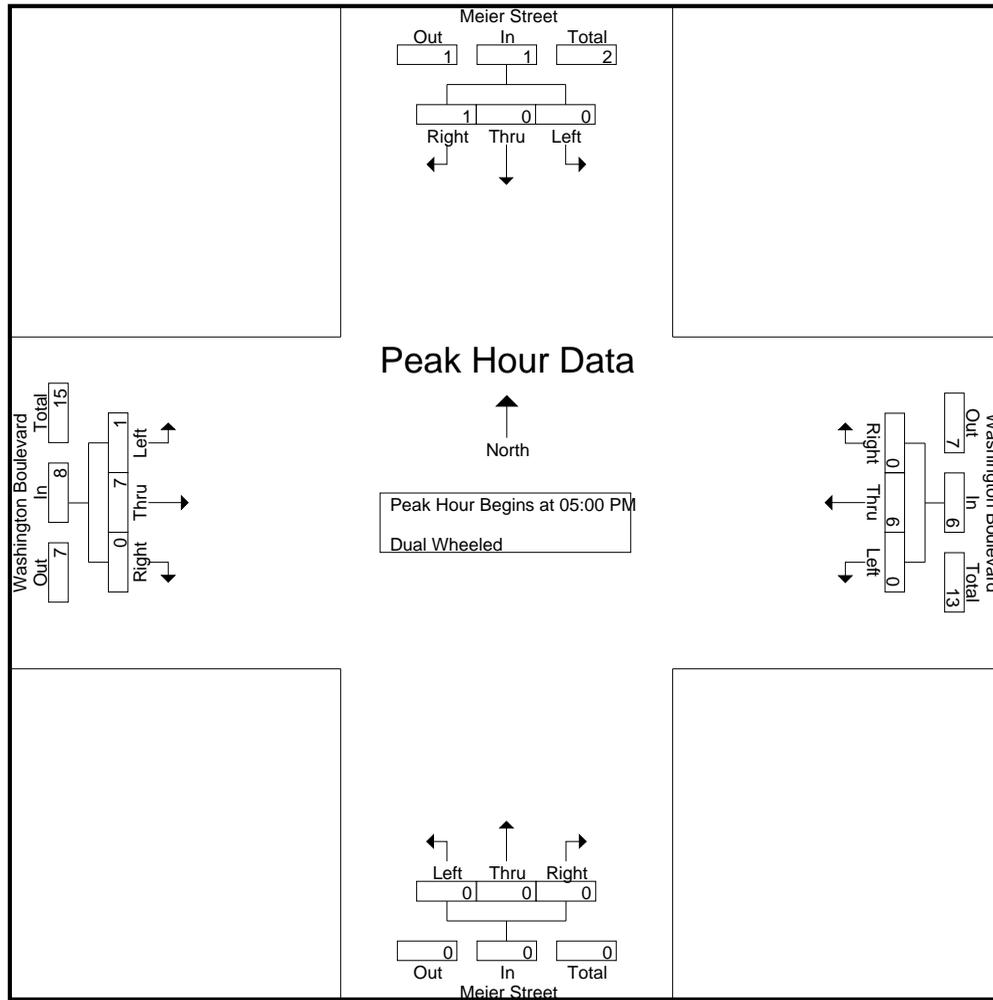
Groups Printed- Dual Wheeled

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
03:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
03:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	5	0	5	7
03:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	7	0	7	1	0	0	1	0	13	0	13	21
04:00 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	4	0	4	6
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	1	2	0	3	5
04:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total	0	0	1	1	1	5	0	6	0	0	1	1	1	10	0	11	19
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total	0	0	1	1	0	6	0	6	0	0	0	0	1	7	0	8	15
Grand Total	0	0	2	2	1	18	0	19	1	0	1	2	2	30	0	32	55
Apprch %	0	0	100		5.3	94.7	0		50	0	50		6.2	93.8	0		
Total %	0	0	3.6	3.6	1.8	32.7	0	34.5	1.8	0	1.8	3.6	3.6	54.5	0	58.2	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total Volume	0	0	1	1	0	6	0	6	0	0	0	0	1	7	0	8	15
% App. Total	0	0	100		0	100	0		0	0	0		12.5	87.5	0		
PHF	.000	.000	.250	.250	.000	.750	.000	.750	.000	.000	.000	.000	.250	.583	.000	.667	.750

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	0	3
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	0	3
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	0	2	0	2
Total Volume	0	0	1	1	0	6	0	6	0	0	0	0	1	7	0	0	8
% App. Total	0	0	100		0	100	0		0	0	0		12.5	87.5	0		
PHF	.000	.000	.250	.250	.000	.750	.000	.750	.000	.000	.000	.000	.250	.583	.000	.000	.667

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

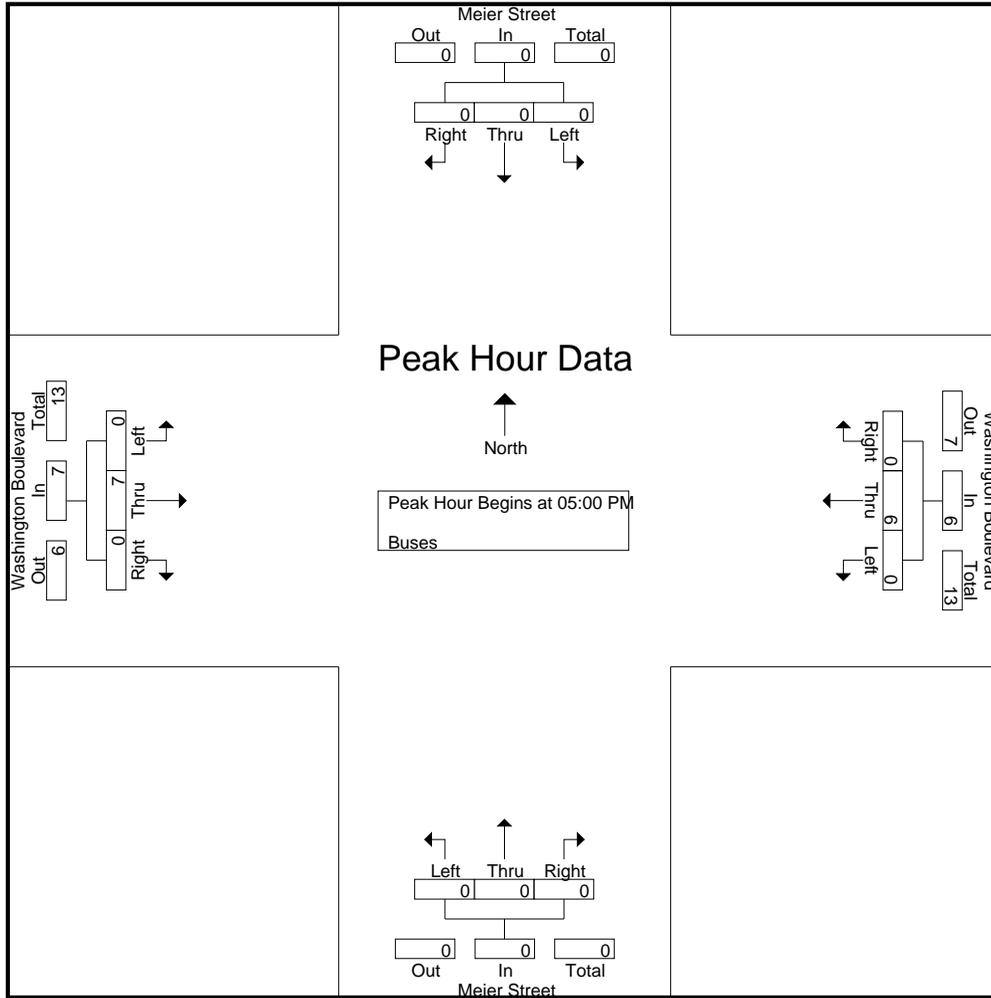
Groups Printed- Buses

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
03:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
03:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	6	13
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
Grand Total	0	0	0	0	0	21	0	21	0	0	0	0	0	23	0	23	44
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	47.7	0	47.7	0	0	0	0	0	52.3	0	52.3	

Start Time	Meier Street Southbound				Washington Boulevard Westbound				Meier Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.583	.000	.583	.813

City of Culver
 N/S: Meier Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 05_CVC_Meier_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.583	.000	.583	

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

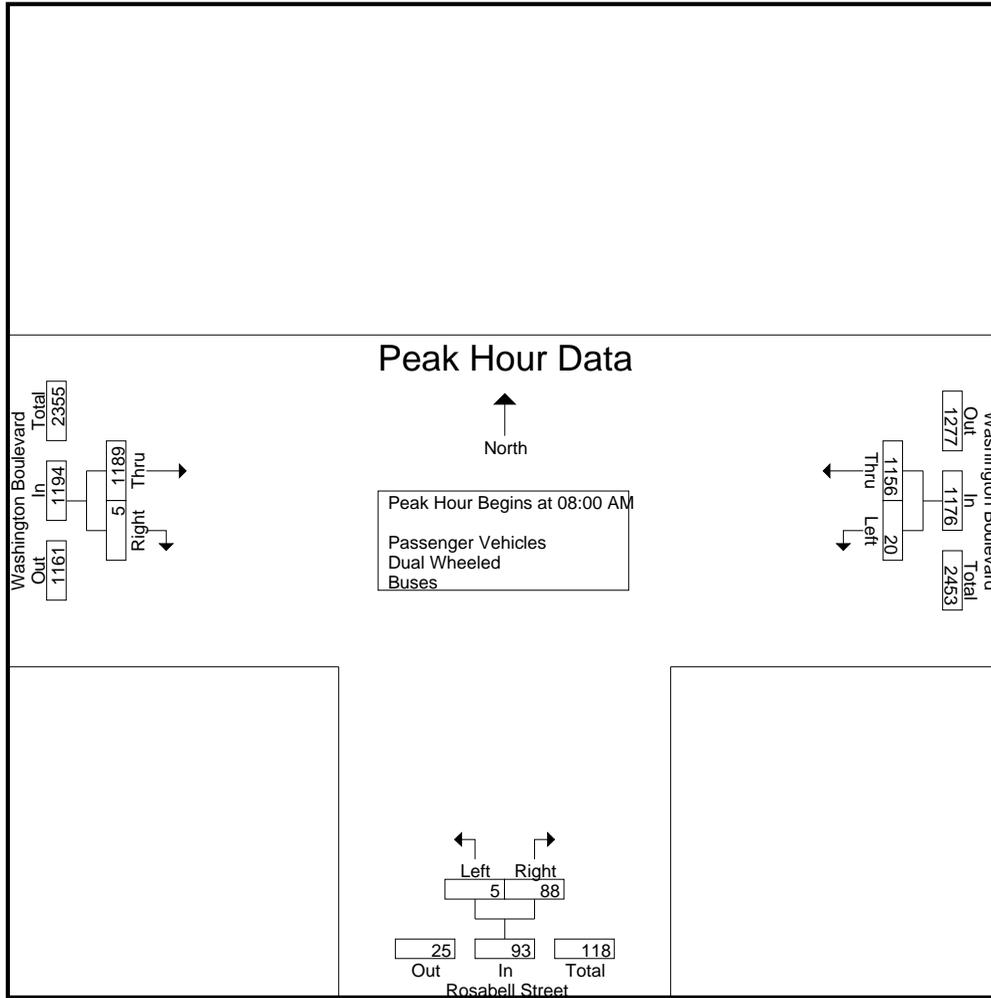
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	176	178	0	12	12	156	0	156	346
07:15 AM	0	167	167	2	9	11	234	0	234	412
07:30 AM	2	240	242	0	25	25	254	0	254	521
07:45 AM	6	251	257	1	26	27	308	0	308	592
Total	10	834	844	3	72	75	952	0	952	1871
08:00 AM	8	270	278	4	29	33	286	3	289	600
08:15 AM	3	279	282	0	21	21	276	1	277	580
08:30 AM	7	289	296	0	24	24	331	0	331	651
08:45 AM	2	318	320	1	14	15	296	1	297	632
Total	20	1156	1176	5	88	93	1189	5	1194	2463
09:00 AM	8	286	294	1	12	13	266	3	269	576
09:15 AM	12	264	276	0	8	8	189	1	190	474
09:30 AM	7	275	282	1	18	19	236	2	238	539
09:45 AM	10	305	315	1	11	12	270	1	271	598
Total	37	1130	1167	3	49	52	961	7	968	2187
Grand Total	67	3120	3187	11	209	220	3102	12	3114	6521
Apprch %	2.1	97.9		5	95		99.6	0.4		
Total %	1	47.8	48.9	0.2	3.2	3.4	47.6	0.2	47.8	
Passenger Vehicles	67	3049	3116	11	209	220	3034	12	3046	6382
% Passenger Vehicles	100	97.7	97.8	100	100	100	97.8	100	97.8	97.9
Dual Wheeled	0	46	46	0	0	0	50	0	50	96
% Dual Wheeled	0	1.5	1.4	0	0	0	1.6	0	1.6	1.5
Buses	0	25	25	0	0	0	18	0	18	43
% Buses	0	0.8	0.8	0	0	0	0.6	0	0.6	0.7

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	8	270	278	4	29	33	286	3	289	600
08:15 AM	3	279	282	0	21	21	276	1	277	580
08:30 AM	7	289	296	0	24	24	331	0	331	651
08:45 AM	2	318	320	1	14	15	296	1	297	632
Total Volume	20	1156	1176	5	88	93	1189	5	1194	2463
% App. Total	1.7	98.3		5.4	94.6		99.6	0.4		
PHF	.625	.909	.919	.313	.759	.705	.898	.417	.902	.946

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:15 AM			07:30 AM			07:45 AM		
+0 mins.	3	279	282	0	25	25	308	0	308
+15 mins.	7	289	296	1	26	27	286	3	289
+30 mins.	2	318	320	4	29	33	276	1	277
+45 mins.	8	286	294	0	21	21	331	0	331
Total Volume	20	1172	1192	5	101	106	1201	4	1205
% App. Total	1.7	98.3		4.7	95.3		99.7	0.3	
PHF	.625	.921	.931	.313	.871	.803	.907	.333	.910

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

Groups Printed- Passenger Vehicles

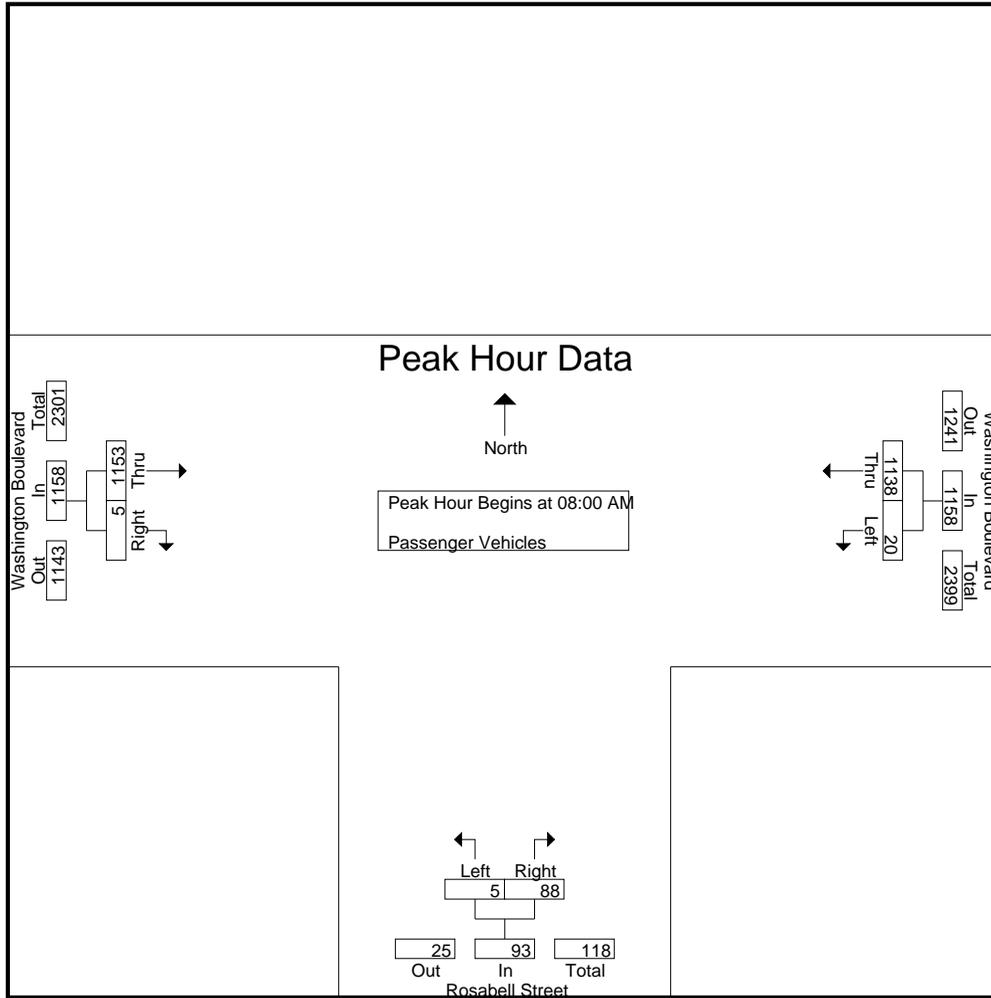
Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	174	176	0	12	12	154	0	154	342
07:15 AM	0	156	156	2	9	11	231	0	231	398
07:30 AM	2	233	235	0	25	25	250	0	250	510
07:45 AM	6	246	252	1	26	27	303	0	303	582
Total	10	809	819	3	72	75	938	0	938	1832
08:00 AM	8	265	273	4	29	33	283	3	286	592
08:15 AM	3	272	275	0	21	21	266	1	267	563
08:30 AM	7	286	293	0	24	24	311	0	311	628
08:45 AM	2	315	317	1	14	15	293	1	294	626
Total	20	1138	1158	5	88	93	1153	5	1158	2409
09:00 AM	8	280	288	1	12	13	263	3	266	567
09:15 AM	12	256	268	0	8	8	185	1	186	462
09:30 AM	7	267	274	1	18	19	230	2	232	525
09:45 AM	10	299	309	1	11	12	265	1	266	587
Total	37	1102	1139	3	49	52	943	7	950	2141
Grand Total	67	3049	3116	11	209	220	3034	12	3046	6382
Apprch %	2.2	97.8		5	95		99.6	0.4		
Total %	1	47.8	48.8	0.2	3.3	3.4	47.5	0.2	47.7	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	8	265	273	4	29	33	283	3	286	592
08:15 AM	3	272	275	0	21	21	266	1	267	563
08:30 AM	7	286	293	0	24	24	311	0	311	628
08:45 AM	2	315	317	1	14	15	293	1	294	626
Total Volume	20	1138	1158	5	88	93	1153	5	1158	2409
% App. Total	1.7	98.3		5.4	94.6		99.6	0.4		
PHF	.625	.903	.913	.313	.759	.705	.927	.417	.931	.959

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	8	265	273	4	29	33	283	3	286
+15 mins.	3	272	275	0	21	21	266	1	267
+30 mins.	7	286	293	0	24	24	311	0	311
+45 mins.	2	315	317	1	14	15	293	1	294
Total Volume	20	1138	1158	5	88	93	1153	5	1158
% App. Total	1.7	98.3		5.4	94.6		99.6	0.4	
PHF	.625	.903	.913	.313	.759	.705	.927	.417	.931

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

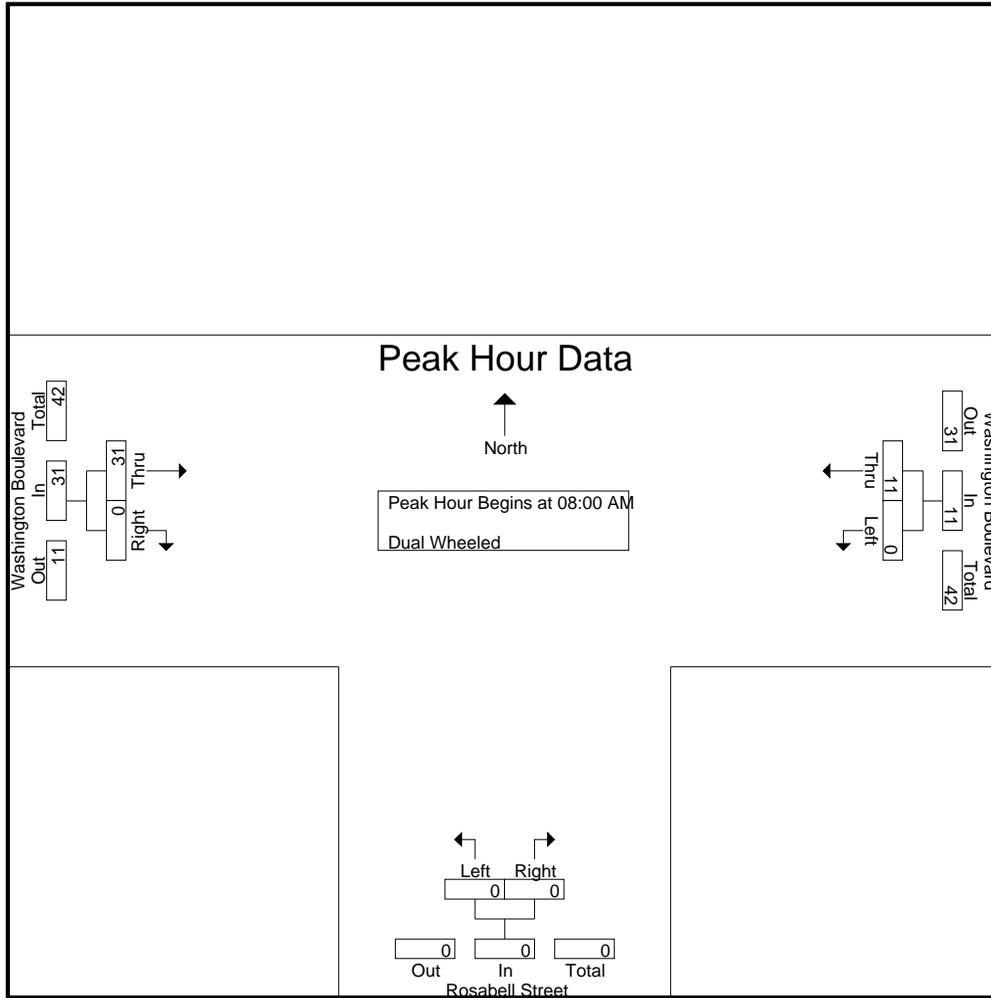
Groups Printed- Dual Wheeled

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	0	0	0	1	0	1	2
07:15 AM	0	5	5	0	0	0	1	0	1	6
07:30 AM	0	5	5	0	0	0	3	0	3	8
07:45 AM	0	2	2	0	0	0	2	0	2	4
Total	0	13	13	0	0	0	7	0	7	20
08:00 AM	0	5	5	0	0	0	2	0	2	7
08:15 AM	0	3	3	0	0	0	8	0	8	11
08:30 AM	0	1	1	0	0	0	19	0	19	20
08:45 AM	0	2	2	0	0	0	2	0	2	4
Total	0	11	11	0	0	0	31	0	31	42
09:00 AM	0	4	4	0	0	0	1	0	1	5
09:15 AM	0	6	6	0	0	0	3	0	3	9
09:30 AM	0	7	7	0	0	0	4	0	4	11
09:45 AM	0	5	5	0	0	0	4	0	4	9
Total	0	22	22	0	0	0	12	0	12	34
Grand Total	0	46	46	0	0	0	50	0	50	96
Apprch %	0	100		0	0		100	0		
Total %	0	47.9	47.9	0	0	0	52.1	0	52.1	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	5	5	0	0	0	2	0	2	7
08:15 AM	0	3	3	0	0	0	8	0	8	11
08:30 AM	0	1	1	0	0	0	19	0	19	20
08:45 AM	0	2	2	0	0	0	2	0	2	4
Total Volume	0	11	11	0	0	0	31	0	31	42
% App. Total	0	100		0	0		100	0		
PHF	.000	.550	.550	.000	.000	.000	.408	.000	.408	.525

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	5	5	0	0	0	2	0	2
+15 mins.	0	3	3	0	0	0	8	0	8
+30 mins.	0	1	1	0	0	0	19	0	19
+45 mins.	0	2	2	0	0	0	2	0	2
Total Volume	0	11	11	0	0	0	31	0	31
% App. Total	0	100		0	0		100	0	
PHF	.000	.550	.550	.000	.000	.000	.408	.000	.408

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

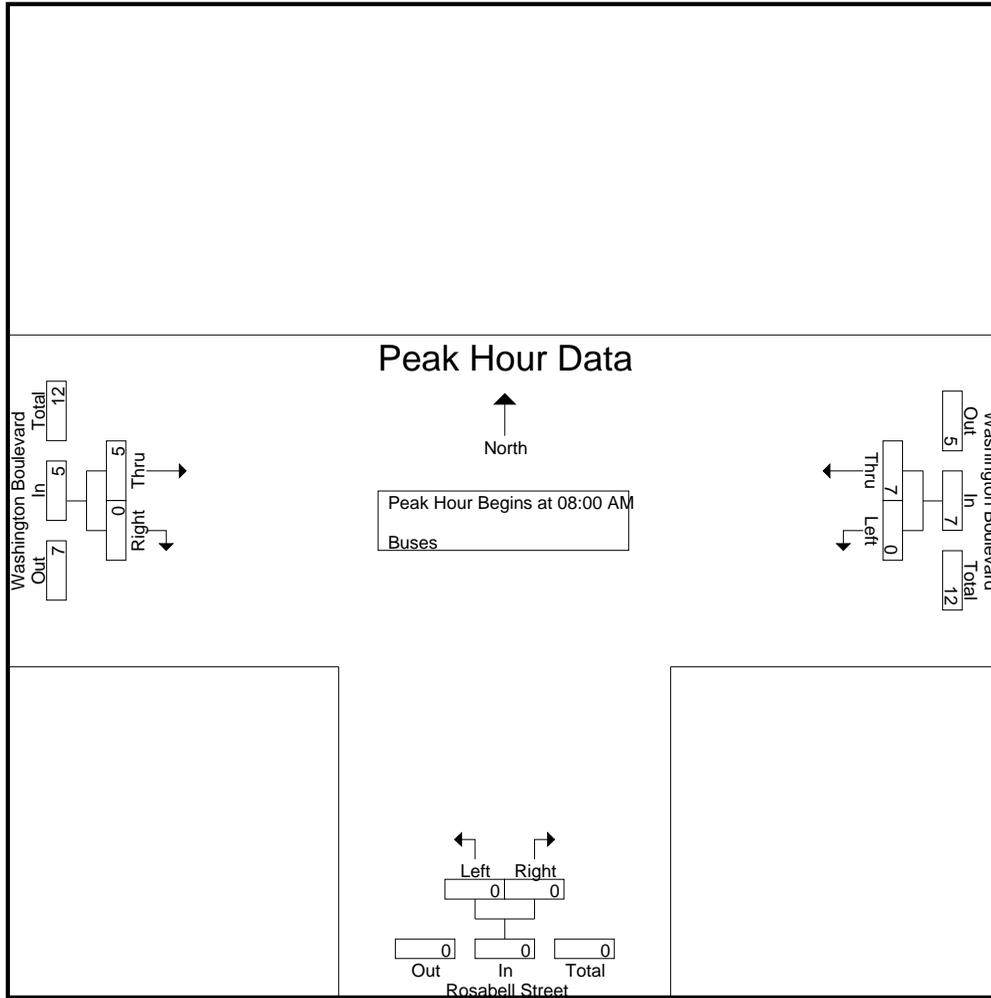
Groups Printed- Buses

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	0	0	0	1	0	1	2
07:15 AM	0	6	6	0	0	0	2	0	2	8
07:30 AM	0	2	2	0	0	0	1	0	1	3
07:45 AM	0	3	3	0	0	0	3	0	3	6
Total	0	12	12	0	0	0	7	0	7	19
08:00 AM	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	4	4	0	0	0	2	0	2	6
08:30 AM	0	2	2	0	0	0	1	0	1	3
08:45 AM	0	1	1	0	0	0	1	0	1	2
Total	0	7	7	0	0	0	5	0	5	12
09:00 AM	0	2	2	0	0	0	2	0	2	4
09:15 AM	0	2	2	0	0	0	1	0	1	3
09:30 AM	0	1	1	0	0	0	2	0	2	3
09:45 AM	0	1	1	0	0	0	1	0	1	2
Total	0	6	6	0	0	0	6	0	6	12
Grand Total	0	25	25	0	0	0	18	0	18	43
Apprch %	0	100		0	0		100	0		
Total %	0	58.1	58.1	0	0	0	41.9	0	41.9	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	4	4	0	0	0	2	0	2	6
08:30 AM	0	2	2	0	0	0	1	0	1	3
08:45 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	7	7	0	0	0	5	0	5	12
% App. Total	0	100		0	0		100	0		
PHF	.000	.438	.438	.000	.000	.000	.625	.000	.625	.500

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	4	4	0	0	0	2	0	2
+30 mins.	0	2	2	0	0	0	1	0	1
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	7	7	0	0	0	5	0	5
% App. Total	0	100		0	0		100	0	
PHF	.000	.438	.438	.000	.000	.000	.625	.000	.625

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

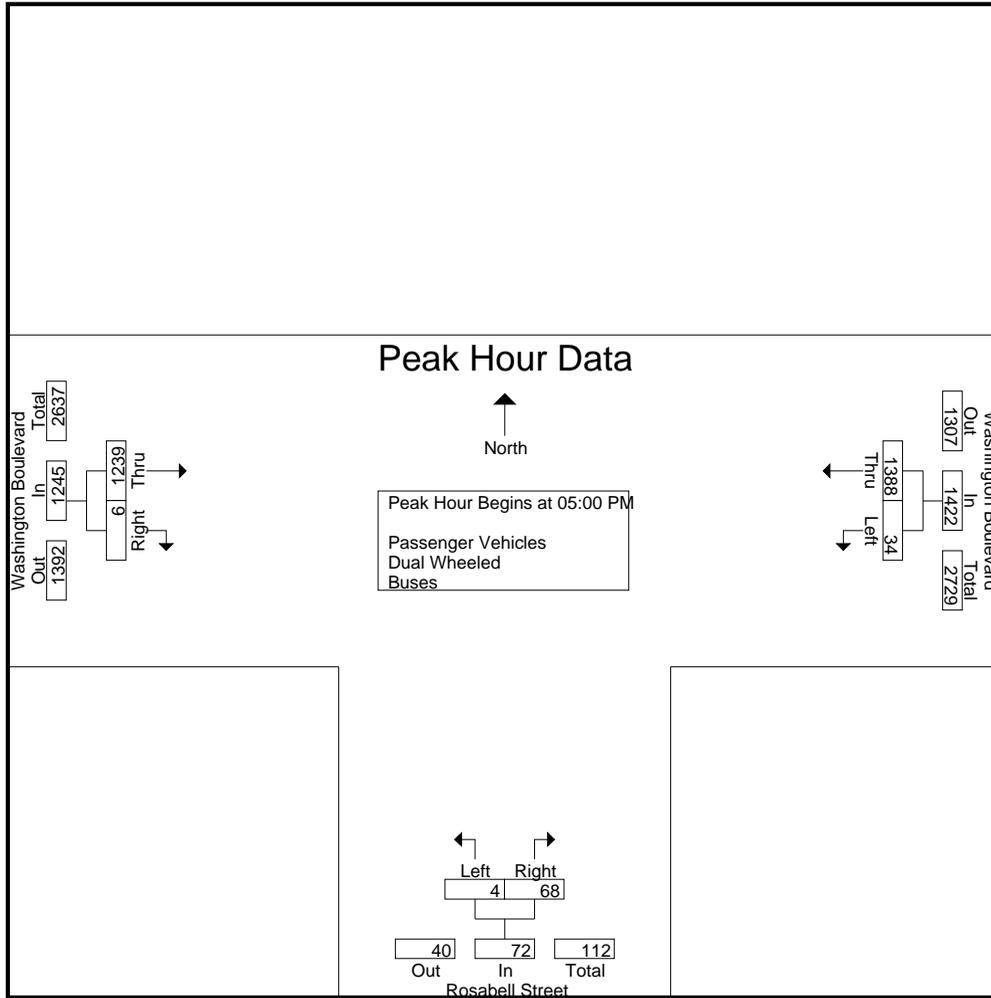
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	9	297	306	1	13	14	294	1	295	615
03:15 PM	9	310	319	0	13	13	287	1	288	620
03:30 PM	10	284	294	2	11	13	313	2	315	622
03:45 PM	8	284	292	1	17	18	291	1	292	602
Total	36	1175	1211	4	54	58	1185	5	1190	2459
04:00 PM	4	312	316	1	16	17	283	4	287	620
04:15 PM	6	307	313	2	15	17	302	1	303	633
04:30 PM	7	343	350	4	21	25	312	3	315	690
04:45 PM	9	329	338	3	11	14	245	3	248	600
Total	26	1291	1317	10	63	73	1142	11	1153	2543
05:00 PM	16	346	362	2	13	15	293	2	295	672
05:15 PM	6	334	340	2	21	23	310	4	314	677
05:30 PM	9	351	360	0	18	18	331	0	331	709
05:45 PM	3	357	360	0	16	16	305	0	305	681
Total	34	1388	1422	4	68	72	1239	6	1245	2739
Grand Total	96	3854	3950	18	185	203	3566	22	3588	7741
Apprch %	2.4	97.6		8.9	91.1		99.4	0.6		
Total %	1.2	49.8	51	0.2	2.4	2.6	46.1	0.3	46.4	
Passenger Vehicles	96	3812	3908	17	184	201	3518	22	3540	7649
% Passenger Vehicles	100	98.9	98.9	94.4	99.5	99	98.7	100	98.7	98.8
Dual Wheeled	0	19	19	1	1	2	27	0	27	48
% Dual Wheeled	0	0.5	0.5	5.6	0.5	1	0.8	0	0.8	0.6
Buses	0	23	23	0	0	0	21	0	21	44
% Buses	0	0.6	0.6	0	0	0	0.6	0	0.6	0.6

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	16	346	362	2	13	15	293	2	295	672
05:15 PM	6	334	340	2	21	23	310	4	314	677
05:30 PM	9	351	360	0	18	18	331	0	331	709
05:45 PM	3	357	360	0	16	16	305	0	305	681
Total Volume	34	1388	1422	4	68	72	1239	6	1245	2739
% App. Total	2.4	97.6		5.6	94.4		99.5	0.5		
PHF	.531	.972	.982	.500	.810	.783	.936	.375	.940	.966

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM			03:45 PM			05:00 PM		
+0 mins.	16	346	362	1	17	18	293	2	295
+15 mins.	6	334	340	1	16	17	310	4	314
+30 mins.	9	351	360	2	15	17	331	0	331
+45 mins.	3	357	360	4	21	25	305	0	305
Total Volume	34	1388	1422	8	69	77	1239	6	1245
% App. Total	2.4	97.6		10.4	89.6		99.5	0.5	
PHF	.531	.972	.982	.500	.821	.770	.936	.375	.940

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

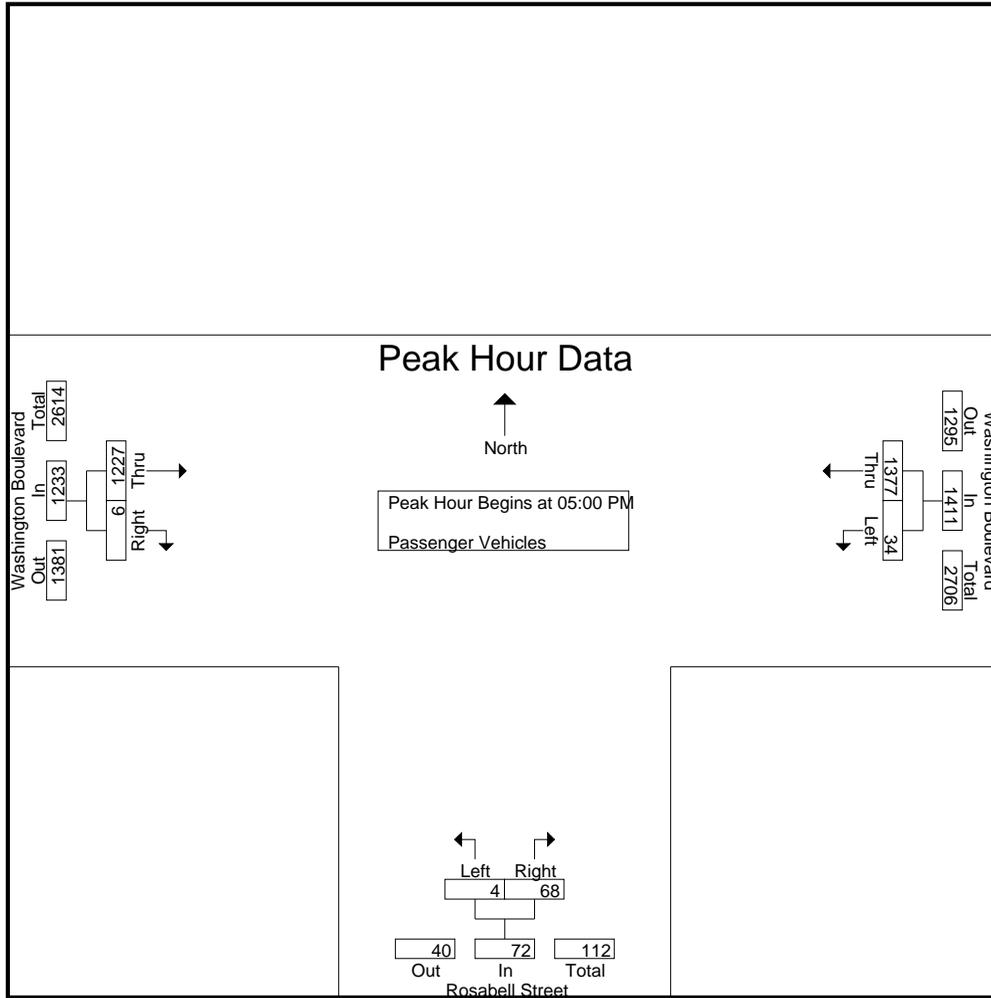
Groups Printed- Passenger Vehicles

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	9	293	302	1	13	14	290	1	291	607
03:15 PM	9	304	313	0	13	13	280	1	281	607
03:30 PM	10	281	291	2	10	12	306	2	308	611
03:45 PM	8	278	286	1	17	18	289	1	290	594
Total	36	1156	1192	4	53	57	1165	5	1170	2419
04:00 PM	4	308	312	1	16	17	278	4	282	611
04:15 PM	6	304	310	2	15	17	298	1	299	626
04:30 PM	7	341	348	4	21	25	308	3	311	684
04:45 PM	9	326	335	2	11	13	242	3	245	593
Total	26	1279	1305	9	63	72	1126	11	1137	2514
05:00 PM	16	343	359	2	13	15	292	2	294	668
05:15 PM	6	332	338	2	21	23	308	4	312	673
05:30 PM	9	347	356	0	18	18	326	0	326	700
05:45 PM	3	355	358	0	16	16	301	0	301	675
Total	34	1377	1411	4	68	72	1227	6	1233	2716
Grand Total	96	3812	3908	17	184	201	3518	22	3540	7649
Apprch %	2.5	97.5		8.5	91.5		99.4	0.6		
Total %	1.3	49.8	51.1	0.2	2.4	2.6	46	0.3	46.3	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	16	343	359	2	13	15	292	2	294	668
05:15 PM	6	332	338	2	21	23	308	4	312	673
05:30 PM	9	347	356	0	18	18	326	0	326	700
05:45 PM	3	355	358	0	16	16	301	0	301	675
Total Volume	34	1377	1411	4	68	72	1227	6	1233	2716
% App. Total	2.4	97.6		5.6	94.4		99.5	0.5		
PHF	.531	.970	.983	.500	.810	.783	.941	.375	.946	.970

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	16	343	359	2	13	15	292	2	294
+15 mins.	6	332	338	2	21	23	308	4	312
+30 mins.	9	347	356	0	18	18	326	0	326
+45 mins.	3	355	358	0	16	16	301	0	301
Total Volume	34	1377	1411	4	68	72	1227	6	1233
% App. Total	2.4	97.6		5.6	94.4		99.5	0.5	
PHF	.531	.970	.983	.500	.810	.783	.941	.375	.946

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

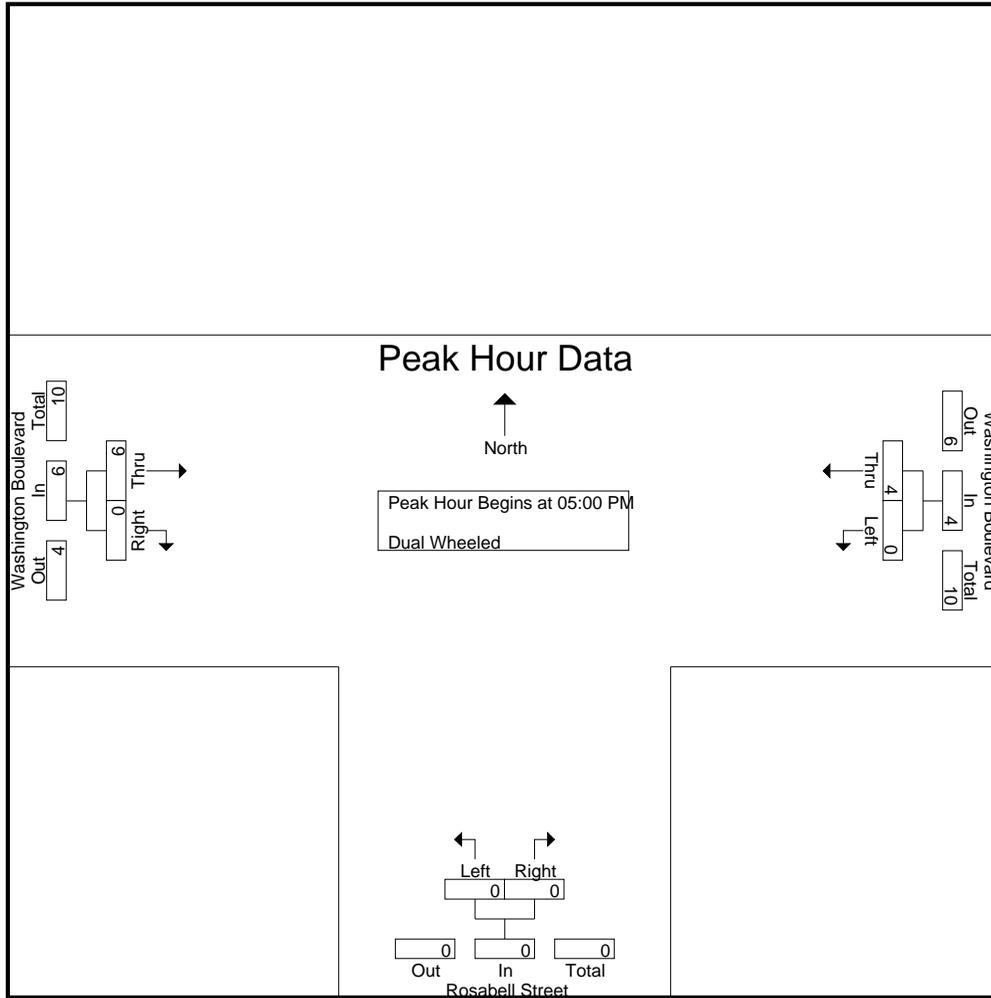
Groups Printed- Dual Wheeled

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	0	2	2	0	0	0	0	0	0	2
03:15 PM	0	2	2	0	0	0	4	0	4	6
03:30 PM	0	3	3	0	1	1	5	0	5	9
03:45 PM	0	3	3	0	0	0	1	0	1	4
Total	0	10	10	0	1	1	10	0	10	21
04:00 PM	0	3	3	0	0	0	4	0	4	7
04:15 PM	0	1	1	0	0	0	2	0	2	3
04:30 PM	0	0	0	0	0	0	3	0	3	3
04:45 PM	0	1	1	1	0	1	2	0	2	4
Total	0	5	5	1	0	1	11	0	11	17
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	1	1	0	0	0	2	0	2	3
05:45 PM	0	1	1	0	0	0	3	0	3	4
Total	0	4	4	0	0	0	6	0	6	10
Grand Total	0	19	19	1	1	2	27	0	27	48
Apprch %	0	100		50	50		100	0		
Total %	0	39.6	39.6	2.1	2.1	4.2	56.2	0	56.2	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	1	1	0	0	0	2	0	2	3
05:45 PM	0	1	1	0	0	0	3	0	3	4
Total Volume	0	4	4	0	0	0	6	0	6	10
% App. Total	0	100		0	0		100	0		
PHF	.000	1.00	1.00	.000	.000	.000	.500	.000	.500	.625

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	1	1	0	0	0	0	0	0
+15 mins.	0	1	1	0	0	0	1	0	1
+30 mins.	0	1	1	0	0	0	2	0	2
+45 mins.	0	1	1	0	0	0	3	0	3
Total Volume	0	4	4	0	0	0	6	0	6
% App. Total	0	100	100	0	0	0	100	0	100
PHF	.000	1.000	1.000	.000	.000	.000	.500	.000	.500

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

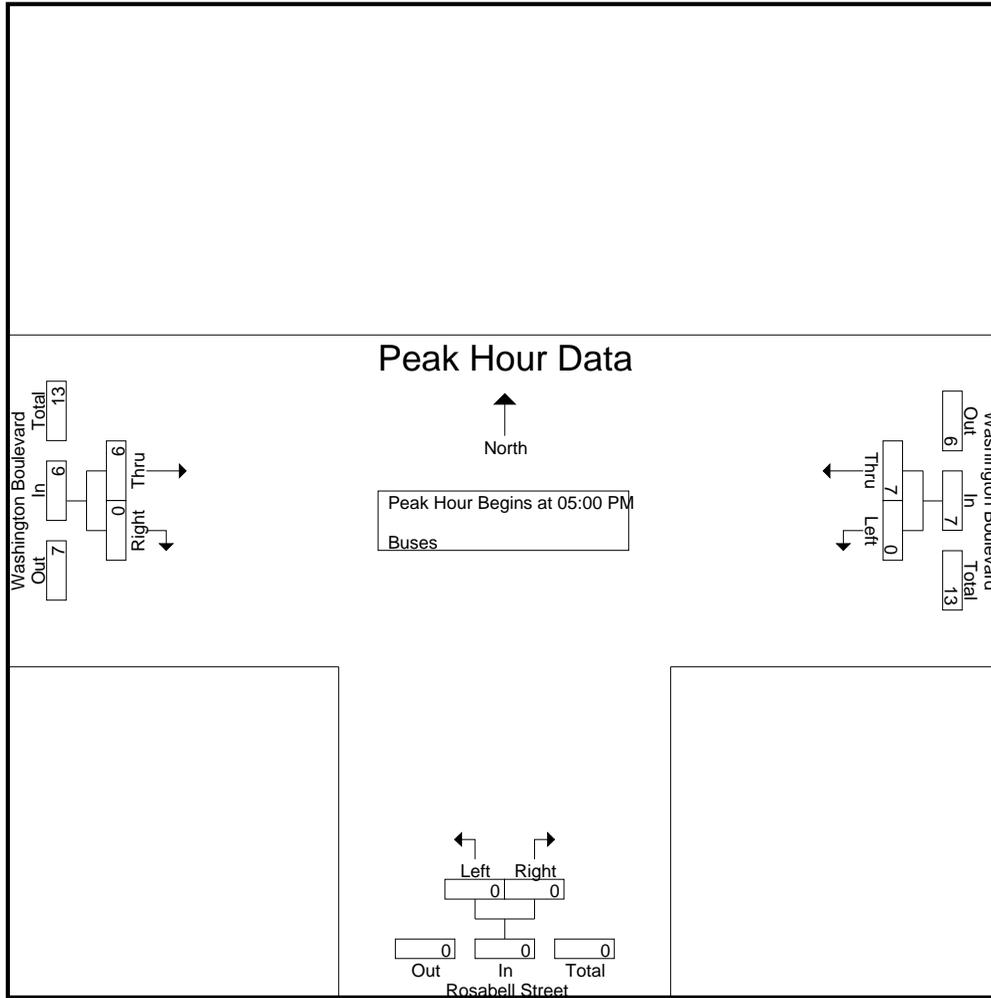
Groups Printed- Buses

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	0	2	2	0	0	0	4	0	4	6
03:15 PM	0	4	4	0	0	0	3	0	3	7
03:30 PM	0	0	0	0	0	0	2	0	2	2
03:45 PM	0	3	3	0	0	0	1	0	1	4
Total	0	9	9	0	0	0	10	0	10	19
04:00 PM	0	1	1	0	0	0	1	0	1	2
04:15 PM	0	2	2	0	0	0	2	0	2	4
04:30 PM	0	2	2	0	0	0	1	0	1	3
04:45 PM	0	2	2	0	0	0	1	0	1	3
Total	0	7	7	0	0	0	5	0	5	12
05:00 PM	0	2	2	0	0	0	1	0	1	3
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	3	3	0	0	0	3	0	3	6
05:45 PM	0	1	1	0	0	0	1	0	1	2
Total	0	7	7	0	0	0	6	0	6	13
Grand Total	0	23	23	0	0	0	21	0	21	44
Apprch %	0	100		0	0		100	0		
Total %	0	52.3	52.3	0	0	0	47.7	0	47.7	

Start Time	Washington Boulevard Westbound			Rosabell Street Northbound			Washington Boulevard Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	2	2	0	0	0	1	0	1	3
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	3	3	0	0	0	3	0	3	6
05:45 PM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	7	7	0	0	0	6	0	6	13
% App. Total	0	100		0	0		100	0		
PHF	.000	.583	.583	.000	.000	.000	.500	.000	.500	.542

City of Culver
 N/S: Rosabell Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 06_CVC_Rosabell_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	2	2	0	0	0	1	0	1
+15 mins.	0	1	1	0	0	0	1	0	1
+30 mins.	0	3	3	0	0	0	3	0	3
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	7	7	0	0	0	6	0	6
% App. Total	0	100		0	0		100	0	
PHF	.000	.583	.583	.000	.000	.000	.500	.000	.500

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

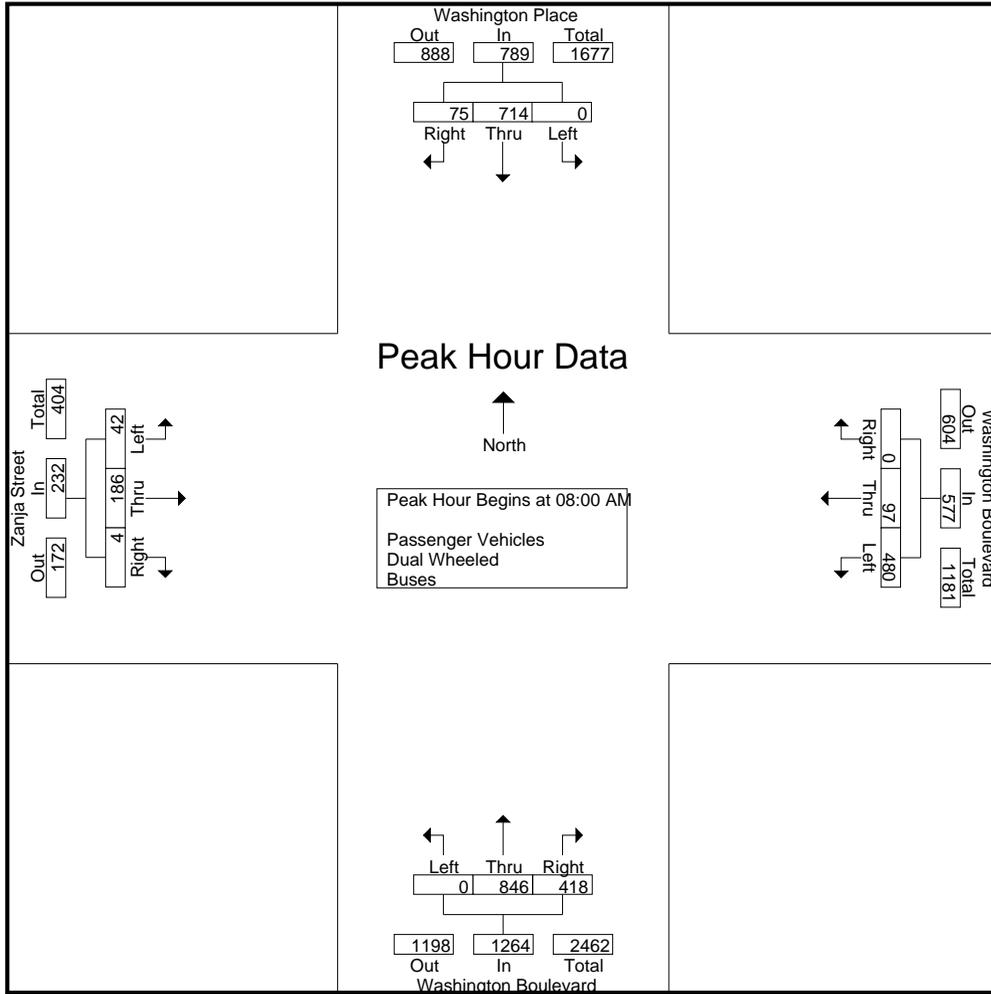
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	93	16	109	62	17	0	79	0	113	46	159	2	14	0	16	363
07:15 AM	0	89	24	113	73	25	0	98	0	171	73	244	6	26	0	32	487
07:30 AM	0	122	29	151	119	46	0	165	0	189	95	284	8	31	0	39	639
07:45 AM	0	148	33	181	100	43	0	143	0	201	132	333	9	61	2	72	729
Total	0	452	102	554	354	131	0	485	0	674	346	1020	25	132	2	159	2218
08:00 AM	0	153	25	178	118	20	0	138	0	205	111	316	10	51	2	63	695
08:15 AM	0	170	12	182	133	22	0	155	0	185	114	299	5	52	0	57	693
08:30 AM	0	171	14	185	97	32	0	129	0	251	83	334	18	38	2	58	706
08:45 AM	0	220	24	244	132	23	0	155	0	205	110	315	9	45	0	54	768
Total	0	714	75	789	480	97	0	577	0	846	418	1264	42	186	4	232	2862
09:00 AM	0	173	9	182	110	24	0	134	0	175	93	268	12	39	1	52	636
09:15 AM	0	187	20	207	120	30	0	150	0	138	83	221	11	40	1	52	630
09:30 AM	0	151	11	162	98	24	0	122	0	167	67	234	9	27	0	36	554
09:45 AM	0	201	14	215	117	30	0	147	0	161	134	295	7	34	3	44	701
Total	0	712	54	766	445	108	0	553	0	641	377	1018	39	140	5	184	2521
Grand Total	0	1878	231	2109	1279	336	0	1615	0	2161	1141	3302	106	458	11	575	7601
Apprch %	0	89	11		79.2	20.8	0		0	65.4	34.6		18.4	79.7	1.9		
Total %	0	24.7	3	27.7	16.8	4.4	0	21.2	0	28.4	15	43.4	1.4	6	0.1	7.6	
Passenger Vehicles	0	1840	229	2069	1240	332	0	1572	0	2121	1106	3227	106	455	10	571	7439
% Passenger Vehicles	0	98	99.1	98.1	97	98.8	0	97.3	0	98.1	96.9	97.7	100	99.3	90.9	99.3	97.9
Dual Wheeled	0	29	2	31	21	4	0	25	0	30	21	51	0	3	1	4	111
% Dual Wheeled	0	1.5	0.9	1.5	1.6	1.2	0	1.5	0	1.4	1.8	1.5	0	0.7	9.1	0.7	1.5
Buses	0	9	0	9	18	0	0	18	0	10	14	24	0	0	0	0	51
% Buses	0	0.5	0	0.4	1.4	0	0	1.1	0	0.5	1.2	0.7	0	0	0	0	0.7

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	153	25	178	118	20	0	138	0	205	111	316	10	51	2	63	695
08:15 AM	0	170	12	182	133	22	0	155	0	185	114	299	5	52	0	57	693
08:30 AM	0	171	14	185	97	32	0	129	0	251	83	334	18	38	2	58	706
08:45 AM	0	220	24	244	132	23	0	155	0	205	110	315	9	45	0	54	768
Total Volume	0	714	75	789	480	97	0	577	0	846	418	1264	42	186	4	232	2862
% App. Total	0	90.5	9.5		83.2	16.8	0		0	66.9	33.1		18.1	80.2	1.7		
PHF	.000	.811	.750	.808	.902	.758	.000	.931	.000	.843	.917	.946	.583	.894	.500	.921	.932

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:30 AM			07:30 AM			07:45 AM			07:45 AM						
+0 mins.	0	171	14	185	119	46	0	165	0	201	132	333	9	61	2	72
+15 mins.	0	220	24	244	100	43	0	143	0	205	111	316	10	51	2	63
+30 mins.	0	173	9	182	118	20	0	138	0	185	114	299	5	52	0	57
+45 mins.	0	187	20	207	133	22	0	155	0	251	83	334	18	38	2	58
Total Volume	0	751	67	818	470	131	0	601	0	842	440	1282	42	202	6	250
% App. Total	0	91.8	8.2		78.2	21.8	0		0	65.7	34.3		16.8	80.8	2.4	
PHF	.000	.853	.698	.838	.883	.712	.000	.911	.000	.839	.833	.960	.583	.828	.750	.868

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

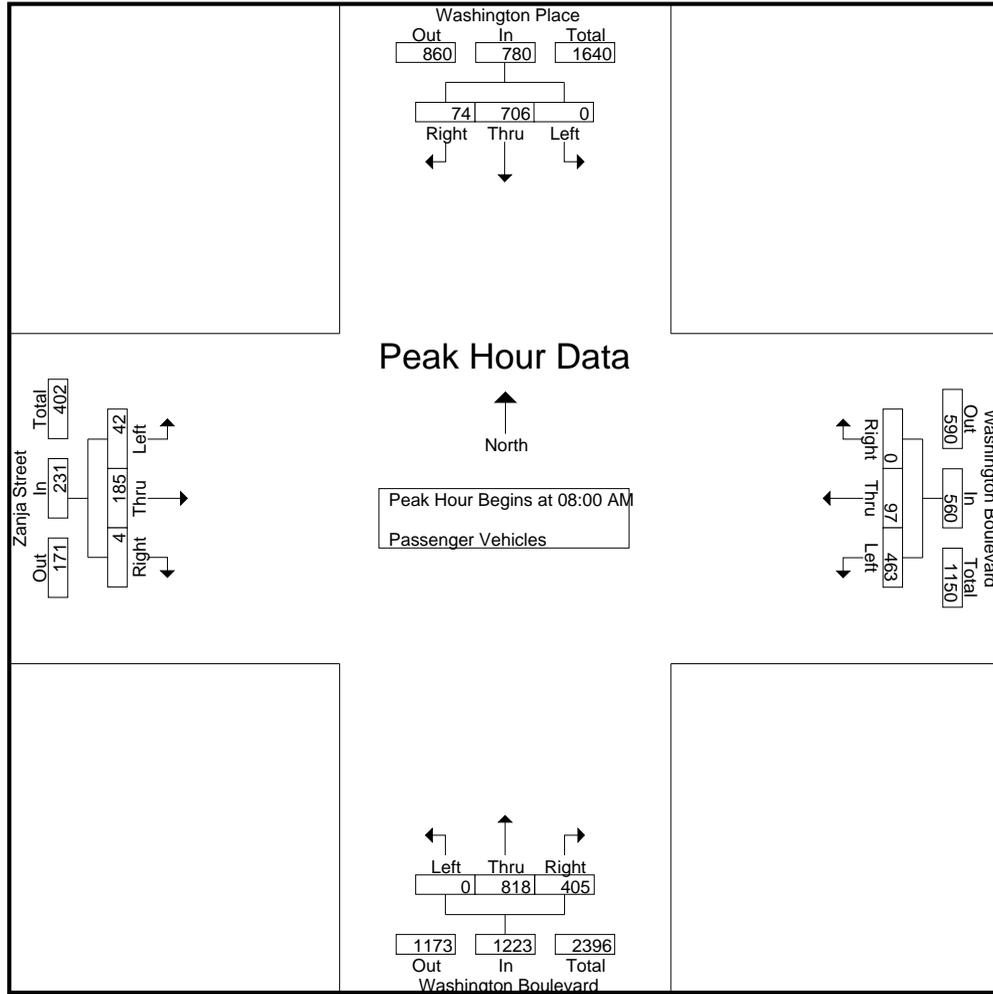
Groups Printed- Passenger Vehicles

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	92	16	108	61	17	0	78	0	113	44	157	2	14	0	16	359
07:15 AM	0	84	24	108	67	24	0	91	0	170	71	241	6	26	0	32	472
07:30 AM	0	120	28	148	117	46	0	163	0	189	91	280	8	31	0	39	630
07:45 AM	0	145	33	178	100	42	0	142	0	199	129	328	9	61	2	72	720
Total	0	441	101	542	345	129	0	474	0	671	335	1006	25	132	2	159	2181
08:00 AM	0	150	25	175	116	20	0	136	0	204	109	313	10	51	2	63	687
08:15 AM	0	168	12	180	127	22	0	149	0	177	109	286	5	52	0	57	672
08:30 AM	0	169	13	182	94	32	0	126	0	235	80	315	18	38	2	58	681
08:45 AM	0	219	24	243	126	23	0	149	0	202	107	309	9	44	0	53	754
Total	0	706	74	780	463	97	0	560	0	818	405	1223	42	185	4	231	2794
09:00 AM	0	170	9	179	108	23	0	131	0	174	93	267	12	39	1	52	629
09:15 AM	0	181	20	201	114	29	0	143	0	136	79	215	11	39	1	51	610
09:30 AM	0	143	11	154	97	24	0	121	0	164	65	229	9	27	0	36	540
09:45 AM	0	199	14	213	113	30	0	143	0	158	129	287	7	33	2	42	685
Total	0	693	54	747	432	106	0	538	0	632	366	998	39	138	4	181	2464
Grand Total	0	1840	229	2069	1240	332	0	1572	0	2121	1106	3227	106	455	10	571	7439
Apprch %	0	88.9	11.1		78.9	21.1	0		0	65.7	34.3		18.6	79.7	1.8		
Total %	0	24.7	3.1	27.8	16.7	4.5	0	21.1	0	28.5	14.9	43.4	1.4	6.1	0.1	7.7	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	150	25	175	116	20	0	136	0	204	109	313	10	51	2	63	687
08:15 AM	0	168	12	180	127	22	0	149	0	177	109	286	5	52	0	57	672
08:30 AM	0	169	13	182	94	32	0	126	0	235	80	315	18	38	2	58	681
08:45 AM	0	219	24	243	126	23	0	149	0	202	107	309	9	44	0	53	754
Total Volume	0	706	74	780	463	97	0	560	0	818	405	1223	42	185	4	231	2794
% App. Total	0	90.5	9.5		82.7	17.3	0		0	66.9	33.1		18.2	80.1	1.7		
PHF	.000	.806	.740	.802	.911	.758	.000	.940	.000	.870	.929	.971	.583	.889	.500	.917	.926

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM							
+0 mins.	0	150	25	175	116	20	0	136	0	204	109	313	10	51	2	63
+15 mins.	0	168	12	180	127	22	0	149	0	177	109	286	5	52	0	57
+30 mins.	0	169	13	182	94	32	0	126	0	235	80	315	18	38	2	58
+45 mins.	0	219	24	243	126	23	0	149	0	202	107	309	9	44	0	53
Total Volume	0	706	74	780	463	97	0	560	0	818	405	1223	42	185	4	231
% App. Total	0	90.5	9.5		82.7	17.3	0		0	66.9	33.1		18.2	80.1	1.7	
PHF	.000	.806	.740	.802	.911	.758	.000	.940	.000	.870	.929	.971	.583	.889	.500	.917

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

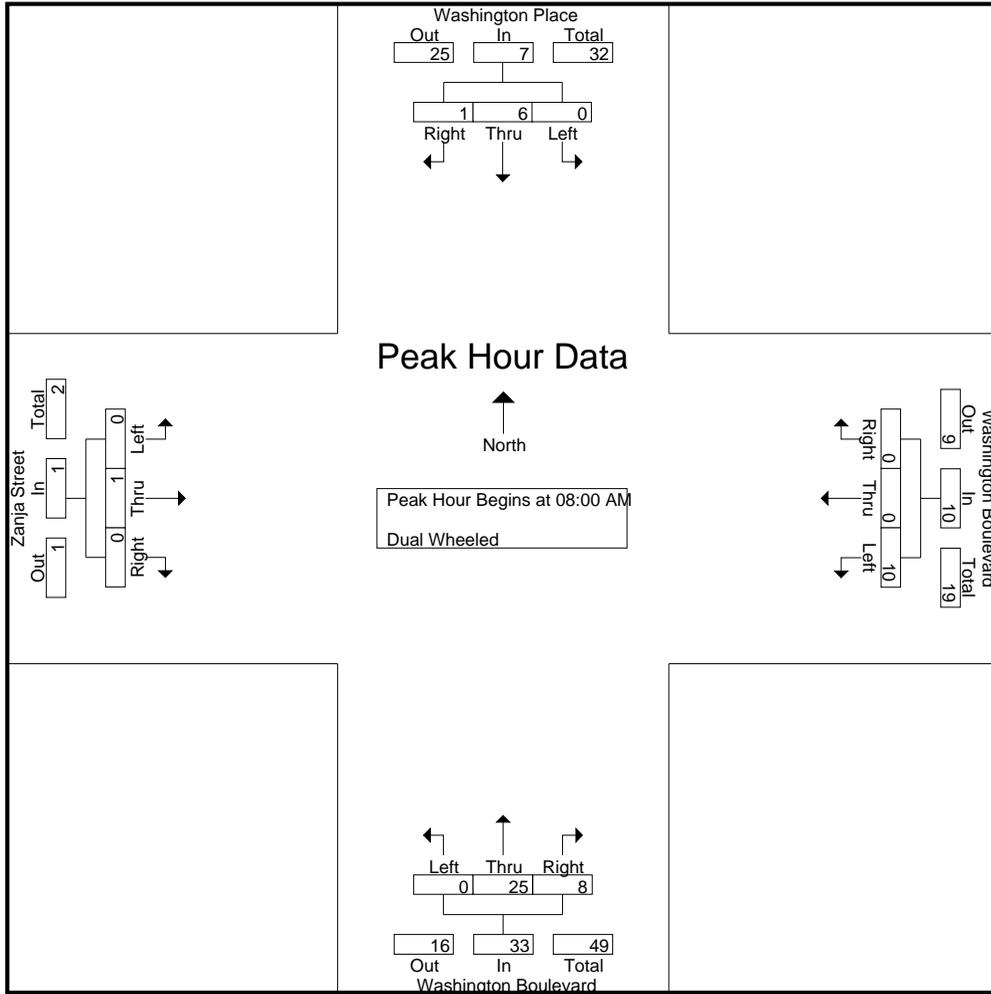
Groups Printed- Dual Wheeled

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
07:15 AM	0	3	0	3	2	1	0	3	0	0	1	1	0	0	0	0	7
07:30 AM	0	2	1	3	0	0	0	0	0	0	2	2	0	0	0	0	5
07:45 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	0	0	0	3
Total	0	6	1	7	2	2	0	4	0	1	5	6	0	0	0	0	17
08:00 AM	0	3	0	3	2	0	0	2	0	0	2	2	0	0	0	0	7
08:15 AM	0	2	0	2	2	0	0	2	0	7	3	10	0	0	0	0	14
08:30 AM	0	0	1	1	2	0	0	2	0	15	3	18	0	0	0	0	21
08:45 AM	0	1	0	1	4	0	0	4	0	3	0	3	0	1	0	1	9
Total	0	6	1	7	10	0	0	10	0	25	8	33	0	1	0	1	51
09:00 AM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	0	0	4
09:15 AM	0	6	0	6	3	1	0	4	0	1	3	4	0	1	0	1	15
09:30 AM	0	7	0	7	1	0	0	1	0	2	1	3	0	0	0	0	11
09:45 AM	0	2	0	2	4	0	0	4	0	1	4	5	0	1	1	2	13
Total	0	17	0	17	9	2	0	11	0	4	8	12	0	2	1	3	43
Grand Total	0	29	2	31	21	4	0	25	0	30	21	51	0	3	1	4	111
Apprch %	0	93.5	6.5		84	16	0		0	58.8	41.2		0	75	25		
Total %	0	26.1	1.8	27.9	18.9	3.6	0	22.5	0	27	18.9	45.9	0	2.7	0.9	3.6	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	3	0	3	2	0	0	2	0	0	2	2	0	0	0	0	7
08:15 AM	0	2	0	2	2	0	0	2	0	7	3	10	0	0	0	0	14
08:30 AM	0	0	1	1	2	0	0	2	0	15	3	18	0	0	0	0	21
08:45 AM	0	1	0	1	4	0	0	4	0	3	0	3	0	1	0	1	9
Total Volume	0	6	1	7	10	0	0	10	0	25	8	33	0	1	0	1	51
% App. Total	0	85.7	14.3		100	0	0		0	75.8	24.2		0	100	0		
PHF	.000	.500	.250	.583	.625	.000	.000	.625	.000	.417	.667	.458	.000	.250	.000	.250	.607

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	3	0	3	2	0	0	2	0	0	2	2	0	0	0	0
+15 mins.	0	2	0	2	2	0	0	2	0	7	3	10	0	0	0	0
+30 mins.	0	0	1	1	2	0	0	2	0	15	3	18	0	0	0	0
+45 mins.	0	1	0	1	4	0	0	4	0	3	0	3	0	1	0	1
Total Volume	0	6	1	7	10	0	0	10	0	25	8	33	0	1	0	1
% App. Total	0	85.7	14.3		100	0	0		0	75.8	24.2		0	100	0	
PHF	.000	.500	.250	.583	.625	.000	.000	.625	.000	.417	.667	.458	.000	.250	.000	.250

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

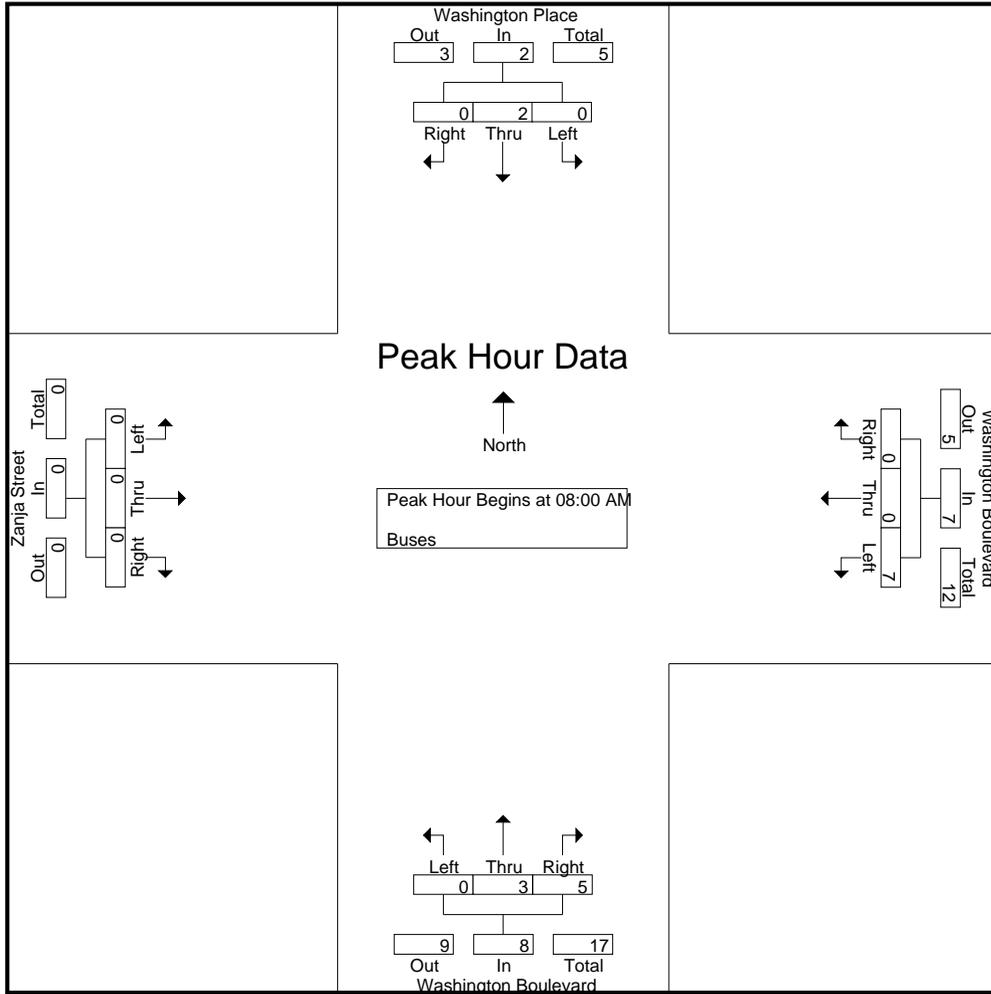
Groups Printed- Buses

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
07:15 AM	0	2	0	2	4	0	0	4	0	1	1	2	0	0	0	0	8
07:30 AM	0	0	0	0	2	0	0	2	0	0	2	2	0	0	0	0	4
07:45 AM	0	3	0	3	0	0	0	0	0	1	2	3	0	0	0	0	6
Total	0	5	0	5	7	0	0	7	0	2	6	8	0	0	0	0	20
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	4	0	0	4	0	1	2	3	0	0	0	0	7
08:30 AM	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0	4
08:45 AM	0	0	0	0	2	0	0	2	0	0	3	3	0	0	0	0	5
Total	0	2	0	2	7	0	0	7	0	3	5	8	0	0	0	0	17
09:00 AM	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
09:15 AM	0	0	0	0	3	0	0	3	0	1	1	2	0	0	0	0	5
09:30 AM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
09:45 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
Total	0	2	0	2	4	0	0	4	0	5	3	8	0	0	0	0	14
Grand Total	0	9	0	9	18	0	0	18	0	10	14	24	0	0	0	0	51
Apprch %	0	100	0		100	0	0		0	41.7	58.3		0	0	0		
Total %	0	17.6	0	17.6	35.3	0	0	35.3	0	19.6	27.5	47.1	0	0	0	0	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	4	0	0	4	0	1	2	3	0	0	0	0	7
08:30 AM	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0	4
08:45 AM	0	0	0	0	2	0	0	2	0	0	3	3	0	0	0	0	5
Total Volume	0	2	0	2	7	0	0	7	0	3	5	8	0	0	0	0	17
% App. Total	0	100	0		100	0	0		0	37.5	62.5		0	0	0		
PHF	.000	.250	.000	.250	.438	.000	.000	.438	.000	.750	.417	.667	.000	.000	.000	.000	.607

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	4	0	0	4	0	1	2	3	0	0	0	0
+30 mins.	0	2	0	2	1	0	0	1	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	2	0	0	2	0	0	3	3	0	0	0	0
Total Volume	0	2	0	2	7	0	0	7	0	3	5	8	0	0	0	0
% App. Total	0	100	0	0	100	0	0	0	0	37.5	62.5	0	0	0	0	0
PHF	.000	.250	.000	.250	.438	.000	.000	.438	.000	.750	.417	.667	.000	.000	.000	.000

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

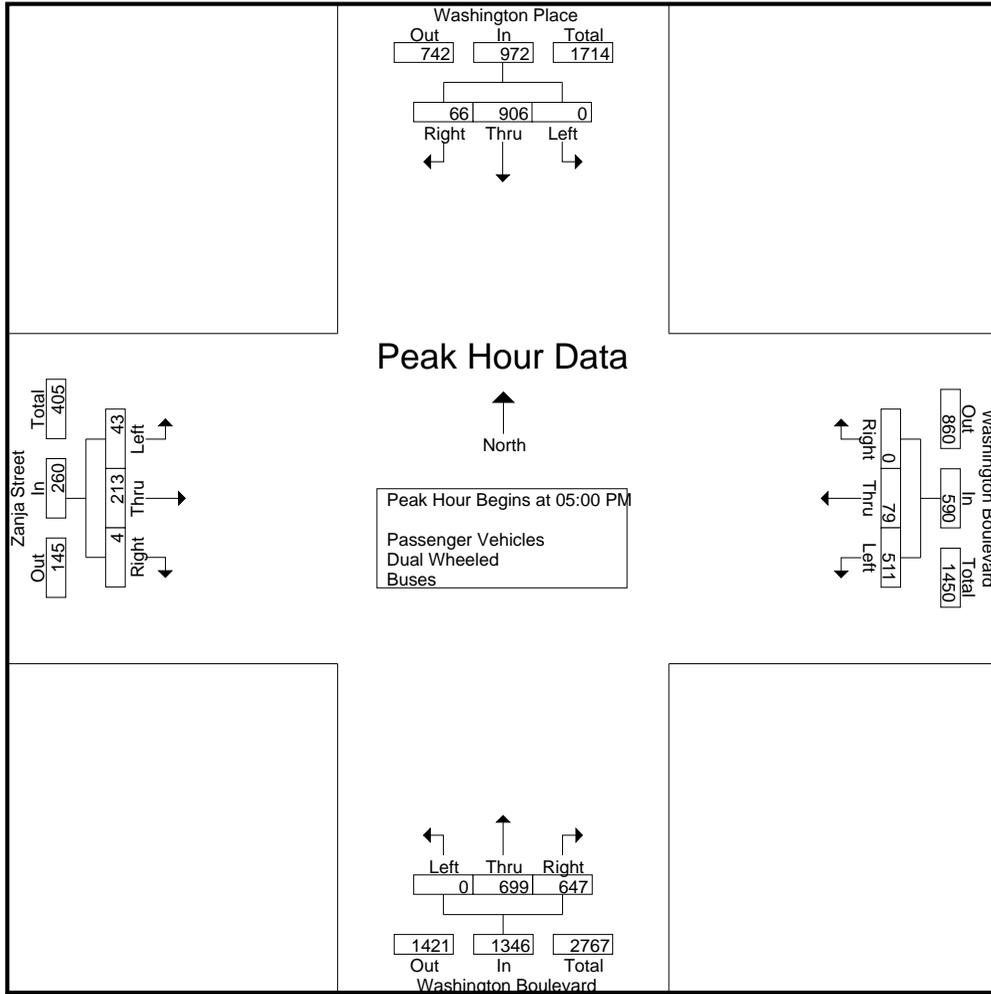
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	179	18	197	111	34	0	145	0	170	141	311	10	48	3	61	714
03:15 PM	0	189	20	209	139	17	0	156	0	162	136	298	16	46	0	62	725
03:30 PM	0	178	19	197	102	25	0	127	0	179	129	308	10	60	2	72	704
03:45 PM	0	192	15	207	111	25	0	136	0	168	129	297	7	61	1	69	709
Total	0	738	72	810	463	101	0	564	0	679	535	1214	43	215	6	264	2852
04:00 PM	0	188	17	205	113	24	0	137	0	171	125	296	8	62	2	72	710
04:15 PM	0	207	13	220	120	26	0	146	0	166	156	322	11	60	1	72	760
04:30 PM	0	210	16	226	126	19	0	145	0	183	137	320	12	58	1	71	762
04:45 PM	0	234	8	242	117	12	0	129	0	153	103	256	9	69	1	79	706
Total	0	839	54	893	476	81	0	557	0	673	521	1194	40	249	5	294	2938
05:00 PM	0	223	12	235	141	25	0	166	0	161	165	326	16	46	3	65	792
05:15 PM	0	217	20	237	118	17	0	135	0	175	155	330	8	63	1	72	774
05:30 PM	0	225	16	241	138	14	0	152	0	182	189	371	10	47	0	57	821
05:45 PM	0	241	18	259	114	23	0	137	0	181	138	319	9	57	0	66	781
Total	0	906	66	972	511	79	0	590	0	699	647	1346	43	213	4	260	3168
Grand Total	0	2483	192	2675	1450	261	0	1711	0	2051	1703	3754	126	677	15	818	8958
Apprch %	0	92.8	7.2		84.7	15.3	0		0	54.6	45.4		15.4	82.8	1.8		
Total %	0	27.7	2.1	29.9	16.2	2.9	0	19.1	0	22.9	19	41.9	1.4	7.6	0.2	9.1	
Passenger Vehicles	0	2455	192	2647	1428	259	0	1687	0	2024	1665	3689	126	669	15	810	8833
% Passenger Vehicles	0	98.9	100	99	98.5	99.2	0	98.6	0	98.7	97.8	98.3	100	98.8	100	99	98.6
Dual Wheeled	0	21	0	21	7	2	0	9	0	20	23	43	0	8	0	8	81
% Dual Wheeled	0	0.8	0	0.8	0.5	0.8	0	0.5	0	1	1.4	1.1	0	1.2	0	1	0.9
Buses	0	7	0	7	15	0	0	15	0	7	15	22	0	0	0	0	44
% Buses	0	0.3	0	0.3	1	0	0	0.9	0	0.3	0.9	0.6	0	0	0	0	0.5

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	223	12	235	141	25	0	166	0	161	165	326	16	46	3	65	792
05:15 PM	0	217	20	237	118	17	0	135	0	175	155	330	8	63	1	72	774
05:30 PM	0	225	16	241	138	14	0	152	0	182	189	371	10	47	0	57	821
05:45 PM	0	241	18	259	114	23	0	137	0	181	138	319	9	57	0	66	781
Total Volume	0	906	66	972	511	79	0	590	0	699	647	1346	43	213	4	260	3168
% App. Total	0	93.2	6.8		86.6	13.4	0		0	51.9	48.1		16.5	81.9	1.5		
PHF	.000	.940	.825	.938	.906	.790	.000	.889	.000	.960	.856	.907	.672	.845	.333	.903	.965

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	0	223	12	235	141	25	0	166	0	161	165	326	8	62	2	72
+15 mins.	0	217	20	237	118	17	0	135	0	175	155	330	11	60	1	72
+30 mins.	0	225	16	241	138	14	0	152	0	182	189	371	12	58	1	71
+45 mins.	0	241	18	259	114	23	0	137	0	181	138	319	9	69	1	79
Total Volume	0	906	66	972	511	79	0	590	0	699	647	1346	40	249	5	294
% App. Total	0	93.2	6.8		86.6	13.4	0		0	51.9	48.1		13.6	84.7	1.7	
PHF	.000	.940	.825	.938	.906	.790	.000	.889	.000	.960	.856	.907	.833	.902	.625	.930

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

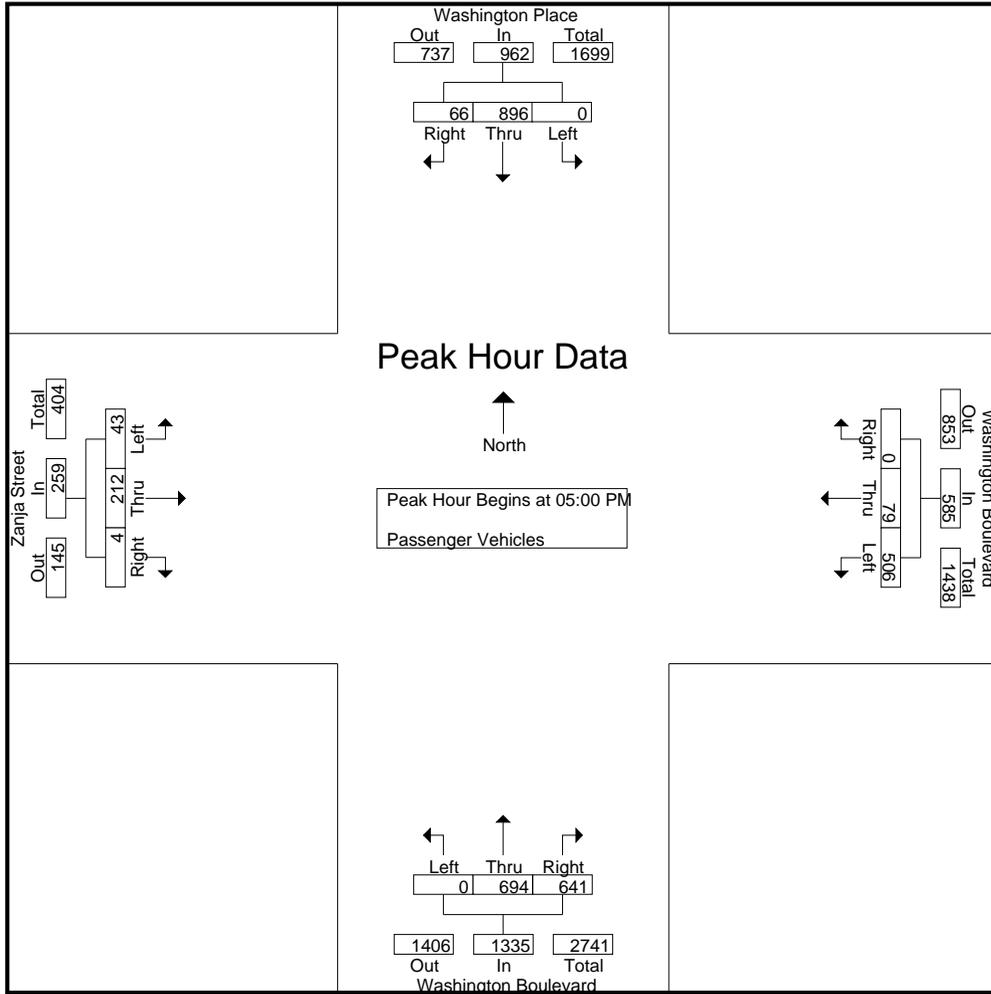
Groups Printed- Passenger Vehicles

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	176	18	194	110	33	0	143	0	167	135	302	10	48	3	61	700
03:15 PM	0	186	20	206	135	17	0	152	0	157	130	287	16	45	0	61	706
03:30 PM	0	176	19	195	102	25	0	127	0	173	125	298	10	57	2	69	689
03:45 PM	0	188	15	203	109	25	0	134	0	165	128	293	7	59	1	67	697
Total	0	726	72	798	456	100	0	556	0	662	518	1180	43	209	6	258	2792
04:00 PM	0	186	17	203	109	23	0	132	0	170	120	290	8	61	2	71	696
04:15 PM	0	206	13	219	117	26	0	143	0	163	152	315	11	60	1	72	749
04:30 PM	0	208	16	224	124	19	0	143	0	182	132	314	12	58	1	71	752
04:45 PM	0	233	8	241	116	12	0	128	0	153	102	255	9	69	1	79	703
Total	0	833	54	887	466	80	0	546	0	668	506	1174	40	248	5	293	2900
05:00 PM	0	221	12	233	139	25	0	164	0	161	164	325	16	46	3	65	787
05:15 PM	0	215	20	235	117	17	0	134	0	174	154	328	8	63	1	72	769
05:30 PM	0	221	16	237	137	14	0	151	0	180	187	367	10	47	0	57	812
05:45 PM	0	239	18	257	113	23	0	136	0	179	136	315	9	56	0	65	773
Total	0	896	66	962	506	79	0	585	0	694	641	1335	43	212	4	259	3141
Grand Total	0	2455	192	2647	1428	259	0	1687	0	2024	1665	3689	126	669	15	810	8833
Apprch %	0	92.7	7.3		84.6	15.4	0		0	54.9	45.1		15.6	82.6	1.9		
Total %	0	27.8	2.2	30	16.2	2.9	0	19.1	0	22.9	18.8	41.8	1.4	7.6	0.2	9.2	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	221	12	233	139	25	0	164	0	161	164	325	16	46	3	65	787
05:15 PM	0	215	20	235	117	17	0	134	0	174	154	328	8	63	1	72	769
05:30 PM	0	221	16	237	137	14	0	151	0	180	187	367	10	47	0	57	812
05:45 PM	0	239	18	257	113	23	0	136	0	179	136	315	9	56	0	65	773
Total Volume	0	896	66	962	506	79	0	585	0	694	641	1335	43	212	4	259	3141
% App. Total	0	93.1	6.9		86.5	13.5	0		0	52	48		16.6	81.9	1.5		
PHF	.000	.937	.825	.936	.910	.790	.000	.892	.000	.964	.857	.909	.672	.841	.333	.899	.967

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM							
+0 mins.	0	221	12	233	139	25	0	164	0	161	164	325	16	46	3	65
+15 mins.	0	215	20	235	117	17	0	134	0	174	154	328	8	63	1	72
+30 mins.	0	221	16	237	137	14	0	151	0	180	187	367	10	47	0	57
+45 mins.	0	239	18	257	113	23	0	136	0	179	136	315	9	56	0	65
Total Volume	0	896	66	962	506	79	0	585	0	694	641	1335	43	212	4	259
% App. Total	0	93.1	6.9		86.5	13.5	0		0	52	48		16.6	81.9	1.5	
PHF	.000	.937	.825	.936	.910	.790	.000	.892	.000	.964	.857	.909	.672	.841	.333	.899

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

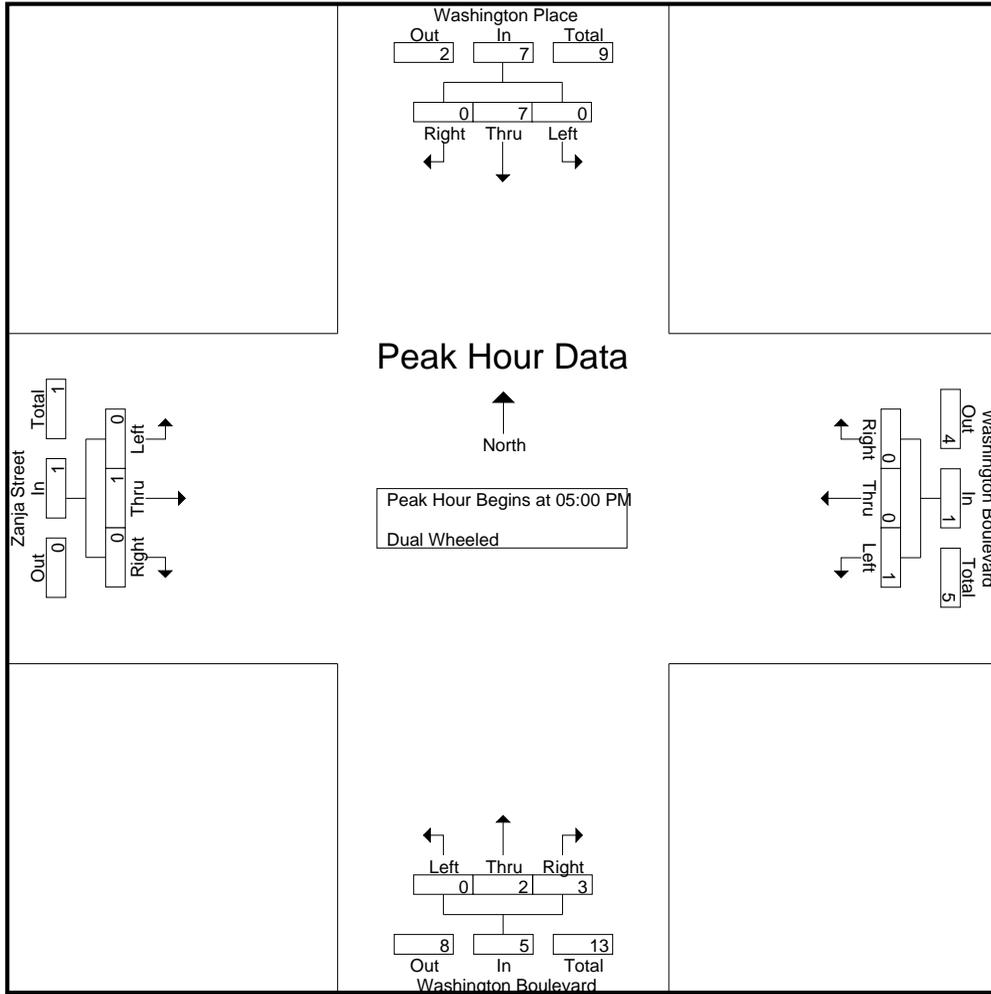
Groups Printed- Dual Wheeled

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	2	0	2	1	1	0	2	0	2	2	4	0	0	0	0	8
03:15 PM	0	2	0	2	1	0	0	1	0	4	4	8	0	1	0	1	12
03:30 PM	0	2	0	2	0	0	0	0	0	6	2	8	0	3	0	3	13
03:45 PM	0	3	0	3	0	0	0	0	0	2	1	3	0	2	0	2	8
Total	0	9	0	9	2	1	0	3	0	14	9	23	0	6	0	6	41
04:00 PM	0	2	0	2	2	1	0	3	0	1	4	5	0	1	0	1	11
04:15 PM	0	1	0	1	1	0	0	1	0	2	3	5	0	0	0	0	7
04:30 PM	0	1	0	1	1	0	0	1	0	1	4	5	0	0	0	0	7
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	5	0	5	4	1	0	5	0	4	11	15	0	1	0	1	26
05:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	3	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
05:45 PM	0	2	0	2	0	0	0	0	0	1	2	3	0	1	0	1	6
Total	0	7	0	7	1	0	0	1	0	2	3	5	0	1	0	1	14
Grand Total	0	21	0	21	7	2	0	9	0	20	23	43	0	8	0	8	81
Apprch %	0	100	0		77.8	22.2	0		0	46.5	53.5		0	100	0		
Total %	0	25.9	0	25.9	8.6	2.5	0	11.1	0	24.7	28.4	53.1	0	9.9	0	9.9	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	3	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
05:45 PM	0	2	0	2	0	0	0	0	0	1	2	3	0	1	0	1	6
Total Volume	0	7	0	7	1	0	0	1	0	2	3	5	0	1	0	1	14
% App. Total	0	100	0		100	0	0		0	40	60		0	100	0		
PHF	.000	.583	.000	.583	.250	.000	.000	.250	.000	.500	.375	.417	.000	.250	.000	.250	.583

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	1	2	3	0	1	0	1
Total Volume	0	7	0	7	1	0	0	1	0	2	3	5	0	1	0	1
% App. Total	0	100	0		100	0	0		0	40	60		0	100	0	
PHF	.000	.583	.000	.583	.250	.000	.000	.250	.000	.500	.375	.417	.000	.250	.000	.250

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

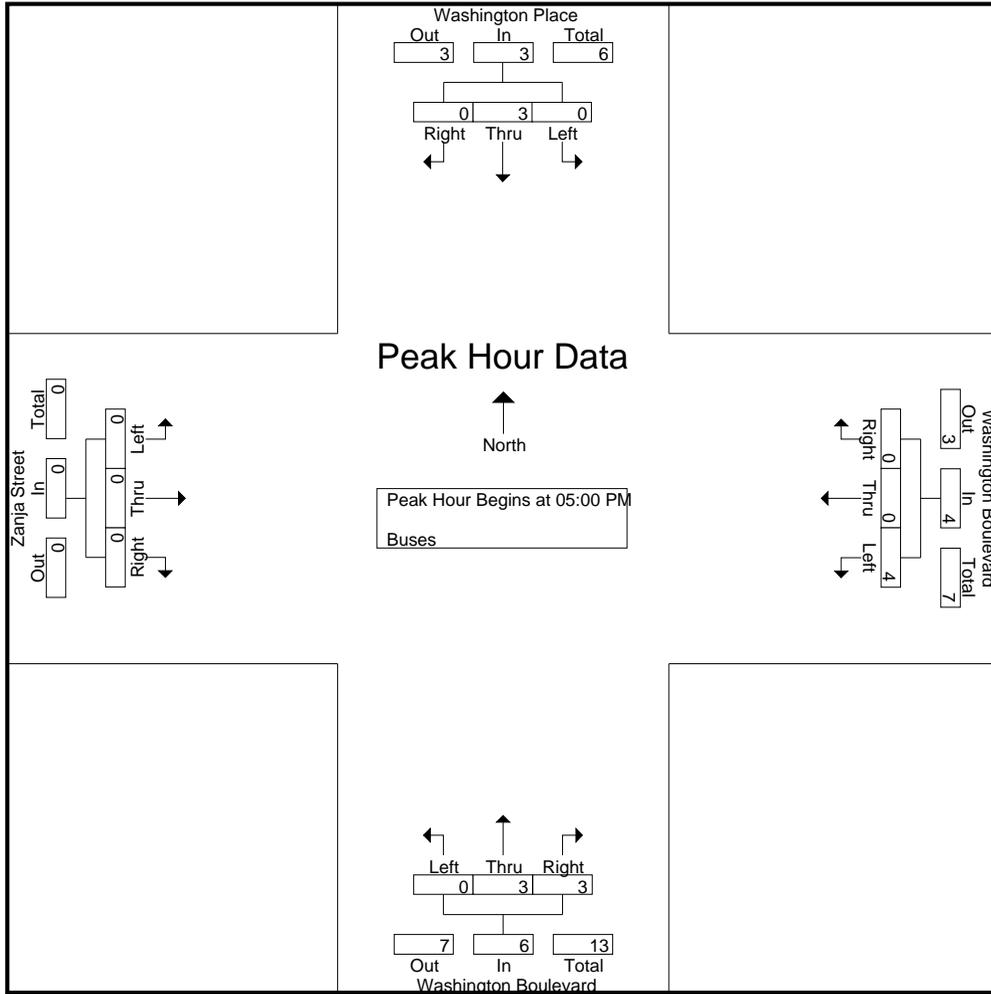
Groups Printed- Buses

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	1	0	1	0	0	0	0	0	1	4	5	0	0	0	0	6
03:15 PM	0	1	0	1	3	0	0	3	0	1	2	3	0	0	0	0	7
03:30 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
03:45 PM	0	1	0	1	2	0	0	2	0	1	0	1	0	0	0	0	4
Total	0	3	0	3	5	0	0	5	0	3	8	11	0	0	0	0	19
04:00 PM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
04:15 PM	0	0	0	0	2	0	0	2	0	1	1	2	0	0	0	0	4
04:30 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
04:45 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
Total	0	1	0	1	6	0	0	6	0	1	4	5	0	0	0	0	12
05:00 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:15 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	1	0	0	1	0	2	1	3	0	0	0	0	5
05:45 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
Total	0	3	0	3	4	0	0	4	0	3	3	6	0	0	0	0	13
Grand Total	0	7	0	7	15	0	0	15	0	7	15	22	0	0	0	0	44
Apprch %	0	100	0		100	0	0		0	31.8	68.2		0	0	0		
Total %	0	15.9	0	15.9	34.1	0	0	34.1	0	15.9	34.1	50	0	0	0	0	

Start Time	Washington Place Southbound				Washington Boulevard Westbound				Washington Boulevard Northbound				Zanja Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:15 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	1	0	0	1	0	2	1	3	0	0	0	0	5
05:45 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
Total Volume	0	3	0	3	4	0	0	4	0	3	3	6	0	0	0	0	13
% App. Total	0	100	0		100	0	0		0	50	50		0	0	0		
PHF	.000	.750	.000	.750	1.00	.000	.000	1.00	.000	.375	.750	.500	.000	.000	.000	.000	.650

City of Culver City
 N/S: Washington Blvd / Washington Place
 E/W: Zanja Street / Washington Blvd
 Weather: Clear

File Name : 07_CVC_Washington_Zanja_PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0
+15 mins.	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0
+30 mins.	0	1	0	1	1	0	0	1	0	2	1	3	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0
Total Volume	0	3	0	3	4	0	0	4	0	3	3	6	0	0	0	0
% App. Total	0	100	0		100	0	0		0	50	50		0	0	0	
PHF	.000	.750	.000	.750	1.000	.000	.000	1.000	.000	.375	.750	.500	.000	.000	.000	.000

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

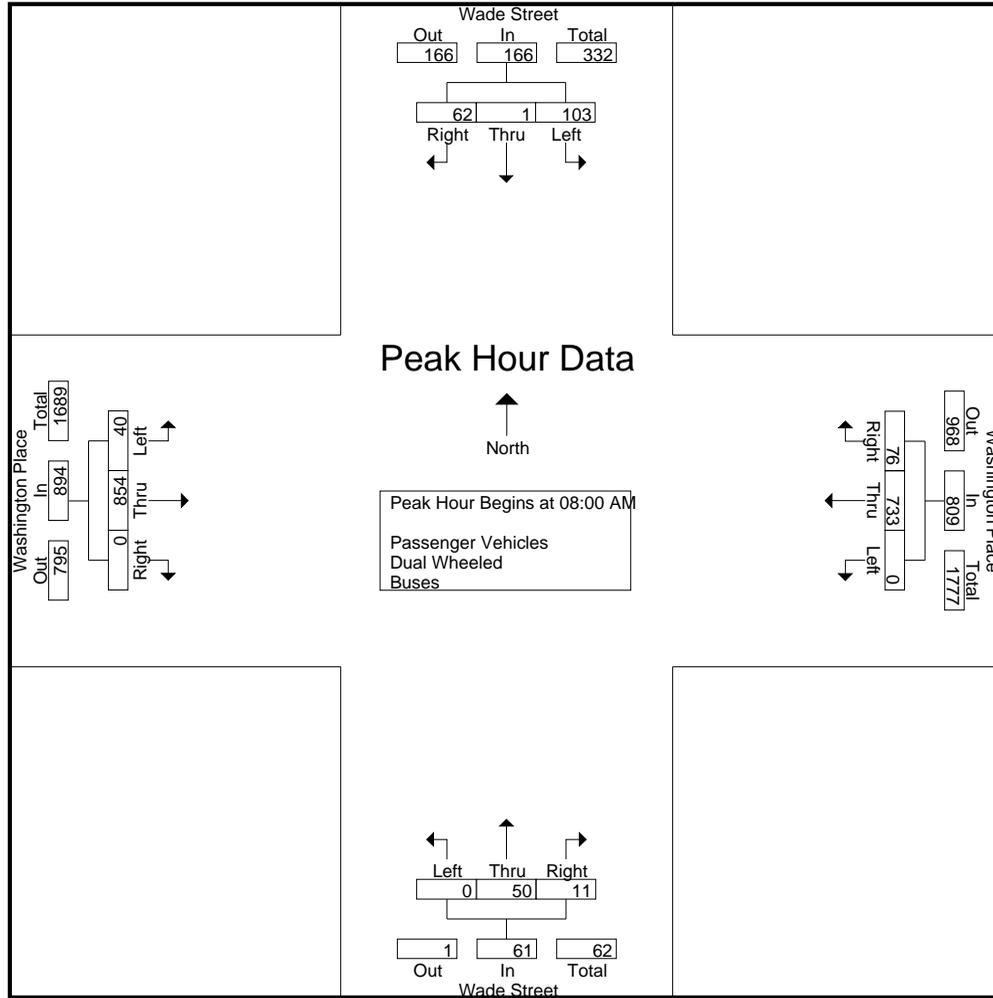
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	0	6	15	0	101	9	110	0	8	1	9	4	109	0	113	247
07:15 AM	12	0	6	18	0	125	20	145	0	13	1	14	4	185	0	189	366
07:30 AM	14	0	7	21	0	127	20	147	0	27	1	28	7	184	0	191	387
07:45 AM	31	0	14	45	0	182	23	205	0	35	4	39	16	206	0	222	511
Total	66	0	33	99	0	535	72	607	0	83	7	90	31	684	0	715	1511
08:00 AM	31	1	16	48	0	156	15	171	0	18	2	20	8	204	0	212	451
08:15 AM	32	0	17	49	0	186	17	203	0	6	2	8	8	192	0	200	460
08:30 AM	12	0	10	22	0	165	20	185	0	8	5	13	15	259	0	274	494
08:45 AM	28	0	19	47	0	226	24	250	0	18	2	20	9	199	0	208	525
Total	103	1	62	166	0	733	76	809	0	50	11	61	40	854	0	894	1930
09:00 AM	16	0	9	25	0	176	11	187	0	15	5	20	9	172	0	181	413
09:15 AM	11	0	5	16	0	180	19	199	0	11	4	15	4	146	0	150	380
09:30 AM	13	0	10	23	0	168	14	182	0	11	5	16	13	173	0	186	407
09:45 AM	12	0	11	23	0	204	13	217	0	8	3	11	6	164	0	170	421
Total	52	0	35	87	0	728	57	785	0	45	17	62	32	655	0	687	1621
Grand Total	221	1	130	352	0	1996	205	2201	0	178	35	213	103	2193	0	2296	5062
Apprch %	62.8	0.3	36.9		0	90.7	9.3		0	83.6	16.4		4.5	95.5	0		
Total %	4.4	0	2.6	7	0	39.4	4	43.5	0	3.5	0.7	4.2	2	43.3	0	45.4	
Passenger Vehicles	218	1	123	342	0	1963	203	2166	0	177	33	210	98	2161	0	2259	4977
% Passenger Vehicles	98.6	100	94.6	97.2	0	98.3	99	98.4	0	99.4	94.3	98.6	95.1	98.5	0	98.4	98.3
Dual Wheeled	1	0	2	3	0	26	1	27	0	1	1	2	0	28	0	28	60
% Dual Wheeled	0.5	0	1.5	0.9	0	1.3	0.5	1.2	0	0.6	2.9	0.9	0	1.3	0	1.2	1.2
Buses	2	0	5	7	0	7	1	8	0	0	1	1	5	4	0	9	25
% Buses	0.9	0	3.8	2	0	0.4	0.5	0.4	0	0	2.9	0.5	4.9	0.2	0	0.4	0.5

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	31	1	16	48	0	156	15	171	0	18	2	20	8	204	0	212	451
08:15 AM	32	0	17	49	0	186	17	203	0	6	2	8	8	192	0	200	460
08:30 AM	12	0	10	22	0	165	20	185	0	8	5	13	15	259	0	274	494
08:45 AM	28	0	19	47	0	226	24	250	0	18	2	20	9	199	0	208	525
Total Volume	103	1	62	166	0	733	76	809	0	50	11	61	40	854	0	894	1930
% App. Total	62	0.6	37.3		0	90.6	9.4		0	82	18		4.5	95.5	0		
PHF	.805	.250	.816	.847	.000	.811	.792	.809	.000	.694	.550	.763	.667	.824	.000	.816	.919

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:15 AM				07:15 AM				07:45 AM			
+0 mins.	31	1	16	48	0	186	17	203	0	13	1	14	16	206	0	222
+15 mins.	32	0	17	49	0	165	20	185	0	27	1	28	8	204	0	212
+30 mins.	12	0	10	22	0	226	24	250	0	35	4	39	8	192	0	200
+45 mins.	28	0	19	47	0	176	11	187	0	18	2	20	15	259	0	274
Total Volume	103	1	62	166	0	753	72	825	0	93	8	101	47	861	0	908
% App. Total	62	0.6	37.3		0	91.3	8.7		0	92.1	7.9		5.2	94.8	0	
PHF	.805	.250	.816	.847	.000	.833	.750	.825	.000	.664	.500	.647	.734	.831	.000	.828

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

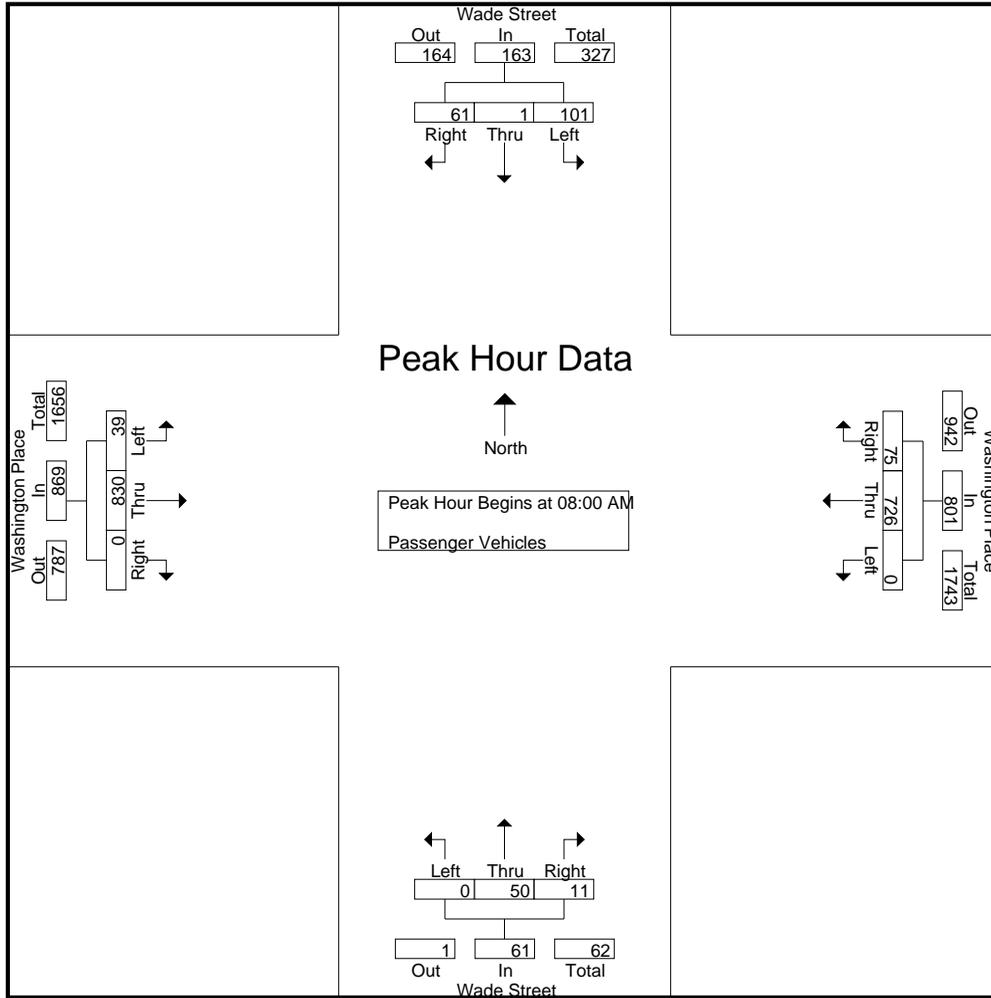
Groups Printed- Passenger Vehicles

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	0	6	15	0	101	8	109	0	8	1	9	4	109	0	113	246
07:15 AM	12	0	5	17	0	121	20	141	0	13	0	13	3	185	0	188	359
07:30 AM	14	0	6	20	0	125	20	145	0	27	1	28	7	184	0	191	384
07:45 AM	30	0	13	43	0	181	23	204	0	34	3	37	15	205	0	220	504
Total	65	0	30	95	0	528	71	599	0	82	5	87	29	683	0	712	1493
08:00 AM	31	1	16	48	0	154	15	169	0	18	2	20	8	203	0	211	448
08:15 AM	31	0	17	48	0	184	16	200	0	6	2	8	8	183	0	191	447
08:30 AM	12	0	9	21	0	163	20	183	0	8	5	13	14	246	0	260	477
08:45 AM	27	0	19	46	0	225	24	249	0	18	2	20	9	198	0	207	522
Total	101	1	61	163	0	726	75	801	0	50	11	61	39	830	0	869	1894
09:00 AM	16	0	7	23	0	173	11	184	0	15	5	20	8	171	0	179	406
09:15 AM	11	0	5	16	0	176	19	195	0	11	4	15	4	144	0	148	374
09:30 AM	13	0	9	22	0	161	14	175	0	11	5	16	12	171	0	183	396
09:45 AM	12	0	11	23	0	199	13	212	0	8	3	11	6	162	0	168	414
Total	52	0	32	84	0	709	57	766	0	45	17	62	30	648	0	678	1590
Grand Total	218	1	123	342	0	1963	203	2166	0	177	33	210	98	2161	0	2259	4977
Apprch %	63.7	0.3	36		0	90.6	9.4		0	84.3	15.7		4.3	95.7	0		
Total %	4.4	0	2.5	6.9	0	39.4	4.1	43.5	0	3.6	0.7	4.2	2	43.4	0	45.4	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	31	1	16	48	0	154	15	169	0	18	2	20	8	203	0	211	448
08:15 AM	31	0	17	48	0	184	16	200	0	6	2	8	8	183	0	191	447
08:30 AM	12	0	9	21	0	163	20	183	0	8	5	13	14	246	0	260	477
08:45 AM	27	0	19	46	0	225	24	249	0	18	2	20	9	198	0	207	522
Total Volume	101	1	61	163	0	726	75	801	0	50	11	61	39	830	0	869	1894
% App. Total	62	0.6	37.4		0	90.6	9.4		0	82	18		4.5	95.5	0		
PHF	.815	.250	.803	.849	.000	.807	.781	.804	.000	.694	.550	.763	.696	.843	.000	.836	.907

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	31	1	16	48	0	154	15	169	0	18	2	20	8	203	0	211
+15 mins.	31	0	17	48	0	184	16	200	0	6	2	8	8	183	0	191
+30 mins.	12	0	9	21	0	163	20	183	0	8	5	13	14	246	0	260
+45 mins.	27	0	19	46	0	225	24	249	0	18	2	20	9	198	0	207
Total Volume	101	1	61	163	0	726	75	801	0	50	11	61	39	830	0	869
% App. Total	62	0.6	37.4		0	90.6	9.4		0	82	18		4.5	95.5	0	
PHF	.815	.250	.803	.849	.000	.807	.781	.804	.000	.694	.550	.763	.696	.843	.000	.836

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

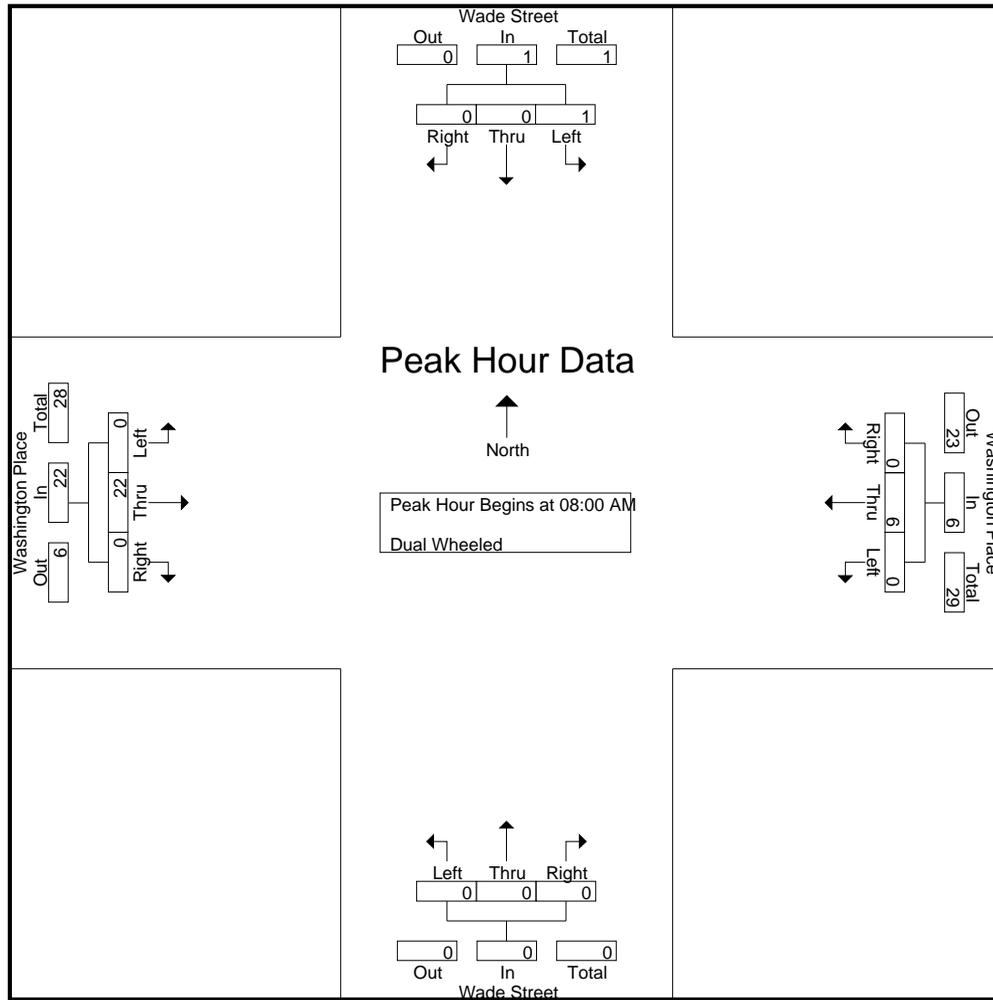
Groups Printed- Dual Wheeled

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	0	0	0	4
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	1	1	0	5	1	6	0	1	1	2	0	0	0	0	9
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:15 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	8	0	8	11
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	13	0	13	14
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	1	0	0	1	0	6	0	6	0	0	0	0	0	22	0	22	29
09:00 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	1	0	1	5
09:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
09:30 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
09:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	1	1	0	15	0	15	0	0	0	0	0	6	0	6	22
Grand Total	1	0	2	3	0	26	1	27	0	1	1	2	0	28	0	28	60
Apprch %	33.3	0	66.7		0	96.3	3.7		0	50	50		0	100	0		
Total %	1.7	0	3.3	5	0	43.3	1.7	45	0	1.7	1.7	3.3	0	46.7	0	46.7	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:15 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	8	0	8	11
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	13	0	13	14
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	1	0	0	1	0	6	0	6	0	0	0	0	0	22	0	22	29
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.000	.423	.000	.423	.518

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	8	0	8
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	13	0	13
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	1	0	0	1	0	6	0	6	0	0	0	0	0	22	0	22
% App. Total	100	0	0	100	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.250	.000	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.000	.423	.000	.423

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

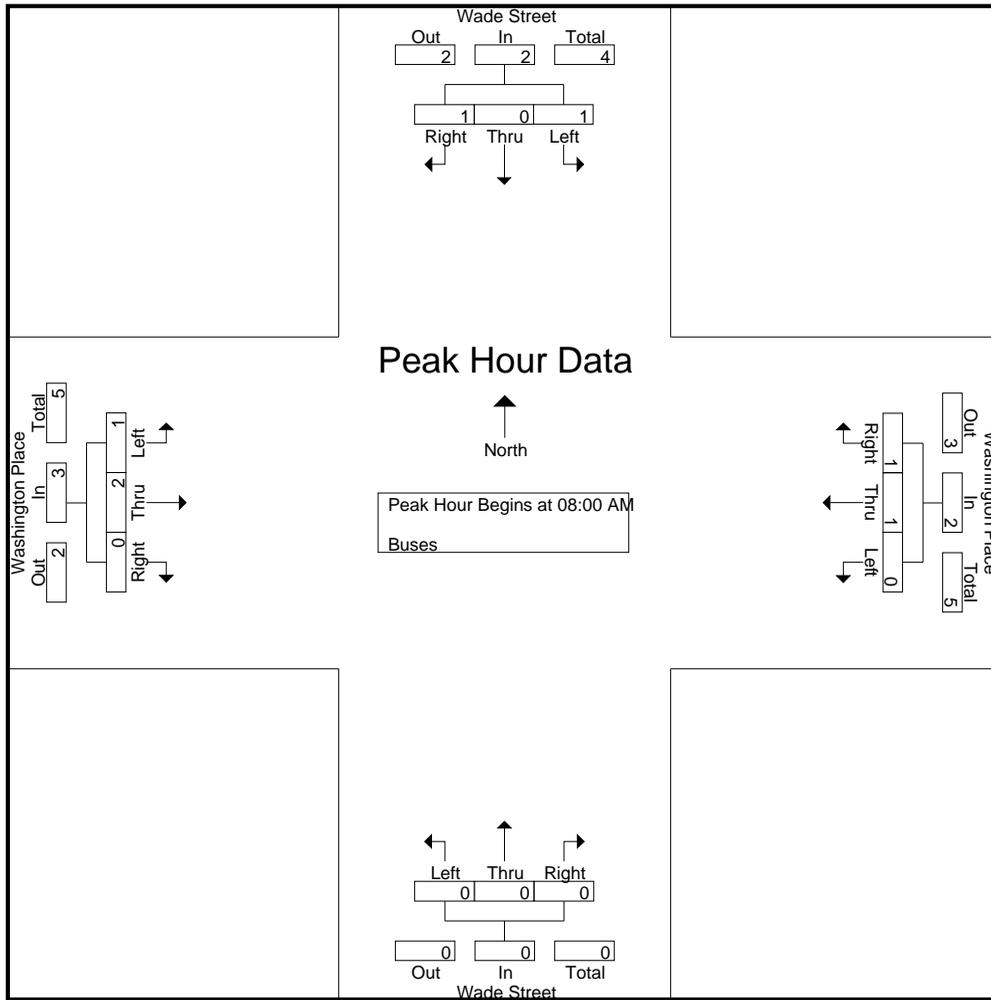
Groups Printed- Buses

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	0	1	2	0	1	0	1	0	0	1	1	1	1	0	2	6
Total	1	0	2	3	0	2	0	2	0	0	1	1	2	1	0	3	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
08:30 AM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	1	2	0	1	1	2	0	0	0	0	1	2	0	3	7
09:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
09:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total	0	0	2	2	0	4	0	4	0	0	0	0	2	1	0	3	9
Grand Total	2	0	5	7	0	7	1	8	0	0	1	1	5	4	0	9	25
Apprch %	28.6	0	71.4		0	87.5	12.5		0	0	100		55.6	44.4	0		
Total %	8	0	20	28	0	28	4	32	0	0	4	4	20	16	0	36	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
08:30 AM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	1	2	0	1	1	2	0	0	0	0	1	2	0	3	7
% App. Total	50	0	50		0	50	50		0	0	0		33.3	66.7	0		
PHF	.250	.000	.250	.500	.000	.250	.250	.500	.000	.000	.000	.000	.250	.500	.000	.750	.583

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	2	0	1	1	2	0	0	0	0	1	2	0	3
% App. Total	50	0	50		0	50	50		0	0	0		33.3	66.7	0	
PHF	.250	.000	.250	.500	.000	.250	.250	.500	.000	.000	.000	.000	.250	.500	.000	.750

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

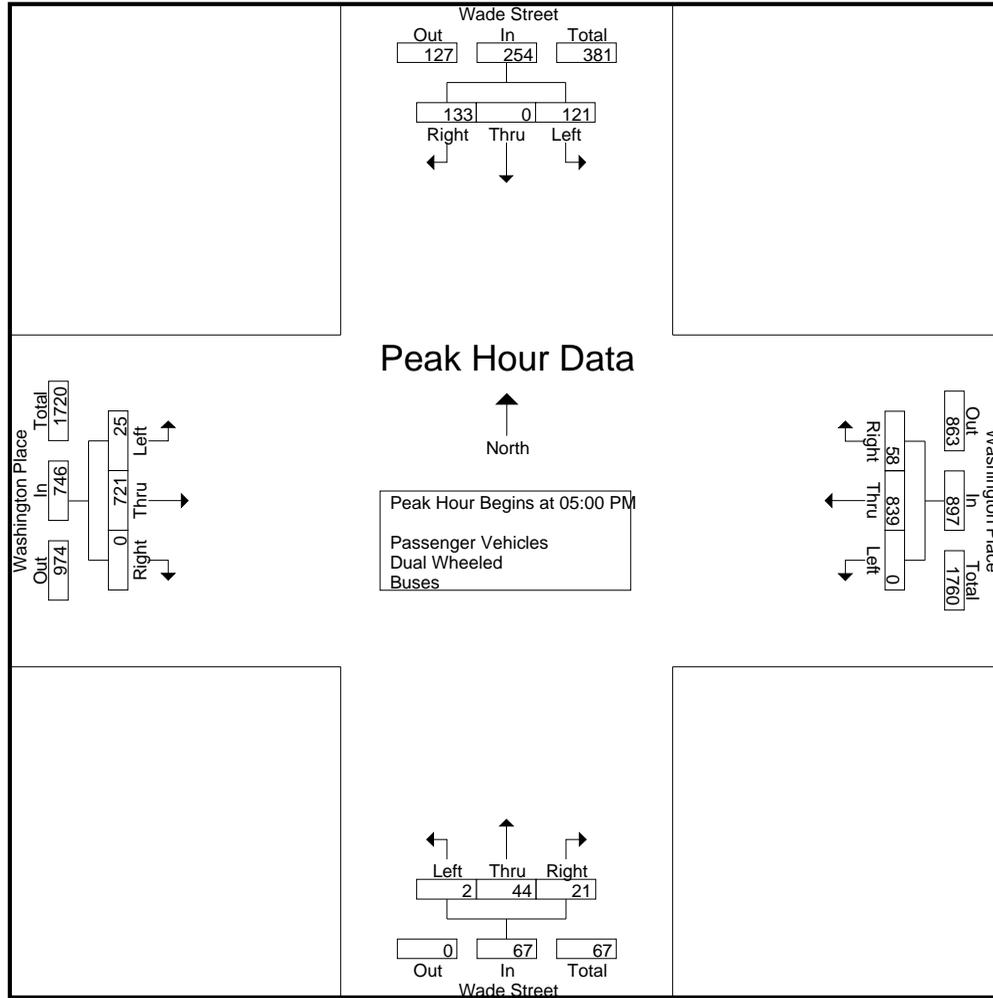
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	20	0	16	36	0	171	10	181	0	15	4	19	9	166	0	175	411
03:15 PM	47	0	19	66	0	197	20	217	1	10	5	16	9	172	0	181	480
03:30 PM	42	0	22	64	0	175	10	185	1	6	6	13	16	164	0	180	442
03:45 PM	20	0	24	44	0	183	10	193	0	7	6	13	6	178	0	184	434
Total	129	0	81	210	0	726	50	776	2	38	21	61	40	680	0	720	1767
04:00 PM	21	0	17	38	0	180	16	196	1	6	4	11	13	146	0	159	404
04:15 PM	31	0	24	55	0	206	6	212	0	7	2	9	10	174	0	184	460
04:30 PM	34	0	27	61	0	197	19	216	1	11	10	22	9	188	0	197	496
04:45 PM	29	0	27	56	0	225	12	237	0	9	6	15	6	161	0	167	475
Total	115	0	95	210	0	808	53	861	2	33	22	57	38	669	0	707	1835
05:00 PM	31	0	35	66	0	198	14	212	1	12	8	21	7	156	0	163	462
05:15 PM	29	0	31	60	0	212	25	237	1	12	4	17	5	191	0	196	510
05:30 PM	31	0	31	62	0	209	10	219	0	8	4	12	6	182	0	188	481
05:45 PM	30	0	36	66	0	220	9	229	0	12	5	17	7	192	0	199	511
Total	121	0	133	254	0	839	58	897	2	44	21	67	25	721	0	746	1964
Grand Total	365	0	309	674	0	2373	161	2534	6	115	64	185	103	2070	0	2173	5566
Apprch %	54.2	0	45.8		0	93.6	6.4		3.2	62.2	34.6		4.7	95.3	0		
Total %	6.6	0	5.6	12.1	0	42.6	2.9	45.5	0.1	2.1	1.1	3.3	1.9	37.2	0	39	
Passenger Vehicles	362	0	301	663	0	2359	161	2520	6	115	64	185	97	2055	0	2152	5520
% Passenger Vehicles	99.2	0	97.4	98.4	0	99.4	100	99.4	100	100	100	100	94.2	99.3	0	99	99.2
Dual Wheeled	2	0	3	5	0	12	0	12	0	0	0	0	0	13	0	13	30
% Dual Wheeled	0.5	0	1	0.7	0	0.5	0	0.5	0	0	0	0	0	0.6	0	0.6	0.5
Buses	1	0	5	6	0	2	0	2	0	0	0	0	6	2	0	8	16
% Buses	0.3	0	1.6	0.9	0	0.1	0	0.1	0	0	0	0	5.8	0.1	0	0.4	0.3

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	31	0	35	66	0	198	14	212	1	12	8	21	7	156	0	163	462
05:15 PM	29	0	31	60	0	212	25	237	1	12	4	17	5	191	0	196	510
05:30 PM	31	0	31	62	0	209	10	219	0	8	4	12	6	182	0	188	481
05:45 PM	30	0	36	66	0	220	9	229	0	12	5	17	7	192	0	199	511
Total Volume	121	0	133	254	0	839	58	897	2	44	21	67	25	721	0	746	1964
% App. Total	47.6	0	52.4		0	93.5	6.5		3	65.7	31.3		3.4	96.6	0		
PHF	.976	.000	.924	.962	.000	.953	.580	.946	.500	.917	.656	.798	.893	.939	.000	.937	.961

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:30 PM				05:00 PM			
+0 mins.	31	0	35	66	0	225	12	237	1	11	10	22	7	156	0	163
+15 mins.	29	0	31	60	0	198	14	212	0	9	6	15	5	191	0	196
+30 mins.	31	0	31	62	0	212	25	237	1	12	8	21	6	182	0	188
+45 mins.	30	0	36	66	0	209	10	219	1	12	4	17	7	192	0	199
Total Volume	121	0	133	254	0	844	61	905	3	44	28	75	25	721	0	746
% App. Total	47.6	0	52.4		0	93.3	6.7		4	58.7	37.3		3.4	96.6	0	
PHF	.976	.000	.924	.962	.000	.938	.610	.955	.750	.917	.700	.852	.893	.939	.000	.937

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

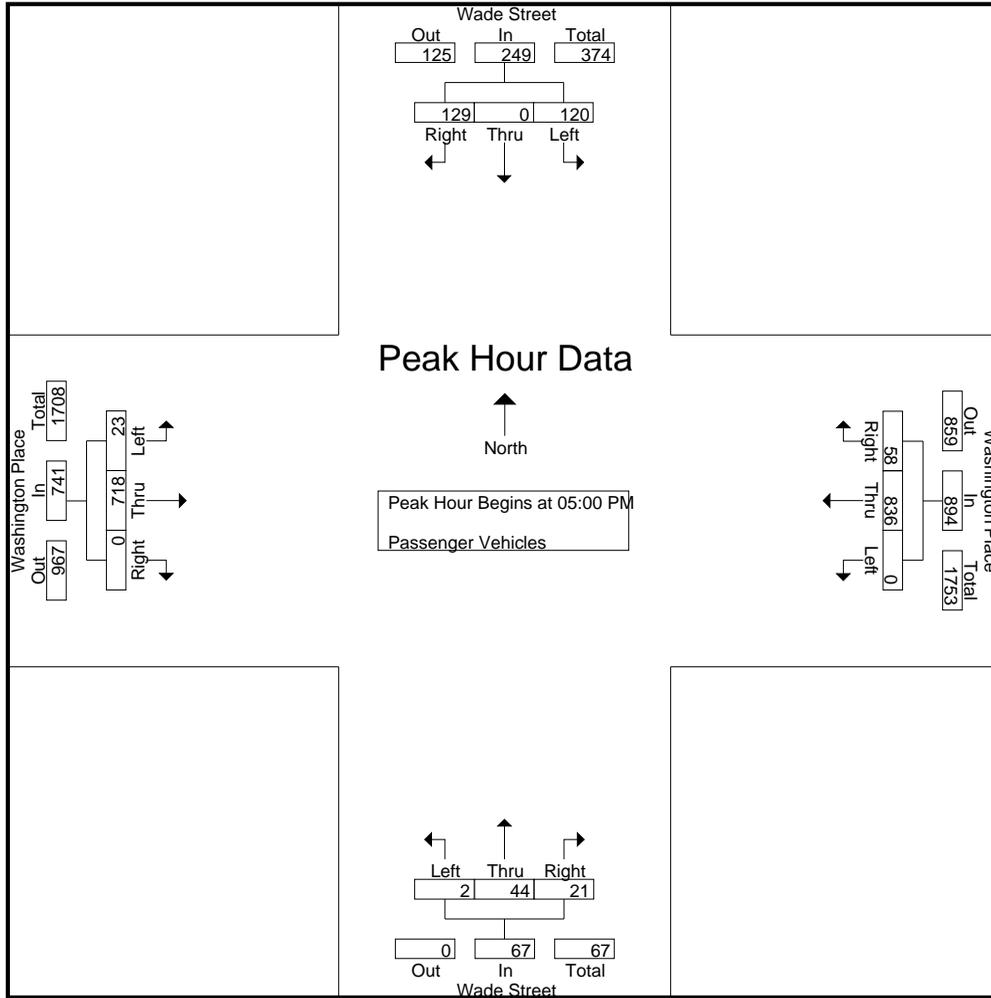
Groups Printed- Passenger Vehicles

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	20	0	15	35	0	170	10	180	0	15	4	19	9	165	0	174	408
03:15 PM	47	0	19	66	0	194	20	214	1	10	5	16	8	169	0	177	473
03:30 PM	41	0	22	63	0	174	10	184	1	6	6	13	16	160	0	176	436
03:45 PM	20	0	23	43	0	180	10	190	0	7	6	13	5	177	0	182	428
Total	128	0	79	207	0	718	50	768	2	38	21	61	38	671	0	709	1745
04:00 PM	21	0	16	37	0	179	16	195	1	6	4	11	13	145	0	158	401
04:15 PM	31	0	24	55	0	205	6	211	0	7	2	9	9	173	0	182	457
04:30 PM	33	0	26	59	0	197	19	216	1	11	10	22	9	187	0	196	493
04:45 PM	29	0	27	56	0	224	12	236	0	9	6	15	5	161	0	166	473
Total	114	0	93	207	0	805	53	858	2	33	22	57	36	666	0	702	1824
05:00 PM	30	0	35	65	0	197	14	211	1	12	8	21	7	156	0	163	460
05:15 PM	29	0	30	59	0	211	25	236	1	12	4	17	5	190	0	195	507
05:30 PM	31	0	29	60	0	208	10	218	0	8	4	12	5	181	0	186	476
05:45 PM	30	0	35	65	0	220	9	229	0	12	5	17	6	191	0	197	508
Total	120	0	129	249	0	836	58	894	2	44	21	67	23	718	0	741	1951
Grand Total	362	0	301	663	0	2359	161	2520	6	115	64	185	97	2055	0	2152	5520
Apprch %	54.6	0	45.4		0	93.6	6.4		3.2	62.2	34.6		4.5	95.5	0		
Total %	6.6	0	5.5	12	0	42.7	2.9	45.7	0.1	2.1	1.2	3.4	1.8	37.2	0	39	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	30	0	35	65	0	197	14	211	1	12	8	21	7	156	0	163	460
05:15 PM	29	0	30	59	0	211	25	236	1	12	4	17	5	190	0	195	507
05:30 PM	31	0	29	60	0	208	10	218	0	8	4	12	5	181	0	186	476
05:45 PM	30	0	35	65	0	220	9	229	0	12	5	17	6	191	0	197	508
Total Volume	120	0	129	249	0	836	58	894	2	44	21	67	23	718	0	741	1951
% App. Total	48.2	0	51.8		0	93.5	6.5		3	65.7	31.3		3.1	96.9	0		
PHF	.968	.000	.921	.958	.000	.950	.580	.947	.500	.917	.656	.798	.821	.940	.000	.940	.960

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	30	0	35	65	0	197	14	211	1	12	8	21	7	156	0	163
+15 mins.	29	0	30	59	0	211	25	236	1	12	4	17	5	190	0	195
+30 mins.	31	0	29	60	0	208	10	218	0	8	4	12	5	181	0	186
+45 mins.	30	0	35	65	0	220	9	229	0	12	5	17	6	191	0	197
Total Volume	120	0	129	249	0	836	58	894	2	44	21	67	23	718	0	741
% App. Total	48.2	0	51.8		0	93.5	6.5		3	65.7	31.3		3.1	96.9	0	
PHF	.968	.000	.921	.958	.000	.950	.580	.947	.500	.917	.656	.798	.821	.940	.000	.940

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

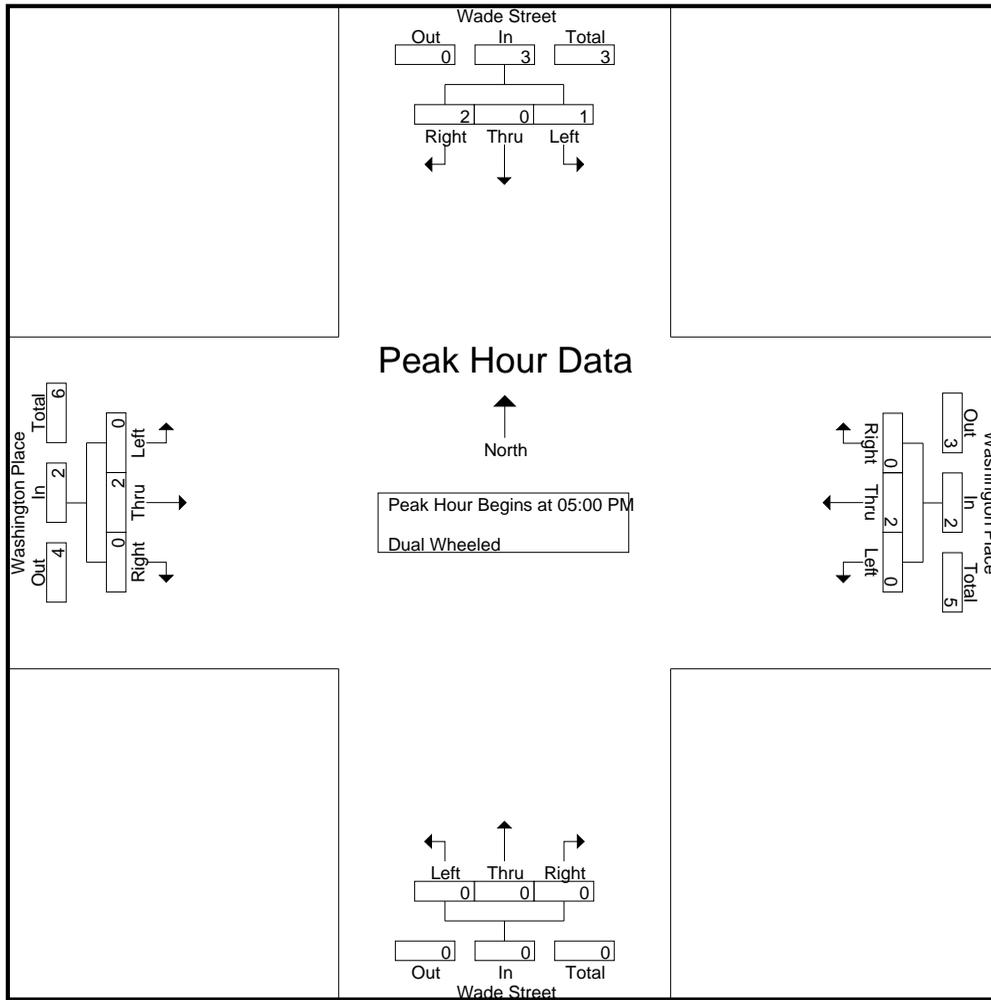
Groups Printed- Dual Wheeled

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
03:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	0	3	5
03:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	4	0	0	4	6
03:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	0	1	4
Total	1	0	0	1	0	7	0	7	0	0	0	0	0	8	0	0	8	16
04:00 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	1	3
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	1	0	3	0	3	0	0	0	0	0	3	0	0	3	7
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	2
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	1	0	2	3	0	2	0	2	0	0	0	0	0	2	0	0	2	7
Grand Total	2	0	3	5	0	12	0	12	0	0	0	0	0	13	0	0	13	30
Apprch %	40	0	60		0	100	0		0	0	0		0	100	0			
Total %	6.7	0	10	16.7	0	40	0	40	0	0	0	0	0	43.3	0	0	43.3	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 05:00 PM																		
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	2
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total Volume	1	0	2	3	0	2	0	2	0	0	0	0	0	2	0	0	2	7
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	100	0			
PHF	.250	.000	.500	.750	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.875	

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	1	0	2	3	0	2	0	2	0	0	0	0	0	2	0	2
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.500	.750	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

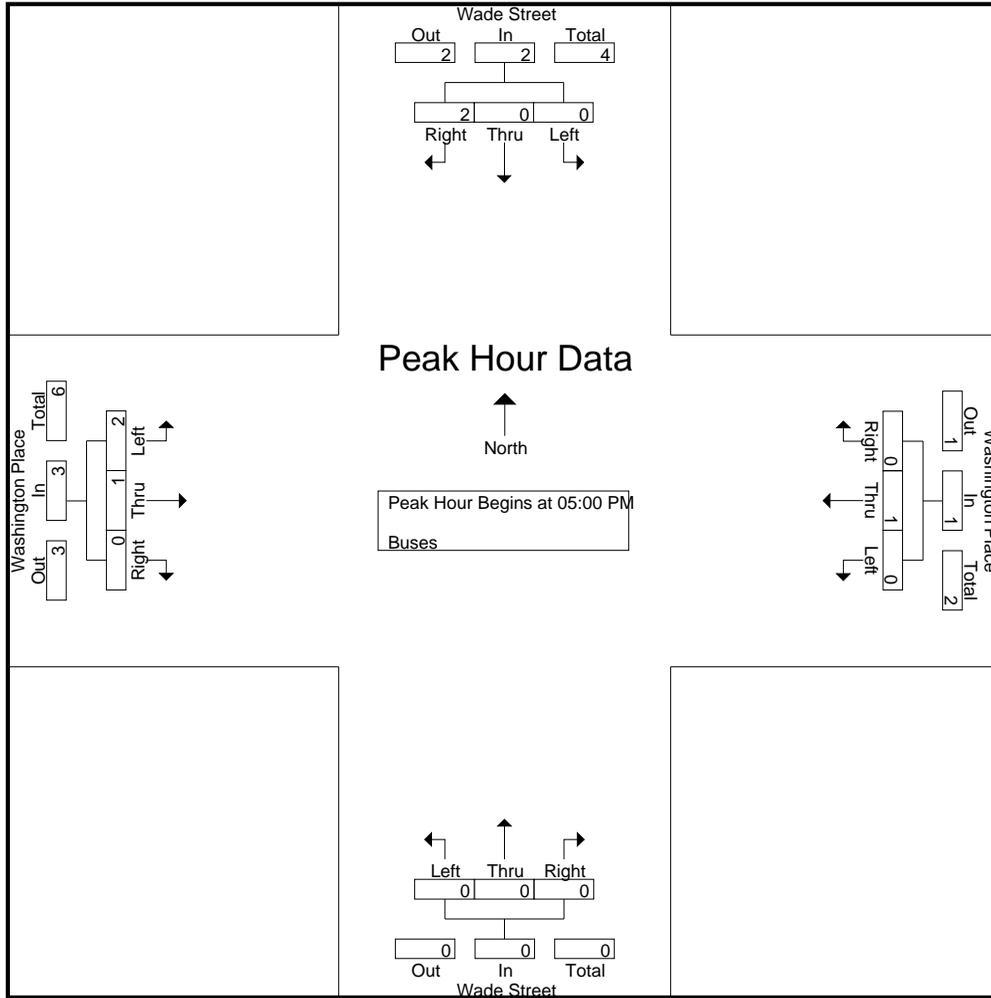
Groups Printed- Buses

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	2	2	0	1	0	1	0	0	0	0	2	1	0	3	6
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:30 PM	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	0	1	2	0	0	0	0	0	0	0	0	2	0	0	2	4
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	2	2	0	1	0	1	0	0	0	0	2	1	0	3	6
Grand Total	1	0	5	6	0	2	0	2	0	0	0	0	6	2	0	8	16
Apprch %	16.7	0	83.3		0	100	0		0	0	0		75	25	0		
Total %	6.2	0	31.2	37.5	0	12.5	0	12.5	0	0	0	0	37.5	12.5	0	50	

Start Time	Wade Street Southbound				Washington Place Westbound				Wade Street Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	2	2	0	1	0	1	0	0	0	0	2	1	0	3	6
% App. Total	0	0	100		0	100	0		0	0	0		66.7	33.3	0		
PHF	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000	.500	.250	.000	.375	.500

City of Culver
 N/S: Wade Street
 E/W: Washington Place
 Weather: Clear

File Name : 08_CVC_Wade_Washington PI PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	0	0	2	2	0	1	0	1	0	0	0	0	2	1	0	3
% App. Total	0	0	100		0	100	0		0	0	0		66.7	33.3	0	
PHF	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000	.500	.250	.000	.375

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

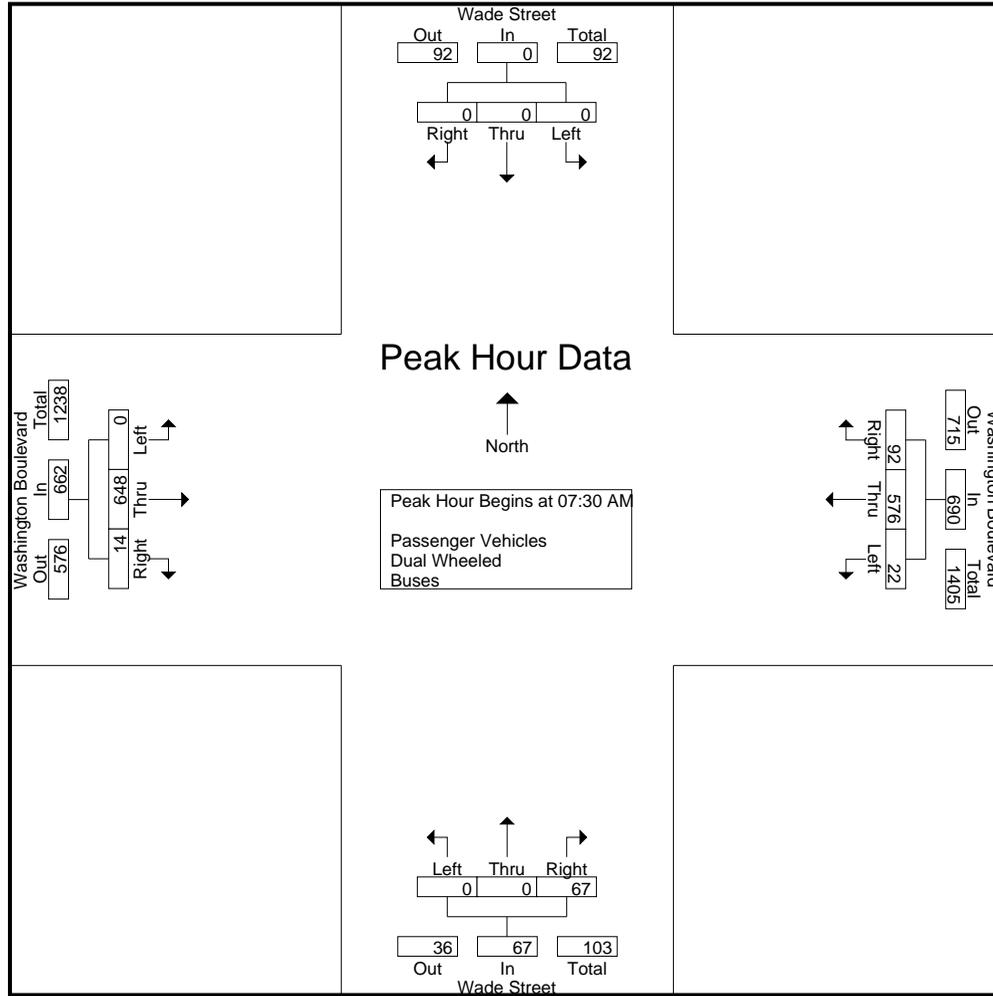
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	91	10	103	0	0	6	6	0	66	1	67	176
07:15 AM	0	0	0	0	5	107	11	123	0	0	4	4	0	99	1	100	227
07:30 AM	0	0	0	0	6	151	29	186	0	0	17	17	0	124	3	127	330
07:45 AM	0	0	0	0	2	147	33	182	0	0	21	21	0	190	2	192	395
Total	0	0	0	0	15	496	83	594	0	0	48	48	0	479	7	486	1128
08:00 AM	0	0	0	0	8	132	23	163	0	0	14	14	0	164	5	169	346
08:15 AM	0	0	0	0	6	146	7	159	0	0	15	15	0	170	4	174	348
08:30 AM	0	0	0	0	7	134	15	156	0	0	19	19	0	122	8	130	305
08:45 AM	0	0	0	0	6	152	23	181	0	0	19	19	0	160	7	167	367
Total	0	0	0	0	27	564	68	659	0	0	67	67	0	616	24	640	1366
09:00 AM	0	0	0	0	10	128	21	159	0	0	19	19	0	127	10	137	315
09:15 AM	0	0	0	0	6	148	14	168	0	0	21	21	0	121	2	123	312
09:30 AM	0	0	0	0	5	116	18	139	0	0	9	9	0	100	3	103	251
09:45 AM	0	0	0	0	7	135	10	152	0	0	6	6	0	159	3	162	320
Total	0	0	0	0	28	527	63	618	0	0	55	55	0	507	18	525	1198
Grand Total	0	0	0	0	70	1587	214	1871	0	0	170	170	0	1602	49	1651	3692
Apprch %	0	0	0	0	3.7	84.8	11.4		0	0	100		0	97	3		
Total %	0	0	0	0	1.9	43	5.8	50.7	0	0	4.6	4.6	0	43.4	1.3	44.7	
Passenger Vehicles	0	0	0	0	67	1547	210	1824	0	0	168	168	0	1566	49	1615	3607
% Passenger Vehicles	0	0	0	0	95.7	97.5	98.1	97.5	0	0	98.8	98.8	0	97.8	100	97.8	97.7
Dual Wheeled	0	0	0	0	3	24	3	30	0	0	2	2	0	25	0	25	57
% Dual Wheeled	0	0	0	0	4.3	1.5	1.4	1.6	0	0	1.2	1.2	0	1.6	0	1.5	1.5
Buses	0	0	0	0	0	16	1	17	0	0	0	0	0	11	0	11	28
% Buses	0	0	0	0	0	1	0.5	0.9	0	0	0	0	0	0.7	0	0.7	0.8

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	6	151	29	186	0	0	17	17	0	124	3	127	330
07:45 AM	0	0	0	0	2	147	33	182	0	0	21	21	0	190	2	192	395
08:00 AM	0	0	0	0	8	132	23	163	0	0	14	14	0	164	5	169	346
08:15 AM	0	0	0	0	6	146	7	159	0	0	15	15	0	170	4	174	348
Total Volume	0	0	0	0	22	576	92	690	0	0	67	67	0	648	14	662	1419
% App. Total	0	0	0	0	3.2	83.5	13.3		0	0	100		0	97.9	2.1		
PHF	.000	.000	.000	.000	.688	.954	.697	.927	.000	.000	.798	.798	.000	.853	.700	.862	.898

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				08:30 AM				07:45 AM			
+0 mins.	0	0	0	0	6	151	29	186	0	0	19	19	0	190	2	192
+15 mins.	0	0	0	0	2	147	33	182	0	0	19	19	0	164	5	169
+30 mins.	0	0	0	0	8	132	23	163	0	0	19	19	0	170	4	174
+45 mins.	0	0	0	0	6	146	7	159	0	0	21	21	0	122	8	130
Total Volume	0	0	0	0	22	576	92	690	0	0	78	78	0	646	19	665
% App. Total	0	0	0	0	3.2	83.5	13.3		0	0	100		0	97.1	2.9	
PHF	.000	.000	.000	.000	.688	.954	.697	.927	.000	.000	.929	.929	.000	.850	.594	.866

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

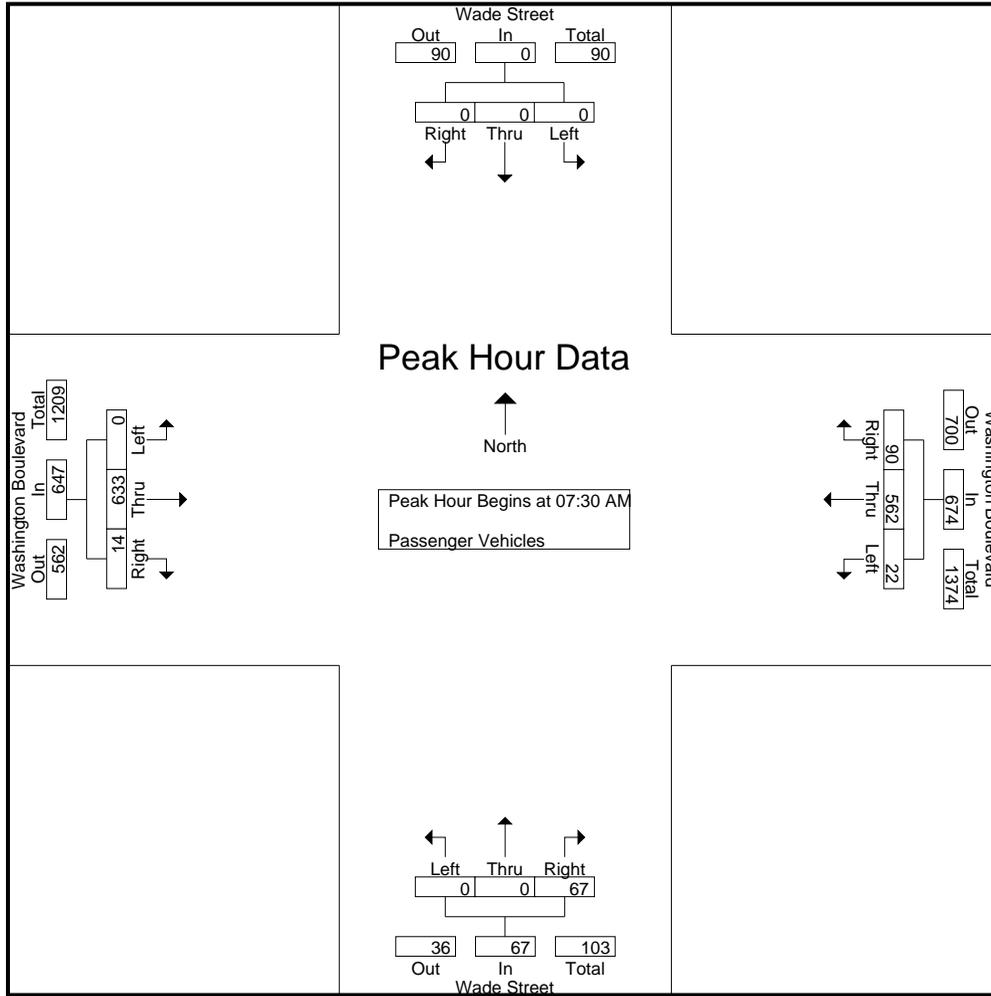
Groups Printed- Passenger Vehicles

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	88	10	100	0	0	6	6	0	64	1	65	171
07:15 AM	0	0	0	0	4	99	10	113	0	0	4	4	0	97	1	98	215
07:30 AM	0	0	0	0	6	147	29	182	0	0	17	17	0	119	3	122	321
07:45 AM	0	0	0	0	2	145	31	178	0	0	21	21	0	186	2	188	387
Total	0	0	0	0	14	479	80	573	0	0	48	48	0	466	7	473	1094
08:00 AM	0	0	0	0	8	129	23	160	0	0	14	14	0	162	5	167	341
08:15 AM	0	0	0	0	6	141	7	154	0	0	15	15	0	166	4	170	339
08:30 AM	0	0	0	0	7	132	14	153	0	0	19	19	0	119	8	127	299
08:45 AM	0	0	0	0	6	151	23	180	0	0	19	19	0	158	7	165	364
Total	0	0	0	0	27	553	67	647	0	0	67	67	0	605	24	629	1343
09:00 AM	0	0	0	0	10	125	21	156	0	0	18	18	0	126	10	136	310
09:15 AM	0	0	0	0	5	142	14	161	0	0	20	20	0	119	2	121	302
09:30 AM	0	0	0	0	5	115	18	138	0	0	9	9	0	96	3	99	246
09:45 AM	0	0	0	0	6	133	10	149	0	0	6	6	0	154	3	157	312
Total	0	0	0	0	26	515	63	604	0	0	53	53	0	495	18	513	1170
Grand Total	0	0	0	0	67	1547	210	1824	0	0	168	168	0	1566	49	1615	3607
Apprch %	0	0	0	0	3.7	84.8	11.5		0	0	100		0	97	3		
Total %	0	0	0	0	1.9	42.9	5.8	50.6	0	0	4.7	4.7	0	43.4	1.4	44.8	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	6	147	29	182	0	0	17	17	0	119	3	122	321
07:45 AM	0	0	0	0	2	145	31	178	0	0	21	21	0	186	2	188	387
08:00 AM	0	0	0	0	8	129	23	160	0	0	14	14	0	162	5	167	341
08:15 AM	0	0	0	0	6	141	7	154	0	0	15	15	0	166	4	170	339
Total Volume	0	0	0	0	22	562	90	674	0	0	67	67	0	633	14	647	1388
% App. Total	0	0	0	0	3.3	83.4	13.4		0	0	100		0	97.8	2.2		
PHF	.000	.000	.000	.000	.688	.956	.726	.926	.000	.000	.798	.798	.000	.851	.700	.860	.897

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	6	147	29	182	0	0	17	17	0	119	3	122
+15 mins.	0	0	0	0	2	145	31	178	0	0	21	21	0	186	2	188
+30 mins.	0	0	0	0	8	129	23	160	0	0	14	14	0	162	5	167
+45 mins.	0	0	0	0	6	141	7	154	0	0	15	15	0	166	4	170
Total Volume	0	0	0	0	22	562	90	674	0	0	67	67	0	633	14	647
% App. Total	0	0	0	0	3.3	83.4	13.4		0	0	100		0	97.8	2.2	
PHF	.000	.000	.000	.000	.688	.956	.726	.926	.000	.000	.798	.798	.000	.851	.700	.860

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

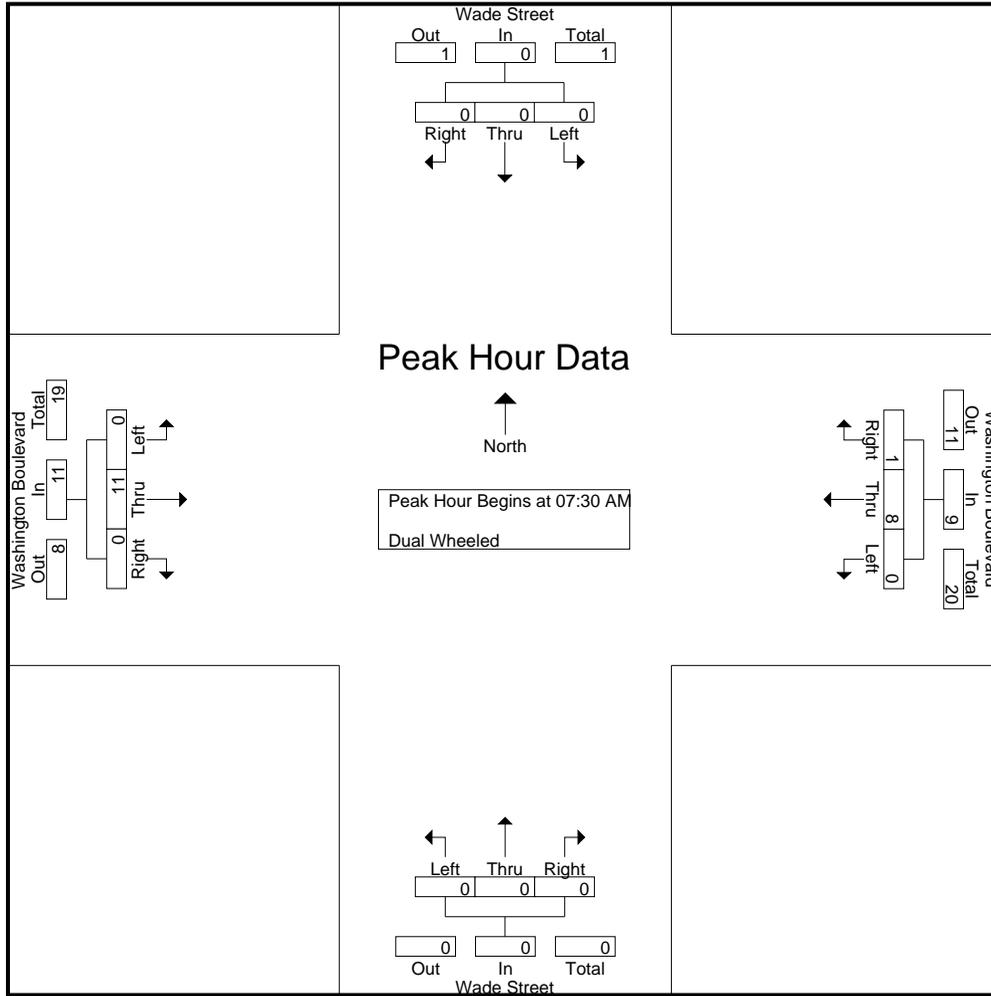
Groups Printed- Dual Wheeled

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	0	1	4	1	6	0	0	0	0	0	1	0	1	7
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
07:45 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	1	10	2	13	0	0	0	0	0	8	0	8	21
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	3	0	3	5
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	6	1	7	0	0	0	0	0	9	0	9	16
09:00 AM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
09:15 AM	0	0	0	0	1	3	0	4	0	0	1	1	0	1	0	1	6
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
09:45 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	4	0	4	7
Total	0	0	0	0	2	8	0	10	0	0	2	2	0	8	0	8	20
Grand Total	0	0	0	0	3	24	3	30	0	0	2	2	0	25	0	25	57
Apprch %	0	0	0	0	10	80	10		0	0	100		0	100	0		
Total %	0	0	0	0	5.3	42.1	5.3	52.6	0	0	3.5	3.5	0	43.9	0	43.9	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
07:45 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2	5
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
Total Volume	0	0	0	0	0	8	1	9	0	0	0	0	0	11	0	11	20
% App. Total	0	0	0	0	0	88.9	11.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.667	.250	.750	.000	.000	.000	.000	.000	.688	.000	.688	.833

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4
+15 mins.	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	8	1	9	0	0	0	0	0	11	0	11
% App. Total	0	0	0	0	0	88.9	11.1		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.667	.250	.750	.000	.000	.000	.000	.000	.688	.000	.688

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

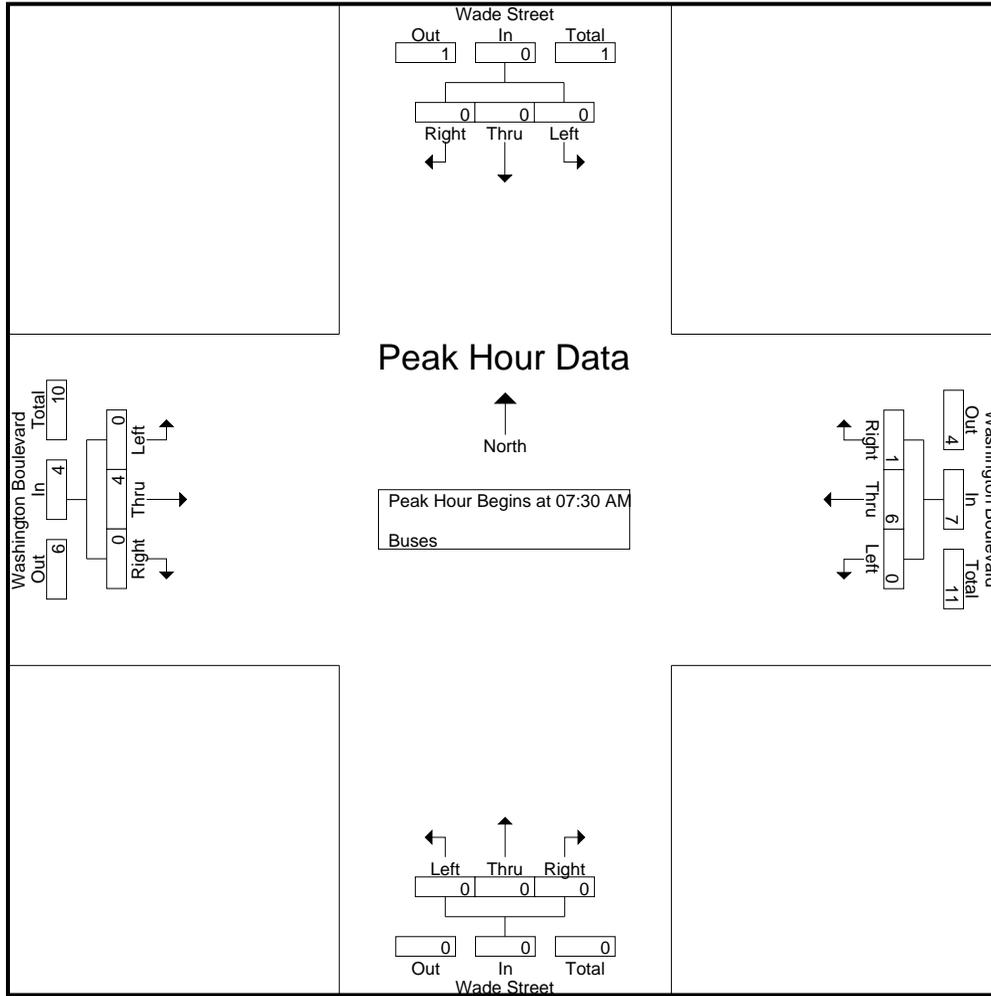
Groups Printed- Buses

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	7	1	8	0	0	0	0	0	5	0	5	13
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
09:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
09:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
Grand Total	0	0	0	0	0	16	1	17	0	0	0	0	0	11	0	11	28
Apprch %	0	0	0	0	0	94.1	5.9		0	0	0	0	0	100	0		
Total %	0	0	0	0	0	57.1	3.6	60.7	0	0	0	0	0	39.3	0	39.3	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total Volume	0	0	0	0	0	6	1	7	0	0	0	0	0	4	0	4	11
% App. Total	0	0	0	0	0	85.7	14.3		0	0	0	0	0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.250	.438	.000	.000	.000	.000	.000	.500	.000	.500	.550

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	6	1	7	0	0	0	0	0	4	0	4
% App. Total	0	0	0	0	0	85.7	14.3		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.375	.250	.438	.000	.000	.000	.000	.000	.500	.000	.500

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

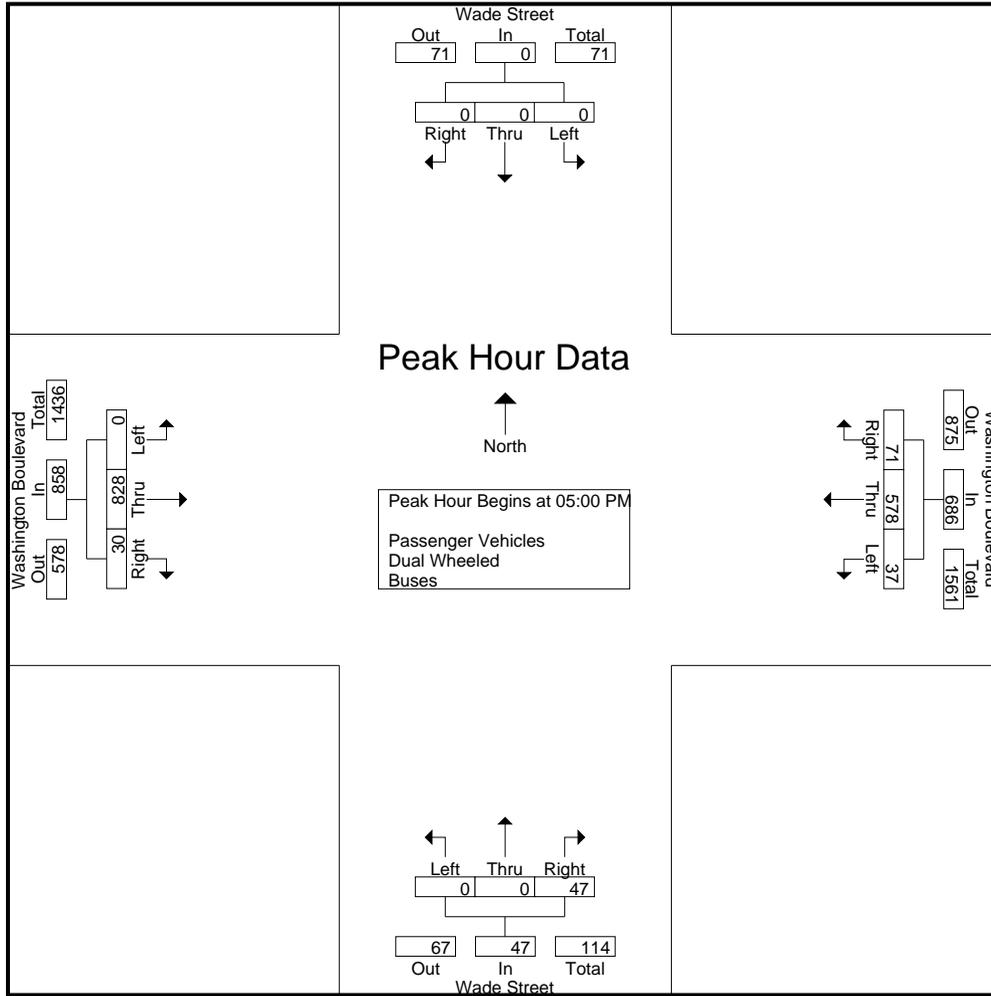
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	9	160	21	190	0	0	11	11	0	190	5	195	396
03:15 PM	0	0	0	0	6	147	18	171	0	0	10	10	0	184	6	190	371
03:30 PM	0	0	0	0	8	127	13	148	0	0	11	11	0	199	6	205	364
03:45 PM	0	0	0	0	9	134	11	154	0	0	11	11	0	195	2	197	362
Total	0	0	0	0	32	568	63	663	0	0	43	43	0	768	19	787	1493
04:00 PM	0	0	0	0	6	145	12	163	0	0	8	8	0	194	6	200	371
04:15 PM	0	0	0	0	3	136	9	148	0	0	9	9	0	203	4	207	364
04:30 PM	0	0	0	0	11	145	20	176	0	0	13	13	0	193	9	202	391
04:45 PM	0	0	0	0	6	144	15	165	0	0	17	17	0	184	1	185	367
Total	0	0	0	0	26	570	56	652	0	0	47	47	0	774	20	794	1493
05:00 PM	0	0	0	0	15	153	24	192	0	0	8	8	0	207	5	212	412
05:15 PM	0	0	0	0	9	147	17	173	0	0	13	13	0	212	11	223	409
05:30 PM	0	0	0	0	5	132	11	148	0	0	9	9	0	222	6	228	385
05:45 PM	0	0	0	0	8	146	19	173	0	0	17	17	0	187	8	195	385
Total	0	0	0	0	37	578	71	686	0	0	47	47	0	828	30	858	1591
Grand Total	0	0	0	0	95	1716	190	2001	0	0	137	137	0	2370	69	2439	4577
Apprch %	0	0	0	0	4.7	85.8	9.5		0	0	100		0	97.2	2.8		
Total %	0	0	0	0	2.1	37.5	4.2	43.7	0	0	3	3	0	51.8	1.5	53.3	
Passenger Vehicles	0	0	0	0	93	1695	190	1978	0	0	136	136	0	2337	68	2405	4519
% Passenger Vehicles	0	0	0	0	97.9	98.8	100	98.9	0	0	99.3	99.3	0	98.6	98.6	98.6	98.7
Dual Wheeled	0	0	0	0	2	5	0	7	0	0	1	1	0	19	1	20	28
% Dual Wheeled	0	0	0	0	2.1	0.3	0	0.3	0	0	0.7	0.7	0	0.8	1.4	0.8	0.6
Buses	0	0	0	0	0	16	0	16	0	0	0	0	0	14	0	14	30
% Buses	0	0	0	0	0	0.9	0	0.8	0	0	0	0	0	0.6	0	0.6	0.7

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	15	153	24	192	0	0	8	8	0	207	5	212	412
05:15 PM	0	0	0	0	9	147	17	173	0	0	13	13	0	212	11	223	409
05:30 PM	0	0	0	0	5	132	11	148	0	0	9	9	0	222	6	228	385
05:45 PM	0	0	0	0	8	146	19	173	0	0	17	17	0	187	8	195	385
Total Volume	0	0	0	0	37	578	71	686	0	0	47	47	0	828	30	858	1591
% App. Total	0	0	0	0	5.4	84.3	10.3		0	0	100		0	96.5	3.5		
PHF	.000	.000	.000	.000	.617	.944	.740	.893	.000	.000	.691	.691	.000	.932	.682	.941	.965

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	03:00 PM				04:30 PM				04:30 PM				05:00 PM			
+0 mins.	0	0	0	0	11	145	20	176	0	0	13	13	0	207	5	212
+15 mins.	0	0	0	0	6	144	15	165	0	0	17	17	0	212	11	223
+30 mins.	0	0	0	0	15	153	24	192	0	0	8	8	0	222	6	228
+45 mins.	0	0	0	0	9	147	17	173	0	0	13	13	0	187	8	195
Total Volume	0	0	0	0	41	589	76	706	0	0	51	51	0	828	30	858
% App. Total	0	0	0	0	5.8	83.4	10.8		0	0	100		0	96.5	3.5	
PHF	.000	.000	.000	.000	.683	.962	.792	.919	.000	.000	.750	.750	.000	.932	.682	.941

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

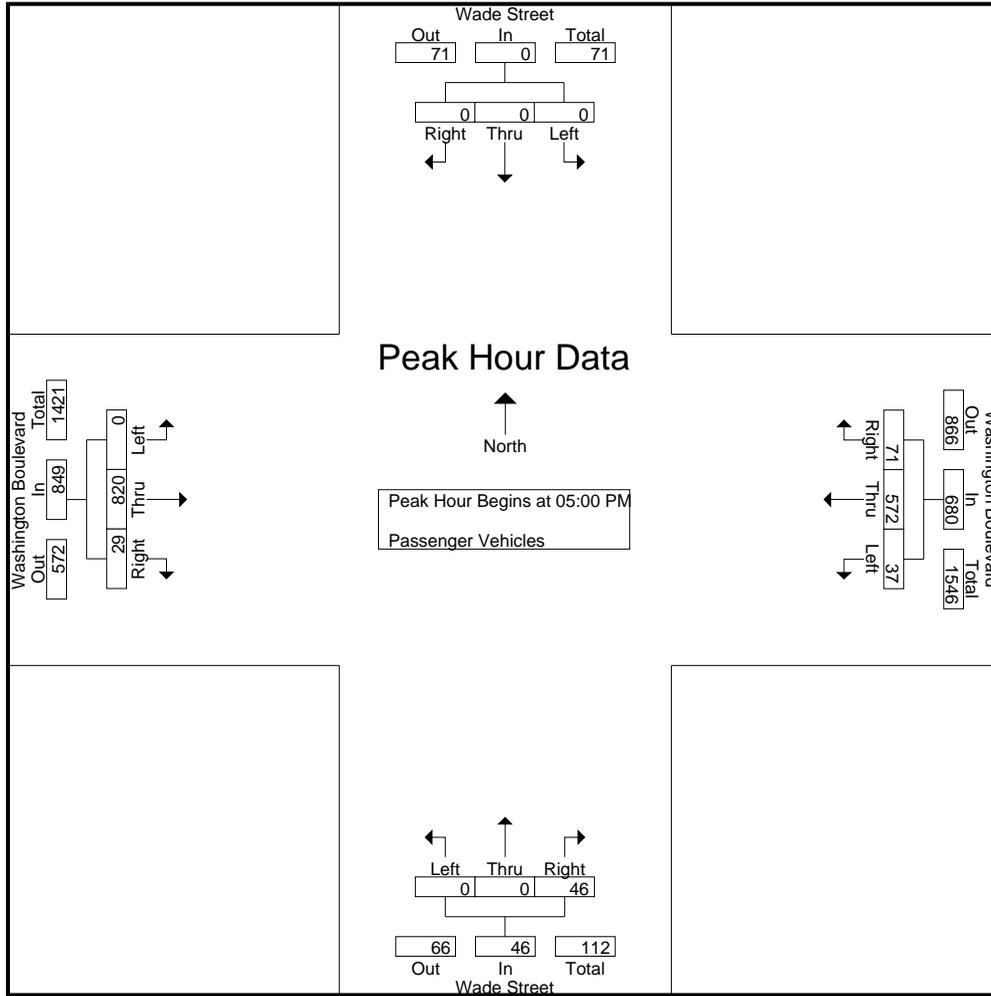
Groups Printed- Passenger Vehicles

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	9	159	21	189	0	0	11	11	0	187	5	192	392
03:15 PM	0	0	0	0	6	143	18	167	0	0	10	10	0	181	6	187	364
03:30 PM	0	0	0	0	7	127	13	147	0	0	11	11	0	194	6	200	358
03:45 PM	0	0	0	0	9	132	11	152	0	0	11	11	0	193	2	195	358
Total	0	0	0	0	31	561	63	655	0	0	43	43	0	755	19	774	1472
04:00 PM	0	0	0	0	6	143	12	161	0	0	8	8	0	189	6	195	364
04:15 PM	0	0	0	0	3	133	9	145	0	0	9	9	0	201	4	205	359
04:30 PM	0	0	0	0	10	144	20	174	0	0	13	13	0	190	9	199	386
04:45 PM	0	0	0	0	6	142	15	163	0	0	17	17	0	182	1	183	363
Total	0	0	0	0	25	562	56	643	0	0	47	47	0	762	20	782	1472
05:00 PM	0	0	0	0	15	151	24	190	0	0	8	8	0	206	5	211	409
05:15 PM	0	0	0	0	9	145	17	171	0	0	13	13	0	211	11	222	406
05:30 PM	0	0	0	0	5	131	11	147	0	0	9	9	0	218	6	224	380
05:45 PM	0	0	0	0	8	145	19	172	0	0	16	16	0	185	7	192	380
Total	0	0	0	0	37	572	71	680	0	0	46	46	0	820	29	849	1575
Grand Total	0	0	0	0	93	1695	190	1978	0	0	136	136	0	2337	68	2405	4519
Apprch %	0	0	0	0	4.7	85.7	9.6		0	0	100		0	97.2	2.8		
Total %	0	0	0	0	2.1	37.5	4.2	43.8	0	0	3	3	0	51.7	1.5	53.2	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	15	151	24	190	0	0	8	8	0	206	5	211	409
05:15 PM	0	0	0	0	9	145	17	171	0	0	13	13	0	211	11	222	406
05:30 PM	0	0	0	0	5	131	11	147	0	0	9	9	0	218	6	224	380
05:45 PM	0	0	0	0	8	145	19	172	0	0	16	16	0	185	7	192	380
Total Volume	0	0	0	0	37	572	71	680	0	0	46	46	0	820	29	849	1575
% App. Total	0	0	0	0	5.4	84.1	10.4		0	0	100		0	96.6	3.4		
PHF	.000	.000	.000	.000	.617	.947	.740	.895	.000	.000	.719	.719	.000	.940	.659	.948	.963

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	15	151	24	190	0	0	8	8	0	206	5	211
+15 mins.	0	0	0	0	9	145	17	171	0	0	13	13	0	211	11	222
+30 mins.	0	0	0	0	5	131	11	147	0	0	9	9	0	218	6	224
+45 mins.	0	0	0	0	8	145	19	172	0	0	16	16	0	185	7	192
Total Volume	0	0	0	0	37	572	71	680	0	0	46	46	0	820	29	849
% App. Total	0	0	0	0	5.4	84.1	10.4		0	0	100		0	96.6	3.4	
PHF	.000	.000	.000	.000	.617	.947	.740	.895	.000	.000	.719	.719	.000	.940	.659	.948

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

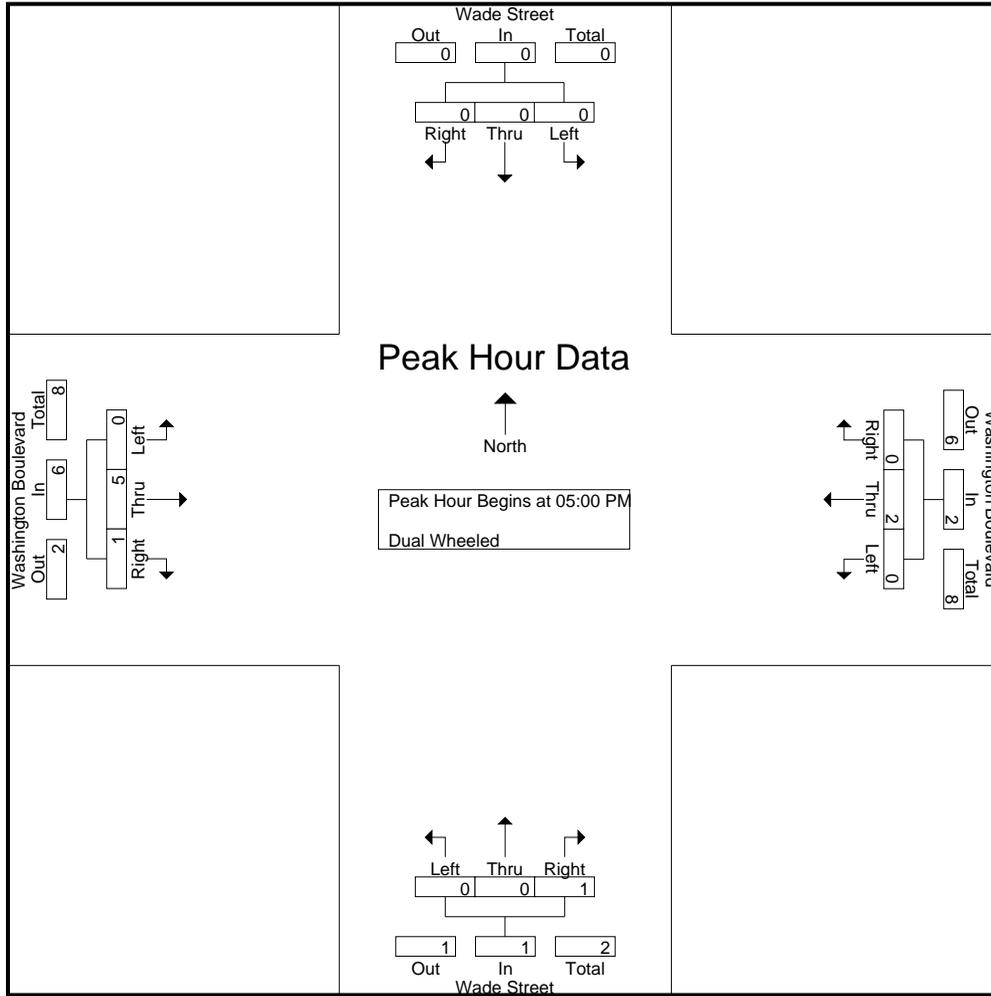
Groups Printed- Dual Wheeled

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
03:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	3	0	3	4
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	1	1	0	2	0	0	0	0	0	6	0	6	8
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	1	2	0	3	0	0	0	0	0	8	0	8	11
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	3	4
Total	0	0	0	0	0	2	0	2	0	0	1	1	0	5	1	6	9
Grand Total	0	0	0	0	2	5	0	7	0	0	1	1	0	19	1	20	28
Apprch %	0	0	0		28.6	71.4	0		0	0	100		0	95	5		
Total %	0	0	0		7.1	17.9	0	25	0	0	3.6	3.6	0	67.9	3.6	71.4	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	3	4
Total Volume	0	0	0	0	0	2	0	2	0	0	1	1	0	5	1	6	9
% App. Total	0	0	0		0	100	0		0	0	100		0	83.3	16.7		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.250	.250	.000	.417	.250	.500	.563

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	3
Total Volume	0	0	0	0	0	2	0	2	0	0	1	1	0	5	1	6
% App. Total	0	0	0	0	0	100	0	0	0	0	100	0	0	83.3	16.7	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.250	.250	.000	.417	.250	.500

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

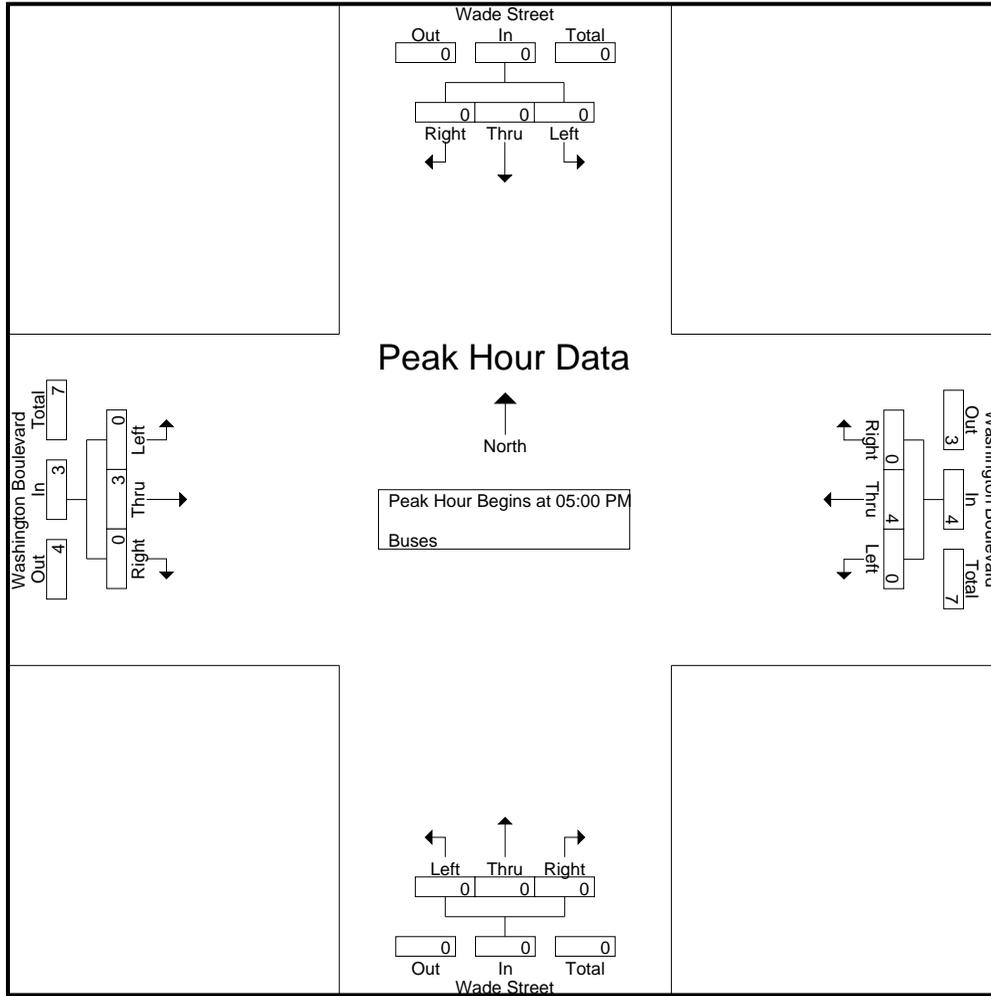
Groups Printed- Buses

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
03:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
03:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	4	0	4	10
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Grand Total	0	0	0	0	0	16	0	16	0	0	0	0	0	14	0	14	30
Apprch %	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
Total %	0	0	0	0	0	53.3	0	53.3	0	0	0	0	0	46.7	0	46.7	

Start Time	Wade Street Southbound				Washington Boulevard Westbound				Wade Street Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.750	.000	.750	.583

City of Culver
 N/S: Wade Street
 E/W: Washington Boulevard
 Weather: Clear

File Name : 09_CVC_Wade_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.750	.000	.750

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

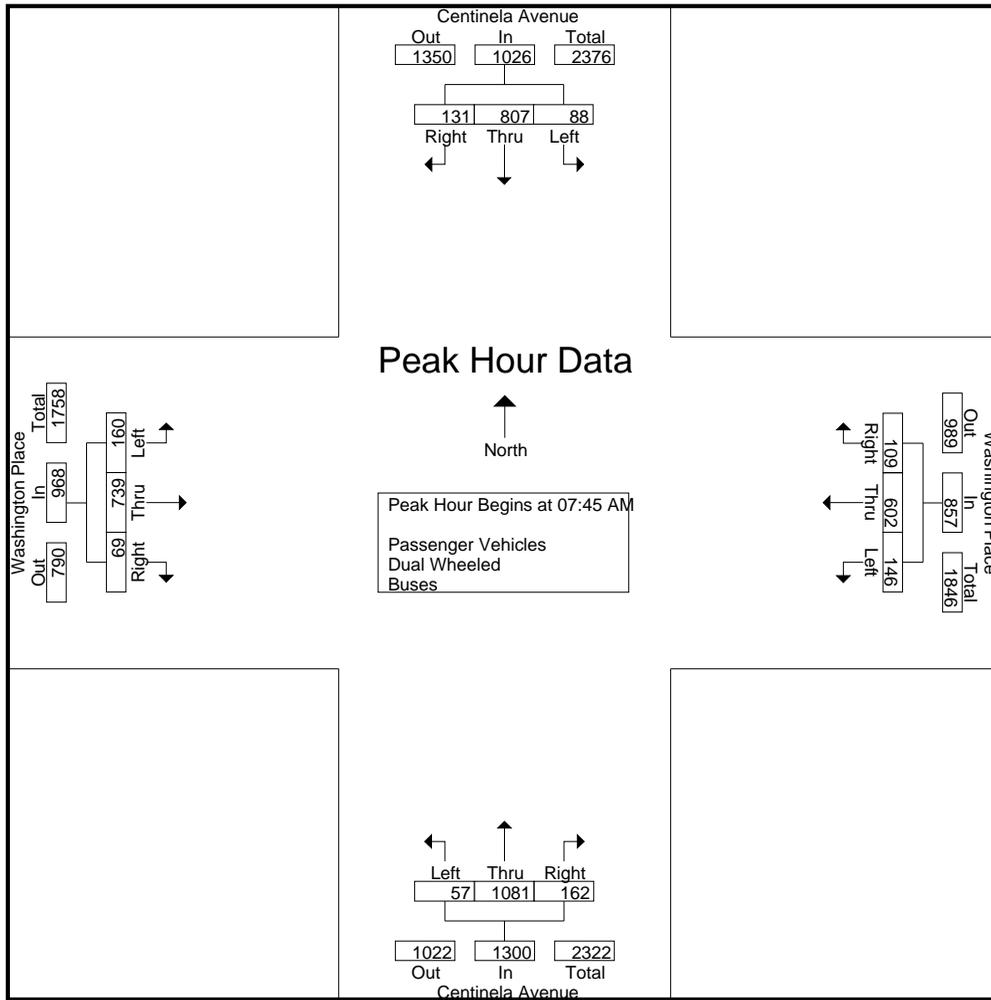
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	69	14	92	10	84	8	102	13	307	28	348	29	88	10	127	669
07:15 AM	9	104	13	126	10	116	15	141	22	290	35	347	28	143	12	183	797
07:30 AM	7	160	19	186	19	114	8	141	24	287	45	356	31	126	6	163	846
07:45 AM	18	199	33	250	34	177	23	234	17	291	43	351	38	194	23	255	1090
Total	43	532	79	654	73	491	54	618	76	1175	151	1402	126	551	51	728	3402
08:00 AM	22	183	26	231	32	130	19	181	17	233	32	282	49	177	14	240	934
08:15 AM	21	215	39	275	37	162	25	224	14	302	43	359	35	186	22	243	1101
08:30 AM	27	210	33	270	43	133	42	218	9	255	44	308	38	182	10	230	1026
08:45 AM	18	205	50	273	31	183	20	234	15	212	38	265	29	179	14	222	994
Total	88	813	148	1049	143	608	106	857	55	1002	157	1214	151	724	60	935	4055
09:00 AM	22	251	39	312	18	140	15	173	18	253	49	320	43	158	19	220	1025
09:15 AM	24	162	30	216	29	160	13	202	20	271	46	337	32	140	14	186	941
09:30 AM	13	171	41	225	33	122	16	171	25	283	59	367	38	125	23	186	949
09:45 AM	14	133	28	175	24	179	11	214	17	266	37	320	31	140	16	187	896
Total	73	717	138	928	104	601	55	760	80	1073	191	1344	144	563	72	779	3811
Grand Total	204	2062	365	2631	320	1700	215	2235	211	3250	499	3960	421	1838	183	2442	11268
Apprch %	7.8	78.4	13.9		14.3	76.1	9.6		5.3	82.1	12.6		17.2	75.3	7.5		
Total %	1.8	18.3	3.2	23.3	2.8	15.1	1.9	19.8	1.9	28.8	4.4	35.1	3.7	16.3	1.6	21.7	
Passenger Vehicles	201	2004	359	2564	314	1678	211	2203	204	3168	493	3865	414	1811	178	2403	11035
% Passenger Vehicles	98.5	97.2	98.4	97.5	98.1	98.7	98.1	98.6	96.7	97.5	98.8	97.6	98.3	98.5	97.3	98.4	97.9
Dual Wheeled	2	34	6	42	4	18	0	22	5	57	3	65	6	23	4	33	162
% Dual Wheeled	1	1.6	1.6	1.6	1.2	1.1	0	1	2.4	1.8	0.6	1.6	1.4	1.3	2.2	1.4	1.4
Buses	1	24	0	25	2	4	4	10	2	25	3	30	1	4	1	6	71
% Buses	0.5	1.2	0	1	0.6	0.2	1.9	0.4	0.9	0.8	0.6	0.8	0.2	0.2	0.5	0.2	0.6

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	18	199	33	250	34	177	23	234	17	291	43	351	38	194	23	255	1090
08:00 AM	22	183	26	231	32	130	19	181	17	233	32	282	49	177	14	240	934
08:15 AM	21	215	39	275	37	162	25	224	14	302	43	359	35	186	22	243	1101
08:30 AM	27	210	33	270	43	133	42	218	9	255	44	308	38	182	10	230	1026
Total Volume	88	807	131	1026	146	602	109	857	57	1081	162	1300	160	739	69	968	4151
% App. Total	8.6	78.7	12.8		17	70.2	12.7		4.4	83.2	12.5		16.5	76.3	7.1		
PHF	.815	.938	.840	.933	.849	.850	.649	.916	.838	.895	.920	.905	.816	.952	.750	.949	.943

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:15 AM				07:45 AM				07:00 AM				07:45 AM			
+0 mins.	21	215	39	275	34	177	23	234	13	307	28	348	38	194	23	255
+15 mins.	27	210	33	270	32	130	19	181	22	290	35	347	49	177	14	240
+30 mins.	18	205	50	273	37	162	25	224	24	287	45	356	35	186	22	243
+45 mins.	22	251	39	312	43	133	42	218	17	291	43	351	38	182	10	230
Total Volume	88	881	161	1130	146	602	109	857	76	1175	151	1402	160	739	69	968
% App. Total	7.8	78	14.2		17	70.2	12.7		5.4	83.8	10.8		16.5	76.3	7.1	
PHF	.815	.877	.805	.905	.849	.850	.649	.916	.792	.957	.839	.985	.816	.952	.750	.949

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

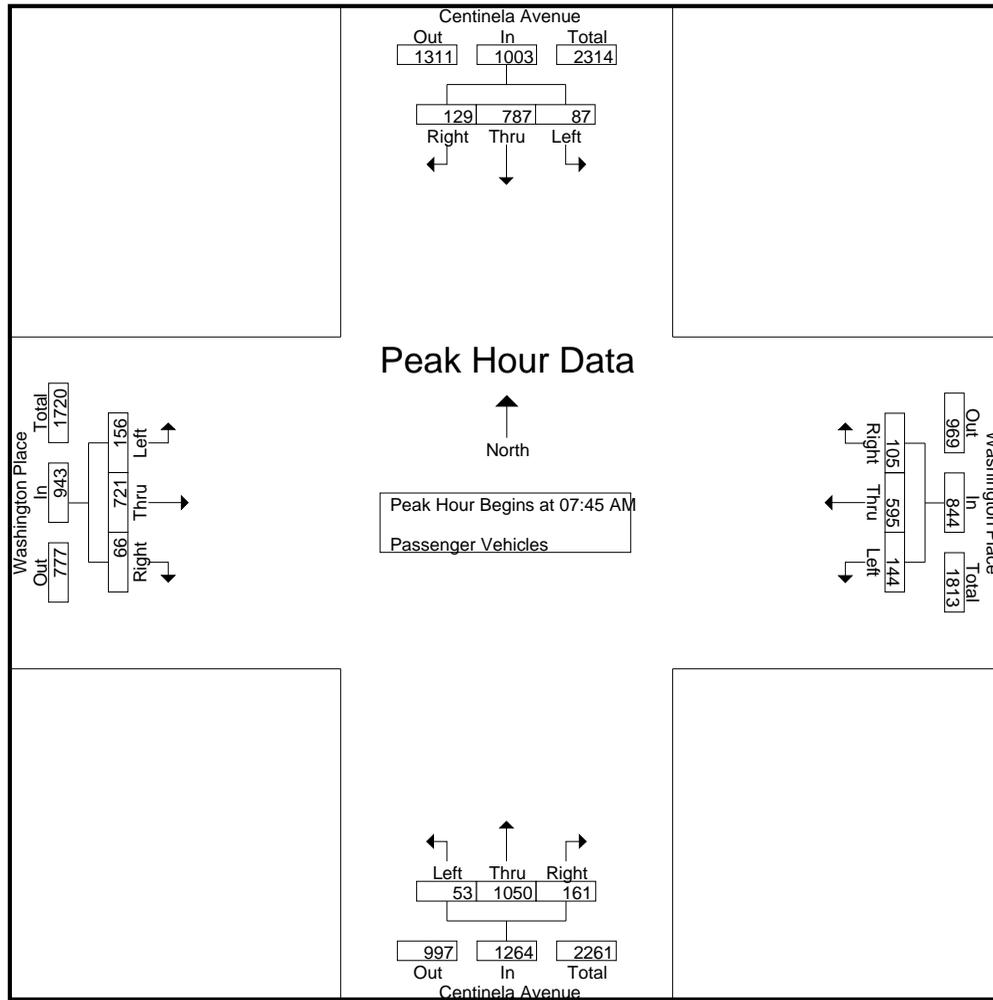
Groups Printed- Passenger Vehicles

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	67	14	90	10	84	8	102	12	299	28	339	29	88	10	127	658
07:15 AM	9	99	12	120	9	113	15	137	22	283	33	338	27	143	12	182	777
07:30 AM	7	152	19	178	19	113	8	140	24	276	45	345	31	126	6	163	826
07:45 AM	18	198	33	249	34	175	20	229	16	281	43	340	38	194	21	253	1071
Total	43	516	78	637	72	485	51	608	74	1139	149	1362	125	551	49	725	3332
08:00 AM	22	178	25	225	31	129	18	178	17	228	32	277	49	174	14	237	917
08:15 AM	20	206	38	264	36	159	25	220	11	294	43	348	33	181	21	235	1067
08:30 AM	27	205	33	265	43	132	42	217	9	247	43	299	36	172	10	218	999
08:45 AM	18	205	48	271	31	183	20	234	15	208	37	260	29	177	14	220	985
Total	87	794	144	1025	141	603	105	849	52	977	155	1184	147	704	59	910	3968
09:00 AM	22	244	39	305	18	138	15	171	18	245	49	312	43	156	18	217	1005
09:15 AM	23	155	30	208	28	157	13	198	20	266	46	332	32	137	13	182	920
09:30 AM	13	168	40	221	32	118	16	166	24	280	57	361	37	125	23	185	933
09:45 AM	13	127	28	168	23	177	11	211	16	261	37	314	30	138	16	184	877
Total	71	694	137	902	101	590	55	746	78	1052	189	1319	142	556	70	768	3735
Grand Total	201	2004	359	2564	314	1678	211	2203	204	3168	493	3865	414	1811	178	2403	11035
Apprch %	7.8	78.2	14		14.3	76.2	9.6		5.3	82	12.8		17.2	75.4	7.4		
Total %	1.8	18.2	3.3	23.2	2.8	15.2	1.9	20	1.8	28.7	4.5	35	3.8	16.4	1.6	21.8	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	18	198	33	249	34	175	20	229	16	281	43	340	38	194	21	253	1071
08:00 AM	22	178	25	225	31	129	18	178	17	228	32	277	49	174	14	237	917
08:15 AM	20	206	38	264	36	159	25	220	11	294	43	348	33	181	21	235	1067
08:30 AM	27	205	33	265	43	132	42	217	9	247	43	299	36	172	10	218	999
Total Volume	87	787	129	1003	144	595	105	844	53	1050	161	1264	156	721	66	943	4054
% App. Total	8.7	78.5	12.9		17.1	70.5	12.4		4.2	83.1	12.7		16.5	76.5	7		
PHF	.806	.955	.849	.946	.837	.850	.625	.921	.779	.893	.936	.908	.796	.929	.786	.932	.946

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	18	198	33	249	34	175	20	229	16	281	43	340	38	194	21	253
+15 mins.	22	178	25	225	31	129	18	178	17	228	32	277	49	174	14	237
+30 mins.	20	206	38	264	36	159	25	220	11	294	43	348	33	181	21	235
+45 mins.	27	205	33	265	43	132	42	217	9	247	43	299	36	172	10	218
Total Volume	87	787	129	1003	144	595	105	844	53	1050	161	1264	156	721	66	943
% App. Total	8.7	78.5	12.9		17.1	70.5	12.4		4.2	83.1	12.7		16.5	76.5	7	
PHF	.806	.955	.849	.946	.837	.850	.625	.921	.779	.893	.936	.908	.796	.929	.786	.932

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

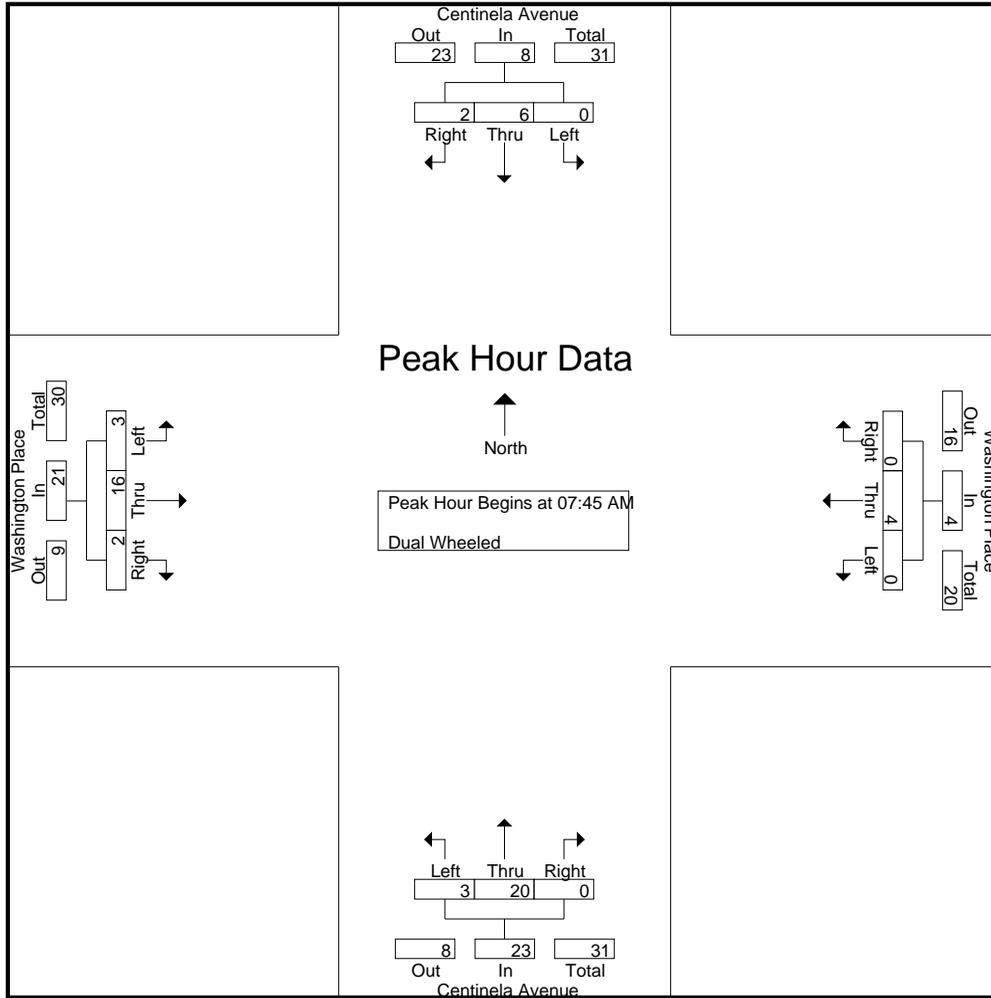
Groups Printed- Dual Wheeled

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
07:15 AM	0	3	1	4	1	2	0	3	0	3	1	4	1	0	0	1	12
07:30 AM	0	5	0	5	0	1	0	1	0	9	0	9	0	0	0	0	15
07:45 AM	0	0	0	0	0	0	0	0	1	6	0	7	0	0	1	1	8
Total	0	9	1	10	1	3	0	4	1	24	1	26	1	0	1	2	42
08:00 AM	0	3	1	4	0	1	0	1	0	1	0	1	0	2	0	2	8
08:15 AM	0	3	1	4	0	3	0	3	2	6	0	8	1	4	1	6	21
08:30 AM	0	0	0	0	0	0	0	0	0	7	0	7	2	10	0	12	19
08:45 AM	0	0	2	2	0	0	0	0	0	2	1	3	0	1	0	1	6
Total	0	6	4	10	0	4	0	4	2	16	1	19	3	17	1	21	54
09:00 AM	0	7	0	7	0	2	0	2	0	6	0	6	0	2	1	3	18
09:15 AM	1	5	0	6	1	3	0	4	0	5	0	5	0	3	1	4	19
09:30 AM	0	2	1	3	1	4	0	5	1	2	1	4	1	0	0	1	13
09:45 AM	1	5	0	6	1	2	0	3	1	4	0	5	1	1	0	2	16
Total	2	19	1	22	3	11	0	14	2	17	1	20	2	6	2	10	66
Grand Total	2	34	6	42	4	18	0	22	5	57	3	65	6	23	4	33	162
Apprch %	4.8	81	14.3		18.2	81.8	0		7.7	87.7	4.6		18.2	69.7	12.1		
Total %	1.2	21	3.7	25.9	2.5	11.1	0	13.6	3.1	35.2	1.9	40.1	3.7	14.2	2.5	20.4	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	1	6	0	7	0	0	1	1	8
08:00 AM	0	3	1	4	0	1	0	1	0	1	0	1	0	2	0	2	8
08:15 AM	0	3	1	4	0	3	0	3	2	6	0	8	1	4	1	6	21
08:30 AM	0	0	0	0	0	0	0	0	0	7	0	7	2	10	0	12	19
Total Volume	0	6	2	8	0	4	0	4	3	20	0	23	3	16	2	21	56
% App. Total	0	75	25		0	100	0		13	87	0		14.3	76.2	9.5		
PHF	.000	.500	.500	.500	.000	.333	.000	.333	.375	.714	.000	.719	.375	.400	.500	.438	.667

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	1	6	0	7	0	0	1	1
+15 mins.	0	3	1	4	0	1	0	1	0	1	0	1	0	2	0	2
+30 mins.	0	3	1	4	0	3	0	3	2	6	0	8	1	4	1	6
+45 mins.	0	0	0	0	0	0	0	0	0	7	0	7	2	10	0	12
Total Volume	0	6	2	8	0	4	0	4	3	20	0	23	3	16	2	21
% App. Total	0	75	25		0	100	0		13	87	0		14.3	76.2	9.5	
PHF	.000	.500	.500	.500	.000	.333	.000	.333	.375	.714	.000	.719	.375	.400	.500	.438

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

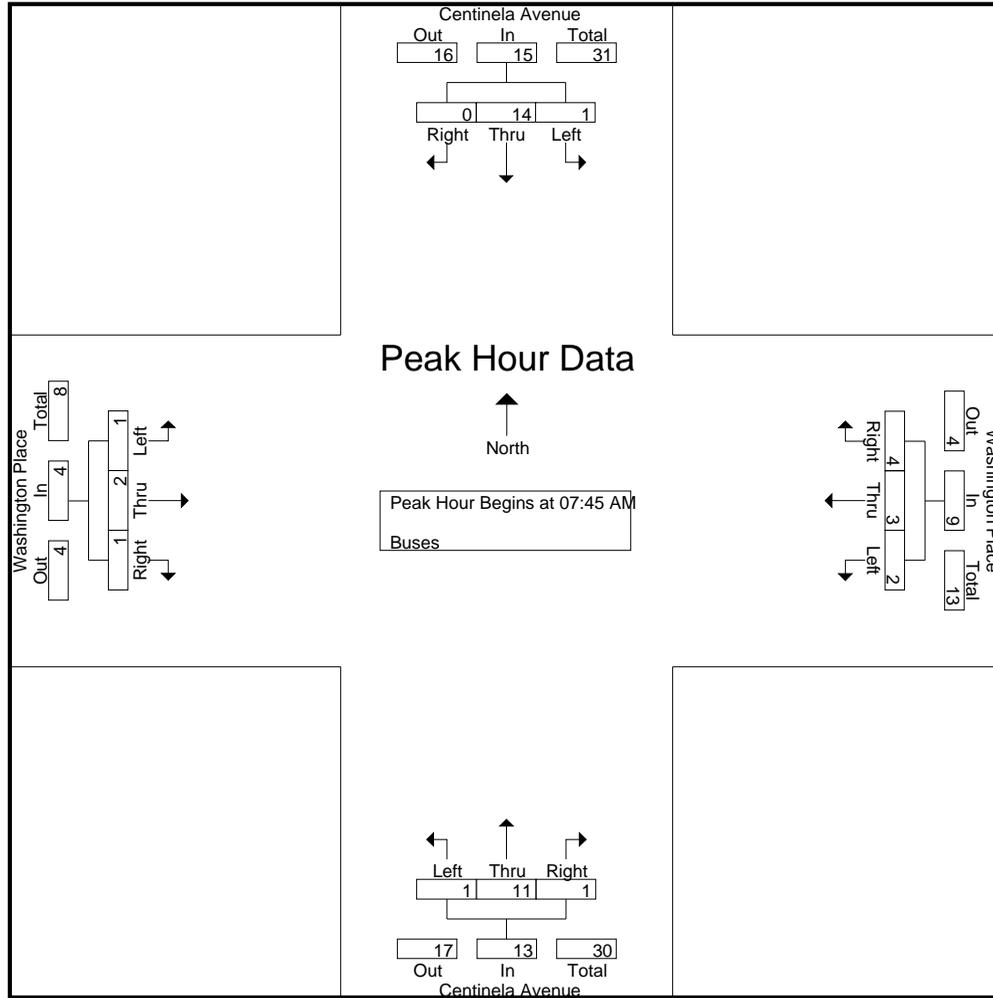
Groups Printed- Buses

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	4
07:15 AM	0	2	0	2	0	1	0	1	0	4	1	5	0	0	0	0	8
07:30 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:45 AM	0	1	0	1	0	2	3	5	0	4	0	4	0	0	1	1	11
Total	0	7	0	7	0	3	3	6	1	12	1	14	0	0	1	1	28
08:00 AM	0	2	0	2	1	0	1	2	0	4	0	4	0	1	0	1	9
08:15 AM	1	6	0	7	1	0	0	1	1	2	0	3	1	1	0	2	13
08:30 AM	0	5	0	5	0	1	0	1	0	1	1	2	0	0	0	0	8
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
Total	1	13	0	14	2	1	1	4	1	9	1	11	1	3	0	4	33
09:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
09:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
09:30 AM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
09:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
Total	0	4	0	4	0	0	0	0	0	4	1	5	0	1	0	1	10
Grand Total	1	24	0	25	2	4	4	10	2	25	3	30	1	4	1	6	71
Apprch %	4	96	0		20	40	40		6.7	83.3	10		16.7	66.7	16.7		
Total %	1.4	33.8	0	35.2	2.8	5.6	5.6	14.1	2.8	35.2	4.2	42.3	1.4	5.6	1.4	8.5	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	0	1	0	2	3	5	0	4	0	4	0	0	1	1	11
08:00 AM	0	2	0	2	1	0	1	2	0	4	0	4	0	1	0	1	9
08:15 AM	1	6	0	7	1	0	0	1	1	2	0	3	1	1	0	2	13
08:30 AM	0	5	0	5	0	1	0	1	0	1	1	2	0	0	0	0	8
Total Volume	1	14	0	15	2	3	4	9	1	11	1	13	1	2	1	4	41
% App. Total	6.7	93.3	0		22.2	33.3	44.4		7.7	84.6	7.7		25	50	25		
PHF	.250	.583	.000	.536	.500	.375	.333	.450	.250	.688	.250	.813	.250	.500	.250	.500	.788

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	1	0	1	0	2	3	5	0	4	0	4	0	0	1	1
+15 mins.	0	2	0	2	1	0	1	2	0	4	0	4	0	1	0	1
+30 mins.	1	6	0	7	1	0	0	1	1	2	0	3	1	1	0	2
+45 mins.	0	5	0	5	0	1	0	1	0	1	1	2	0	0	0	0
Total Volume	1	14	0	15	2	3	4	9	1	11	1	13	1	2	1	4
% App. Total	6.7	93.3	0		22.2	33.3	44.4		7.7	84.6	7.7		25	50	25	
PHF	.250	.583	.000	.536	.500	.375	.333	.450	.250	.688	.250	.813	.250	.500	.250	.500

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

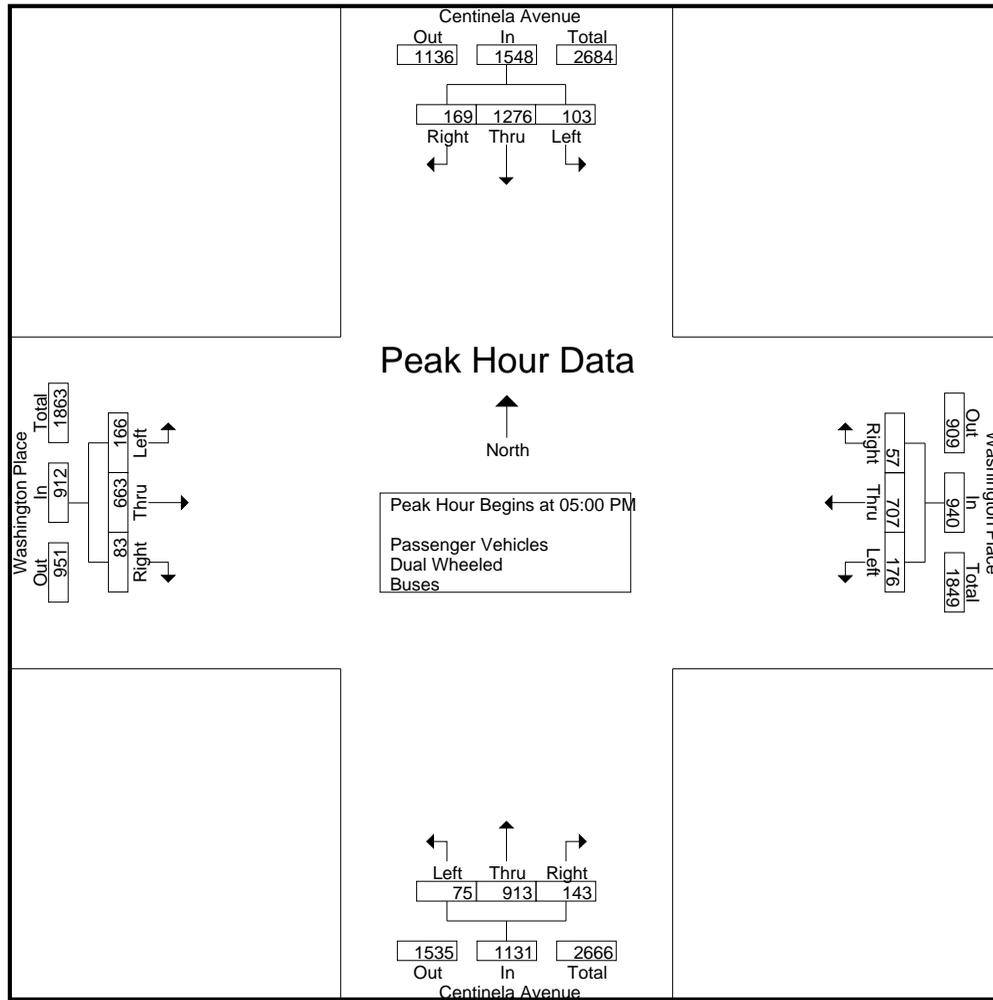
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	18	283	31	332	31	130	42	203	27	231	48	306	43	119	17	179	1020
03:15 PM	15	277	30	322	30	171	42	243	21	200	48	269	43	169	20	232	1066
03:30 PM	17	335	41	393	37	132	8	177	19	194	41	254	27	164	40	231	1055
03:45 PM	27	299	40	366	43	140	15	198	15	188	33	236	44	148	19	211	1011
Total	77	1194	142	1413	141	573	107	821	82	813	170	1065	157	600	96	853	4152
04:00 PM	30	313	39	382	42	143	11	196	27	191	35	253	31	115	16	162	993
04:15 PM	24	314	47	385	55	164	11	230	14	172	36	222	44	155	19	218	1055
04:30 PM	29	329	46	404	50	159	16	225	20	208	30	258	54	163	18	235	1122
04:45 PM	28	312	50	390	49	203	6	258	14	193	34	241	39	130	25	194	1083
Total	111	1268	182	1561	196	669	44	909	75	764	135	974	168	563	78	809	4253
05:00 PM	19	325	36	380	43	154	13	210	20	230	48	298	30	146	20	196	1084
05:15 PM	17	283	39	339	42	198	15	255	26	218	33	277	43	173	25	241	1112
05:30 PM	33	345	48	426	38	162	15	215	18	267	41	326	42	168	19	229	1196
05:45 PM	34	323	46	403	53	193	14	260	11	198	21	230	51	176	19	246	1139
Total	103	1276	169	1548	176	707	57	940	75	913	143	1131	166	663	83	912	4531
Grand Total	291	3738	493	4522	513	1949	208	2670	232	2490	448	3170	491	1826	257	2574	12936
Apprch %	6.4	82.7	10.9		19.2	73	7.8		7.3	78.5	14.1		19.1	70.9	10		
Total %	2.2	28.9	3.8	35	4	15.1	1.6	20.6	1.8	19.2	3.5	24.5	3.8	14.1	2	19.9	
Passenger Vehicles	287	3649	488	4424	508	1938	203	2649	231	2448	447	3126	479	1813	250	2542	12741
% Passenger Vehicles	98.6	97.6	99	97.8	99	99.4	97.6	99.2	99.6	98.3	99.8	98.6	97.6	99.3	97.3	98.8	98.5
Dual Wheeled	1	58	4	63	5	10	4	19	1	29	1	31	12	11	5	28	141
% Dual Wheeled	0.3	1.6	0.8	1.4	1	0.5	1.9	0.7	0.4	1.2	0.2	1	2.4	0.6	1.9	1.1	1.1
Buses	3	31	1	35	0	1	1	2	0	13	0	13	0	2	2	4	54
% Buses	1	0.8	0.2	0.8	0	0.1	0.5	0.1	0	0.5	0	0.4	0	0.1	0.8	0.2	0.4

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	325	36	380	43	154	13	210	20	230	48	298	30	146	20	196	1084
05:15 PM	17	283	39	339	42	198	15	255	26	218	33	277	43	173	25	241	1112
05:30 PM	33	345	48	426	38	162	15	215	18	267	41	326	42	168	19	229	1196
05:45 PM	34	323	46	403	53	193	14	260	11	198	21	230	51	176	19	246	1139
Total Volume	103	1276	169	1548	176	707	57	940	75	913	143	1131	166	663	83	912	4531
% App. Total	6.7	82.4	10.9		18.7	75.2	6.1		6.6	80.7	12.6		18.2	72.7	9.1		
PHF	.757	.925	.880	.908	.830	.893	.950	.904	.721	.855	.745	.867	.814	.942	.830	.927	.947

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	30	313	39	382	50	159	16	225	14	193	34	241	30	146	20	196
+15 mins.	24	314	47	385	49	203	6	258	20	230	48	298	43	173	25	241
+30 mins.	29	329	46	404	43	154	13	210	26	218	33	277	42	168	19	229
+45 mins.	28	312	50	390	42	198	15	255	18	267	41	326	51	176	19	246
Total Volume	111	1268	182	1561	184	714	50	948	78	908	156	1142	166	663	83	912
% App. Total	7.1	81.2	11.7		19.4	75.3	5.3		6.8	79.5	13.7		18.2	72.7	9.1	
PHF	.925	.964	.910	.966	.920	.879	.781	.919	.750	.850	.813	.876	.814	.942	.830	.927

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

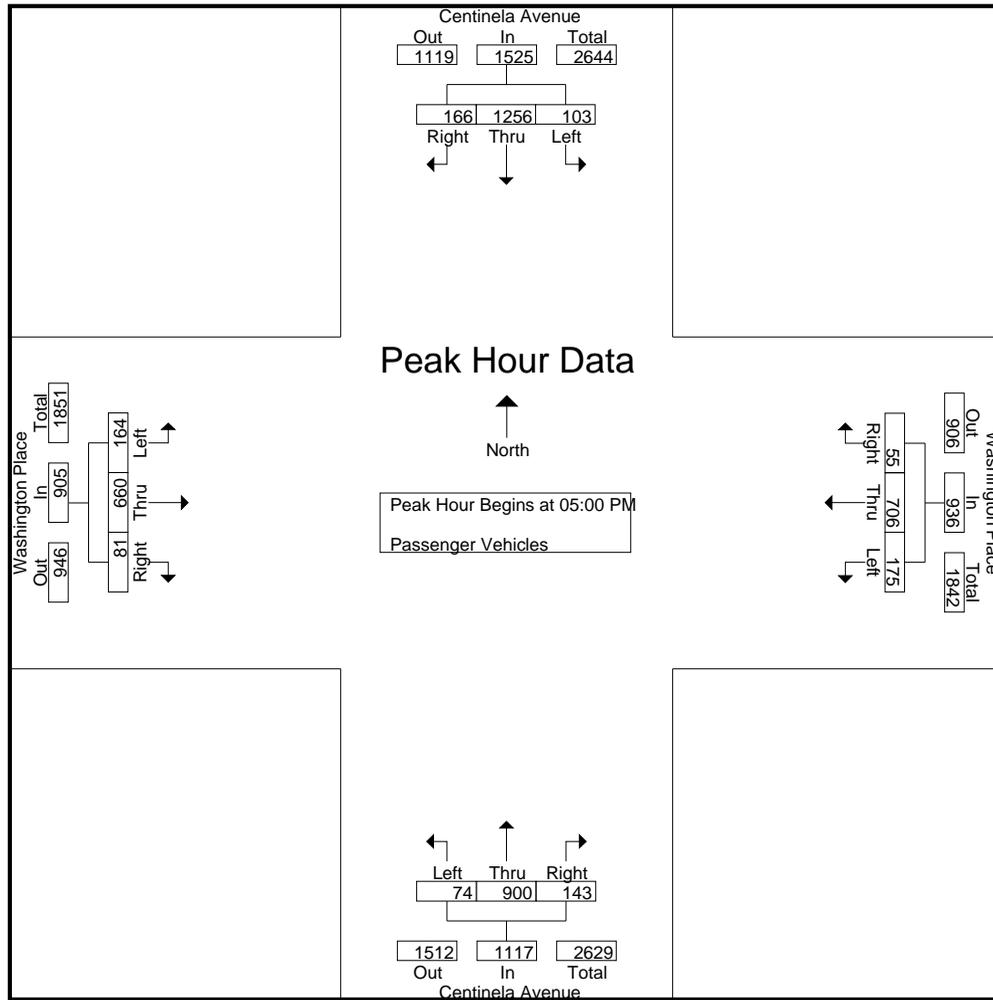
Groups Printed- Passenger Vehicles

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	18	272	31	321	30	129	42	201	27	227	48	302	41	118	17	176	1000
03:15 PM	13	265	30	308	30	168	40	238	21	197	48	266	42	167	20	229	1041
03:30 PM	17	327	40	384	36	131	8	175	19	188	41	248	26	161	37	224	1031
03:45 PM	27	288	40	355	43	138	14	195	15	182	32	229	42	147	19	208	987
Total	75	1152	141	1368	139	566	104	809	82	794	169	1045	151	593	93	837	4059
04:00 PM	28	308	39	375	42	142	11	195	27	189	35	251	30	115	16	161	982
04:15 PM	24	307	47	378	55	163	11	229	14	170	36	220	43	154	19	216	1043
04:30 PM	29	323	46	398	48	158	16	222	20	207	30	257	53	162	17	232	1109
04:45 PM	28	303	49	380	49	203	6	258	14	188	34	236	38	129	24	191	1065
Total	109	1241	181	1531	194	666	44	904	75	754	135	964	164	560	76	800	4199
05:00 PM	19	320	35	374	43	154	13	210	19	226	48	293	30	146	20	196	1073
05:15 PM	17	280	39	336	42	197	15	254	26	217	33	276	42	171	25	238	1104
05:30 PM	33	338	46	417	38	162	15	215	18	263	41	322	42	167	17	226	1180
05:45 PM	34	318	46	398	52	193	12	257	11	194	21	226	50	176	19	245	1126
Total	103	1256	166	1525	175	706	55	936	74	900	143	1117	164	660	81	905	4483
Grand Total	287	3649	488	4424	508	1938	203	2649	231	2448	447	3126	479	1813	250	2542	12741
Apprch %	6.5	82.5	11		19.2	73.2	7.7		7.4	78.3	14.3		18.8	71.3	9.8		
Total %	2.3	28.6	3.8	34.7	4	15.2	1.6	20.8	1.8	19.2	3.5	24.5	3.8	14.2	2	20	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	320	35	374	43	154	13	210	19	226	48	293	30	146	20	196	1073
05:15 PM	17	280	39	336	42	197	15	254	26	217	33	276	42	171	25	238	1104
05:30 PM	33	338	46	417	38	162	15	215	18	263	41	322	42	167	17	226	1180
05:45 PM	34	318	46	398	52	193	12	257	11	194	21	226	50	176	19	245	1126
Total Volume	103	1256	166	1525	175	706	55	936	74	900	143	1117	164	660	81	905	4483
% App. Total	6.8	82.4	10.9		18.7	75.4	5.9		6.6	80.6	12.8		18.1	72.9	9		
PHF	.757	.929	.902	.914	.841	.896	.917	.911	.712	.856	.745	.867	.820	.938	.810	.923	.950

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	19	320	35	374	43	154	13	210	19	226	48	293	30	146	20	196
+15 mins.	17	280	39	336	42	197	15	254	26	217	33	276	42	171	25	238
+30 mins.	33	338	46	417	38	162	15	215	18	263	41	322	42	167	17	226
+45 mins.	34	318	46	398	52	193	12	257	11	194	21	226	50	176	19	245
Total Volume	103	1256	166	1525	175	706	55	936	74	900	143	1117	164	660	81	905
% App. Total	6.8	82.4	10.9		18.7	75.4	5.9		6.6	80.6	12.8		18.1	72.9	9	
PHF	.757	.929	.902	.914	.841	.896	.917	.911	.712	.856	.745	.867	.820	.938	.810	.923

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

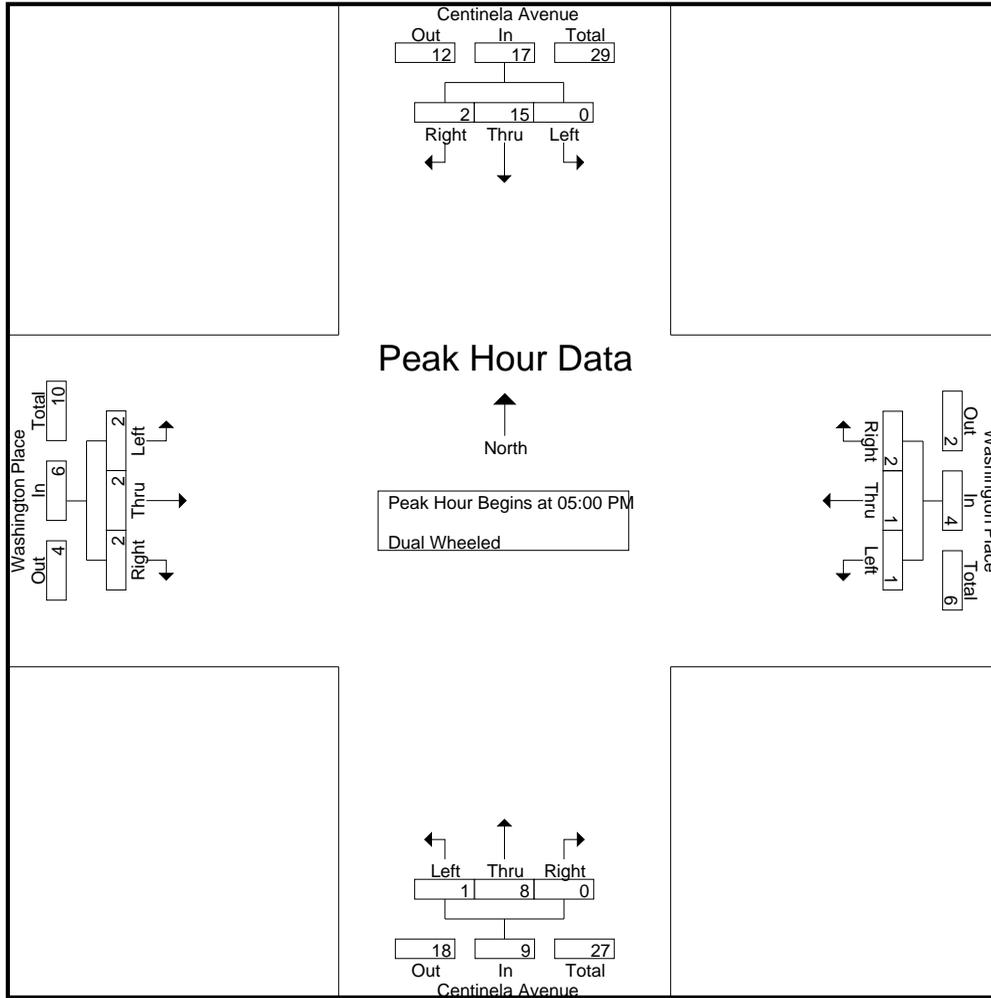
Groups Printed- Dual Wheeled

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	5	0	5	1	1	0	2	0	3	0	3	2	0	0	2	12
03:15 PM	0	6	0	6	0	2	2	4	0	3	0	3	1	2	0	3	16
03:30 PM	0	6	1	7	1	1	0	2	0	5	0	5	1	3	2	6	20
03:45 PM	0	8	0	8	0	2	0	2	0	4	1	5	2	1	0	3	18
Total	0	25	1	26	2	6	2	10	0	15	1	16	6	6	2	14	66
04:00 PM	1	4	0	5	0	1	0	1	0	0	0	0	1	0	0	1	7
04:15 PM	0	7	0	7	0	1	0	1	0	1	0	1	1	1	0	2	11
04:30 PM	0	1	0	1	2	1	0	3	0	1	0	1	1	1	0	2	7
04:45 PM	0	6	1	7	0	0	0	0	0	4	0	4	1	1	1	3	14
Total	1	18	1	20	2	3	0	5	0	6	0	6	4	3	1	8	39
05:00 PM	0	5	0	5	0	0	0	0	1	3	0	4	0	0	0	0	9
05:15 PM	0	2	0	2	0	1	0	1	0	0	0	0	1	2	0	3	6
05:30 PM	0	5	2	7	0	0	0	0	0	2	0	2	0	0	2	2	11
05:45 PM	0	3	0	3	1	0	2	3	0	3	0	3	1	0	0	1	10
Total	0	15	2	17	1	1	2	4	1	8	0	9	2	2	2	6	36
Grand Total	1	58	4	63	5	10	4	19	1	29	1	31	12	11	5	28	141
Apprch %	1.6	92.1	6.3		26.3	52.6	21.1		3.2	93.5	3.2		42.9	39.3	17.9		
Total %	0.7	41.1	2.8	44.7	3.5	7.1	2.8	13.5	0.7	20.6	0.7	22	8.5	7.8	3.5	19.9	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	5	0	5	0	0	0	0	1	3	0	4	0	0	0	0	9
05:15 PM	0	2	0	2	0	1	0	1	0	0	0	0	1	2	0	3	6
05:30 PM	0	5	2	7	0	0	0	0	0	2	0	2	0	0	2	2	11
05:45 PM	0	3	0	3	1	0	2	3	0	3	0	3	1	0	0	1	10
Total Volume	0	15	2	17	1	1	2	4	1	8	0	9	2	2	2	6	36
% App. Total	0	88.2	11.8		25	25	50		11.1	88.9	0		33.3	33.3	33.3		
PHF	.000	.750	.250	.607	.250	.250	.250	.333	.250	.667	.000	.563	.500	.250	.250	.500	.818

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	5	0	5	0	0	0	0	1	3	0	4	0	0	0	0
+15 mins.	0	2	0	2	0	1	0	1	0	0	0	0	0	1	2	0
+30 mins.	0	5	2	7	0	0	0	0	0	2	0	2	0	0	0	2
+45 mins.	0	3	0	3	1	0	2	3	0	3	0	3	1	0	0	1
Total Volume	0	15	2	17	1	1	2	4	1	8	0	9	2	2	2	6
% App. Total	0	88.2	11.8		25	25	50		11.1	88.9	0		33.3	33.3	33.3	
PHF	.000	.750	.250	.607	.250	.250	.250	.333	.250	.667	.000	.563	.500	.250	.250	.500

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
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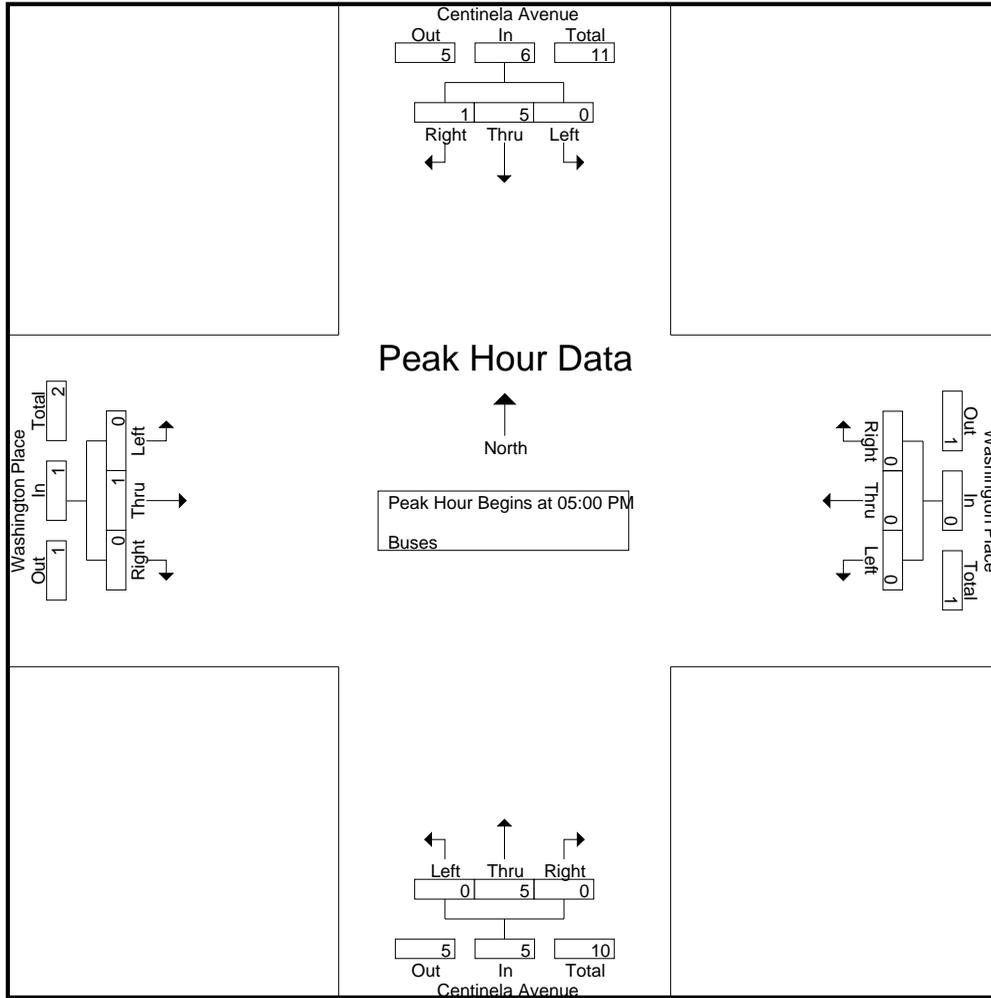
Groups Printed- Buses

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	6	0	6	0	0	0	0	0	1	0	1	0	1	0	1	8
03:15 PM	2	6	0	8	0	1	0	1	0	0	0	0	0	0	0	0	9
03:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	1	1	4
03:45 PM	0	3	0	3	0	0	1	1	0	2	0	2	0	0	0	0	6
Total	2	17	0	19	0	1	1	2	0	4	0	4	0	1	1	2	27
04:00 PM	1	1	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	1	1	6
04:45 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	1	9	0	10	0	0	0	0	0	4	0	4	0	0	1	1	15
05:00 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	1	0	1	5
05:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	5	1	6	0	0	0	0	0	5	0	5	0	1	0	1	12
Grand Total	3	31	1	35	0	1	1	2	0	13	0	13	0	2	2	4	54
Apprch %	8.6	88.6	2.9		0	50	50		0	100	0		0	50	50		
Total %	5.6	57.4	1.9	64.8	0	1.9	1.9	3.7	0	24.1	0	24.1	0	3.7	3.7	7.4	

Start Time	Centinela Avenue Southbound				Washington Place Westbound				Centinela Avenue Northbound				Washington Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	1	0	1	5
05:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total Volume	0	5	1	6	0	0	0	0	0	5	0	5	0	1	0	1	12
% App. Total	0	83.3	16.7		0	0	0		0	100	0		0	100	0		
PHF	.000	.625	.250	.750	.000	.000	.000	.000	.000	.625	.000	.625	.000	.250	.000	.250	.600

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Place
 Weather: Clear

File Name : 10_CVC_Centinela_Washington PI Pm
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	1	0	1
+45 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	5	1	6	0	0	0	0	0	5	0	5	0	1	0	1
% App. Total	0	83.3	16.7		0	0	0	0	0	100	0		0	100	0	
PHF	.000	.625	.250	.750	.000	.000	.000	.000	.000	.625	.000	.625	.000	.250	.000	.250

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

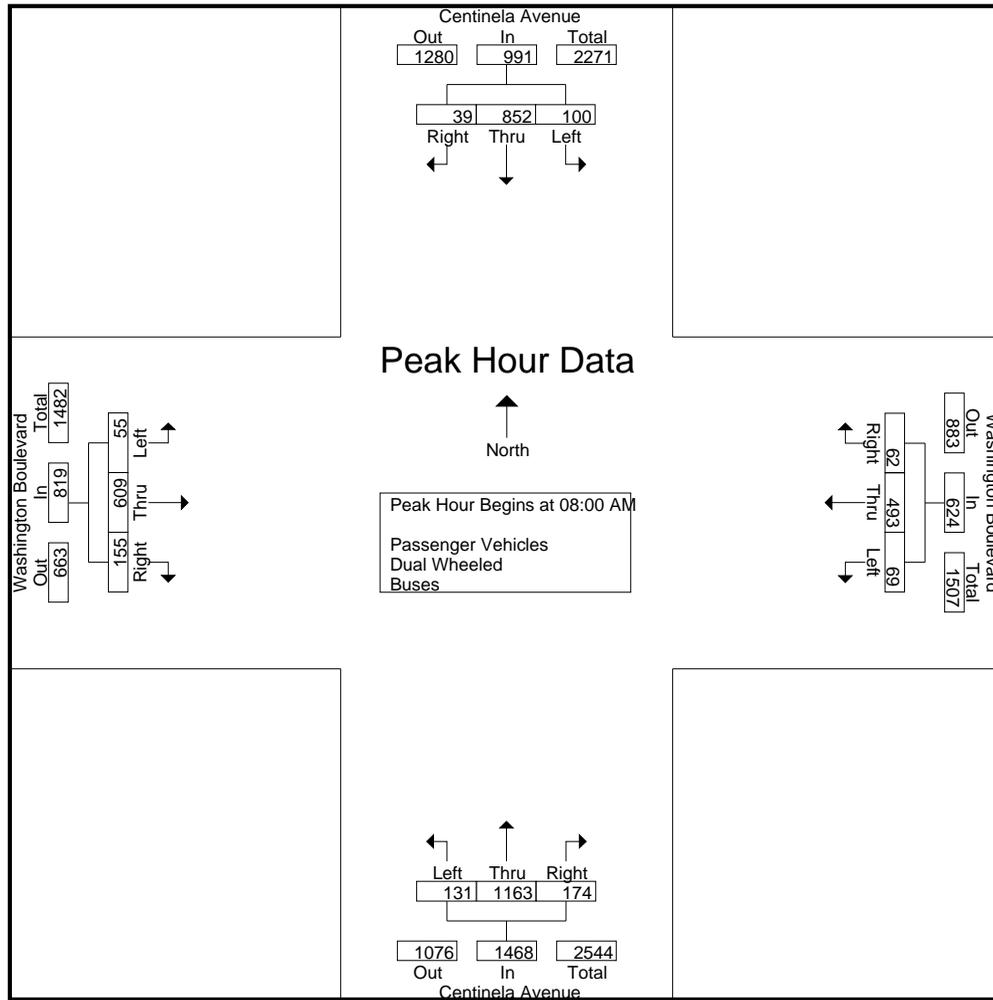
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	69	4	78	12	65	12	89	26	316	18	360	10	47	25	82	609
07:15 AM	15	109	2	126	12	78	15	105	33	342	31	406	9	77	16	102	739
07:30 AM	16	117	6	139	11	128	14	153	35	321	30	386	8	94	30	132	810
07:45 AM	19	173	3	195	16	143	12	171	49	297	26	372	14	167	50	231	969
Total	55	468	15	538	51	414	53	518	143	1276	105	1524	41	385	121	547	3127
08:00 AM	23	192	9	224	11	129	10	150	26	312	37	375	12	177	37	226	975
08:15 AM	26	218	8	252	17	149	19	185	25	326	38	389	11	154	41	206	1032
08:30 AM	27	216	11	254	14	89	18	121	33	281	52	366	14	128	31	173	914
08:45 AM	24	226	11	261	27	126	15	168	47	244	47	338	18	150	46	214	981
Total	100	852	39	991	69	493	62	624	131	1163	174	1468	55	609	155	819	3902
09:00 AM	24	208	19	251	26	128	19	173	33	270	39	342	10	110	45	165	931
09:15 AM	19	194	6	219	22	127	26	175	28	303	33	364	15	115	37	167	925
09:30 AM	31	196	10	237	16	114	23	153	32	287	38	357	12	79	45	136	883
09:45 AM	27	149	11	187	25	120	20	165	39	256	26	321	17	120	33	170	843
Total	101	747	46	894	89	489	88	666	132	1116	136	1384	54	424	160	638	3582
Grand Total	256	2067	100	2423	209	1396	203	1808	406	3555	415	4376	150	1418	436	2004	10611
Apprch %	10.6	85.3	4.1		11.6	77.2	11.2		9.3	81.2	9.5		7.5	70.8	21.8		
Total %	2.4	19.5	0.9	22.8	2	13.2	1.9	17	3.8	33.5	3.9	41.2	1.4	13.4	4.1	18.9	
Passenger Vehicles	245	2013	96	2354	208	1365	196	1769	398	3484	410	4292	146	1392	430	1968	10383
% Passenger Vehicles	95.7	97.4	96	97.2	99.5	97.8	96.6	97.8	98	98	98.8	98.1	97.3	98.2	98.6	98.2	97.9
Dual Wheeled	5	34	4	43	1	13	3	17	8	44	3	55	4	15	6	25	140
% Dual Wheeled	2	1.6	4	1.8	0.5	0.9	1.5	0.9	2	1.2	0.7	1.3	2.7	1.1	1.4	1.2	1.3
Buses	6	20	0	26	0	18	4	22	0	27	2	29	0	11	0	11	88
% Buses	2.3	1	0	1.1	0	1.3	2	1.2	0	0.8	0.5	0.7	0	0.8	0	0.5	0.8

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	23	192	9	224	11	129	10	150	26	312	37	375	12	177	37	226	975
08:15 AM	26	218	8	252	17	149	19	185	25	326	38	389	11	154	41	206	1032
08:30 AM	27	216	11	254	14	89	18	121	33	281	52	366	14	128	31	173	914
08:45 AM	24	226	11	261	27	126	15	168	47	244	47	338	18	150	46	214	981
Total Volume	100	852	39	991	69	493	62	624	131	1163	174	1468	55	609	155	819	3902
% App. Total	10.1	86	3.9		11.1	79	9.9		8.9	79.2	11.9		6.7	74.4	18.9		
PHF	.926	.942	.886	.949	.639	.827	.816	.843	.697	.892	.837	.943	.764	.860	.842	.906	.945

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:15 AM				08:45 AM				07:15 AM				07:45 AM			
+0 mins.	26	218	8	252	27	126	15	168	33	342	31	406	14	167	50	231
+15 mins.	27	216	11	254	26	128	19	173	35	321	30	386	12	177	37	226
+30 mins.	24	226	11	261	22	127	26	175	49	297	26	372	11	154	41	206
+45 mins.	24	208	19	251	16	114	23	153	26	312	37	375	14	128	31	173
Total Volume	101	868	49	1018	91	495	83	669	143	1272	124	1539	51	626	159	836
% App. Total	9.9	85.3	4.8		13.6	74	12.4		9.3	82.7	8.1		6.1	74.9	19	
PHF	.935	.960	.645	.975	.843	.967	.798	.956	.730	.930	.838	.948	.911	.884	.795	.905

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

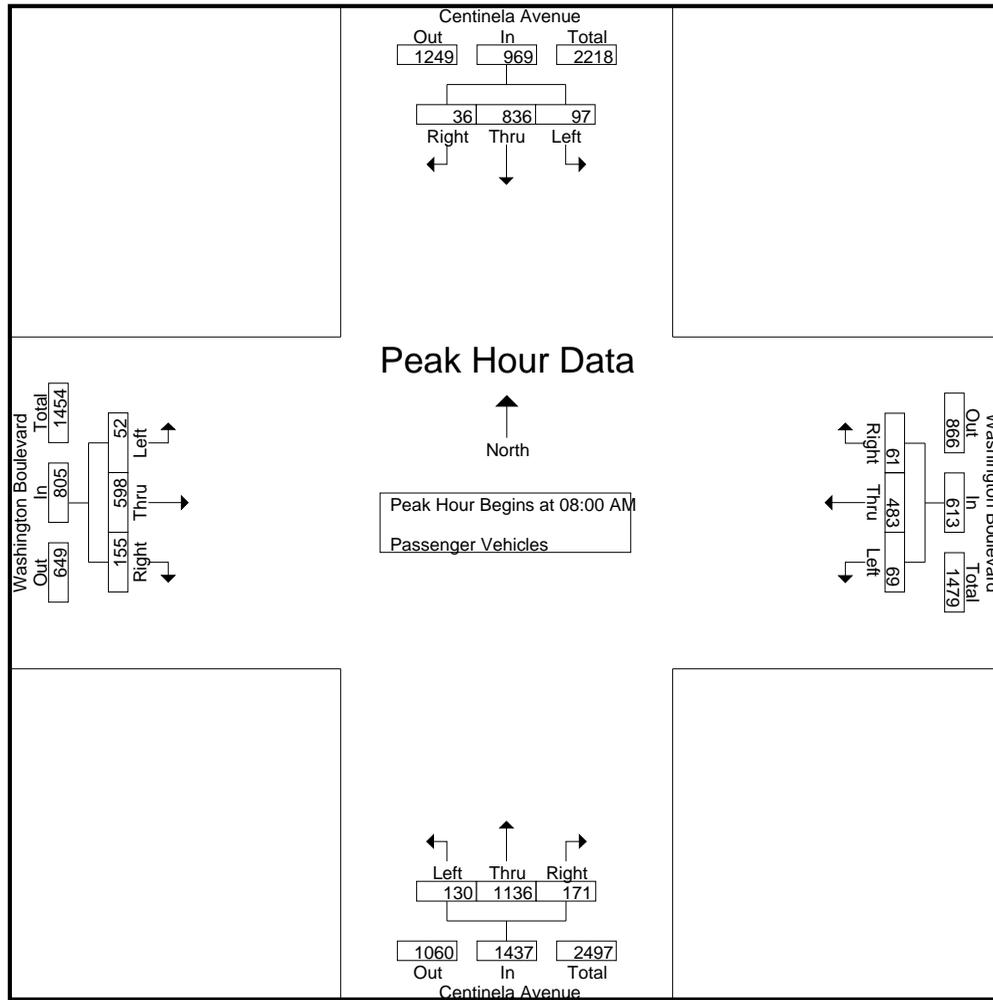
Groups Printed- Passenger Vehicles

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	65	4	74	12	64	11	87	26	309	18	353	10	46	24	80	594
07:15 AM	14	105	1	120	12	72	15	99	32	330	30	392	9	75	16	100	711
07:30 AM	14	113	6	133	10	126	14	150	32	312	30	374	7	93	29	129	786
07:45 AM	18	170	3	191	16	140	12	168	48	293	26	367	14	164	48	226	952
Total	51	453	14	518	50	402	52	504	138	1244	104	1486	40	378	117	535	3043
08:00 AM	22	189	6	217	11	127	10	148	25	303	37	365	11	172	37	220	950
08:15 AM	26	213	8	247	17	143	18	178	25	318	38	381	11	151	41	203	1009
08:30 AM	25	210	11	246	14	88	18	120	33	275	50	358	13	127	31	171	895
08:45 AM	24	224	11	259	27	125	15	167	47	240	46	333	17	148	46	211	970
Total	97	836	36	969	69	483	61	613	130	1136	171	1437	52	598	155	805	3824
09:00 AM	24	207	19	250	26	126	16	168	33	266	39	338	10	108	45	163	919
09:15 AM	18	185	6	209	22	125	25	172	27	299	33	359	15	113	37	165	905
09:30 AM	28	190	10	228	16	111	22	149	32	286	38	356	12	78	44	134	867
09:45 AM	27	142	11	180	25	118	20	163	38	253	25	316	17	117	32	166	825
Total	97	724	46	867	89	480	83	652	130	1104	135	1369	54	416	158	628	3516
Grand Total	245	2013	96	2354	208	1365	196	1769	398	3484	410	4292	146	1392	430	1968	10383
Apprch %	10.4	85.5	4.1		11.8	77.2	11.1		9.3	81.2	9.6		7.4	70.7	21.8		
Total %	2.4	19.4	0.9	22.7	2	13.1	1.9	17	3.8	33.6	3.9	41.3	1.4	13.4	4.1	19	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	22	189	6	217	11	127	10	148	25	303	37	365	11	172	37	220	950
08:15 AM	26	213	8	247	17	143	18	178	25	318	38	381	11	151	41	203	1009
08:30 AM	25	210	11	246	14	88	18	120	33	275	50	358	13	127	31	171	895
08:45 AM	24	224	11	259	27	125	15	167	47	240	46	333	17	148	46	211	970
Total Volume	97	836	36	969	69	483	61	613	130	1136	171	1437	52	598	155	805	3824
% App. Total	10	86.3	3.7		11.3	78.8	10		9	79.1	11.9		6.5	74.3	19.3		
PHF	.933	.933	.818	.935	.639	.844	.847	.861	.691	.893	.855	.943	.765	.869	.842	.915	.947

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	22	189	6	217	11	127	10	148	25	303	37	365	11	172	37	220
+15 mins.	26	213	8	247	17	143	18	178	25	318	38	381	11	151	41	203
+30 mins.	25	210	11	246	14	88	18	120	33	275	50	358	13	127	31	171
+45 mins.	24	224	11	259	27	125	15	167	47	240	46	333	17	148	46	211
Total Volume	97	836	36	969	69	483	61	613	130	1136	171	1437	52	598	155	805
% App. Total	10	86.3	3.7		11.3	78.8	10		9	79.1	11.9		6.5	74.3	19.3	
PHF	.933	.933	.818	.935	.639	.844	.847	.861	.691	.893	.855	.943	.765	.869	.842	.915

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

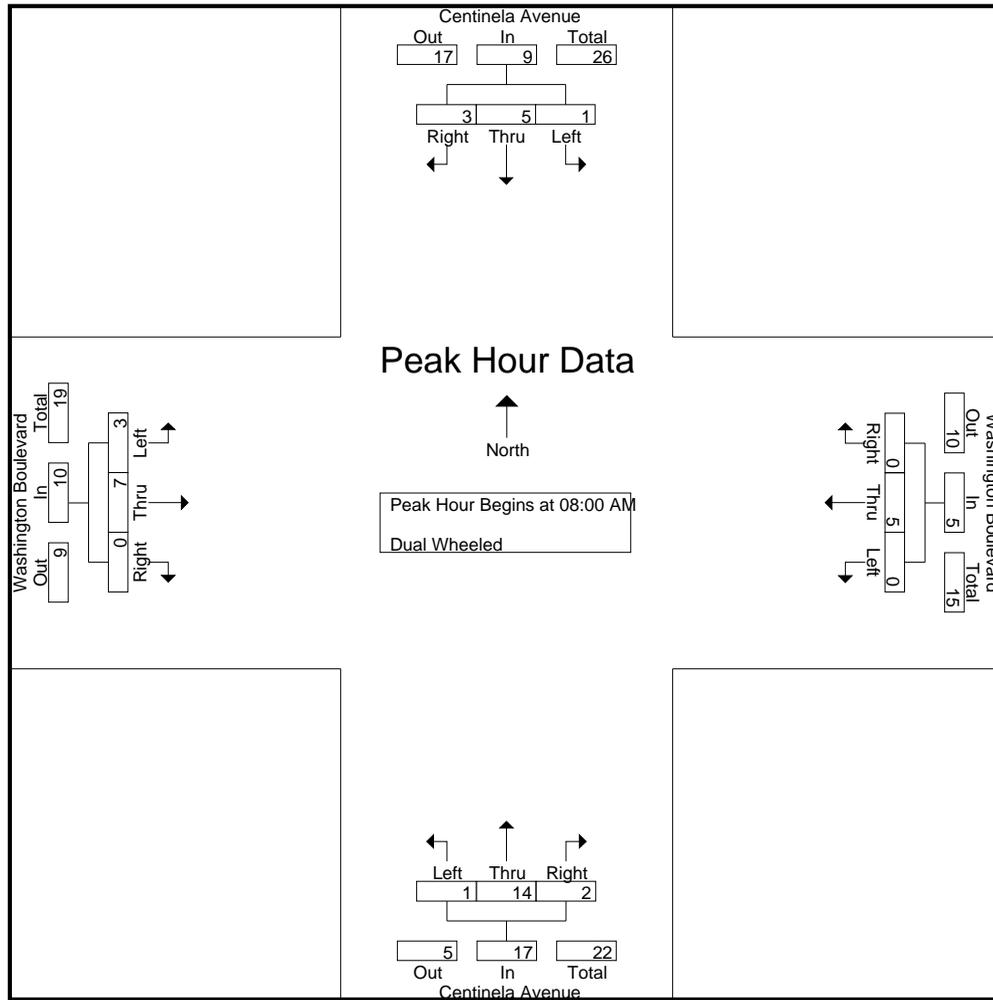
Groups Printed- Dual Wheeled

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	3	0	3	0	0	1	1	0	5	0	5	0	0	1	1	10
07:15 AM	1	3	1	5	0	1	0	1	1	6	0	7	0	2	0	2	15
07:30 AM	0	2	0	2	1	1	0	2	3	7	0	10	1	0	1	2	16
07:45 AM	0	2	0	2	0	1	0	1	1	3	0	4	0	2	2	4	11
Total	1	10	1	12	1	3	1	5	5	21	0	26	1	4	4	9	52
08:00 AM	0	2	3	5	0	2	0	2	1	4	0	5	1	3	0	4	16
08:15 AM	0	0	0	0	0	2	0	2	0	4	0	4	0	2	0	2	8
08:30 AM	1	3	0	4	0	1	0	1	0	4	2	6	1	1	0	2	13
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	1	0	2	4
Total	1	5	3	9	0	5	0	5	1	14	2	17	3	7	0	10	41
09:00 AM	0	0	0	0	0	1	1	2	0	4	0	4	0	1	0	1	7
09:15 AM	1	8	0	9	0	0	1	1	1	3	0	4	0	1	0	1	15
09:30 AM	2	5	0	7	0	2	0	2	0	1	0	1	0	0	1	1	11
09:45 AM	0	6	0	6	0	2	0	2	1	1	1	3	0	2	1	3	14
Total	3	19	0	22	0	5	2	7	2	9	1	12	0	4	2	6	47
Grand Total	5	34	4	43	1	13	3	17	8	44	3	55	4	15	6	25	140
Apprch %	11.6	79.1	9.3		5.9	76.5	17.6		14.5	80	5.5		16	60	24		
Total %	3.6	24.3	2.9	30.7	0.7	9.3	2.1	12.1	5.7	31.4	2.1	39.3	2.9	10.7	4.3	17.9	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	2	3	5	0	2	0	2	1	4	0	5	1	3	0	4	16
08:15 AM	0	0	0	0	0	2	0	2	0	4	0	4	0	2	0	2	8
08:30 AM	1	3	0	4	0	1	0	1	0	4	2	6	1	1	0	2	13
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	1	0	2	4
Total Volume	1	5	3	9	0	5	0	5	1	14	2	17	3	7	0	10	41
% App. Total	11.1	55.6	33.3		0	100	0		5.9	82.4	11.8		30	70	0		
PHF	.250	.417	.250	.450	.000	.625	.000	.625	.250	.875	.250	.708	.750	.583	.000	.625	.641

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	2	3	5	0	2	0	2	1	4	0	5	1	3	0	4
+15 mins.	0	0	0	0	0	2	0	2	0	4	0	4	0	2	0	2
+30 mins.	1	3	0	4	0	1	0	1	0	4	2	6	1	1	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	2	0	2	1	1	0	2
Total Volume	1	5	3	9	0	5	0	5	1	14	2	17	3	7	0	10
% App. Total	11.1	55.6	33.3		0	100	0		5.9	82.4	11.8		30	70	0	
PHF	.250	.417	.250	.450	.000	.625	.000	.625	.250	.875	.250	.708	.750	.583	.000	.625

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

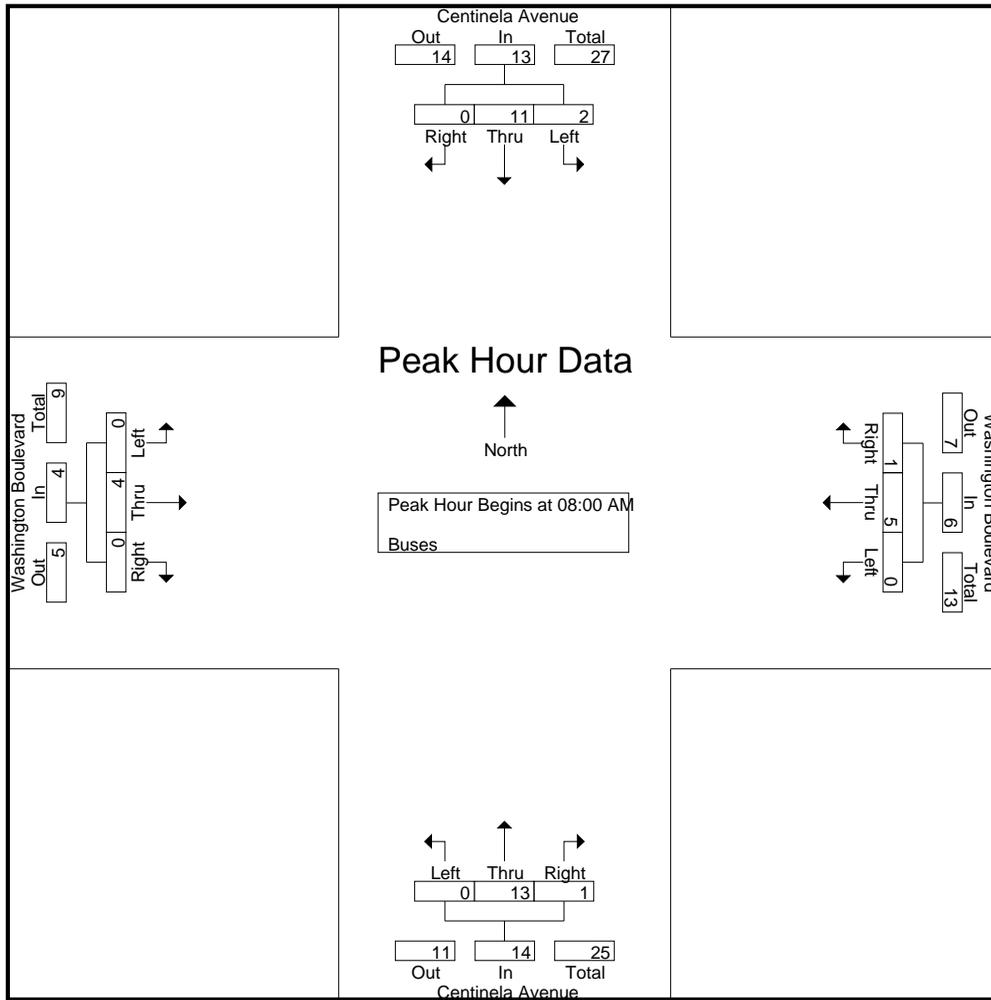
Groups Printed- Buses

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	1	0	1	0	2	0	2	0	1	0	1	5
07:15 AM	0	1	0	1	0	5	0	5	0	6	1	7	0	0	0	0	13
07:30 AM	2	2	0	4	0	1	0	1	0	2	0	2	0	1	0	1	8
07:45 AM	1	1	0	2	0	2	0	2	0	1	0	1	0	1	0	1	6
Total	3	5	0	8	0	9	0	9	0	11	1	12	0	3	0	3	32
08:00 AM	1	1	0	2	0	0	0	0	0	5	0	5	0	2	0	2	9
08:15 AM	0	5	0	5	0	4	1	5	0	4	0	4	0	1	0	1	15
08:30 AM	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
08:45 AM	0	2	0	2	0	1	0	1	0	2	1	3	0	1	0	1	7
Total	2	11	0	13	0	5	1	6	0	13	1	14	0	4	0	4	37
09:00 AM	0	1	0	1	0	1	2	3	0	0	0	0	0	1	0	1	5
09:15 AM	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1	5
09:30 AM	1	1	0	2	0	1	1	2	0	0	0	0	0	1	0	1	5
09:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	4
Total	1	4	0	5	0	4	3	7	0	3	0	3	0	4	0	4	19
Grand Total	6	20	0	26	0	18	4	22	0	27	2	29	0	11	0	11	88
Apprch %	23.1	76.9	0		0	81.8	18.2		0	93.1	6.9		0	100	0		
Total %	6.8	22.7	0	29.5	0	20.5	4.5	25	0	30.7	2.3	33	0	12.5	0	12.5	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	1	0	2	0	0	0	0	0	5	0	5	0	2	0	2	9
08:15 AM	0	5	0	5	0	4	1	5	0	4	0	4	0	1	0	1	15
08:30 AM	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
08:45 AM	0	2	0	2	0	1	0	1	0	2	1	3	0	1	0	1	7
Total Volume	2	11	0	13	0	5	1	6	0	13	1	14	0	4	0	4	37
% App. Total	15.4	84.6	0		0	83.3	16.7		0	92.9	7.1		0	100	0		
PHF	.500	.550	.000	.650	.000	.313	.250	.300	.000	.650	.250	.700	.000	.500	.000	.500	.617

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd AM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	1	0	2	0	0	0	0	0	5	0	5	0	2	0	2
+15 mins.	0	5	0	5	0	4	1	5	0	4	0	4	0	1	0	1
+30 mins.	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	2	0	2	0	1	0	1	0	2	1	3	0	1	0	1
Total Volume	2	11	0	13	0	5	1	6	0	13	1	14	0	4	0	4
% App. Total	15.4	84.6	0		0	83.3	16.7		0	92.9	7.1		0	100	0	
PHF	.500	.550	.000	.650	.000	.313	.250	.300	.000	.650	.250	.700	.000	.500	.000	.500

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

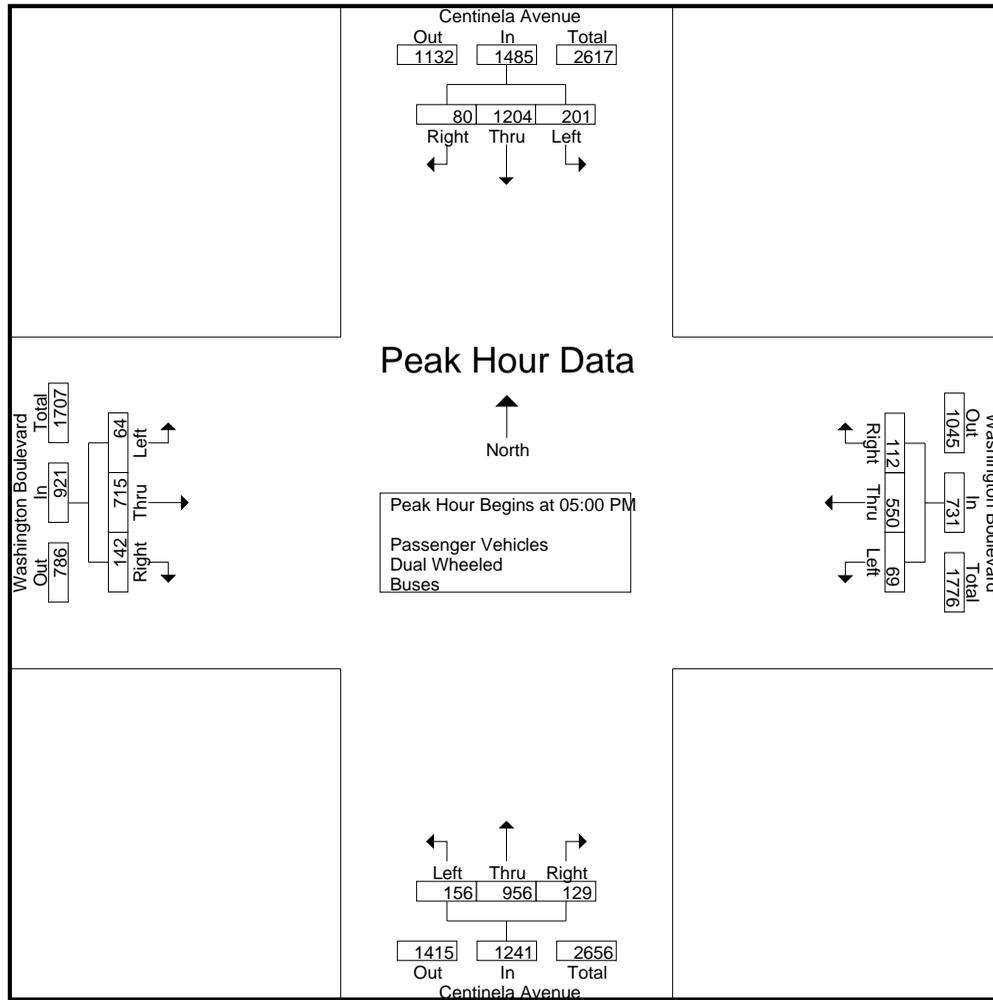
Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	35	272	14	321	21	133	15	169	32	256	35	323	19	127	37	183	996
03:15 PM	28	259	6	293	20	146	16	182	36	184	25	245	19	156	46	221	941
03:30 PM	46	325	14	385	20	111	21	152	31	180	22	233	12	145	42	199	969
03:45 PM	28	306	15	349	18	137	23	178	27	184	21	232	21	168	46	235	994
Total	137	1162	49	1348	79	527	75	681	126	804	103	1033	71	596	171	838	3900
04:00 PM	42	308	11	361	12	119	19	150	33	190	30	253	14	140	37	191	955
04:15 PM	40	301	13	354	17	134	27	178	29	189	25	243	23	180	46	249	1024
04:30 PM	41	348	15	404	26	164	21	211	40	189	27	256	12	161	55	228	1099
04:45 PM	34	305	15	354	22	132	22	176	41	214	14	269	20	133	45	198	997
Total	157	1262	54	1473	77	549	89	715	143	782	96	1021	69	614	183	866	4075
05:00 PM	50	317	19	386	16	150	28	194	43	253	36	332	16	155	39	210	1122
05:15 PM	35	249	26	310	18	122	26	166	34	228	40	302	19	178	29	226	1004
05:30 PM	58	325	25	408	17	132	36	185	32	256	26	314	14	169	31	214	1121
05:45 PM	58	313	10	381	18	146	22	186	47	219	27	293	15	213	43	271	1131
Total	201	1204	80	1485	69	550	112	731	156	956	129	1241	64	715	142	921	4378
Grand Total	495	3628	183	4306	225	1626	276	2127	425	2542	328	3295	204	1925	496	2625	12353
Apprch %	11.5	84.3	4.2		10.6	76.4	13		12.9	77.1	10		7.8	73.3	18.9		
Total %	4	29.4	1.5	34.9	1.8	13.2	2.2	17.2	3.4	20.6	2.7	26.7	1.7	15.6	4	21.2	
Passenger Vehicles	486	3541	183	4210	222	1604	275	2101	423	2505	326	3254	202	1906	489	2597	12162
% Passenger Vehicles	98.2	97.6	100	97.8	98.7	98.6	99.6	98.8	99.5	98.5	99.4	98.8	99	99	98.6	98.9	98.5
Dual Wheeled	5	59	0	64	2	8	1	11	0	23	2	25	2	6	7	15	115
% Dual Wheeled	1	1.6	0	1.5	0.9	0.5	0.4	0.5	0	0.9	0.6	0.8	1	0.3	1.4	0.6	0.9
Buses	4	28	0	32	1	14	0	15	2	14	0	16	0	13	0	13	76
% Buses	0.8	0.8	0	0.7	0.4	0.9	0	0.7	0.5	0.6	0	0.5	0	0.7	0	0.5	0.6

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	50	317	19	386	16	150	28	194	43	253	36	332	16	155	39	210	1122
05:15 PM	35	249	26	310	18	122	26	166	34	228	40	302	19	178	29	226	1004
05:30 PM	58	325	25	408	17	132	36	185	32	256	26	314	14	169	31	214	1121
05:45 PM	58	313	10	381	18	146	22	186	47	219	27	293	15	213	43	271	1131
Total Volume	201	1204	80	1485	69	550	112	731	156	956	129	1241	64	715	142	921	4378
% App. Total	13.5	81.1	5.4		9.4	75.2	15.3		12.6	77	10.4		6.9	77.6	15.4		
PHF	.866	.926	.769	.910	.958	.917	.778	.942	.830	.934	.806	.934	.842	.839	.826	.850	.968

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				05:00 PM				05:00 PM			
+0 mins.	40	301	13	354	17	134	27	178	43	253	36	332	16	155	39	210
+15 mins.	41	348	15	404	26	164	21	211	34	228	40	302	19	178	29	226
+30 mins.	34	305	15	354	22	132	22	176	32	256	26	314	14	169	31	214
+45 mins.	50	317	19	386	16	150	28	194	47	219	27	293	15	213	43	271
Total Volume	165	1271	62	1498	81	580	98	759	156	956	129	1241	64	715	142	921
% App. Total	11	84.8	4.1		10.7	76.4	12.9		12.6	77	10.4		6.9	77.6	15.4	
PHF	.825	.913	.816	.927	.779	.884	.875	.899	.830	.934	.806	.934	.842	.839	.826	.850

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

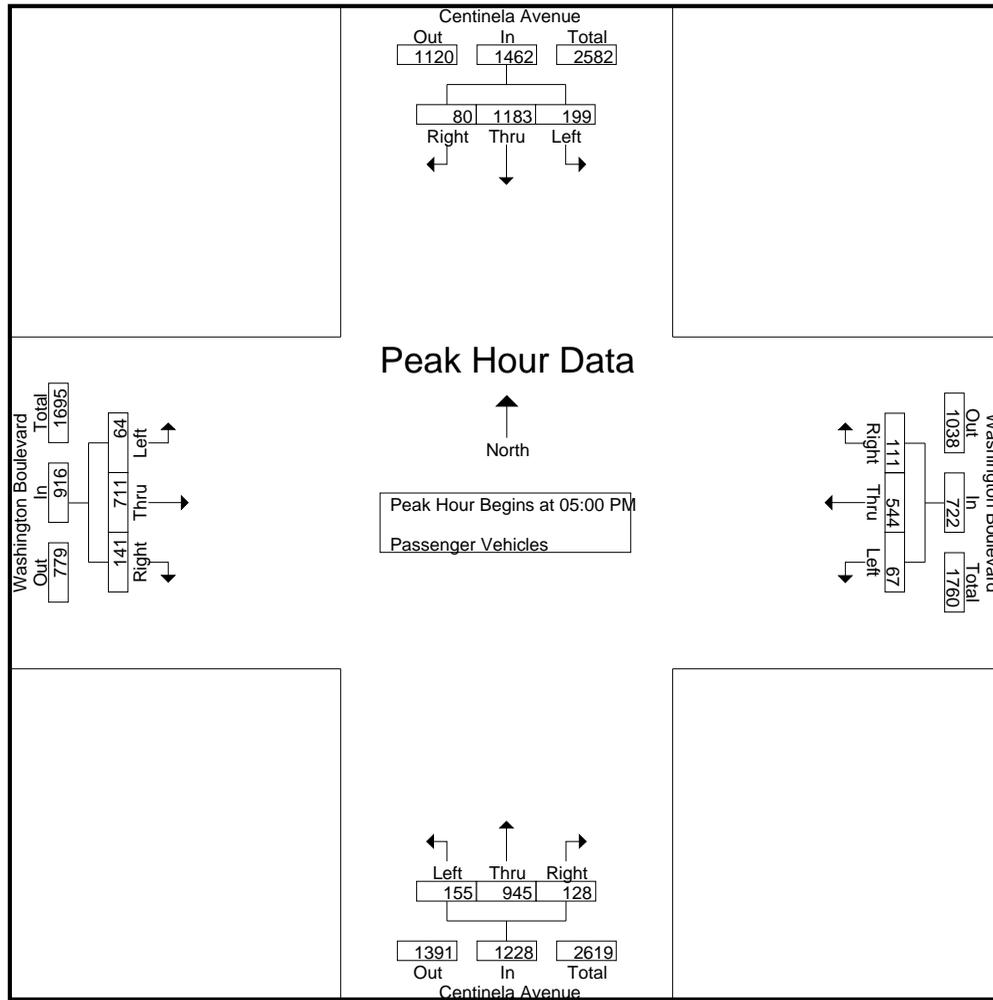
Groups Printed- Passenger Vehicles

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	35	262	14	311	21	130	15	166	32	252	35	319	18	126	37	181	977
03:15 PM	28	247	6	281	19	144	16	179	35	183	24	242	19	152	46	217	919
03:30 PM	42	317	14	373	20	110	21	151	31	175	22	228	12	144	40	196	948
03:45 PM	28	298	15	341	18	135	23	176	27	180	21	228	20	167	44	231	976
Total	133	1124	49	1306	78	519	75	672	125	790	102	1017	69	589	167	825	3820
04:00 PM	41	302	11	354	12	116	19	147	33	186	30	249	14	139	37	190	940
04:15 PM	40	294	13	347	17	132	27	176	29	187	25	241	23	176	46	245	1009
04:30 PM	41	339	15	395	26	163	21	210	40	188	27	255	12	159	53	224	1084
04:45 PM	32	299	15	346	22	130	22	174	41	209	14	264	20	132	45	197	981
Total	154	1234	54	1442	77	541	89	707	143	770	96	1009	69	606	181	856	4014
05:00 PM	50	311	19	380	16	149	28	193	42	250	36	328	16	155	39	210	1111
05:15 PM	35	245	26	306	18	121	25	164	34	226	39	299	19	177	29	225	994
05:30 PM	58	320	25	403	15	129	36	180	32	254	26	312	14	168	30	212	1107
05:45 PM	56	307	10	373	18	145	22	185	47	215	27	289	15	211	43	269	1116
Total	199	1183	80	1462	67	544	111	722	155	945	128	1228	64	711	141	916	4328
Grand Total	486	3541	183	4210	222	1604	275	2101	423	2505	326	3254	202	1906	489	2597	12162
Apprch %	11.5	84.1	4.3		10.6	76.3	13.1		13	77	10		7.8	73.4	18.8		
Total %	4	29.1	1.5	34.6	1.8	13.2	2.3	17.3	3.5	20.6	2.7	26.8	1.7	15.7	4	21.4	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	50	311	19	380	16	149	28	193	42	250	36	328	16	155	39	210	1111
05:15 PM	35	245	26	306	18	121	25	164	34	226	39	299	19	177	29	225	994
05:30 PM	58	320	25	403	15	129	36	180	32	254	26	312	14	168	30	212	1107
05:45 PM	56	307	10	373	18	145	22	185	47	215	27	289	15	211	43	269	1116
Total Volume	199	1183	80	1462	67	544	111	722	155	945	128	1228	64	711	141	916	4328
% App. Total	13.6	80.9	5.5		9.3	75.3	15.4		12.6	77	10.4		7	77.6	15.4		
PHF	.858	.924	.769	.907	.931	.913	.771	.935	.824	.930	.821	.936	.842	.842	.820	.851	.970

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	50	311	19	380	16	149	28	193	42	250	36	328	16	155	39	210
+15 mins.	35	245	26	306	18	121	25	164	34	226	39	299	19	177	29	225
+30 mins.	58	320	25	403	15	129	36	180	32	254	26	312	14	168	30	212
+45 mins.	56	307	10	373	18	145	22	185	47	215	27	289	15	211	43	269
Total Volume	199	1183	80	1462	67	544	111	722	155	945	128	1228	64	711	141	916
% App. Total	13.6	80.9	5.5		9.3	75.3	15.4		12.6	77	10.4		7	77.6	15.4	
PHF	.858	.924	.769	.907	.931	.913	.771	.935	.824	.930	.821	.936	.842	.842	.820	.851

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

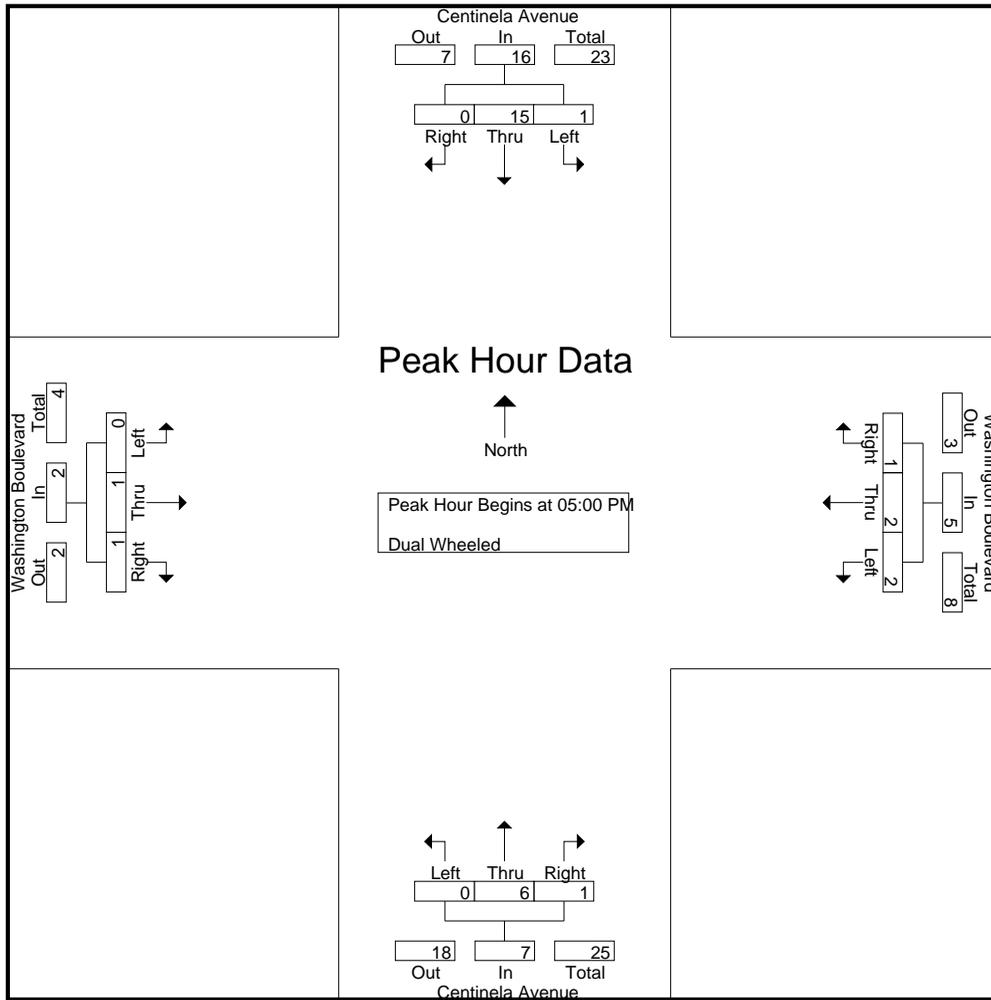
Groups Printed- Dual Wheeled

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	6	0	6	0	2	0	2	0	3	0	3	1	0	0	1	12
03:15 PM	0	4	0	4	0	0	0	0	0	1	1	2	0	1	0	1	7
03:30 PM	2	6	0	8	0	1	0	1	0	4	0	4	0	0	2	2	15
03:45 PM	0	5	0	5	0	0	0	0	0	2	0	2	1	0	2	3	10
Total	2	21	0	23	0	3	0	3	0	10	1	11	2	1	4	7	44
04:00 PM	1	6	0	7	0	2	0	2	0	2	0	2	0	1	0	1	12
04:15 PM	0	6	0	6	0	0	0	0	0	1	0	1	0	2	0	2	9
04:30 PM	0	6	0	6	0	0	0	0	0	0	0	0	0	1	2	3	9
04:45 PM	1	5	0	6	0	1	0	1	0	4	0	4	0	0	0	0	11
Total	2	23	0	25	0	3	0	3	0	7	0	7	0	4	2	6	41
05:00 PM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:15 PM	0	2	0	2	0	1	1	2	0	1	1	2	0	0	0	0	6
05:30 PM	0	4	0	4	2	1	0	3	0	1	0	1	0	0	1	1	9
05:45 PM	1	5	0	6	0	0	0	0	0	2	0	2	0	1	0	1	9
Total	1	15	0	16	2	2	1	5	0	6	1	7	0	1	1	2	30
Grand Total	5	59	0	64	2	8	1	11	0	23	2	25	2	6	7	15	115
Apprch %	7.8	92.2	0		18.2	72.7	9.1		0	92	8		13.3	40	46.7		
Total %	4.3	51.3	0	55.7	1.7	7	0.9	9.6	0	20	1.7	21.7	1.7	5.2	6.1	13	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:15 PM	0	2	0	2	0	1	1	2	0	1	1	2	0	0	0	0	6
05:30 PM	0	4	0	4	2	1	0	3	0	1	0	1	0	0	1	1	9
05:45 PM	1	5	0	6	0	0	0	0	0	2	0	2	0	1	0	1	9
Total Volume	1	15	0	16	2	2	1	5	0	6	1	7	0	1	1	2	30
% App. Total	6.2	93.8	0		40	40	20		0	85.7	14.3		0	50	50		
PHF	.250	.750	.000	.667	.250	.500	.250	.417	.000	.750	.250	.875	.000	.250	.250	.500	.833

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	2	0	2	0	1	1	2	0	1	1	2	0	0	0	0
+30 mins.	0	4	0	4	2	1	0	3	0	1	0	1	0	0	1	1
+45 mins.	1	5	0	6	0	0	0	0	0	2	0	2	0	1	0	1
Total Volume	1	15	0	16	2	2	1	5	0	6	1	7	0	1	1	2
% App. Total	6.2	93.8	0		40	40	20		0	85.7	14.3		0	50	50	
PHF	.250	.750	.000	.667	.250	.500	.250	.417	.000	.750	.250	.875	.000	.250	.250	.500

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 1

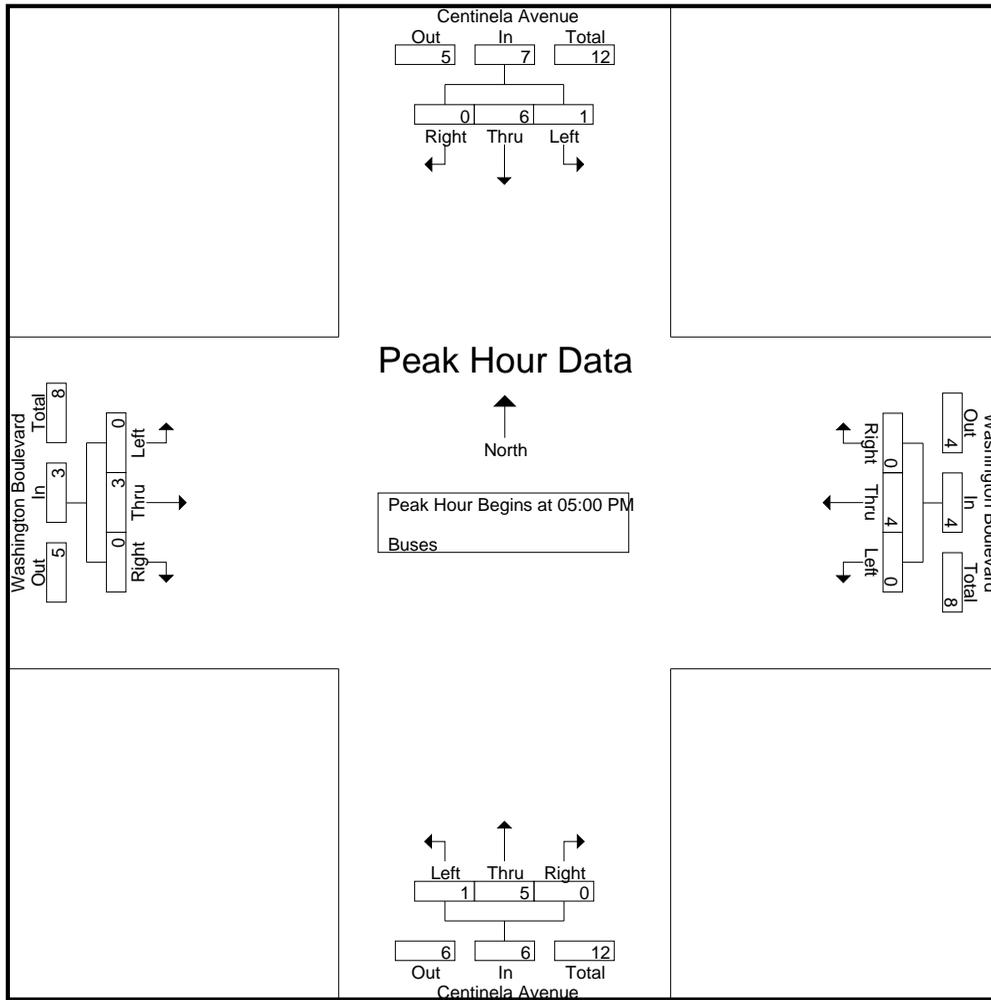
Groups Printed- Buses

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
03:00 PM	0	4	0	4	0	1	0	1	0	1	0	1	0	1	0	1	7
03:15 PM	0	8	0	8	1	2	0	3	1	0	0	1	0	3	0	3	15
03:30 PM	2	2	0	4	0	0	0	0	0	1	0	1	0	1	0	1	6
03:45 PM	0	3	0	3	0	2	0	2	0	2	0	2	0	1	0	1	8
Total	2	17	0	19	1	5	0	6	1	4	0	5	0	6	0	6	36
04:00 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
04:15 PM	0	1	0	1	0	2	0	2	0	1	0	1	0	2	0	2	6
04:30 PM	0	3	0	3	0	1	0	1	0	1	0	1	0	1	0	1	6
04:45 PM	1	1	0	2	0	1	0	1	0	1	0	1	0	1	0	1	5
Total	1	5	0	6	0	5	0	5	0	5	0	5	0	4	0	4	20
05:00 PM	0	2	0	2	0	1	0	1	1	1	0	2	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	1	0	1	4
05:30 PM	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1	5
05:45 PM	1	1	0	2	0	1	0	1	0	2	0	2	0	1	0	1	6
Total	1	6	0	7	0	4	0	4	1	5	0	6	0	3	0	3	20
Grand Total	4	28	0	32	1	14	0	15	2	14	0	16	0	13	0	13	76
Apprch %	12.5	87.5	0		6.7	93.3	0		12.5	87.5	0		0	100	0		
Total %	5.3	36.8	0	42.1	1.3	18.4	0	19.7	2.6	18.4	0	21.1	0	17.1	0	17.1	

Start Time	Centinela Avenue Southbound				Washington Boulevard Westbound				Centinela Avenue Northbound				Washington Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	1	0	1	1	1	0	2	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	1	0	1	4
05:30 PM	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1	5
05:45 PM	1	1	0	2	0	1	0	1	0	2	0	2	0	1	0	1	6
Total Volume	1	6	0	7	0	4	0	4	1	5	0	6	0	3	0	3	20
% App. Total	14.3	85.7	0		0	100	0		16.7	83.3	0		0	100	0		
PHF	.250	.750	.000	.875	.000	.500	.000	.500	.250	.625	.000	.750	.000	.750	.000	.750	.833

City of Culver
 N/S: Centinela Avenue
 E/W: Washington Boulevard
 Weather: Clear

File Name : 11_CVC_Centinela_Washington Blvd PM
 Site Code : 16616351
 Start Date : 5/16/2018
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	0	2	0	1	0	1	1	1	0	2	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	1	0	1
+30 mins.	0	1	0	1	0	2	0	2	0	1	0	1	0	1	0	1
+45 mins.	1	1	0	2	0	1	0	1	0	2	0	2	0	1	0	1
Total Volume	1	6	0	7	0	4	0	4	1	5	0	6	0	3	0	3
% App. Total	14.3	85.7	0		0	100	0		16.7	83.3	0		0	100	0	
PHF	.250	.750	.000	.875	.000	.500	.000	.500	.250	.625	.000	.750	.000	.750	.000	.750

Appendix D

Existing Conditions
LOS Analysis Worksheets

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.978			0.984	
Flt Protected	0.950			0.950				0.978			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1782	0	0	1804	0
Flt Permitted	0.150			0.166				0.808			0.839	
Satd. Flow (perm)	279	3539	1583	309	3539	1583	0	1472	0	0	1538	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			54		17			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1907			1445			1456			760	
Travel Time (s)		43.3			32.8			33.1			17.3	

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	20	1034	32	76	1104	52	129	109	45	44	77	16
Future Volume (vph)	20	1034	32	76	1104	52	129	109	45	44	77	16
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	21	1100	34	81	1174	55	137	116	48	47	82	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1100	34	81	1174	55	0	301	0	0	146	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

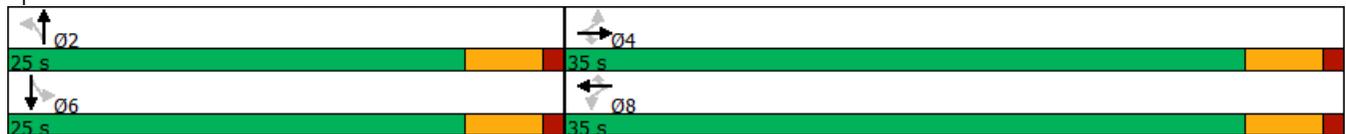
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	1034	32	76	1104	52	129	109	44	77
Future Volume (vph)	20	1034	32	76	1104	52	129	109	44	77
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effect Green (s)	26.6	26.6	26.6	26.6	26.6	26.6		20.7		20.7
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47		0.37		0.37
v/c Ratio	0.16	0.66	0.04	0.55	0.70	0.07		0.55		0.26
Control Delay	11.5	13.3	3.3	28.2	14.2	2.9		19.1		14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	11.5	13.3	3.3	28.2	14.2	2.9		19.1		14.3
LOS	B	B	A	C	B	A		B		B
Approach Delay		13.0			14.6			19.1		14.3
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.4
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 14.4
 Intersection Capacity Utilization 68.2%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	21	1100	34	81	1174	55	301	146
v/c Ratio	0.16	0.66	0.04	0.55	0.70	0.07	0.55	0.26
Control Delay	11.5	13.3	3.3	28.2	14.2	2.9	19.1	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.5	13.3	3.3	28.2	14.2	2.9	19.1	14.3
Queue Length 50th (ft)	4	137	0	18	151	0	82	34
Queue Length 95th (ft)	16	192	11	#76	211	14	154	72
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	152	1930	879	168	1930	888	550	571
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.57	0.04	0.48	0.61	0.06	0.55	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1034	32	76	1104	52	129	109	45	44	77	16
Future Volume (veh/h)	20	1034	32	76	1104	52	129	109	45	44	77	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1100	34	81	1174	55	137	116	48	47	82	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	1739	775	254	1739	775	310	249	89	231	375	69
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	453	3554	1585	496	3554	1585	617	701	250	419	1057	194
Grp Volume(v), veh/h	21	1100	34	81	1174	55	301	0	0	146	0	0
Grp Sat Flow(s),veh/h/ln	453	1777	1585	496	1777	1585	1567	0	0	1670	0	0
Q Serve(g_s), s	2.1	13.2	0.6	8.3	14.6	1.1	5.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.7	13.2	0.6	21.6	14.6	1.1	8.4	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.46		0.16	0.32		0.12
Lane Grp Cap(c), veh/h	232	1739	775	254	1739	775	647	0	0	675	0	0
V/C Ratio(X)	0.09	0.63	0.04	0.32	0.68	0.07	0.47	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	250	1877	837	273	1877	837	647	0	0	675	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.6	10.9	7.7	18.9	11.3	7.8	14.6	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.0	0.7	0.9	0.0	2.4	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.4	0.2	0.9	4.9	0.3	3.2	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	11.5	7.7	19.6	12.1	7.8	17.0	0.0	0.0	13.8	0.0	0.0
LnGrp LOS	B	B	A	B	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1155			1310			301			146	
Approach Delay, s/veh		11.5			12.4			17.0			13.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		32.8		25.0		32.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		20.5		30.5		20.5		30.5				
Max Q Clear Time (g_c+I1), s		10.4		18.7		5.2		23.6				
Green Ext Time (p_c), s		1.3		6.3		0.6		4.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.6								
HCM 6th LOS				B								

Lanes and Geometrics
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.979			0.955	
Flt Protected	0.950			0.950				0.995			0.991	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1815	0	0	1763	0
Flt Permitted	0.146			0.139				0.955			0.908	
Satd. Flow (perm)	272	3539	1583	259	3539	1583	0	1742	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			38		16			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	95	1200	8	31	1116	35	31	214	45	31	78	55
Future Volume (vph)	95	1200	8	31	1116	35	31	214	45	31	78	55
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	103	1304	9	34	1213	38	34	233	49	34	85	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	1304	9	34	1213	38	0	316	0	0	179	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

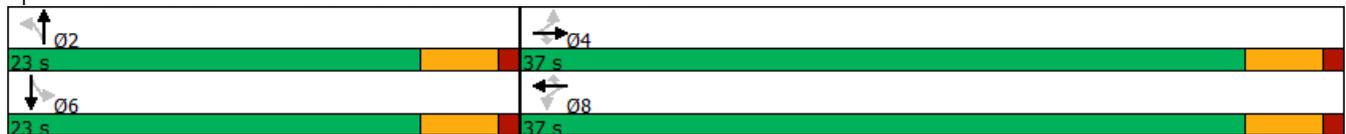
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	95	1200	8	31	1116	35	31	214	31	78
Future Volume (vph)	95	1200	8	31	1116	35	31	214	31	78
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	23.0	23.0	23.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	28.8	28.8	28.8	28.8	28.8	28.8		18.7		18.7
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.33		0.33
v/c Ratio	0.75	0.72	0.01	0.26	0.67	0.05		0.54		0.32
Control Delay	47.8	13.3	1.1	13.4	12.3	2.7		19.9		13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	47.8	13.3	1.1	13.4	12.3	2.7		19.9		13.8
LOS	D	B	A	B	B	A		B		B
Approach Delay		15.8			12.1			19.9		13.8
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.5
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 14.6
 Intersection Capacity Utilization 66.9%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	103	1304	9	34	1213	38	316	179
v/c Ratio	0.75	0.72	0.01	0.26	0.67	0.05	0.54	0.32
Control Delay	47.8	13.3	1.1	13.4	12.3	2.7	19.9	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.8	13.3	1.1	13.4	12.3	2.7	19.9	13.8
Queue Length 50th (ft)	25	162	0	6	145	0	90	36
Queue Length 95th (ft)	#105	226	2	23	203	10	161	81
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	157	2052	929	150	2052	933	585	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.64	0.01	0.23	0.59	0.04	0.54	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	1200	8	31	1116	35	31	214	45	31	78	55
Future Volume (veh/h)	95	1200	8	31	1116	35	31	214	45	31	78	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	1304	9	34	1213	38	34	233	49	34	85	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	1903	849	233	1903	849	100	434	86	130	288	174
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	444	3554	1585	419	3554	1585	104	1391	274	184	923	558
Grp Volume(v), veh/h	103	1304	9	34	1213	38	316	0	0	179	0	0
Grp Sat Flow(s),veh/h/ln	444	1777	1585	419	1777	1585	1769	0	0	1664	0	0
Q Serve(g_s), s	12.6	15.9	0.2	3.8	14.3	0.7	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	26.9	15.9	0.2	19.8	14.3	0.7	8.6	0.0	0.0	4.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.11		0.16	0.19		0.34
Lane Grp Cap(c), veh/h	253	1903	849	233	1903	849	620	0	0	592	0	0
V/C Ratio(X)	0.41	0.69	0.01	0.15	0.64	0.04	0.51	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	258	1950	870	239	1950	870	620	0	0	592	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.2	10.1	6.4	17.3	9.7	6.5	16.9	0.0	0.0	15.6	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.0	0.0	0.3	0.7	0.0	3.0	0.0	0.0	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.1	0.0	0.4	4.5	0.2	3.7	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.2	11.1	6.4	17.6	10.4	6.6	19.9	0.0	0.0	16.9	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1416			1285			316			179	
Approach Delay, s/veh		11.7			10.4			19.9			16.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		36.2		23.0		36.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5				
Max Q Clear Time (g_c+I1), s		10.6		28.9		6.6		21.8				
Green Ext Time (p_c), s		1.1		2.9		0.7		6.5				
Intersection Summary												
HCM 6th Ctrl Delay				12.3								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.991			0.975			0.899	
Flt Protected		0.996			0.999			0.976			0.990	
Satd. Flow (prot)	0	1844	0	0	1844	0	0	1773	0	0	1658	0
Flt Permitted		0.996			0.999			0.976			0.990	
Satd. Flow (perm)	0	1844	0	0	1844	0	0	1773	0	0	1658	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	24	258	12	4	198	14	19	12	7	7	2	26
Future Volume (vph)	24	258	12	4	198	14	19	12	7	7	2	26
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	28	300	14	5	230	16	22	14	8	8	2	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	342	0	0	251	0	0	44	0	0	40	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	258	12	4	198	14	19	12	7	7	2	26
Future Vol, veh/h	24	258	12	4	198	14	19	12	7	7	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	300	14	5	230	16	22	14	8	8	2	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	314	0	0	627	619	307	622	618	238
Stage 1	-	-	-	-	-	-	363	363	-	248	248	-
Stage 2	-	-	-	-	-	-	264	256	-	374	370	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1320	-	-	1246	-	-	396	404	733	399	405	801
Stage 1	-	-	-	-	-	-	656	625	-	756	701	-
Stage 2	-	-	-	-	-	-	741	696	-	647	620	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1246	-	-	370	391	733	375	392	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	391	-	375	392	-
Stage 1	-	-	-	-	-	-	639	609	-	736	697	-
Stage 2	-	-	-	-	-	-	707	693	-	609	604	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			14.7			11.2		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	415	1320	-	-	1246	-	-	622
HCM Lane V/C Ratio	0.106	0.021	-	-	0.004	-	-	0.065
HCM Control Delay (s)	14.7	7.8	0	-	7.9	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.2

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998			0.892			0.892	
Flt Protected	0.950			0.950				0.995			0.990	
Satd. Flow (prot)	1770	3539	0	1770	3532	0	0	1653	0	0	1645	0
Flt Permitted	0.950			0.950				0.995			0.990	
Satd. Flow (perm)	1770	3539	0	1770	3532	0	0	1653	0	0	1645	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	

Intersection Summary

Area Type: Other

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	35	1227	4	22	1126	16	1	1	8	3	0	12
Future Volume (vph)	35	1227	4	22	1126	16	1	1	8	3	0	12
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	36	1265	4	23	1161	16	1	1	8	3	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	1269	0	23	1177	0	0	10	0	0	15	0
Intersection Summary												

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕		↵	↕			↕			↕	
Traffic Vol, veh/h	35	1227	4	22	1126	16	1	1	8	3	0	12
Future Vol, veh/h	35	1227	4	22	1126	16	1	1	8	3	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	1265	4	23	1161	16	1	1	8	3	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1177	0	0	1269	0	0	1966	2562	635	1920	2556	589
Stage 1	-	-	-	-	-	-	1339	1339	-	1215	1215	-
Stage 2	-	-	-	-	-	-	627	1223	-	705	1341	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	589	-	-	543	-	-	37	26	421	41	26	452
Stage 1	-	-	-	-	-	-	161	220	-	192	252	-
Stage 2	-	-	-	-	-	-	438	250	-	393	219	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	589	-	-	543	-	-	33	23	421	36	23	452
Mov Cap-2 Maneuver	-	-	-	-	-	-	33	23	-	36	23	-
Stage 1	-	-	-	-	-	-	151	207	-	180	241	-
Stage 2	-	-	-	-	-	-	408	240	-	360	206	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.2			41.8			34.6		
HCM LOS							E			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	108	589	-	-	543	-	-	137
HCM Lane V/C Ratio	0.095	0.061	-	-	0.042	-	-	0.113
HCM Control Delay (s)	41.8	11.5	-	-	11.9	-	-	34.6
HCM Lane LOS	E	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.1	-	-	0.4

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3536	0	1770	3539	1621	0
Flt Permitted			0.141		0.998	
Satd. Flow (perm)	3536	0	263	3539	1621	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				43	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1237	5	21	1202	5	92
Future Volume (vph)	1237	5	21	1202	5	92
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1302	5	22	1265	5	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	22	1265	102	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1237	21	1202	5
Future Volume (vph)	1237	21	1202	5
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.1	37.1	37.1	22.9
Total Split (%)	61.8%	61.8%	61.8%	38.2%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	28.3	28.3	28.3	18.5
Actuated g/C Ratio	0.51	0.51	0.51	0.33
v/c Ratio	0.73	0.17	0.71	0.18
Control Delay	13.4	10.6	12.9	10.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.4	10.6	12.9	10.8
LOS	B	B	B	B
Approach Delay	13.4		12.9	10.8
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 55.9
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 13.1
 Intersection Capacity Utilization 47.8%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1307	22	1265	102
v/c Ratio	0.73	0.17	0.71	0.18
Control Delay	13.4	10.6	12.9	10.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.4	10.6	12.9	10.8
Queue Length 50th (ft)	162	4	154	14
Queue Length 95th (ft)	225	15	215	46
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	2077	154	2078	566
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.63	0.14	0.61	0.18

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1237	5	21	1202	5	92
Future Volume (veh/h)	1237	5	21	1202	5	92
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1302	5	22	1265	5	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1809	7	224	1771	26	506
Arrive On Green	0.50	0.50	0.50	0.50	0.34	0.34
Sat Flow, veh/h	3724	14	421	3647	77	1503
Grp Volume(v), veh/h	637	670	22	1265	103	0
Grp Sat Flow(s),veh/h/ln	1777	1868	421	1777	1596	0
Q Serve(g_s), s	15.3	15.3	2.4	15.1	2.5	0.0
Cycle Q Clear(g_c), s	15.3	15.3	17.7	15.1	2.5	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	885	931	224	1771	538	0
V/C Ratio(X)	0.72	0.72	0.10	0.71	0.19	0.00
Avail Cap(c_a), veh/h	1061	1115	265	2121	538	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	10.7	17.6	10.7	12.8	0.0
Incr Delay (d2), s/veh	1.9	1.8	0.2	0.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	0.2	4.8	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	12.5	17.8	11.6	13.6	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1307			1287	103	
Approach Delay, s/veh	12.6			11.7	13.6	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		22.9		31.7		31.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.4		32.6		32.6
Max Q Clear Time (g_c+I1), s		4.5		17.3		19.7
Green Ext Time (p_c), s		0.2		8.0		7.5
Intersection Summary						
HCM 6th Ctrl Delay			12.2			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.986	
Flt Protected		0.991			0.960							
Satd. Flow (prot)	0	1842	0	0	3398	0	0	3539	1583	0	3490	0
Flt Permitted		0.991			0.960							
Satd. Flow (perm)	0	1842	0	0	3398	0	0	3539	1583	0	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1							287		10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	44	193	4	499	101	0	0	880	435	0	743	78
Future Volume (vph)	44	193	4	499	101	0	0	880	435	0	743	78
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	47	208	4	537	109	0	0	946	468	0	799	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	259	0	0	646	0	0	946	468	0	883	0
Intersection Summary												

Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↘	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	259	646	946	468	883
v/c Ratio	0.71	1.18dl	0.67	0.58	0.63
Control Delay	47.7	38.1	28.3	13.1	27.2
Queue Delay	0.0	0.1	0.0	0.0	0.0
Total Delay	47.7	38.3	28.3	13.1	27.2
Queue Length 50th (ft)	145	185	240	74	217
Queue Length 95th (ft)	253	276	414	228	377
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	620	1361	1418	806	1404
Starvation Cap Reductn	0	114	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.42	0.52	0.67	0.58	0.63

Intersection Summary

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	193	4	499	101	0	0	880	435	0	743	78
Future Volume (veh/h)	44	193	4	499	101	0	0	880	435	0	743	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	47	208	4	537	109	0	0	946	0	0	799	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	56	249	5	588	587	0	0	1312		0	1198	126
Arrive On Green	0.17	0.17	0.17	0.33	0.33	0.00	0.00	0.37	0.00	0.00	0.37	0.37
Sat Flow, veh/h	335	1484	29	1781	1870	0	0	3647	1585	0	3338	341
Grp Volume(v), veh/h	259	0	0	537	109	0	0	946	0	0	437	446
Grp Sat Flow(s),veh/h/ln	1848	0	0	1781	1777	0	0	1777	1585	0	1777	1809
Q Serve(g_s), s	13.8	0.0	0.0	29.4	4.4	0.0	0.0	23.2	0.0	0.0	20.9	20.9
Cycle Q Clear(g_c), s	13.8	0.0	0.0	29.4	4.4	0.0	0.0	23.2	0.0	0.0	20.9	20.9
Prop In Lane	0.18		0.02	1.00		0.00	0.00		1.00	0.00		0.19
Lane Grp Cap(c), veh/h	310	0	0	588	587	0	0	1312		0	656	668
V/C Ratio(X)	0.84	0.00	0.00	0.91	0.19	0.00	0.00	0.72		0.00	0.67	0.67
Avail Cap(c_a), veh/h	573	0	0	658	656	0	0	1312		0	656	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	0.0	32.6	24.3	0.0	0.0	27.5	0.0	0.0	26.8	26.8
Incr Delay (d2), s/veh	5.9	0.0	0.0	16.2	0.2	0.0	0.0	3.5	0.0	0.0	5.3	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	0.0	15.0	1.9	0.0	0.0	10.2	0.0	0.0	9.6	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	0.0	48.8	24.4	0.0	0.0	31.0	0.0	0.0	32.1	32.0
LnGrp LOS	D	A	A	D	C	A	A	C		A	C	C
Approach Vol, veh/h		259			646			946	A		883	
Approach Delay, s/veh		46.8			44.7			31.0			32.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		21.5		42.0		38.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		37.5		31.5		37.5		37.5				
Max Q Clear Time (g_c+I1), s		25.2		15.8		22.9		31.4				
Green Ext Time (p_c), s		5.3		1.3		5.0		2.2				
Intersection Summary												
HCM 6th Ctrl Delay				36.1								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.986			0.977				0.949
Flt Protected	0.950											0.970
Satd. Flow (prot)	1770	3539	0	0	3490	0	0	1820	0	0	1715	0
Flt Permitted	0.218											0.791
Satd. Flow (perm)	406	3539	0	0	3490	0	0	1820	0	0	1398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					26			12				56
Link Speed (mph)		30			30			30				30
Link Distance (ft)		398			997			334				522
Travel Time (s)		9.0			22.7			7.6				11.9

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	42	888	0	0	762	79	0	52	11	107	0	64
Future Volume (vph)	42	888	0	0	762	79	0	52	11	107	0	64
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	965	0	0	828	86	0	57	12	116	0	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	965	0	0	914	0	0	69	0	0	186	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

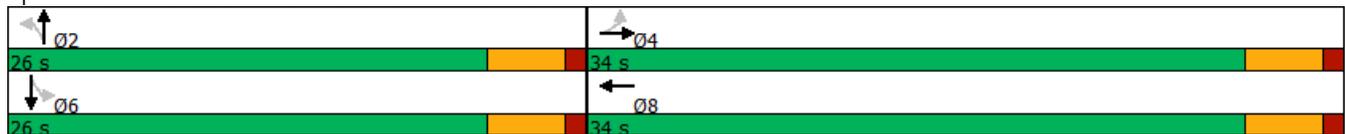
Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	888	762	52	107	0
Future Volume (vph)	42	888	762	52	107	0
Turn Type	Perm	NA	NA	NA	Perm	NA
Protected Phases		4	8	2		6
Permitted Phases	4				6	
Detector Phase	4	4	8	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	26.0	26.0	26.0
Total Split (%)	56.7%	56.7%	56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	Max	Max	Max
Act Effct Green (s)	22.1	22.1	22.1	21.7		21.7
Actuated g/C Ratio	0.42	0.42	0.42	0.41		0.41
v/c Ratio	0.27	0.65	0.62	0.09		0.31
Control Delay	14.2	14.3	13.4	10.4		10.6
Queue Delay	0.0	0.0	0.0	0.0		0.0
Total Delay	14.2	14.3	13.4	10.4		10.6
LOS	B	B	B	B		B
Approach Delay		14.3	13.4	10.4		10.6
Approach LOS		B	B	B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 52.9
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 13.5
 Intersection Capacity Utilization 55.5%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	46	965	914	69	186
v/c Ratio	0.27	0.65	0.62	0.09	0.31
Control Delay	14.2	14.3	13.4	10.4	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	14.3	13.4	10.4	10.6
Queue Length 50th (ft)	9	118	107	11	26
Queue Length 95th (ft)	29	167	153	36	76
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	228	1991	1975	753	606
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.48	0.46	0.09	0.31
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	888	0	0	762	79	0	52	11	107	0	64
Future Volume (veh/h)	42	888	0	0	762	79	0	52	11	107	0	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	965	0	0	828	86	0	57	12	116	0	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	271	1485	0	0	1357	141	0	615	129	454	25	222
Arrive On Green	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.41	0.41	0.41	0.00	0.41
Sat Flow, veh/h	611	3647	0	0	3343	337	0	1498	315	834	61	540
Grp Volume(v), veh/h	46	965	0	0	453	461	0	0	69	186	0	0
Grp Sat Flow(s),veh/h/ln	611	1777	0	0	1777	1810	0	0	1814	1435	0	0
Q Serve(g_s), s	3.3	11.4	0.0	0.0	10.4	10.4	0.0	0.0	1.2	3.1	0.0	0.0
Cycle Q Clear(g_c), s	13.8	11.4	0.0	0.0	10.4	10.4	0.0	0.0	1.2	4.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.19	0.00		0.17	0.62		0.38
Lane Grp Cap(c), veh/h	271	1485	0	0	742	756	0	0	744	700	0	0
V/C Ratio(X)	0.17	0.65	0.00	0.00	0.61	0.61	0.00	0.00	0.09	0.27	0.00	0.00
Avail Cap(c_a), veh/h	360	2001	0	0	1001	1019	0	0	744	700	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.3	12.2	0.0	0.0	11.9	11.9	0.0	0.0	9.5	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.0	0.8	0.8	0.0	0.0	0.2	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.8	0.0	0.0	3.6	3.6	0.0	0.0	0.5	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	12.7	0.0	0.0	12.7	12.7	0.0	0.0	9.7	11.3	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	A	A	A	B	A	A
Approach Vol, veh/h		1011			914			69			186	
Approach Delay, s/veh		12.9			12.7			9.7			11.3	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		26.4		26.0		26.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		29.5		21.5		29.5				
Max Q Clear Time (g_c+I1), s		3.2		15.8		6.4		12.4				
Green Ext Time (p_c), s		0.2		6.1		0.9		5.6				
Intersection Summary												
HCM 6th Ctrl Delay				12.6								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	3529	0	1770	3539	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	3529	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4					263
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	674	15	23	599	0	70
Future Volume (vph)	674	15	23	599	0	70
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	749	17	26	666	0	78
Shared Lane Traffic (%)						
Lane Group Flow (vph)	766	0	26	666	0	78
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD



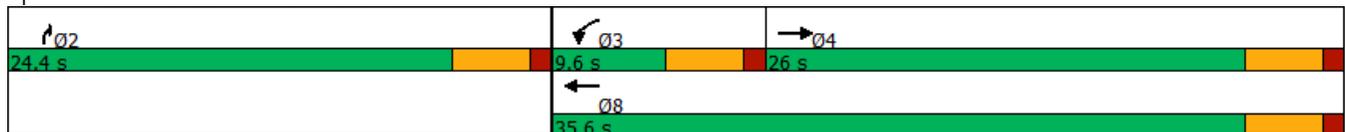
Lane Group	EBT	WBL	WBT	NBR
Lane Configurations	↑↑	↵	↑↑	↗
Traffic Volume (vph)	674	23	599	70
Future Volume (vph)	674	23	599	70
Turn Type	NA	Prot	NA	Prot
Protected Phases	4	3	8	2
Permitted Phases				
Detector Phase	4	3	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		
Recall Mode	None	None	None	Max
Act Effct Green (s)	16.9	5.2	20.1	20.5
Actuated g/C Ratio	0.34	0.10	0.40	0.41
v/c Ratio	0.64	0.14	0.47	0.10
Control Delay	17.0	26.1	11.3	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.0	26.1	11.3	0.2
LOS	B	C	B	A
Approach Delay	17.0		11.9	
Approach LOS	B		B	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 49.8
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 13.8
 Intersection Capacity Utilization 30.9%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD



Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	766	26	666	78
v/c Ratio	0.64	0.14	0.47	0.10
Control Delay	17.0	26.1	11.3	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.0	26.1	11.3	0.2
Queue Length 50th (ft)	81	6	68	0
Queue Length 95th (ft)	166	29	100	0
Internal Link Dist (ft)	299		900	
Turn Bay Length (ft)		125		
Base Capacity (vph)	1570	186	2275	817
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.49	0.14	0.29	0.10

Intersection Summary

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	674	15	23	599	0	70
Future Volume (veh/h)	674	15	23	599	0	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	749	17	26	666	0	78
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	1722	39	60	2698	0	0
Arrive On Green	0.48	0.48	0.03	0.76	0.00	0.00
Sat Flow, veh/h	3646	81	1781	3647	0	
Grp Volume(v), veh/h	375	391	26	666	0.0	
Grp Sat Flow(s),veh/h/ln	1777	1856	1781	1777		
Q Serve(g_s), s	2.6	2.6	0.3	1.0		
Cycle Q Clear(g_c), s	2.6	2.6	0.3	1.0		
Prop In Lane		0.04	1.00			
Lane Grp Cap(c), veh/h	862	900	60	2698		
V/C Ratio(X)	0.43	0.43	0.43	0.25		
Avail Cap(c_a), veh/h	2043	2134	486	5910		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	3.1	3.1	8.9	0.7		
Incr Delay (d2), s/veh	0.3	0.3	4.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.5	3.5	13.7	0.7		
LnGrp LOS	A	A	B	A		
Approach Vol, veh/h	766			692		
Approach Delay, s/veh	3.5			1.2		
Approach LOS	A			A		
Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			5.1	13.6		18.7
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s			2.3	4.6		3.0
Green Ext Time (p_c), s			0.0	4.5		5.0
Intersection Summary						
HCM 6th Ctrl Delay			2.4			
HCM 6th LOS			A			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3465	0
Flt Permitted	0.950			0.950			0.139			0.110		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	259	3539	1583	205	3465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127			24
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	166	769	72	152	626	113	59	1124	168	92	839	136
Future Volume (vph)	166	769	72	152	626	113	59	1124	168	92	839	136
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	177	818	77	162	666	120	63	1196	179	98	893	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	818	77	162	666	120	63	1196	179	98	1038	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	166	769	72	152	626	113	59	1124	168	92	839
Future Volume (vph)	166	769	72	152	626	113	59	1124	168	92	839
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.9	29.0	29.0	11.0	28.1	28.1	9.6	40.5	40.5	9.5	40.4
Total Split (%)	13.2%	32.2%	32.2%	12.2%	31.2%	31.2%	10.7%	45.0%	45.0%	10.6%	44.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	7.3	23.3	23.3	6.5	22.5	22.5	40.1	36.2	36.2	40.0	36.1
Actuated g/C Ratio	0.08	0.27	0.27	0.07	0.26	0.26	0.46	0.42	0.42	0.46	0.42
v/c Ratio	0.61	0.86	0.15	0.63	0.73	0.24	0.30	0.81	0.24	0.53	0.71
Control Delay	49.2	41.5	1.9	52.1	35.1	5.9	15.5	28.8	7.1	22.8	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	49.2	41.5	1.9	52.1	35.1	5.9	15.5	29.1	7.1	22.8	24.8
LOS	D	D	A	D	D	A	B	C	A	C	C
Approach Delay		40.0			34.3			25.7			24.7
Approach LOS		D			C			C			C

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 86.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 30.6

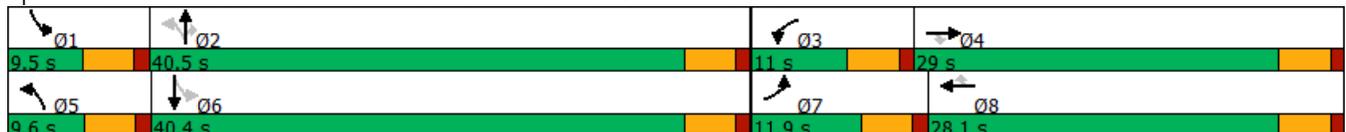
Intersection LOS: C

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	177	818	77	162	666	120	63	1196	179	98	1038
v/c Ratio	0.61	0.86	0.15	0.63	0.73	0.24	0.30	0.81	0.24	0.53	0.71
Control Delay	49.2	41.5	1.9	52.1	35.1	5.9	15.5	28.8	7.1	22.8	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	49.2	41.5	1.9	52.1	35.1	5.9	15.5	29.1	7.1	22.8	24.8
Queue Length 50th (ft)	51	231	0	47	181	0	18	317	18	28	254
Queue Length 95th (ft)	#85	#328	10	#87	243	37	38	406	59	#54	330
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	294	1002	539	257	966	524	208	1473	733	185	1453
Starvation Cap Reductn	0	0	0	0	0	0	0	35	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.82	0.14	0.63	0.69	0.23	0.30	0.83	0.24	0.53	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	769	72	152	626	113	59	1124	168	92	839	136
Future Volume (veh/h)	166	769	72	152	626	113	59	1124	168	92	839	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	818	77	162	666	120	63	1196	179	98	893	145
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	935	417	234	917	409	260	1463	652	219	1282	208
Arrive On Green	0.07	0.26	0.26	0.07	0.26	0.26	0.04	0.41	0.41	0.05	0.42	0.42
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3061	497
Grp Volume(v), veh/h	177	818	77	162	666	120	63	1196	179	98	518	520
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1781
Q Serve(g_s), s	4.4	19.3	3.3	4.0	15.0	5.3	1.7	26.1	6.6	2.7	20.9	20.9
Cycle Q Clear(g_c), s	4.4	19.3	3.3	4.0	15.0	5.3	1.7	26.1	6.6	2.7	20.9	20.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	251	935	417	234	917	409	260	1463	652	219	744	746
V/C Ratio(X)	0.71	0.88	0.18	0.69	0.73	0.29	0.24	0.82	0.27	0.45	0.70	0.70
Avail Cap(c_a), veh/h	292	995	444	257	959	428	284	1463	652	229	744	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	30.9	25.0	39.9	29.6	26.0	16.1	22.8	17.1	18.5	20.9	20.9
Incr Delay (d2), s/veh	6.3	8.4	0.2	7.0	2.7	0.4	0.5	5.2	1.0	1.4	5.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.1	1.2	1.9	6.5	2.0	0.7	11.3	0.2	1.1	9.3	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	39.3	25.2	46.8	32.3	26.4	16.5	28.0	18.1	19.9	26.2	26.2
LnGrp LOS	D	D	C	D	C	C	B	C	B	B	C	C
Approach Vol, veh/h		1072			948			1438			1136	
Approach Delay, s/veh		39.4			34.0			26.3			25.7	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	40.5	10.4	27.5	8.4	41.1	10.8	27.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	36.0	6.5	24.5	5.1	35.9	7.4	23.6				
Max Q Clear Time (g_c+I1), s	4.7	28.1	6.0	21.3	3.7	22.9	6.4	17.0				
Green Ext Time (p_c), s	0.0	5.1	0.0	1.7	0.0	5.6	0.1	2.7				
Intersection Summary												
HCM 6th Ctrl Delay			30.8									
HCM 6th LOS			C									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.970			0.983			0.980			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3433	0	1770	3479	0	1770	3468	0	1770	3514	0
Flt Permitted	0.281			0.215			0.950			0.139		
Satd. Flow (perm)	523	3433	0	400	3479	0	1770	3468	0	259	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			19			31			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	57	633	161	72	513	64	136	1210	181	104	886	41
Future Volume (vph)	57	633	161	72	513	64	136	1210	181	104	886	41
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	60	666	169	76	540	67	143	1274	191	109	933	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	835	0	76	607	0	143	1465	0	109	976	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

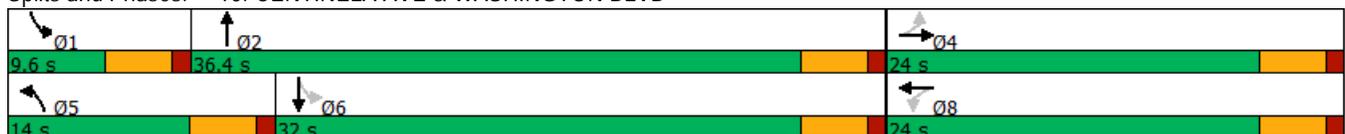


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↖↗	↖	↖↗	↖	↖↗	↖	↖↗
Traffic Volume (vph)	57	633	72	513	136	1210	104	886
Future Volume (vph)	57	633	72	513	136	1210	104	886
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	14.0	36.4	9.6	32.0
Total Split (%)	34.3%	34.3%	34.3%	34.3%	20.0%	52.0%	13.7%	45.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	18.6	18.6	18.6	18.6	8.8	32.2	32.7	28.8
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.13	0.48	0.49	0.43
v/c Ratio	0.42	0.85	0.69	0.62	0.61	0.87	0.45	0.65
Control Delay	31.0	32.3	58.0	24.2	41.1	24.3	14.3	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	32.3	58.0	24.2	41.1	24.3	14.3	18.9
LOS	C	C	E	C	D	C	B	B
Approach Delay		32.2		27.9		25.8		18.4
Approach LOS		C		C		C		B

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 67.2
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 25.6
 Intersection Capacity Utilization 86.8%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

10: CENTINELA AVE & WASHINGTON BLVD

02/13/2022

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	60	835	76	607	143	1465	109	976
v/c Ratio	0.42	0.85	0.69	0.62	0.61	0.87	0.45	0.65
Control Delay	31.0	32.3	58.0	24.2	41.1	24.3	14.3	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	32.3	58.0	24.2	41.1	24.3	14.3	18.9
Queue Length 50th (ft)	21	168	29	115	59	290	18	178
Queue Length 95th (ft)	57	#264	#97	166	#125	#444	40	245
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	152	1035	117	1030	252	1675	241	1511
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.81	0.65	0.59	0.57	0.87	0.45	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	633	161	72	513	64	136	1210	181	104	886	41
Future Volume (veh/h)	57	633	161	72	513	64	136	1210	181	104	886	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	666	169	76	540	67	143	1274	191	109	933	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	790	200	142	896	111	181	1428	213	246	1461	67
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.10	0.46	0.46	0.06	0.42	0.42
Sat Flow, veh/h	813	2807	712	658	3183	394	1781	3102	462	1781	3459	159
Grp Volume(v), veh/h	60	421	414	76	301	306	143	726	739	109	479	497
Grp Sat Flow(s),veh/h/ln	813	1777	1742	658	1777	1799	1781	1777	1787	1781	1777	1842
Q Serve(g_s), s	4.8	15.5	15.5	4.0	10.1	10.2	5.4	25.8	26.3	2.3	14.8	14.8
Cycle Q Clear(g_c), s	15.0	15.5	15.5	19.5	10.1	10.2	5.4	25.8	26.3	2.3	14.8	14.8
Prop In Lane	1.00		0.41	1.00		0.22	1.00		0.26	1.00		0.09
Lane Grp Cap(c), veh/h	213	500	490	142	500	506	181	818	823	246	750	778
V/C Ratio(X)	0.28	0.84	0.84	0.54	0.60	0.60	0.79	0.89	0.90	0.44	0.64	0.64
Avail Cap(c_a), veh/h	213	500	490	142	500	506	244	818	823	264	750	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	23.4	23.5	33.6	21.5	21.6	30.4	17.1	17.2	15.2	15.8	15.8
Incr Delay (d2), s/veh	0.7	12.3	12.7	3.9	2.0	2.0	11.8	13.7	14.6	1.3	4.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.8	7.7	1.4	4.2	4.3	2.8	12.3	12.8	0.9	6.3	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	35.8	36.1	37.6	23.5	23.6	42.2	30.7	31.8	16.5	20.0	19.8
LnGrp LOS	C	D	D	D	C	C	D	C	C	B	B	B
Approach Vol, veh/h		895			683			1608			1085	
Approach Delay, s/veh		35.5			25.1			32.2			19.5	
Approach LOS		D			C			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	36.4		24.0	11.5	33.8		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	31.9		19.5	9.5	27.5		19.5				
Max Q Clear Time (g_c+I1), s	4.3	28.3		17.5	7.4	16.8		21.5				
Green Ext Time (p_c), s	0.0	2.7		1.1	0.1	4.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				28.6								
HCM 6th LOS				C								

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				 
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.963				0.988
Flt Protected	0.950			0.950				0.983				0.993
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1763	0	0	1828	0
Flt Permitted	0.133			0.186				0.750				0.929
Satd. Flow (perm)	248	3539	1583	346	3539	1583	0	1345	0	0	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76			28		27				7
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1907			1445			1456				760
Travel Time (s)		43.3			32.8			33.1				17.3

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	22	1041	71	131	1210	27	72	74	56	46	233	28
Future Volume (vph)	22	1041	71	131	1210	27	72	74	56	46	233	28
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	1119	76	141	1301	29	77	80	60	49	251	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	1119	76	141	1301	29	0	217	0	0	330	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	1041	71	131	1210	27	72	74	46	233
Future Volume (vph)	22	1041	71	131	1210	27	72	74	46	233
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effect Green (s)	33.8	33.8	33.8	33.8	33.8	33.8		18.9		18.9
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55		0.31		0.31
v/c Ratio	0.18	0.58	0.08	0.75	0.67	0.03		0.51		0.63
Control Delay	9.9	10.2	1.9	37.8	11.6	2.6		22.7		27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	9.9	10.2	1.9	37.8	11.6	2.6		22.7		27.2
LOS	A	B	A	D	B	A		C		C
Approach Delay		9.7			13.9			22.7		27.2
Approach LOS		A			B			C		C

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 61.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 14.3

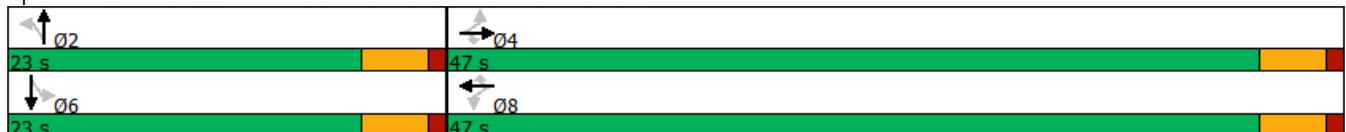
Intersection LOS: B

Intersection Capacity Utilization 71.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	24	1119	76	141	1301	29	217	330
v/c Ratio	0.18	0.58	0.08	0.75	0.67	0.03	0.51	0.63
Control Delay	9.9	10.2	1.9	37.8	11.6	2.6	22.7	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	10.2	1.9	37.8	11.6	2.6	22.7	27.2
Queue Length 50th (ft)	4	128	0	36	162	0	61	109
Queue Length 95th (ft)	16	174	13	#136	218	9	138	#238
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	173	2481	1132	242	2481	1118	429	526
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.45	0.07	0.58	0.52	0.03	0.51	0.63

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	22	1041	71	131	1210	27	72	74	56	46	233	28
Future Volume (veh/h)	22	1041	71	131	1210	27	72	74	56	46	233	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1119	76	141	1301	29	77	80	60	49	251	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	2092	933	295	2092	933	187	187	115	109	398	44
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	412	3554	1585	468	3554	1585	411	676	416	171	1437	161
Grp Volume(v), veh/h	24	1119	76	141	1301	29	217	0	0	330	0	0
Grp Sat Flow(s),veh/h/ln	412	1777	1585	468	1777	1585	1503	0	0	1768	0	0
Q Serve(g_s), s	2.7	12.6	1.4	17.3	15.9	0.5	0.0	0.0	0.0	3.2	0.0	0.0
Cycle Q Clear(g_c), s	18.6	12.6	1.4	29.9	15.9	0.5	7.6	0.0	0.0	10.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.35		0.28	0.15		0.09
Lane Grp Cap(c), veh/h	252	2092	933	295	2092	933	489	0	0	551	0	0
V/C Ratio(X)	0.10	0.54	0.08	0.48	0.62	0.03	0.44	0.00	0.00	0.60	0.00	0.00
Avail Cap(c_a), veh/h	272	2260	1008	317	2260	1008	489	0	0	551	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.0	8.3	5.9	17.2	8.9	5.8	20.1	0.0	0.0	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	1.2	0.5	0.0	2.9	0.0	0.0	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.9	0.4	1.8	5.0	0.1	3.0	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	8.5	6.0	18.4	9.4	5.8	23.0	0.0	0.0	26.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1219			1471			217			330	
Approach Delay, s/veh		8.4			10.2			23.0			26.1	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		43.8		23.0		43.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		42.5		18.5		42.5				
Max Q Clear Time (g_c+I1), s		9.6		20.6		12.8		31.9				
Green Ext Time (p_c), s		0.8		9.4		0.9		7.4				
Intersection Summary												
HCM 6th Ctrl Delay				12.0								
HCM 6th LOS				B								

Lanes and Geometrics
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.966			0.966	
Flt Protected	0.950			0.950				0.992			0.992	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1785	0	0	1785	0
Flt Permitted	0.132			0.132				0.925			0.921	
Satd. Flow (perm)	246	3539	1583	246	3539	1583	0	1664	0	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			27		30			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	61	1217	29	46	1411	19	25	95	40	59	201	89
Future Volume (vph)	61	1217	29	46	1411	19	25	95	40	59	201	89
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	64	1281	31	48	1485	20	26	100	42	62	212	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1281	31	48	1485	20	0	168	0	0	368	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

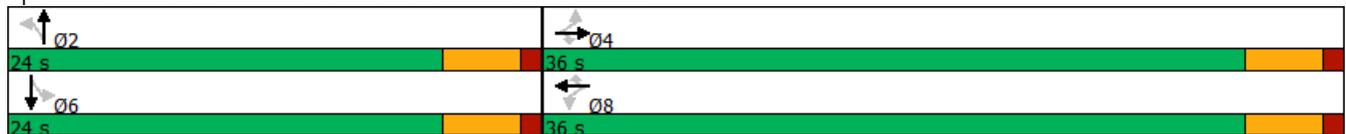
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	61	1217	29	46	1411	19	25	95	59	201
Future Volume (vph)	61	1217	29	46	1411	19	25	95	59	201
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.0	24.0	24.0	24.0
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	30.2	30.2	30.2	30.2	30.2	30.2		19.5		19.5
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.33		0.33
v/c Ratio	0.51	0.70	0.04	0.38	0.82	0.02		0.29		0.65
Control Delay	27.4	13.4	3.3	19.2	16.5	2.7		14.0		22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	27.4	13.4	3.3	19.2	16.5	2.7		14.0		22.6
LOS	C	B	A	B	B	A		B		C
Approach Delay		13.8			16.4			14.0		22.6
Approach LOS		B			B			B		C

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 58.8
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 15.9
 Intersection Capacity Utilization 80.9%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	64	1281	31	48	1485	20	168	368
v/c Ratio	0.51	0.70	0.04	0.38	0.82	0.02	0.29	0.65
Control Delay	27.4	13.4	3.3	19.2	16.5	2.7	14.0	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	13.4	3.3	19.2	16.5	2.7	14.0	22.6
Queue Length 50th (ft)	14	165	0	9	211	0	36	105
Queue Length 95th (ft)	#66	230	10	38	294	7	78	188
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	132	1898	862	132	1898	861	573	566
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.67	0.04	0.36	0.78	0.02	0.29	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	61	1217	29	46	1411	19	25	95	40	59	201	89
Future Volume (veh/h)	61	1217	29	46	1411	19	25	95	40	59	201	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1281	31	48	1485	20	26	100	42	62	212	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1866	832	228	1866	832	115	373	140	132	348	141
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	348	3554	1585	419	3554	1585	141	1148	430	192	1072	433
Grp Volume(v), veh/h	64	1281	31	48	1485	20	168	0	0	368	0	0
Grp Sat Flow(s),veh/h/ln	348	1777	1585	419	1777	1585	1719	0	0	1697	0	0
Q Serve(g_s), s	11.0	16.1	0.6	5.8	20.5	0.4	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	31.5	16.1	0.6	21.8	20.5	0.4	4.2	0.0	0.0	10.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		0.25	0.17		0.26
Lane Grp Cap(c), veh/h	184	1866	832	228	1866	832	628	0	0	621	0	0
V/C Ratio(X)	0.35	0.69	0.04	0.21	0.80	0.02	0.27	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	184	1866	832	228	1866	832	628	0	0	621	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.5	10.6	6.9	18.7	11.6	6.9	15.1	0.0	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	0.0	0.5	2.5	0.0	1.0	0.0	0.0	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.3	0.2	0.5	7.0	0.1	1.7	0.0	0.0	4.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	11.7	6.9	19.1	14.1	6.9	16.1	0.0	0.0	21.4	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	B	A	A	C	A	A
Approach Vol, veh/h		1376			1553			168			368	
Approach Delay, s/veh		12.2			14.2			16.1			21.4	
Approach LOS		B			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		36.0		24.0		36.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.5		31.5		19.5		31.5				
Max Q Clear Time (g_c+I1), s		6.2		33.5		12.9		23.8				
Green Ext Time (p_c), s		0.7		0.0		1.2		5.8				
Intersection Summary												
HCM 6th Ctrl Delay				14.3								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.992			0.982			0.968	
Flt Protected		0.996			0.999			0.985			0.973	
Satd. Flow (prot)	0	1835	0	0	1846	0	0	1802	0	0	1754	0
Flt Permitted		0.996			0.999			0.985			0.973	
Satd. Flow (perm)	0	1835	0	0	1846	0	0	1802	0	0	1754	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	

Intersection Summary

Area Type: Other

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	21	241	24	3	144	9	9	16	4	22	9	10
Future Volume (vph)	21	241	24	3	144	9	9	16	4	22	9	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	22	251	25	3	150	9	9	17	4	23	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	298	0	0	162	0	0	30	0	0	42	0
Intersection Summary												

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	241	24	3	144	9	9	16	4	22	9	10
Future Vol, veh/h	21	241	24	3	144	9	9	16	4	22	9	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	251	25	3	150	9	9	17	4	23	9	10

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	159	0	0	276
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.12	-	-	4.12
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.218	-	-	2.218
Pot Cap-1 Maneuver	1420	-	-	1287
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1420	-	-	1287
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	12.6	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	506	1420	-	-	1287	-	-	535
HCM Lane V/C Ratio	0.06	0.015	-	-	0.002	-	-	0.08
HCM Control Delay (s)	12.6	7.6	0	-	7.8	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.881			0.913	
Flt Protected	0.950			0.950				0.994			0.984	
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1631	0	0	1673	0
Flt Permitted	0.950			0.950				0.994			0.984	
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1631	0	0	1673	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	
Intersection Summary												
Area Type:	Other											

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	31	1286	7	35	1335	4	2	0	15	15	1	28
Future Volume (vph)	31	1286	7	35	1335	4	2	0	15	15	1	28
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	32	1326	7	36	1376	4	2	0	15	15	1	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	1333	0	36	1380	0	0	17	0	0	45	0
Intersection Summary												

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	31	1286	7	35	1335	4	2	0	15	15	1	28
Future Vol, veh/h	31	1286	7	35	1335	4	2	0	15	15	1	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	1326	7	36	1376	4	2	0	15	15	1	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1380	0	0	1333	0	0	2155	2846	667	2177	2847	690
Stage 1	-	-	-	-	-	-	1394	1394	-	1450	1450	-
Stage 2	-	-	-	-	-	-	761	1452	-	727	1397	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	493	-	-	513	-	-	27	17	401	26	17	388
Stage 1	-	-	-	-	-	-	149	207	-	137	194	-
Stage 2	-	-	-	-	-	-	364	194	-	381	206	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	493	-	-	513	-	-	21	15	401	22	15	388
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	15	-	22	15	-
Stage 1	-	-	-	-	-	-	139	194	-	128	180	-
Stage 2	-	-	-	-	-	-	311	180	-	343	193	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			37.5			198.4		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	128	493	-	-	513	-	-	54
HCM Lane V/C Ratio	0.137	0.065	-	-	0.07	-	-	0.84
HCM Control Delay (s)	37.5	12.8	-	-	12.5	-	-	198.4
HCM Lane LOS	E	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0.2	-	-	3.6

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.997	
Satd. Flow (prot)	3536	0	1770	3539	1619	0
Flt Permitted			0.129		0.997	
Satd. Flow (perm)	3536	0	240	3539	1619	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				40	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1289	6	35	1444	4	71
Future Volume (vph)	1289	6	35	1444	4	71
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1329	6	36	1489	4	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1335	0	36	1489	77	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



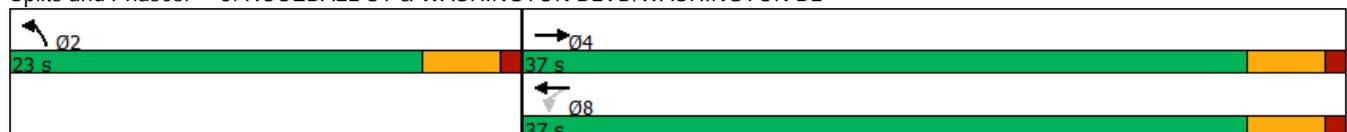
Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1289	35	1444	4
Future Volume (vph)	1289	35	1444	4
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	30.9	30.9	30.9	18.5
Actuated g/C Ratio	0.53	0.53	0.53	0.32
v/c Ratio	0.71	0.28	0.80	0.14
Control Delay	13.0	14.6	15.1	9.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.0	14.6	15.1	9.6
LOS	B	B	B	A
Approach Delay	13.0		15.1	9.6
Approach LOS	B		B	A

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 58.5
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 14.0
 Intersection Capacity Utilization 52.0%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1335	36	1489	77
v/c Ratio	0.71	0.28	0.80	0.14
Control Delay	13.0	14.6	15.1	9.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.0	14.6	15.1	9.6
Queue Length 50th (ft)	168	6	202	9
Queue Length 95th (ft)	235	26	283	35
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	1969	134	1970	540
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.27	0.76	0.14

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1289	6	35	1444	4	71
Future Volume (veh/h)	1289	6	35	1444	4	71
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1329	6	36	1489	4	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1878	8	224	1840	27	485
Arrive On Green	0.52	0.52	0.52	0.52	0.32	0.32
Sat Flow, veh/h	3721	16	410	3647	82	1495
Grp Volume(v), veh/h	651	684	36	1489	78	0
Grp Sat Flow(s),veh/h/ln	1777	1867	410	1777	1597	0
Q Serve(g_s), s	15.9	15.9	4.2	19.8	2.0	0.0
Cycle Q Clear(g_c), s	15.9	15.9	20.1	19.8	2.0	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	920	967	224	1840	518	0
V/C Ratio(X)	0.71	0.71	0.16	0.81	0.15	0.00
Avail Cap(c_a), veh/h	1013	1064	246	2025	518	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.5	10.5	18.1	11.4	13.7	0.0
Incr Delay (d2), s/veh	2.0	2.0	0.3	2.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	5.6	0.4	6.7	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.5	12.4	18.4	13.8	14.3	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1335			1525	78	
Approach Delay, s/veh	12.5			13.9	14.3	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		23.0		34.0		34.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		32.5		32.5
Max Q Clear Time (g_c+I1), s		4.0		17.9		22.1
Green Ext Time (p_c), s		0.1		7.9		7.4
Intersection Summary						
HCM 6th Ctrl Delay			13.3			
HCM 6th LOS			B			

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.990	
Flt Protected		0.992			0.959							
Satd. Flow (prot)	0	1844	0	0	3394	0	0	3539	1583	0	3504	0
Flt Permitted		0.992			0.959							
Satd. Flow (perm)	0	1844	0	0	3394	0	0	3539	1583	0	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1							519		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	45	222	4	531	82	0	0	727	673	0	942	69
Future Volume (vph)	45	222	4	531	82	0	0	727	673	0	942	69
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	229	4	547	85	0	0	749	694	0	971	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	279	0	0	632	0	0	749	694	0	1042	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

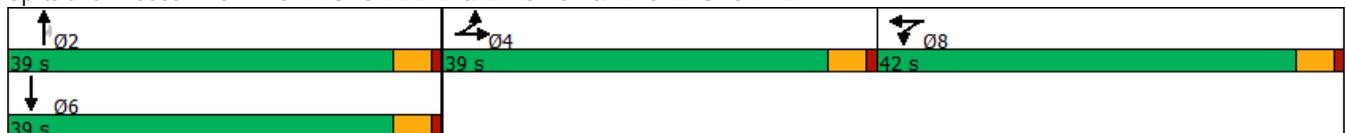
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	222	82	727	673	942
Future Volume (vph)	222	82	727	673	942
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	42.0	39.0	39.0	39.0
Total Split (%)	32.5%	35.0%	32.5%	32.5%	32.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	19.3	23.4	35.1	35.1	35.1
Actuated g/C Ratio	0.21	0.26	0.38	0.38	0.38
v/c Ratio	0.72	1.21dl	0.55	0.75	0.77
Control Delay	45.0	36.9	26.1	13.3	31.7
Queue Delay	0.0	0.1	0.0	0.0	0.0
Total Delay	45.0	36.9	26.1	13.3	31.7
LOS	D	D	C	B	C
Approach Delay	45.0	36.9	20.0		31.7
Approach LOS	D	D	B		C

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 91.5
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 28.8
 Intersection Capacity Utilization 83.3%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	279	632	749	694	1042
v/c Ratio	0.72	1.21dl	0.55	0.75	0.77
Control Delay	45.0	36.9	26.1	13.3	31.7
Queue Delay	0.0	0.1	0.0	0.0	0.0
Total Delay	45.0	36.9	26.1	13.3	31.7
Queue Length 50th (ft)	147	173	171	68	265
Queue Length 95th (ft)	260	262	310	297	#513
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	707	1414	1357	927	1347
Starvation Cap Reductn	0	79	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.47	0.55	0.75	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	222	4	531	82	0	0	727	673	0	942	69
Future Volume (veh/h)	45	222	4	531	82	0	0	727	673	0	942	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	46	229	4	547	85	0	0	749	0	0	971	71
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	55	274	5	599	597	0	0	1234		0	1166	85
Arrive On Green	0.18	0.18	0.18	0.34	0.34	0.00	0.00	0.35	0.00	0.00	0.35	0.35
Sat Flow, veh/h	305	1519	27	1781	1870	0	0	3647	1585	0	3451	245
Grp Volume(v), veh/h	279	0	0	547	85	0	0	749	0	0	514	528
Grp Sat Flow(s),veh/h/ln	1850	0	0	1781	1777	0	0	1777	1585	0	1777	1826
Q Serve(g_s), s	14.5	0.0	0.0	29.2	3.3	0.0	0.0	17.3	0.0	0.0	26.4	26.4
Cycle Q Clear(g_c), s	14.5	0.0	0.0	29.2	3.3	0.0	0.0	17.3	0.0	0.0	26.4	26.4
Prop In Lane	0.16		0.01	1.00		0.00	0.00		1.00	0.00		0.13
Lane Grp Cap(c), veh/h	334	0	0	599	597	0	0	1234		0	617	634
V/C Ratio(X)	0.84	0.00	0.00	0.91	0.14	0.00	0.00	0.61		0.00	0.83	0.83
Avail Cap(c_a), veh/h	643	0	0	672	671	0	0	1234		0	617	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	31.6	23.0	0.0	0.0	26.8	0.0	0.0	29.8	29.8
Incr Delay (d2), s/veh	5.5	0.0	0.0	15.9	0.1	0.0	0.0	2.2	0.0	0.0	12.5	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	0.0	14.8	1.4	0.0	0.0	7.6	0.0	0.0	13.1	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.8	0.0	0.0	47.5	23.1	0.0	0.0	29.0	0.0	0.0	42.2	41.9
LnGrp LOS	D	A	A	D	C	A	A	C		A	D	D
Approach Vol, veh/h		279			632			749	A		1042	
Approach Delay, s/veh		44.8			44.2			29.0			42.1	
Approach LOS		D			D			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		22.4		39.0		37.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		34.5		34.5		37.5				
Max Q Clear Time (g_c+I1), s		19.3		16.5		28.4		31.2				
Green Ext Time (p_c), s		4.6		1.5		3.3		2.2				
Intersection Summary												
HCM 6th Ctrl Delay				39.2								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt					0.990			0.957				0.929
Flt Protected	0.950							0.999				0.977
Satd. Flow (prot)	1770	3539	0	0	3504	0	0	1781	0	0	1691	0
Flt Permitted	0.187							0.994				0.825
Satd. Flow (perm)	348	3539	0	0	3504	0	0	1772	0	0	1428	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					16			23				86
Link Speed (mph)		30			30			30				30
Link Distance (ft)		398			997			334				522
Travel Time (s)		9.0			22.7			7.6				11.9

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	26	750	0	0	873	60	2	46	22	126	0	138
Future Volume (vph)	26	750	0	0	873	60	2	46	22	126	0	138
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	27	781	0	0	909	63	2	48	23	131	0	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	781	0	0	972	0	0	73	0	0	275	0
Intersection Summary												

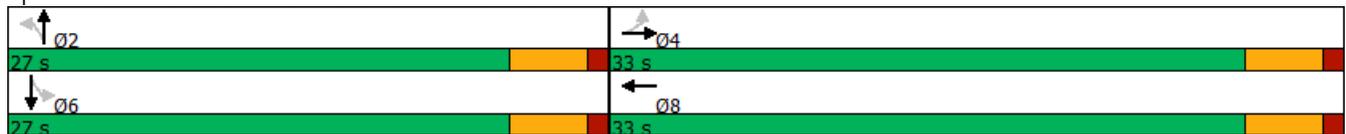
Timings
7: WADE ST & WASHINGTON PL

							
Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	26	750	873	2	46	126	0
Future Volume (vph)	26	750	873	2	46	126	0
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		4	8		2		6
Permitted Phases	4			2		6	
Detector Phase	4	4	8	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	22.1	22.1	22.1		22.7		22.7
Actuated g/C Ratio	0.41	0.41	0.41		0.42		0.42
v/c Ratio	0.19	0.54	0.67		0.10		0.42
Control Delay	13.2	13.2	15.0		9.0		11.0
Queue Delay	0.0	0.0	0.0		0.0		0.0
Total Delay	13.2	13.2	15.0		9.0		11.0
LOS	B	B	B		A		B
Approach Delay		13.2	15.0		9.0		11.0
Approach LOS		B	B		A		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 53.9
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 13.6
 Intersection Capacity Utilization 55.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	27	781	972	73	275
v/c Ratio	0.19	0.54	0.67	0.10	0.42
Control Delay	13.2	13.2	15.0	9.0	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	13.2	15.0	9.0	11.0
Queue Length 50th (ft)	5	93	122	9	38
Queue Length 95th (ft)	20	134	174	34	106
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	185	1887	1876	759	651
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.41	0.52	0.10	0.42
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	750	0	0	873	60	2	46	22	126	0	138
Future Volume (veh/h)	26	750	0	0	873	60	2	46	22	126	0	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	781	0	0	909	62	2	48	23	131	0	144
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	236	1395	0	0	1325	90	75	521	241	373	35	336
Arrive On Green	0.39	0.39	0.00	0.00	0.39	0.39	0.43	0.43	0.43	0.43	0.00	0.43
Sat Flow, veh/h	579	3647	0	0	3469	230	8	1201	556	624	80	773
Grp Volume(v), veh/h	27	781	0	0	478	493	73	0	0	275	0	0
Grp Sat Flow(s),veh/h/ln	579	1777	0	0	1777	1829	1766	0	0	1477	0	0
Q Serve(g_s), s	2.1	8.9	0.0	0.0	11.6	11.6	0.0	0.0	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	13.7	8.9	0.0	0.0	11.6	11.6	1.3	0.0	0.0	6.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.13	0.03		0.32	0.48		0.52
Lane Grp Cap(c), veh/h	236	1395	0	0	697	718	838	0	0	744	0	0
V/C Ratio(X)	0.11	0.56	0.00	0.00	0.69	0.69	0.09	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	327	1953	0	0	977	1005	838	0	0	744	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	12.3	0.0	0.0	13.1	13.1	8.7	0.0	0.0	10.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.0	0.0	1.2	1.2	0.2	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.0	0.0	0.0	4.1	4.2	0.4	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	12.6	0.0	0.0	14.3	14.3	8.9	0.0	0.0	11.4	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	A	A	A	B	A	A
Approach Vol, veh/h		808			971			73			275	
Approach Delay, s/veh		12.8			14.3			8.9			11.4	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		24.8		27.0		24.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		28.5		22.5		28.5				
Max Q Clear Time (g_c+I1), s		3.3		15.7		8.4		13.6				
Green Ext Time (p_c), s		0.3		4.6		1.4		5.6				
Intersection Summary												
HCM 6th Ctrl Delay				13.2								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.995					0.865
Flt Protected			0.950			
Satd. Flow (prot)	3522	0	1770	3539	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	3522	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					240
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	861	31	38	601	0	49
Future Volume (vph)	861	31	38	601	0	49
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	888	32	39	620	0	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	920	0	39	620	0	51
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD



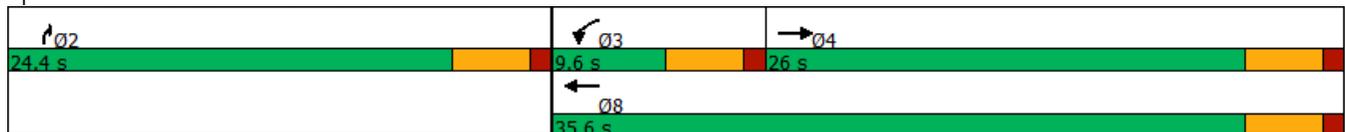
Lane Group	EBT	WBL	WBT	NBR
Lane Configurations	↑↑	↵	↑↑	↶
Traffic Volume (vph)	861	38	601	49
Future Volume (vph)	861	38	601	49
Turn Type	NA	Prot	NA	Prot
Protected Phases	4	3	8	2
Permitted Phases				
Detector Phase	4	3	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		
Recall Mode	None	None	None	Max
Act Effct Green (s)	18.8	5.2	22.1	20.3
Actuated g/C Ratio	0.36	0.10	0.43	0.39
v/c Ratio	0.71	0.22	0.41	0.07
Control Delay	18.2	27.7	10.5	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.2	27.7	10.5	0.2
LOS	B	C	B	A
Approach Delay	18.2		11.5	
Approach LOS	B		B	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 51.6
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 14.9
 Intersection Capacity Utilization 36.5%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD



Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	920	39	620	51
v/c Ratio	0.71	0.22	0.41	0.07
Control Delay	18.2	27.7	10.5	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.2	27.7	10.5	0.2
Queue Length 50th (ft)	103	11	63	0
Queue Length 95th (ft)	208	39	92	0
Internal Link Dist (ft)	299		900	
Turn Bay Length (ft)		125		
Base Capacity (vph)	1501	178	2176	779
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.61	0.22	0.28	0.07

Intersection Summary

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	861	31	38	601	0	49
Future Volume (veh/h)	861	31	38	601	0	49
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	888	32	39	620	0	51
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	1821	66	86	2788	0	0
Arrive On Green	0.52	0.52	0.05	0.78	0.00	0.00
Sat Flow, veh/h	3592	126	1781	3647	0	
Grp Volume(v), veh/h	451	469	39	620	0.0	
Grp Sat Flow(s),veh/h/ln	1777	1848	1781	1777		
Q Serve(g_s), s	3.4	3.4	0.4	1.0		
Cycle Q Clear(g_c), s	3.4	3.4	0.4	1.0		
Prop In Lane		0.07	1.00			
Lane Grp Cap(c), veh/h	925	962	86	2788		
V/C Ratio(X)	0.49	0.49	0.45	0.22		
Avail Cap(c_a), veh/h	1830	1903	435	5293		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	3.2	3.2	9.7	0.6		
Incr Delay (d2), s/veh	0.4	0.4	3.7	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.2	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.6	3.6	13.3	0.6		
LnGrp LOS	A	A	B	A		
Approach Vol, veh/h	920			659		
Approach Delay, s/veh	3.6			1.4		
Approach LOS	A			A		
Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			5.5	15.4		20.9
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s			2.4	5.4		3.0
Green Ext Time (p_c), s			0.0	5.5		4.6
Intersection Summary						
HCM 6th Ctrl Delay			2.7			
HCM 6th LOS			A			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3476	0
Flt Permitted	0.950			0.950			0.090			0.153		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	168	3539	1583	285	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			115			115		19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	173	690	86	183	735	59	78	950	149	107	1327	176
Future Volume (vph)	173	690	86	183	735	59	78	950	149	107	1327	176
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	182	726	91	193	774	62	82	1000	157	113	1397	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	726	91	193	774	62	82	1000	157	113	1582	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	173	690	86	183	735	59	78	950	149	107	1327
Future Volume (vph)	173	690	86	183	735	59	78	950	149	107	1327
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.0	27.4	27.4	11.6	28.0	28.0	9.6	47.4	47.4	13.6	51.4
Total Split (%)	11.0%	27.4%	27.4%	11.6%	28.0%	28.0%	9.6%	47.4%	47.4%	13.6%	51.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	6.5	22.8	22.8	7.1	23.4	23.4	48.5	43.4	43.4	55.0	48.3
Actuated g/C Ratio	0.07	0.23	0.23	0.07	0.24	0.24	0.49	0.44	0.44	0.55	0.49
v/c Ratio	0.81	0.89	0.20	0.79	0.93	0.13	0.50	0.65	0.21	0.41	0.93
Control Delay	73.3	52.3	4.7	68.7	56.1	1.4	22.9	24.6	6.5	14.7	35.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	73.3	52.3	4.7	68.7	56.1	1.4	22.9	25.2	6.5	14.7	35.8
LOS	E	D	A	E	E	A	C	C	A	B	D
Approach Delay		51.8			55.2			22.6			34.4
Approach LOS		D			E			C			C

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 99.3
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 39.3
 Intersection Capacity Utilization 86.9%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	182	726	91	193	774	62	82	1000	157	113	1582
v/c Ratio	0.81	0.89	0.20	0.79	0.93	0.13	0.50	0.65	0.21	0.41	0.93
Control Delay	73.3	52.3	4.7	68.7	56.1	1.4	22.9	24.6	6.5	14.7	35.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	73.3	52.3	4.7	68.7	56.1	1.4	22.9	25.2	6.5	14.7	35.8
Queue Length 50th (ft)	60	237	0	63	255	0	22	257	15	31	493
Queue Length 95th (ft)	#118	#342	27	#120	#371	5	49	331	54	58	#671
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	224	816	453	245	837	462	164	1545	755	295	1699
Starvation Cap Reductn	0	0	0	0	0	0	0	215	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.89	0.20	0.79	0.92	0.13	0.50	0.75	0.21	0.38	0.93

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	690	86	183	735	59	78	950	149	107	1327	176
Future Volume (veh/h)	173	690	86	183	735	59	78	950	149	107	1327	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	726	91	193	774	62	82	1000	157	113	1397	185
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	814	363	247	836	373	168	1658	740	289	1493	196
Arrive On Green	0.07	0.23	0.23	0.07	0.24	0.24	0.05	0.47	0.47	0.05	0.47	0.47
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3158	415
Grp Volume(v), veh/h	182	726	91	193	774	62	82	1000	157	113	781	801
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1796
Q Serve(g_s), s	5.2	19.6	4.7	5.4	21.1	3.1	2.3	20.7	5.8	3.2	41.0	42.2
Cycle Q Clear(g_c), s	5.2	19.6	4.7	5.4	21.1	3.1	2.3	20.7	5.8	3.2	41.0	42.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	226	814	363	247	836	373	168	1658	740	289	840	849
V/C Ratio(X)	0.80	0.89	0.25	0.78	0.93	0.17	0.49	0.60	0.21	0.39	0.93	0.94
Avail Cap(c_a), veh/h	226	820	366	247	842	375	180	1658	740	361	840	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	37.0	31.3	45.3	37.1	30.2	22.8	19.6	15.7	15.1	24.6	24.9
Incr Delay (d2), s/veh	18.6	11.9	0.4	14.8	15.9	0.2	2.2	1.6	0.7	0.9	18.0	20.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.7	1.8	2.8	10.8	1.2	1.0	8.6	2.2	1.3	20.4	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	49.0	31.6	60.1	53.0	30.4	24.9	21.3	16.3	16.0	42.6	44.9
LnGrp LOS	E	D	C	E	D	C	C	C	B	B	D	D
Approach Vol, veh/h		999			1029			1239			1695	
Approach Delay, s/veh		50.2			53.0			20.9			41.9	
Approach LOS		D			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	50.8	11.6	27.2	9.0	51.4	11.0	27.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.1	42.9	7.1	22.9	5.1	46.9	6.5	23.5				
Max Q Clear Time (g_c+I1), s	5.2	22.7	7.4	21.6	4.3	44.2	7.2	23.1				
Green Ext Time (p_c), s	0.1	7.9	0.0	0.7	0.0	2.3	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			40.6									
HCM 6th LOS			D									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.975			0.975			0.982			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3451	0	1770	3451	0	1770	3476	0	1770	3507	0
Flt Permitted	0.216			0.171			0.950			0.121		
Satd. Flow (perm)	402	3451	0	319	3451	0	1770	3476	0	225	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			30			22			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	67	744	148	72	572	116	162	994	134	209	1252	83
Future Volume (vph)	67	744	148	72	572	116	162	994	134	209	1252	83
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	69	767	153	74	590	120	167	1025	138	215	1291	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	920	0	74	710	0	167	1163	0	215	1377	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

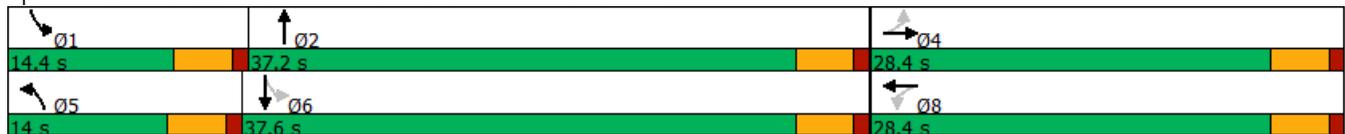
02/13/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	67	744	72	572	162	994	209	1252
Future Volume (vph)	67	744	72	572	162	994	209	1252
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	28.4	28.4	28.4	28.4	14.0	37.2	14.4	37.6
Total Split (%)	35.5%	35.5%	35.5%	35.5%	17.5%	46.5%	18.0%	47.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effect Green (s)	23.4	23.4	23.4	23.4	9.4	33.3	42.3	33.1
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.12	0.42	0.53	0.42
v/c Ratio	0.58	0.89	0.79	0.68	0.80	0.79	0.72	0.94
Control Delay	47.0	37.8	80.0	27.6	63.2	24.9	28.6	36.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	37.8	80.0	27.6	63.2	24.9	28.6	36.2
LOS	D	D	E	C	E	C	C	D
Approach Delay		38.4		32.5		29.7		35.2
Approach LOS		D		C		C		D

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 79.4
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 33.9
 Intersection Capacity Utilization 90.7%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

10: CENTINELA AVE & WASHINGTON BLVD

02/13/2022

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	69	920	74	710	167	1163	215	1377
v/c Ratio	0.58	0.89	0.79	0.68	0.80	0.79	0.72	0.94
Control Delay	47.0	37.8	80.0	27.6	63.2	24.9	28.6	36.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	37.8	80.0	27.6	63.2	24.9	28.6	36.2
Queue Length 50th (ft)	29	221	34	156	83	258	49	336
Queue Length 95th (ft)	#90	#330	#110	216	#184	341	#142	#488
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	121	1060	96	1060	212	1468	314	1467
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.87	0.77	0.67	0.79	0.79	0.68	0.94

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	67	744	148	72	572	116	162	994	134	209	1252	83
Future Volume (veh/h)	67	744	148	72	572	116	162	994	134	209	1252	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	767	153	74	590	120	167	1025	138	215	1291	86
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	887	177	124	884	179	203	1374	185	336	1407	94
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.11	0.44	0.44	0.09	0.42	0.42
Sat Flow, veh/h	739	2952	589	607	2943	597	1781	3148	423	1781	3382	225
Grp Volume(v), veh/h	69	462	458	74	356	354	167	578	585	215	677	700
Grp Sat Flow(s),veh/h/ln	739	1777	1764	607	1777	1763	1781	1777	1794	1781	1777	1830
Q Serve(g_s), s	7.2	19.5	19.5	4.4	13.9	14.0	7.3	21.6	21.7	5.4	28.6	28.8
Cycle Q Clear(g_c), s	21.2	19.5	19.5	23.9	13.9	14.0	7.3	21.6	21.7	5.4	28.6	28.8
Prop In Lane	1.00		0.33	1.00		0.34	1.00		0.24	1.00		0.12
Lane Grp Cap(c), veh/h	182	534	530	124	534	530	203	775	783	336	739	761
V/C Ratio(X)	0.38	0.86	0.87	0.60	0.67	0.67	0.82	0.75	0.75	0.64	0.92	0.92
Avail Cap(c_a), veh/h	182	534	530	124	534	530	213	775	783	391	739	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	26.3	26.3	38.8	24.3	24.4	34.5	18.7	18.7	15.4	21.9	22.0
Incr Delay (d2), s/veh	1.3	13.9	14.0	7.7	3.1	3.2	21.5	6.4	6.4	2.7	18.0	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	9.9	9.8	1.7	6.1	6.0	4.3	9.6	9.7	2.2	14.7	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	40.2	40.3	46.5	27.5	27.6	55.9	25.2	25.2	18.1	39.9	40.0
LnGrp LOS	C	D	D	D	C	C	E	C	C	B	D	D
Approach Vol, veh/h		989			784			1330			1592	
Approach Delay, s/veh		39.8			29.3			29.0			37.0	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	39.2		28.4	13.6	37.6		28.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.9	32.7		23.9	9.5	33.1		23.9				
Max Q Clear Time (g_c+I1), s	7.4	23.7		23.2	9.3	30.8		25.9				
Green Ext Time (p_c), s	0.2	5.0		0.5	0.0	1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				34.1								
HCM 6th LOS				C								

Appendix E

Existing Plus Approved Projects Conditions
LOS Analysis Worksheets

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.978			0.984	
Frt Protected	0.950			0.950				0.978			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1782	0	0	1804	0
Frt Permitted	0.149			0.163				0.810			0.836	
Satd. Flow (perm)	278	3539	1583	304	3539	1583	0	1476	0	0	1532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			54		18			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1907			1445			1456			760	
Travel Time (s)		43.3			32.8			33.1			17.3	

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	20	1045	32	77	1120	53	129	109	46	45	77	16
Future Volume (vph)	20	1045	32	77	1120	53	129	109	46	45	77	16
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	21	1112	34	82	1191	56	137	116	49	48	82	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1112	34	82	1191	56	0	302	0	0	147	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

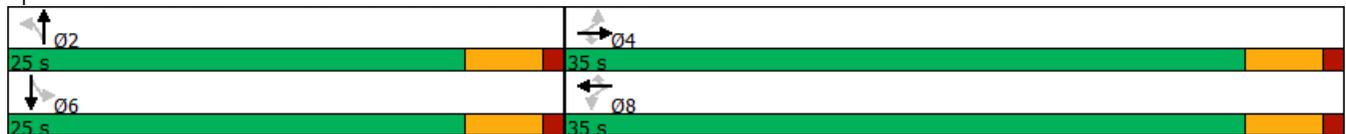
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	1045	32	77	1120	53	129	109	45	77
Future Volume (vph)	20	1045	32	77	1120	53	129	109	45	77
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	26.8	26.8	26.8	26.8	26.8	26.8		20.7		20.7
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47		0.37		0.37
v/c Ratio	0.16	0.66	0.04	0.57	0.71	0.07		0.55		0.26
Control Delay	11.5	13.4	3.3	29.8	14.3	3.0		19.2		14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	11.5	13.4	3.3	29.8	14.3	3.0		19.2		14.4
LOS	B	B	A	C	B	A		B		B
Approach Delay		13.1			14.8			19.2		14.4
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.5
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 14.6
 Intersection Capacity Utilization 68.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	21	1112	34	82	1191	56	302	147
v/c Ratio	0.16	0.66	0.04	0.57	0.71	0.07	0.55	0.26
Control Delay	11.5	13.4	3.3	29.8	14.3	3.0	19.2	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.5	13.4	3.3	29.8	14.3	3.0	19.2	14.4
Queue Length 50th (ft)	4	139	0	18	154	0	82	35
Queue Length 95th (ft)	16	195	11	#78	215	14	154	73
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	151	1924	876	165	1924	885	551	567
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.58	0.04	0.50	0.62	0.06	0.55	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1045	32	77	1120	53	129	109	46	45	77	16
Future Volume (veh/h)	20	1045	32	77	1120	53	129	109	46	45	77	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1112	34	82	1191	56	137	116	49	48	82	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	1747	779	252	1747	779	307	247	90	233	370	68
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	446	3554	1585	491	3554	1585	615	699	254	425	1047	192
Grp Volume(v), veh/h	21	1112	34	82	1191	56	302	0	0	147	0	0
Grp Sat Flow(s),veh/h/ln	446	1777	1585	491	1777	1585	1568	0	0	1664	0	0
Q Serve(g_s), s	2.2	13.4	0.6	8.6	14.9	1.1	5.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	17.1	13.4	0.6	22.0	14.9	1.1	8.5	0.0	0.0	3.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.16	0.33		0.12
Lane Grp Cap(c), veh/h	229	1747	779	252	1747	779	644	0	0	670	0	0
V/C Ratio(X)	0.09	0.64	0.04	0.33	0.68	0.07	0.47	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	244	1868	833	268	1868	833	644	0	0	670	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	10.9	7.7	19.1	11.3	7.8	14.7	0.0	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.7	0.0	0.7	0.9	0.0	2.4	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.4	0.2	0.9	5.0	0.3	3.2	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	11.6	7.7	19.8	12.2	7.8	17.2	0.0	0.0	13.9	0.0	0.0
LnGrp LOS	B	B	A	B	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1167			1329			302			147	
Approach Delay, s/veh		11.6			12.5			17.2			13.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		33.0		25.0		33.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		20.5		30.5		20.5		30.5				
Max Q Clear Time (g_c+I1), s		10.5		19.1		5.3		24.0				
Green Ext Time (p_c), s		1.3		6.2		0.6		4.5				
Intersection Summary												
HCM 6th Ctrl Delay				12.7								
HCM 6th LOS				B								

Lanes and Geometrics
 2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.979			0.955	
Flt Protected	0.950			0.950				0.995			0.990	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1815	0	0	1761	0
Flt Permitted	0.139			0.138				0.955			0.907	
Satd. Flow (perm)	259	3539	1583	257	3539	1583	0	1742	0	0	1613	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			39		16			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	95	1216	8	31	1137	36	31	214	45	32	78	55
Future Volume (vph)	95	1216	8	31	1137	36	31	214	45	32	78	55
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	103	1322	9	34	1236	39	34	233	49	35	85	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	1322	9	34	1236	39	0	316	0	0	180	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

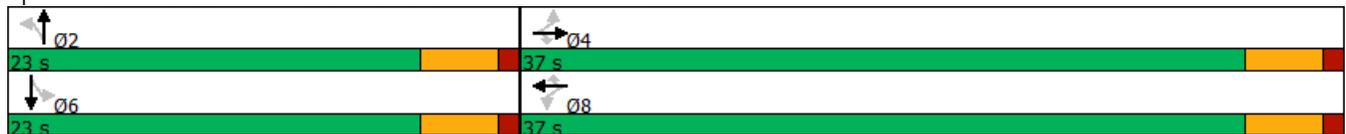
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	95	1216	8	31	1137	36	31	214	32	78
Future Volume (vph)	95	1216	8	31	1137	36	31	214	32	78
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	23.0	23.0	23.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	28.9	28.9	28.9	28.9	28.9	28.9		18.6		18.6
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.33		0.33
v/c Ratio	0.78	0.73	0.01	0.26	0.68	0.05		0.54		0.32
Control Delay	54.5	13.5	1.1	13.5	12.5	2.7		20.0		14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	54.5	13.5	1.1	13.5	12.5	2.7		20.0		14.0
LOS	D	B	A	B	B	A		B		B
Approach Delay		16.4			12.3			20.0		14.0
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.6
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 14.9
 Intersection Capacity Utilization 67.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	103	1322	9	34	1236	39	316	180
v/c Ratio	0.78	0.73	0.01	0.26	0.68	0.05	0.54	0.32
Control Delay	54.5	13.5	1.1	13.5	12.5	2.7	20.0	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.5	13.5	1.1	13.5	12.5	2.7	20.0	14.0
Queue Length 50th (ft)	26	165	0	6	149	0	90	37
Queue Length 95th (ft)	#108	231	2	23	208	11	161	81
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	150	2047	927	148	2047	932	584	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.65	0.01	0.23	0.60	0.04	0.54	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	1216	8	31	1137	36	31	214	45	32	78	55
Future Volume (veh/h)	95	1216	8	31	1137	36	31	214	45	32	78	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	1322	9	34	1236	39	34	233	49	35	85	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1911	852	230	1911	852	99	433	85	132	286	173
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	434	3554	1585	411	3554	1585	104	1391	274	191	919	555
Grp Volume(v), veh/h	103	1322	9	34	1236	39	316	0	0	180	0	0
Grp Sat Flow(s),veh/h/ln	434	1777	1585	411	1777	1585	1769	0	0	1664	0	0
Q Serve(g_s), s	13.1	16.3	0.2	3.9	14.7	0.7	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	27.8	16.3	0.2	20.2	14.7	0.7	8.6	0.0	0.0	4.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.11		0.16	0.19		0.33
Lane Grp Cap(c), veh/h	247	1911	852	230	1911	852	617	0	0	590	0	0
V/C Ratio(X)	0.42	0.69	0.01	0.15	0.65	0.05	0.51	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	251	1942	866	233	1942	866	617	0	0	590	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.6	10.1	6.4	17.6	9.7	6.5	17.1	0.0	0.0	15.7	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.0	0.0	0.3	0.7	0.0	3.0	0.0	0.0	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.3	0.0	0.4	4.7	0.2	3.8	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	11.2	6.4	17.9	10.5	6.5	20.1	0.0	0.0	17.1	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	C	A	A	B	A	A
Approach Vol, veh/h		1434			1309			316			180	
Approach Delay, s/veh		11.8			10.6			20.1			17.1	
Approach LOS		B			B			C			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		36.5		23.0		36.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5				
Max Q Clear Time (g_c+I1), s		10.6		29.8		6.7		22.2				
Green Ext Time (p_c), s		1.1		2.2		0.7		6.4				
Intersection Summary												
HCM 6th Ctrl Delay				12.4								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt		0.994			0.991			0.924			0.899	
Flt Protected		0.996			0.999			0.986			0.990	
Satd. Flow (prot)	0	1844	0	0	1844	0	0	1697	0	0	1658	0
Flt Permitted		0.996			0.999			0.986			0.990	
Satd. Flow (perm)	0	1844	0	0	1844	0	0	1697	0	0	1658	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	24	263	13	4	198	14	25	12	48	7	2	26
Future Volume (vph)	24	263	13	4	198	14	25	12	48	7	2	26
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	28	306	15	5	230	16	29	14	56	8	2	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	349	0	0	251	0	0	99	0	0	40	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	263	13	4	198	14	25	12	48	7	2	26
Future Vol, veh/h	24	263	13	4	198	14	25	12	48	7	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	306	15	5	230	16	29	14	56	8	2	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	321	0	0	634	626	314	653	625	238
Stage 1	-	-	-	-	-	-	370	370	-	248	248	-
Stage 2	-	-	-	-	-	-	264	256	-	405	377	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1320	-	-	1239	-	-	392	401	726	380	401	801
Stage 1	-	-	-	-	-	-	650	620	-	756	701	-
Stage 2	-	-	-	-	-	-	741	696	-	622	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1239	-	-	367	389	726	333	389	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	389	-	333	389	-
Stage 1	-	-	-	-	-	-	633	604	-	736	697	-
Stage 2	-	-	-	-	-	-	707	693	-	546	600	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			13.6			11.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	515	1320	-	-	1239	-	-	597
HCM Lane V/C Ratio	0.192	0.021	-	-	0.004	-	-	0.068
HCM Control Delay (s)	13.6	7.8	0	-	7.9	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0	-	-	0.2

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.989			0.892			0.874	
Flt Protected	0.950			0.950				0.995			0.997	
Satd. Flow (prot)	1770	3539	0	1770	3500	0	0	1653	0	0	1623	0
Flt Permitted	0.950			0.950				0.995			0.997	
Satd. Flow (perm)	1770	3539	0	1770	3500	0	0	1653	0	0	1623	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	
Intersection Summary												
Area Type:	Other											

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	61	1227	4	22	1126	89	1	1	8	3	0	41
Future Volume (vph)	61	1227	4	22	1126	89	1	1	8	3	0	41
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	63	1265	4	23	1161	92	1	1	8	3	0	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	1269	0	23	1253	0	0	10	0	0	45	0
Intersection Summary												

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	61	1227	4	22	1126	89	1	1	8	3	0	41
Future Vol, veh/h	61	1227	4	22	1126	89	1	1	8	3	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	1265	4	23	1161	92	1	1	8	3	0	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1253	0	0	1269	0	0	2020	2692	635	2012	2648	627
Stage 1	-	-	-	-	-	-	1393	1393	-	1253	1253	-
Stage 2	-	-	-	-	-	-	627	1299	-	759	1395	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	551	-	-	543	-	-	34	21	421	35	23	426
Stage 1	-	-	-	-	-	-	149	207	-	182	242	-
Stage 2	-	-	-	-	-	-	438	230	-	365	207	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	551	-	-	543	-	-	27	18	421	29	20	426
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	18	-	29	20	-
Stage 1	-	-	-	-	-	-	132	183	-	161	232	-
Stage 2	-	-	-	-	-	-	378	220	-	315	183	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.2			50.1			25.6		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	90	551	-	-	543	-	-	220
HCM Lane V/C Ratio	0.115	0.114	-	-	0.042	-	-	0.206
HCM Control Delay (s)	50.1	12.4	-	-	11.9	-	-	25.6
HCM Lane LOS	F	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.4	0.4	-	-	0.1	-	-	0.8

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3536	0	1770	3539	1621	0
Flt Permitted			0.137		0.998	
Satd. Flow (perm)	3536	0	255	3539	1621	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				43	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1237	5	21	1275	5	92
Future Volume (vph)	1237	5	21	1275	5	92
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1302	5	22	1342	5	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	22	1342	102	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022

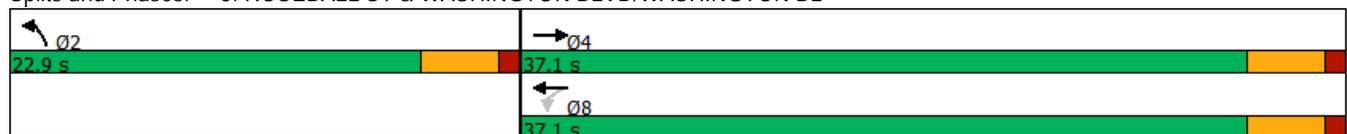


Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1237	21	1275	5
Future Volume (vph)	1237	21	1275	5
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.1	37.1	37.1	22.9
Total Split (%)	61.8%	61.8%	61.8%	38.2%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	29.1	29.1	29.1	18.5
Actuated g/C Ratio	0.51	0.51	0.51	0.33
v/c Ratio	0.72	0.17	0.74	0.18
Control Delay	13.2	10.7	13.6	10.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.2	10.7	13.6	10.9
LOS	B	B	B	B
Approach Delay	13.2		13.5	10.9
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.7
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 13.3
 Intersection Capacity Utilization 48.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1307	22	1342	102
v/c Ratio	0.72	0.17	0.74	0.18
Control Delay	13.2	10.7	13.6	10.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.2	10.7	13.6	10.9
Queue Length 50th (ft)	162	4	169	15
Queue Length 95th (ft)	225	16	236	46
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	2048	147	2049	558
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.64	0.15	0.65	0.18

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1237	5	21	1275	5	92
Future Volume (veh/h)	1237	5	21	1275	5	92
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1302	5	22	1342	5	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1823	7	225	1784	26	503
Arrive On Green	0.50	0.50	0.50	0.50	0.33	0.33
Sat Flow, veh/h	3724	14	421	3647	77	1503
Grp Volume(v), veh/h	637	670	22	1342	103	0
Grp Sat Flow(s),veh/h/ln	1777	1868	421	1777	1596	0
Q Serve(g_s), s	15.3	15.3	2.4	16.6	2.5	0.0
Cycle Q Clear(g_c), s	15.3	15.3	17.7	16.6	2.5	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	892	938	225	1784	534	0
V/C Ratio(X)	0.71	0.71	0.10	0.75	0.19	0.00
Avail Cap(c_a), veh/h	1053	1106	263	2105	534	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	10.6	17.5	11.0	13.0	0.0
Incr Delay (d2), s/veh	1.9	1.8	0.2	1.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	0.2	5.4	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.5	12.4	17.7	12.3	13.8	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1307			1364	103	
Approach Delay, s/veh	12.5			12.4	13.8	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		22.9		32.1		32.1
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.4		32.6		32.6
Max Q Clear Time (g_c+I1), s		4.5		17.3		19.7
Green Ext Time (p_c), s		0.2		8.0		8.0
Intersection Summary						
HCM 6th Ctrl Delay			12.5			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.986	
Flt Protected		0.989			0.960							
Satd. Flow (prot)	0	1839	0	0	3398	0	0	3539	1583	0	3490	0
Flt Permitted		0.989			0.960							
Satd. Flow (perm)	0	1839	0	0	3398	0	0	3539	1583	0	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									287		9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	74	245	4	545	101	0	0	880	435	0	770	78
Future Volume (vph)	74	245	4	545	101	0	0	880	435	0	770	78
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	263	4	586	109	0	0	946	468	0	828	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	0	0	695	0	0	946	468	0	912	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

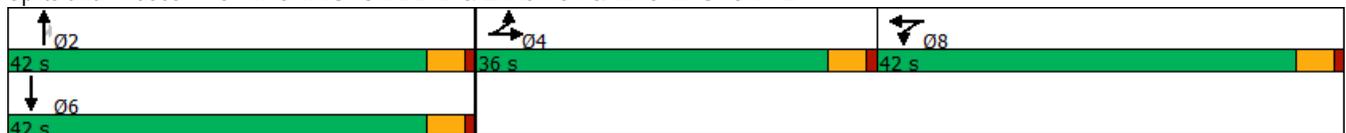
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	245	101	880	435	770
Future Volume (vph)	245	101	880	435	770
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	42.0	42.0	42.0	42.0
Total Split (%)	30.0%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	23.9	27.6	38.1	38.1	38.1
Actuated g/C Ratio	0.23	0.27	0.37	0.37	0.37
v/c Ratio	0.82	1.24dl	0.73	0.61	0.71
Control Delay	54.3	41.3	34.3	15.3	33.4
Queue Delay	0.0	0.4	0.0	0.0	0.0
Total Delay	54.3	41.7	34.3	15.3	33.4
LOS	D	D	C	B	C
Approach Delay	54.3	41.7	28.0		33.4
Approach LOS	D	D	C		C

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 103.3
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 35.0
 Intersection Capacity Utilization 83.0%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↘	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	347	695	946	468	912
v/c Ratio	0.82	1.24dl	0.73	0.61	0.71
Control Delay	54.3	41.3	34.3	15.3	33.4
Queue Delay	0.0	0.4	0.0	0.0	0.0
Total Delay	54.3	41.7	34.3	15.3	33.4
Queue Length 50th (ft)	217	222	284	91	268
Queue Length 95th (ft)	356	312	446	245	425
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	569	1251	1303	764	1291
Starvation Cap Reductn	0	181	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.65	0.73	0.61	0.71

Intersection Summary

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	245	4	545	101	0	0	880	435	0	770	78
Future Volume (veh/h)	74	245	4	545	101	0	0	880	435	0	770	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	80	263	4	586	109	0	0	946	0	0	828	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	90	297	5	595	593	0	0	1186		0	1087	110
Arrive On Green	0.21	0.21	0.21	0.33	0.33	0.00	0.00	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h	425	1399	21	1781	1870	0	0	3647	1585	0	3351	330
Grp Volume(v), veh/h	347	0	0	586	109	0	0	946	0	0	452	460
Grp Sat Flow(s),veh/h/ln	1845	0	0	1781	1777	0	0	1777	1585	0	1777	1811
Q Serve(g_s), s	20.5	0.0	0.0	36.7	4.9	0.0	0.0	27.2	0.0	0.0	25.5	25.5
Cycle Q Clear(g_c), s	20.5	0.0	0.0	36.7	4.9	0.0	0.0	27.2	0.0	0.0	25.5	25.5
Prop In Lane	0.23		0.01	1.00		0.00	0.00		1.00	0.00		0.18
Lane Grp Cap(c), veh/h	392	0	0	595	593	0	0	1186		0	593	604
V/C Ratio(X)	0.89	0.00	0.00	0.99	0.18	0.00	0.00	0.80		0.00	0.76	0.76
Avail Cap(c_a), veh/h	517	0	0	595	593	0	0	1186		0	593	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	0.0	37.2	26.6	0.0	0.0	34.0	0.0	0.0	33.4	33.4
Incr Delay (d2), s/veh	13.6	0.0	0.0	33.2	0.1	0.0	0.0	5.6	0.0	0.0	9.0	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	0.0	21.1	2.1	0.0	0.0	12.5	0.0	0.0	12.3	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	0.0	0.0	70.3	26.7	0.0	0.0	39.6	0.0	0.0	42.4	42.2
LnGrp LOS	E	A	A	E	C	A	A	D		A	D	D
Approach Vol, veh/h		347			695			946	A		912	
Approach Delay, s/veh		56.5			63.5			39.6			42.3	
Approach LOS		E			E			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		28.4		42.0		42.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		37.5		31.5		37.5		37.5				
Max Q Clear Time (g_c+I1), s		29.2		22.5		27.5		38.7				
Green Ext Time (p_c), s		4.1		1.4		4.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				48.2								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.986			0.977				0.949
Flt Protected	0.950											0.970
Satd. Flow (prot)	1770	3539	0	0	3490	0	0	1820	0	0	1715	0
Flt Permitted	0.211											0.790
Satd. Flow (perm)	393	3539	0	0	3490	0	0	1820	0	0	1397	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					25			12				56
Link Speed (mph)		30			30			30				30
Link Distance (ft)		398			997			334				522
Travel Time (s)		9.0			22.7			7.6				11.9

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	42	912	0	0	781	79	0	52	11	107	0	64
Future Volume (vph)	42	912	0	0	781	79	0	52	11	107	0	64
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	991	0	0	849	86	0	57	12	116	0	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	991	0	0	935	0	0	69	0	0	186	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

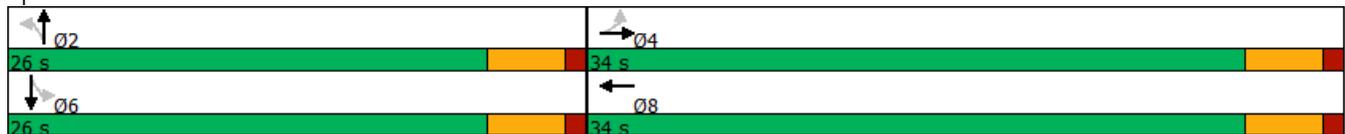
						
Lane Group	EBL	EBT	WBT	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	912	781	52	107	0
Future Volume (vph)	42	912	781	52	107	0
Turn Type	Perm	NA	NA	NA	Perm	NA
Protected Phases		4	8	2		6
Permitted Phases	4				6	
Detector Phase	4	4	8	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	26.0	26.0	26.0
Total Split (%)	56.7%	56.7%	56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	Max	Max	Max
Act Effct Green (s)	22.7	22.7	22.7	21.7		21.7
Actuated g/C Ratio	0.42	0.42	0.42	0.41		0.41
v/c Ratio	0.28	0.66	0.63	0.09		0.31
Control Delay	14.4	14.4	13.5	10.7		10.8
Queue Delay	0.0	0.0	0.0	0.0		0.0
Total Delay	14.4	14.4	13.5	10.7		10.8
LOS	B	B	B	B		B
Approach Delay		14.4	13.5	10.7		10.8
Approach LOS		B	B	B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 53.5
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 13.6
 Intersection Capacity Utilization 56.0%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	46	991	935	69	186
v/c Ratio	0.28	0.66	0.63	0.09	0.31
Control Delay	14.4	14.4	13.5	10.7	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	14.4	13.5	10.7	10.8
Queue Length 50th (ft)	9	123	110	11	26
Queue Length 95th (ft)	29	174	158	36	76
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	219	1971	1955	745	600
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.50	0.48	0.09	0.31
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	912	0	0	781	79	0	52	11	107	0	64
Future Volume (veh/h)	42	912	0	0	781	79	0	52	11	107	0	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	991	0	0	849	86	0	57	12	116	0	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	268	1503	0	0	1378	140	0	609	128	449	25	219
Arrive On Green	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.41	0.41	0.41	0.00	0.41
Sat Flow, veh/h	599	3647	0	0	3351	330	0	1498	315	833	61	540
Grp Volume(v), veh/h	46	991	0	0	463	472	0	0	69	186	0	0
Grp Sat Flow(s),veh/h/ln	599	1777	0	0	1777	1811	0	0	1814	1434	0	0
Q Serve(g_s), s	3.4	11.8	0.0	0.0	10.7	10.8	0.0	0.0	1.2	3.2	0.0	0.0
Cycle Q Clear(g_c), s	14.2	11.8	0.0	0.0	10.7	10.8	0.0	0.0	1.2	4.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.18	0.00		0.17	0.62		0.38
Lane Grp Cap(c), veh/h	268	1503	0	0	751	766	0	0	738	694	0	0
V/C Ratio(X)	0.17	0.66	0.00	0.00	0.62	0.62	0.00	0.00	0.09	0.27	0.00	0.00
Avail Cap(c_a), veh/h	349	1983	0	0	992	1011	0	0	738	694	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.4	12.2	0.0	0.0	11.9	11.9	0.0	0.0	9.7	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.0	0.8	0.8	0.0	0.0	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.9	0.0	0.0	3.7	3.7	0.0	0.0	0.5	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	12.7	0.0	0.0	12.7	12.7	0.0	0.0	9.9	11.5	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	A	A	A	B	A	A
Approach Vol, veh/h		1037			935			69			186	
Approach Delay, s/veh		12.9			12.7			9.9			11.5	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		26.9		26.0		26.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		29.5		21.5		29.5				
Max Q Clear Time (g_c+I1), s		3.2		16.2		6.4		12.8				
Green Ext Time (p_c), s		0.2		6.2		0.9		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.6								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	3529	0	1770	3539	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	3529	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4					254
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	715	15	23	632	0	70
Future Volume (vph)	715	15	23	632	0	70
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	794	17	26	702	0	78
Shared Lane Traffic (%)						
Lane Group Flow (vph)	811	0	26	702	0	78
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD

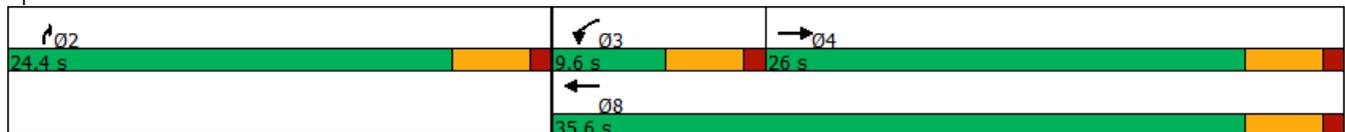
	→	↖	←	↗
Lane Group	EBT	WBL	WBT	NBR
Lane Configurations	↑↑	↖	↑↑	↗
Traffic Volume (vph)	715	23	632	70
Future Volume (vph)	715	23	632	70
Turn Type	NA	Prot	NA	Prot
Protected Phases	4	3	8	2
Permitted Phases				
Detector Phase	4	3	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		
Recall Mode	None	None	None	Max
Act Effect Green (s)	17.4	5.2	20.6	20.4
Actuated g/C Ratio	0.35	0.10	0.41	0.41
v/c Ratio	0.66	0.14	0.48	0.10
Control Delay	17.3	26.3	11.4	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.3	26.3	11.4	0.2
LOS	B	C	B	A
Approach Delay	17.3		11.9	
Approach LOS	B		B	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 50.3
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 14.1
 Intersection Capacity Utilization 32.1%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD



Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	811	26	702	78
v/c Ratio	0.66	0.14	0.48	0.10
Control Delay	17.3	26.3	11.4	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.3	26.3	11.4	0.2
Queue Length 50th (ft)	87	7	73	0
Queue Length 95th (ft)	178	29	106	0
Internal Link Dist (ft)	299		900	
Turn Bay Length (ft)		125		
Base Capacity (vph)	1549	184	2244	804
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.14	0.31	0.10

Intersection Summary

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY
02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	715	15	23	632	0	70
Future Volume (veh/h)	715	15	23	632	0	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	794	17	26	702	0	78
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	1770	38	60	2721	0	0
Arrive On Green	0.50	0.50	0.03	0.77	0.00	0.00
Sat Flow, veh/h	3651	76	1781	3647	0	
Grp Volume(v), veh/h	397	414	26	702	0.0	
Grp Sat Flow(s),veh/h/ln	1777	1857	1781	1777		
Q Serve(g_s), s	2.8	2.8	0.3	1.1		
Cycle Q Clear(g_c), s	2.8	2.8	0.3	1.1		
Prop In Lane		0.04	1.00			
Lane Grp Cap(c), veh/h	884	924	60	2721		
V/C Ratio(X)	0.45	0.45	0.43	0.26		
Avail Cap(c_a), veh/h	1989	2079	473	5755		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	3.1	3.1	9.1	0.7		
Incr Delay (d2), s/veh	0.4	0.3	4.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.5	3.5	13.9	0.7		
LnGrp LOS	A	A	B	A		
Approach Vol, veh/h	811			728		
Approach Delay, s/veh	3.5			1.2		
Approach LOS	A			A		
Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			5.1	14.1		19.2
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s			2.3	4.8		3.1
Green Ext Time (p_c), s			0.0	4.8		5.3
Intersection Summary						
HCM 6th Ctrl Delay			2.4			
HCM 6th LOS			A			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3461	0
Flt Permitted	0.950			0.950			0.135			0.110		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	251	3539	1583	205	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127			26
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	175	783	72	152	638	113	59	1124	168	92	839	144
Future Volume (vph)	175	783	72	152	638	113	59	1124	168	92	839	144
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	186	833	77	162	679	120	63	1196	179	98	893	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	186	833	77	162	679	120	63	1196	179	98	1046	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	175	783	72	152	638	113	59	1124	168	92	839
Future Volume (vph)	175	783	72	152	638	113	59	1124	168	92	839
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.9	29.0	29.0	11.0	28.1	28.1	9.6	40.5	40.5	9.5	40.4
Total Split (%)	13.2%	32.2%	32.2%	12.2%	31.2%	31.2%	10.7%	45.0%	45.0%	10.6%	44.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	7.4	23.4	23.4	6.5	22.5	22.5	40.1	36.2	36.2	40.0	36.1
Actuated g/C Ratio	0.09	0.27	0.27	0.07	0.26	0.26	0.46	0.42	0.42	0.46	0.41
v/c Ratio	0.64	0.88	0.15	0.63	0.74	0.24	0.31	0.81	0.24	0.53	0.72
Control Delay	50.5	42.6	1.9	52.1	35.6	5.9	15.6	28.9	7.1	22.9	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	50.5	42.6	1.9	52.1	35.6	5.9	15.6	29.2	7.1	22.9	25.0
LOS	D	D	A	D	D	A	B	C	A	C	C
Approach Delay		41.1			34.7			25.8			24.8
Approach LOS		D			C			C			C

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 87

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 31.0

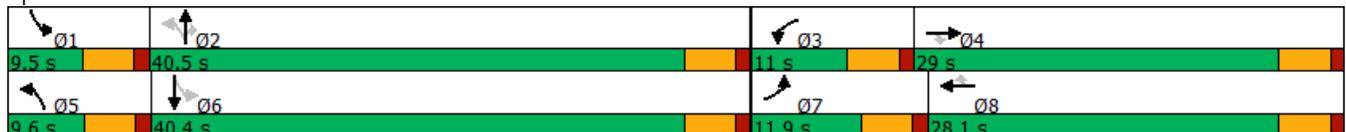
Intersection LOS: C

Intersection Capacity Utilization 77.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	
Lane Group Flow (vph)	186	833	77	162	679	120	63	1196	179	98	1046	
v/c Ratio	0.64	0.88	0.15	0.63	0.74	0.24	0.31	0.81	0.24	0.53	0.72	
Control Delay	50.5	42.6	1.9	52.1	35.6	5.9	15.6	28.9	7.1	22.9	25.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	
Total Delay	50.5	42.6	1.9	52.1	35.6	5.9	15.6	29.2	7.1	22.9	25.0	
Queue Length 50th (ft)	54	236	0	47	185	0	18	317	18	28	256	
Queue Length 95th (ft)	#94	#338	10	#87	248	37	38	406	59	#54	333	
Internal Link Dist (ft)		917			520			439			504	
Turn Bay Length (ft)	100		50	125		50	200		50	100		
Base Capacity (vph)	293	1001	539	257	964	523	205	1471	732	184	1451	
Starvation Cap Reductn	0	0	0	0	0	0	0	35	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.63	0.83	0.14	0.63	0.70	0.23	0.31	0.83	0.24	0.53	0.72	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	783	72	152	638	113	59	1124	168	92	839	144
Future Volume (veh/h)	175	783	72	152	638	113	59	1124	168	92	839	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	833	77	162	679	120	63	1196	179	98	893	153
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	943	420	234	916	408	256	1458	650	218	1266	217
Arrive On Green	0.08	0.27	0.27	0.07	0.26	0.26	0.04	0.41	0.41	0.05	0.42	0.42
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3034	520
Grp Volume(v), veh/h	186	833	77	162	679	120	63	1196	179	98	523	523
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1777
Q Serve(g_s), s	4.6	19.7	3.3	4.0	15.4	5.3	1.8	26.2	6.6	2.7	21.3	21.3
Cycle Q Clear(g_c), s	4.6	19.7	3.3	4.0	15.4	5.3	1.8	26.2	6.6	2.7	21.3	21.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	260	943	420	234	916	408	256	1458	650	218	742	742
V/C Ratio(X)	0.72	0.88	0.18	0.69	0.74	0.29	0.25	0.82	0.28	0.45	0.71	0.71
Avail Cap(c_a), veh/h	291	992	443	256	956	426	280	1458	650	227	742	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	30.9	24.9	40.0	29.9	26.2	16.3	23.0	17.2	18.7	21.1	21.1
Incr Delay (d2), s/veh	7.2	9.2	0.2	7.0	3.0	0.4	0.5	5.3	1.0	1.4	5.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	9.4	1.2	1.9	6.8	2.0	0.7	11.4	0.2	1.1	9.5	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	40.2	25.1	47.1	32.9	26.5	16.8	28.3	18.2	20.1	26.7	26.7
LnGrp LOS	D	D	C	D	C	C	B	C	B	C	C	C
Approach Vol, veh/h		1096			961			1438			1144	
Approach Delay, s/veh		40.2			34.5			26.5			26.1	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	40.5	10.4	27.8	8.4	41.1	11.1	27.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	36.0	6.5	24.5	5.1	35.9	7.4	23.6				
Max Q Clear Time (g_c+I1), s	4.7	28.2	6.0	21.7	3.8	23.3	6.6	17.4				
Green Ext Time (p_c), s	0.0	5.1	0.0	1.5	0.0	5.6	0.0	2.6				
Intersection Summary												
HCM 6th Ctrl Delay			31.3									
HCM 6th LOS			C									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Flt		0.968			0.984			0.980			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3426	0	1770	3483	0	1770	3468	0	1770	3514	0
Flt Permitted	0.265			0.209			0.950			0.140		
Satd. Flow (perm)	494	3426	0	389	3483	0	1770	3468	0	261	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			18			31			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	57	654	177	72	530	64	148	1210	181	104	886	41
Future Volume (vph)	57	654	177	72	530	64	148	1210	181	104	886	41
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	60	688	186	76	558	67	156	1274	191	109	933	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	874	0	76	625	0	156	1465	0	109	976	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

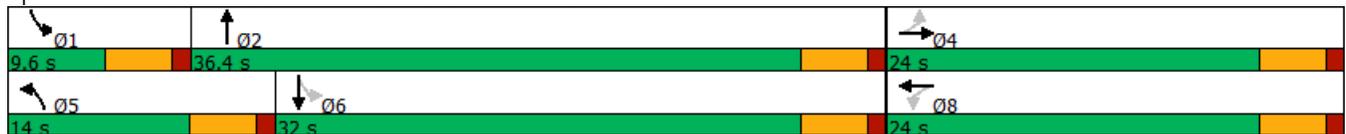
02/13/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	654	72	530	148	1210	104	886
Future Volume (vph)	57	654	72	530	148	1210	104	886
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	14.0	36.4	9.6	32.0
Total Split (%)	34.3%	34.3%	34.3%	34.3%	20.0%	52.0%	13.7%	45.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	19.1	19.1	19.1	19.1	9.0	33.5	32.6	27.5
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.13	0.48	0.47	0.40
v/c Ratio	0.44	0.89	0.71	0.64	0.68	0.87	0.47	0.70
Control Delay	32.8	35.9	61.3	24.9	45.2	23.8	14.8	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	35.9	61.3	24.9	45.2	23.8	14.8	20.6
LOS	C	D	E	C	D	C	B	C
Approach Delay		35.7		28.9		25.9		20.0
Approach LOS		D		C		C		C

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 69.2
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 27.0
 Intersection Capacity Utilization 87.9%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	60	874	76	625	156	1465	109	976
v/c Ratio	0.44	0.89	0.71	0.64	0.68	0.87	0.47	0.70
Control Delay	32.8	35.9	61.3	24.9	45.2	23.8	14.8	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	35.9	61.3	24.9	45.2	23.8	14.8	20.6
Queue Length 50th (ft)	21	178	29	120	65	290	18	178
Queue Length 95th (ft)	58	#285	#98	172	#140	#444	40	245
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	139	1001	109	995	243	1693	234	1402
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.87	0.70	0.63	0.64	0.87	0.47	0.70

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	57	654	177	72	530	64	148	1210	181	104	886	41
Future Volume (veh/h)	57	654	177	72	530	64	148	1210	181	104	886	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	688	186	76	558	67	156	1274	191	109	933	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	778	210	131	899	108	195	1428	213	246	1433	66
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.46	0.46	0.06	0.41	0.41
Sat Flow, veh/h	800	2765	747	634	3196	383	1781	3102	462	1781	3459	159
Grp Volume(v), veh/h	60	442	432	76	310	315	156	726	739	109	479	497
Grp Sat Flow(s),veh/h/ln	800	1777	1736	634	1777	1801	1781	1777	1787	1781	1777	1842
Q Serve(g_s), s	4.9	16.5	16.5	3.0	10.5	10.6	5.9	25.8	26.3	2.4	15.0	15.0
Cycle Q Clear(g_c), s	15.5	16.5	16.5	19.5	10.5	10.6	5.9	25.8	26.3	2.4	15.0	15.0
Prop In Lane	1.00		0.43	1.00		0.21	1.00		0.26	1.00		0.09
Lane Grp Cap(c), veh/h	207	500	489	131	500	507	195	818	823	246	736	763
V/C Ratio(X)	0.29	0.88	0.88	0.58	0.62	0.62	0.80	0.89	0.90	0.44	0.65	0.65
Avail Cap(c_a), veh/h	207	500	489	131	500	507	244	818	823	264	736	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	23.8	23.8	34.1	21.7	21.7	30.1	17.1	17.2	15.3	16.3	16.3
Incr Delay (d2), s/veh	0.8	16.9	17.3	6.2	2.3	2.3	13.9	13.7	14.6	1.3	4.4	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.8	8.6	1.5	4.4	4.5	3.2	12.3	12.8	0.9	6.4	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	40.7	41.1	40.3	24.0	24.0	44.0	30.7	31.8	16.5	20.7	20.6
LnGrp LOS	C	D	D	D	C	C	D	C	C	B	C	C
Approach Vol, veh/h		934			701			1621			1085	
Approach Delay, s/veh		40.2			25.8			32.5			20.2	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	36.4		24.0	12.1	33.2		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	31.9		19.5	9.5	27.5		19.5				
Max Q Clear Time (g_c+I1), s	4.4	28.3		18.5	7.9	17.0		21.5				
Green Ext Time (p_c), s	0.0	2.7		0.6	0.1	4.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				30.0								
HCM 6th LOS				C								

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.962			0.988	
Flt Protected	0.950			0.950				0.983			0.992	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1761	0	0	1826	0
Flt Permitted	0.131			0.182				0.747			0.928	
Satd. Flow (perm)	244	3539	1583	339	3539	1583	0	1339	0	0	1708	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76			28		27			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1907			1445			1456			760	
Travel Time (s)		43.3			32.8			33.1			17.3	

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	22	1055	71	132	1221	28	72	74	57	47	233	28
Future Volume (vph)	22	1055	71	132	1221	28	72	74	57	47	233	28
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	1134	76	142	1313	30	77	80	61	51	251	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	1134	76	142	1313	30	0	218	0	0	332	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

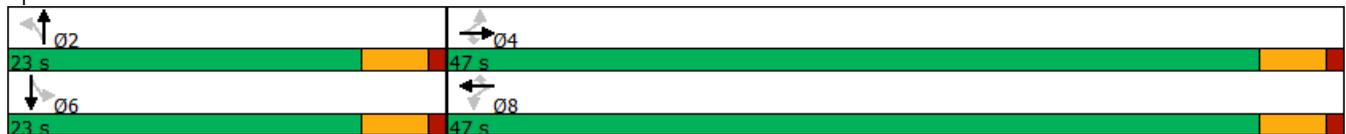
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	1055	71	132	1221	28	72	74	47	233
Future Volume (vph)	22	1055	71	132	1221	28	72	74	47	233
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	34.3	34.3	34.3	34.3	34.3	34.3		18.9		18.9
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55		0.30		0.30
v/c Ratio	0.18	0.58	0.08	0.76	0.67	0.03		0.51		0.64
Control Delay	9.9	10.2	1.9	40.2	11.6	2.6		23.2		27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	9.9	10.2	1.9	40.2	11.6	2.6		23.2		27.9
LOS	A	B	A	D	B	A		C		C
Approach Delay		9.7			14.1			23.2		27.9
Approach LOS		A			B			C		C

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 62.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 14.5
 Intersection Capacity Utilization 71.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	24	1134	76	142	1313	30	218	332
v/c Ratio	0.18	0.58	0.08	0.76	0.67	0.03	0.51	0.64
Control Delay	9.9	10.2	1.9	40.2	11.6	2.6	23.2	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	10.2	1.9	40.2	11.6	2.6	23.2	27.9
Queue Length 50th (ft)	4	131	0	37	164	0	65	117
Queue Length 95th (ft)	16	177	13	#140	221	9	139	#240
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	169	2460	1123	235	2460	1109	424	521
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.46	0.07	0.60	0.53	0.03	0.51	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	22	1055	71	132	1221	28	72	74	57	47	233	28
Future Volume (veh/h)	22	1055	71	132	1221	28	72	74	57	47	233	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1134	76	142	1313	30	77	80	61	51	251	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	2101	937	292	2101	937	184	185	115	111	393	44
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	407	3554	1585	462	3554	1585	407	673	420	179	1428	160
Grp Volume(v), veh/h	24	1134	76	142	1313	30	218	0	0	332	0	0
Grp Sat Flow(s),veh/h/ln	407	1777	1585	462	1777	1585	1500	0	0	1767	0	0
Q Serve(g_s), s	2.7	12.9	1.4	17.9	16.1	0.5	0.0	0.0	0.0	3.2	0.0	0.0
Cycle Q Clear(g_c), s	18.8	12.9	1.4	30.8	16.1	0.5	7.8	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.35		0.28	0.15		0.09
Lane Grp Cap(c), veh/h	250	2101	937	292	2101	937	485	0	0	548	0	0
V/C Ratio(X)	0.10	0.54	0.08	0.49	0.62	0.03	0.45	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	267	2245	1001	310	2245	1001	485	0	0	548	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.0	8.3	5.9	17.5	8.9	5.7	20.3	0.0	0.0	21.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	1.3	0.5	0.0	3.0	0.0	0.0	4.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.0	0.4	1.8	5.1	0.1	3.1	0.0	0.0	5.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	8.5	5.9	18.8	9.4	5.7	23.3	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1234			1485			218			332	
Approach Delay, s/veh		8.5			10.2			23.3			26.5	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		44.3		23.0		44.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		42.5		18.5		42.5				
Max Q Clear Time (g_c+I1), s		9.8		20.8		13.0		32.8				
Green Ext Time (p_c), s		0.8		9.5		0.9		7.0				
Intersection Summary												
HCM 6th Ctrl Delay				12.1								
HCM 6th LOS				B								

Lanes and Geometrics
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.966			0.966	
Flt Protected	0.950			0.950				0.992			0.992	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1785	0	0	1785	0
Flt Permitted	0.132			0.132				0.925			0.919	
Satd. Flow (perm)	246	3539	1583	246	3539	1583	0	1664	0	0	1654	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			27		30			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	61	1234	29	46	1425	20	25	95	40	60	201	89
Future Volume (vph)	61	1234	29	46	1425	20	25	95	40	60	201	89
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	64	1299	31	48	1500	21	26	100	42	63	212	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1299	31	48	1500	21	0	168	0	0	369	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

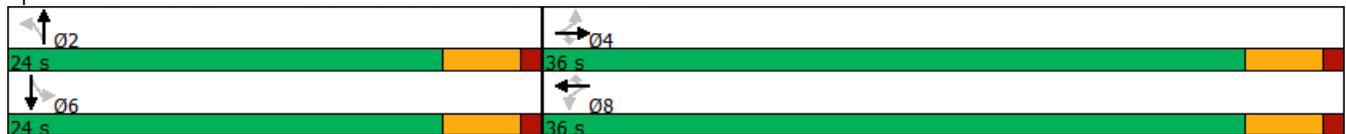
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	61	1234	29	46	1425	20	25	95	60	201
Future Volume (vph)	61	1234	29	46	1425	20	25	95	60	201
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.0	24.0	24.0	24.0
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	30.3	30.3	30.3	30.3	30.3	30.3		19.5		19.5
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.33		0.33
v/c Ratio	0.50	0.71	0.04	0.38	0.82	0.03		0.29		0.66
Control Delay	27.4	13.6	3.3	19.2	16.8	2.9		14.1		22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	27.4	13.6	3.3	19.2	16.8	2.9		14.1		22.9
LOS	C	B	A	B	B	A		B		C
Approach Delay		14.0			16.7			14.1		22.9
Approach LOS		B			B			B		C

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 58.9
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 16.1
 Intersection Capacity Utilization 81.5%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	64	1299	31	48	1500	21	168	369
v/c Ratio	0.50	0.71	0.04	0.38	0.82	0.03	0.29	0.66
Control Delay	27.4	13.6	3.3	19.2	16.8	2.9	14.1	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	13.6	3.3	19.2	16.8	2.9	14.1	22.9
Queue Length 50th (ft)	14	169	0	9	214	0	36	106
Queue Length 95th (ft)	#66	235	10	38	300	7	78	#191
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	132	1895	861	132	1895	860	572	563
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.69	0.04	0.36	0.79	0.02	0.29	0.66

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	61	1234	29	46	1425	20	25	95	40	60	201	89
Future Volume (veh/h)	61	1234	29	46	1425	20	25	95	40	60	201	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1299	31	48	1500	21	26	100	42	63	212	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1866	832	224	1866	832	115	373	140	134	347	140
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	343	3554	1585	412	3554	1585	141	1149	430	195	1068	432
Grp Volume(v), veh/h	64	1299	31	48	1500	21	168	0	0	369	0	0
Grp Sat Flow(s),veh/h/ln	343	1777	1585	412	1777	1585	1720	0	0	1695	0	0
Q Serve(g_s), s	10.7	16.4	0.6	5.9	20.8	0.4	0.0	0.0	0.0	5.0	0.0	0.0
Cycle Q Clear(g_c), s	31.5	16.4	0.6	22.3	20.8	0.4	4.2	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		0.25	0.17		0.25
Lane Grp Cap(c), veh/h	181	1866	832	224	1866	832	628	0	0	621	0	0
V/C Ratio(X)	0.35	0.70	0.04	0.21	0.80	0.03	0.27	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	181	1866	832	224	1866	832	628	0	0	621	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.9	10.7	6.9	19.0	11.7	6.9	15.1	0.0	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.1	0.0	0.5	2.7	0.0	1.0	0.0	0.0	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.4	0.2	0.6	7.2	0.1	1.7	0.0	0.0	4.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	11.8	6.9	19.5	14.4	6.9	16.1	0.0	0.0	21.4	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	B	A	A	C	A	A
Approach Vol, veh/h		1394			1569			168			369	
Approach Delay, s/veh		12.4			14.4			16.1			21.4	
Approach LOS		B			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		36.0		24.0		36.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.5		31.5		19.5		31.5				
Max Q Clear Time (g_c+I1), s		6.2		33.5		13.0		24.3				
Green Ext Time (p_c), s		0.7		0.0		1.2		5.5				
Intersection Summary												
HCM 6th Ctrl Delay				14.4								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.992			0.929			0.968	
Flt Protected		0.996			0.999			0.989			0.973	
Satd. Flow (prot)	0	1833	0	0	1846	0	0	1711	0	0	1754	0
Flt Permitted		0.996			0.999			0.989			0.973	
Satd. Flow (perm)	0	1833	0	0	1846	0	0	1711	0	0	1754	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	21	244	26	3	144	9	13	16	33	22	9	10
Future Volume (vph)	21	244	26	3	144	9	13	16	33	22	9	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	22	254	27	3	150	9	14	17	34	23	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	303	0	0	162	0	0	65	0	0	42	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	244	26	3	144	9	13	16	33	22	9	10
Future Vol, veh/h	21	244	26	3	144	9	13	16	33	22	9	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	254	27	3	150	9	14	17	34	23	9	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	159	0	0	281	0	0	482	477	268	498	486	155
Stage 1	-	-	-	-	-	-	312	312	-	161	161	-
Stage 2	-	-	-	-	-	-	170	165	-	337	325	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1420	-	-	1282	-	-	495	487	771	483	481	891
Stage 1	-	-	-	-	-	-	699	658	-	841	765	-
Stage 2	-	-	-	-	-	-	832	762	-	677	649	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1420	-	-	1282	-	-	474	477	771	442	471	891
Mov Cap-2 Maneuver	-	-	-	-	-	-	474	477	-	442	471	-
Stage 1	-	-	-	-	-	-	686	646	-	826	763	-
Stage 2	-	-	-	-	-	-	810	760	-	619	637	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.2			11.8			12.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	597	1420	-	-	1282	-	-	512
HCM Lane V/C Ratio	0.108	0.015	-	-	0.002	-	-	0.083
HCM Control Delay (s)	11.8	7.6	0	-	7.8	0	-	12.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.3

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.992			0.881			0.897	
Flt Protected	0.950			0.950				0.994			0.989	
Satd. Flow (prot)	1770	3536	0	1770	3511	0	0	1631	0	0	1653	0
Flt Permitted	0.950			0.950				0.994			0.989	
Satd. Flow (perm)	1770	3536	0	1770	3511	0	0	1631	0	0	1653	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	

Intersection Summary

Area Type: Other

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	56	1286	7	35	1335	74	2	0	15	15	1	49
Future Volume (vph)	56	1286	7	35	1335	74	2	0	15	15	1	49
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	58	1326	7	36	1376	76	2	0	15	15	1	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	1333	0	36	1452	0	0	17	0	0	67	0
Intersection Summary												

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	56	1286	7	35	1335	74	2	0	15	15	1	49
Future Vol, veh/h	56	1286	7	35	1335	74	2	0	15	15	1	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	1326	7	36	1376	76	2	0	15	15	1	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1452	0	0	1333	0	0	2207	2970	667	2265	2935	726
Stage 1	-	-	-	-	-	-	1446	1446	-	1486	1486	-
Stage 2	-	-	-	-	-	-	761	1524	-	779	1449	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	462	-	-	513	-	-	25	14	401	22	15	367
Stage 1	-	-	-	-	-	-	138	195	-	130	186	-
Stage 2	-	-	-	-	-	-	364	179	-	355	194	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	462	-	-	513	-	-	17	11	401	18	12	367
Mov Cap-2 Maneuver	-	-	-	-	-	-	17	11	-	18	12	-
Stage 1	-	-	-	-	-	-	121	170	-	114	173	-
Stage 2	-	-	-	-	-	-	290	166	-	298	170	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.3			43.8			250.3		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	110	462	-	-	513	-	-	62
HCM Lane V/C Ratio	0.159	0.125	-	-	0.07	-	-	1.081
HCM Control Delay (s)	43.8	13.9	-	-	12.5	-	-	250.3
HCM Lane LOS	E	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.5	0.4	-	-	0.2	-	-	5.3

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.997	
Satd. Flow (prot)	3536	0	1770	3539	1619	0
Flt Permitted			0.128		0.997	
Satd. Flow (perm)	3536	0	238	3539	1619	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				40	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1289	6	35	1514	4	71
Future Volume (vph)	1289	6	35	1514	4	71
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1329	6	36	1561	4	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1335	0	36	1561	77	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



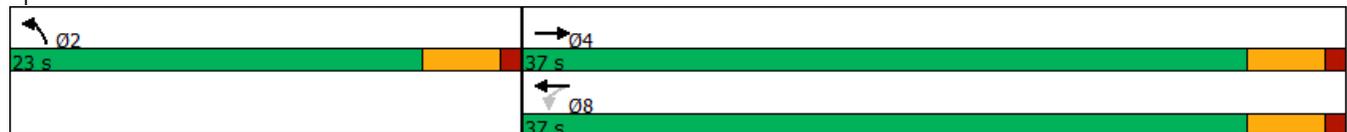
Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1289	35	1514	4
Future Volume (vph)	1289	35	1514	4
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	31.3	31.3	31.3	18.5
Actuated g/C Ratio	0.53	0.53	0.53	0.31
v/c Ratio	0.71	0.29	0.83	0.14
Control Delay	12.9	14.8	16.5	9.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.9	14.8	16.5	9.6
LOS	B	B	B	A
Approach Delay	12.9		16.4	9.6
Approach LOS	B		B	A

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 58.8
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 14.7
 Intersection Capacity Utilization 54.0%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1335	36	1561	77
v/c Ratio	0.71	0.29	0.83	0.14
Control Delay	12.9	14.8	16.5	9.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.9	14.8	16.5	9.6
Queue Length 50th (ft)	168	6	220	9
Queue Length 95th (ft)	235	26	307	35
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	1958	131	1959	537
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.27	0.80	0.14

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1289	6	35	1514	4	71
Future Volume (veh/h)	1289	6	35	1514	4	71
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1329	6	36	1561	4	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1903	9	227	1864	26	478
Arrive On Green	0.52	0.52	0.52	0.52	0.32	0.32
Sat Flow, veh/h	3721	16	410	3647	82	1495
Grp Volume(v), veh/h	651	684	36	1561	78	0
Grp Sat Flow(s),veh/h/ln	1777	1867	410	1777	1597	0
Q Serve(g_s), s	15.9	15.9	4.2	21.5	2.0	0.0
Cycle Q Clear(g_c), s	15.9	15.9	20.1	21.5	2.0	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	932	979	227	1864	511	0
V/C Ratio(X)	0.70	0.70	0.16	0.84	0.15	0.00
Avail Cap(c_a), veh/h	999	1049	242	1997	511	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.3	10.3	17.9	11.7	14.1	0.0
Incr Delay (d2), s/veh	2.0	1.9	0.3	3.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	5.6	0.4	7.4	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.3	12.2	18.2	14.8	14.7	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1335			1597	78	
Approach Delay, s/veh	12.3			14.9	14.7	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		23.0		34.8		34.8
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		32.5		32.5
Max Q Clear Time (g_c+I1), s		4.0		17.9		23.5
Green Ext Time (p_c), s		0.1		7.9		6.8
Intersection Summary						
HCM 6th Ctrl Delay			13.7			
HCM 6th LOS			B			

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.990	
Flt Protected		0.990			0.958							
Satd. Flow (prot)	0	1840	0	0	3391	0	0	3539	1583	0	3504	0
Flt Permitted		0.990			0.958							
Satd. Flow (perm)	0	1840	0	0	3391	0	0	3539	1583	0	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1							519		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	67	259	4	575	82	0	0	727	673	0	968	69
Future Volume (vph)	67	259	4	575	82	0	0	727	673	0	968	69
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	69	267	4	593	85	0	0	749	694	0	998	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	340	0	0	678	0	0	749	694	0	1069	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

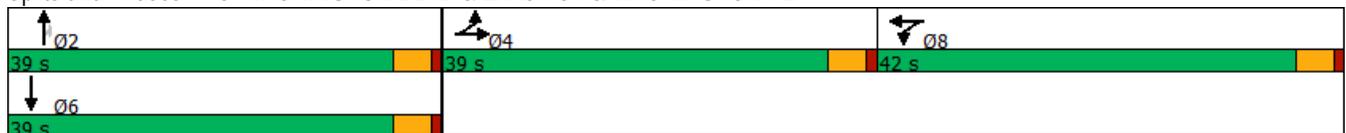
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	259	82	727	673	968
Future Volume (vph)	259	82	727	673	968
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	42.0	39.0	39.0	39.0
Total Split (%)	32.5%	35.0%	32.5%	32.5%	32.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	23.4	26.4	35.1	35.1	35.1
Actuated g/C Ratio	0.24	0.27	0.36	0.36	0.36
v/c Ratio	0.78	1.25dl	0.59	0.77	0.85
Control Delay	48.7	39.1	30.8	15.3	39.5
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	48.7	39.4	30.8	15.3	39.5
LOS	D	D	C	B	D
Approach Delay	48.7	39.4	23.3		39.5
Approach LOS	D	D	C		D

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 98.7
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 33.8
 Intersection Capacity Utilization 89.6%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	340	678	749	694	1069
v/c Ratio	0.78	1.25dl	0.59	0.77	0.85
Control Delay	48.7	39.1	30.8	15.3	39.5
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	48.7	39.4	30.8	15.3	39.5
Queue Length 50th (ft)	198	202	198	86	319
Queue Length 95th (ft)	332	303	348	#351	#613
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	655	1312	1259	897	1251
Starvation Cap Reductn	0	154	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.59	0.59	0.77	0.85

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Volume (veh/h)	67	259	4	575	82	0	0	727	673	0	968	69
Future Volume (veh/h)	67	259	4	575	82	0	0	727	673	0	968	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	69	267	4	593	85	0	0	749	0	0	998	71
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	79	307	5	616	614	0	0	1131		0	1071	76
Arrive On Green	0.21	0.21	0.21	0.35	0.35	0.00	0.00	0.32	0.00	0.00	0.32	0.32
Sat Flow, veh/h	375	1451	22	1781	1870	0	0	3647	1585	0	3458	239
Grp Volume(v), veh/h	340	0	0	593	85	0	0	749	0	0	527	542
Grp Sat Flow(s),veh/h/ln	1848	0	0	1781	1777	0	0	1777	1585	0	1777	1827
Q Serve(g_s), s	19.3	0.0	0.0	35.4	3.6	0.0	0.0	19.7	0.0	0.0	31.1	31.2
Cycle Q Clear(g_c), s	19.3	0.0	0.0	35.4	3.6	0.0	0.0	19.7	0.0	0.0	31.1	31.2
Prop In Lane	0.20		0.01	1.00		0.00	0.00		1.00	0.00		0.13
Lane Grp Cap(c), veh/h	391	0	0	616	614	0	0	1131		0	566	582
V/C Ratio(X)	0.87	0.00	0.00	0.96	0.14	0.00	0.00	0.66		0.00	0.93	0.93
Avail Cap(c_a), veh/h	588	0	0	616	615	0	0	1131		0	566	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	0.0	0.0	34.8	24.4	0.0	0.0	31.9	0.0	0.0	35.8	35.8
Incr Delay (d2), s/veh	9.0	0.0	0.0	27.3	0.1	0.0	0.0	3.1	0.0	0.0	24.2	23.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	0.0	19.6	1.5	0.0	0.0	8.8	0.0	0.0	17.0	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	0.0	0.0	62.1	24.5	0.0	0.0	35.0	0.0	0.0	60.0	59.6
LnGrp LOS	D	A	A	E	C	A	A	C		A	E	E
Approach Vol, veh/h		340			678			749	A		1069	
Approach Delay, s/veh		50.3			57.4			35.0			59.8	
Approach LOS		D			E			C			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		27.4		39.0		41.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		34.5		34.5		37.5				
Max Q Clear Time (g_c+I1), s		21.7		21.3		33.2		37.4				
Green Ext Time (p_c), s		4.2		1.7		0.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				51.5								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt					0.990			0.957			0.929	
Flt Protected	0.950							0.999			0.977	
Satd. Flow (prot)	1770	3539	0	0	3504	0	0	1781	0	0	1691	0
Flt Permitted	0.180							0.994			0.825	
Satd. Flow (perm)	335	3539	0	0	3504	0	0	1772	0	0	1428	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					16			23			81	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			997			334			522	
Travel Time (s)		9.0			22.7			7.6			11.9	

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	26	765	0	0	892	60	2	46	22	126	0	138
Future Volume (vph)	26	765	0	0	892	60	2	46	22	126	0	138
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	27	797	0	0	929	63	2	48	23	131	0	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	797	0	0	992	0	0	73	0	0	275	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

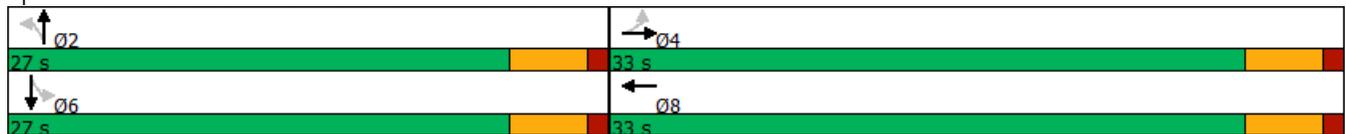
02/13/2022

							
Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	26	765	892	2	46	126	0
Future Volume (vph)	26	765	892	2	46	126	0
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		4	8		2		6
Permitted Phases	4			2		6	
Detector Phase	4	4	8	2	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	22.4	22.4	22.4		22.7		22.7
Actuated g/C Ratio	0.41	0.41	0.41		0.42		0.42
v/c Ratio	0.20	0.55	0.68		0.10		0.43
Control Delay	13.5	13.3	15.2		9.0		11.4
Queue Delay	0.0	0.0	0.0		0.0		0.0
Total Delay	13.5	13.3	15.2		9.0		11.4
LOS	B	B	B		A		B
Approach Delay		13.3	15.2		9.0		11.4
Approach LOS		B	B		A		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 54.1
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 13.7
 Intersection Capacity Utilization 56.2%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	27	797	992	73	275
v/c Ratio	0.20	0.55	0.68	0.10	0.43
Control Delay	13.5	13.3	15.2	9.0	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	13.3	15.2	9.0	11.4
Queue Length 50th (ft)	5	95	126	9	40
Queue Length 95th (ft)	20	137	179	34	107
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	177	1878	1867	756	645
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.42	0.53	0.10	0.43
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	765	0	0	892	60	2	46	22	126	0	138
Future Volume (veh/h)	26	765	0	0	892	60	2	46	22	126	0	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	797	0	0	929	62	2	48	23	131	0	144
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	234	1411	0	0	1343	90	74	517	240	370	34	333
Arrive On Green	0.40	0.40	0.00	0.00	0.40	0.40	0.43	0.43	0.43	0.43	0.00	0.43
Sat Flow, veh/h	568	3647	0	0	3474	226	8	1201	556	624	80	773
Grp Volume(v), veh/h	27	797	0	0	488	503	73	0	0	275	0	0
Grp Sat Flow(s),veh/h/ln	568	1777	0	0	1777	1830	1766	0	0	1477	0	0
Q Serve(g_s), s	2.2	9.1	0.0	0.0	11.9	11.9	0.0	0.0	0.0	4.3	0.0	0.0
Cycle Q Clear(g_c), s	14.1	9.1	0.0	0.0	11.9	11.9	1.3	0.0	0.0	6.5	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.12	0.03		0.32	0.48		0.52
Lane Grp Cap(c), veh/h	234	1411	0	0	706	727	831	0	0	738	0	0
V/C Ratio(X)	0.12	0.56	0.00	0.00	0.69	0.69	0.09	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	318	1938	0	0	969	998	831	0	0	738	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.0	12.2	0.0	0.0	13.1	13.1	8.8	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.0	0.0	1.3	1.2	0.2	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.1	0.0	0.0	4.2	4.3	0.5	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	12.6	0.0	0.0	14.4	14.3	9.0	0.0	0.0	11.7	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	A	A	A	B	A	A
Approach Vol, veh/h		824			991			73				275
Approach Delay, s/veh		12.8			14.3			9.0				11.7
Approach LOS		B			B			A				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		25.3		27.0		25.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		28.5		22.5		28.5				
Max Q Clear Time (g_c+I1), s		3.3		16.1		8.5		13.9				
Green Ext Time (p_c), s		0.3		4.6		1.4		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				13.2								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.995					0.865
Flt Protected			0.950			
Satd. Flow (prot)	3522	0	1770	3539	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	3522	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					237
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	888	31	38	634	0	49
Future Volume (vph)	888	31	38	634	0	49
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	915	32	39	654	0	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	947	0	39	654	0	51
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD



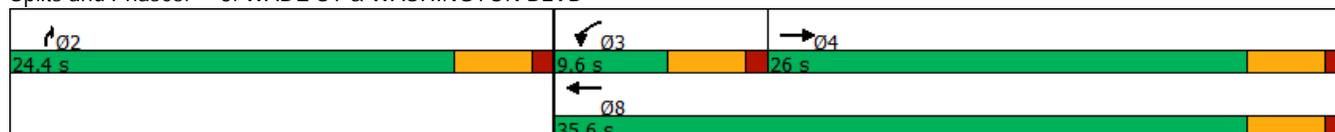
Lane Group	EBT	WBL	WBT	NBR
Lane Configurations	↑↑	↵	↑↑	↶
Traffic Volume (vph)	888	38	634	49
Future Volume (vph)	888	38	634	49
Turn Type	NA	Prot	NA	Prot
Protected Phases	4	3	8	2
Permitted Phases				
Detector Phase	4	3	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		
Recall Mode	None	None	None	Max
Act Effct Green (s)	19.3	5.2	22.6	20.3
Actuated g/C Ratio	0.37	0.10	0.43	0.39
v/c Ratio	0.72	0.22	0.43	0.07
Control Delay	18.4	27.8	10.6	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.4	27.8	10.6	0.2
LOS	B	C	B	A
Approach Delay	18.4		11.6	
Approach LOS	B		B	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 52
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 15.1
 Intersection Capacity Utilization 37.2%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD



Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	947	39	654	51
v/c Ratio	0.72	0.22	0.43	0.07
Control Delay	18.4	27.8	10.6	0.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.4	27.8	10.6	0.2
Queue Length 50th (ft)	107	11	67	0
Queue Length 95th (ft)	216	39	98	0
Internal Link Dist (ft)	299		900	
Turn Bay Length (ft)		125		
Base Capacity (vph)	1485	176	2154	772
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.64	0.22	0.30	0.07

Intersection Summary

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	888	31	38	634	0	49
Future Volume (veh/h)	888	31	38	634	0	49
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	915	32	39	654	0	51
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	1846	65	86	2799	0	0
Arrive On Green	0.53	0.53	0.05	0.79	0.00	0.00
Sat Flow, veh/h	3596	122	1781	3647	0	
Grp Volume(v), veh/h	464	483	39	654	0.0	
Grp Sat Flow(s),veh/h/ln	1777	1848	1781	1777		
Q Serve(g_s), s	3.5	3.5	0.5	1.0		
Cycle Q Clear(g_c), s	3.5	3.5	0.5	1.0		
Prop In Lane		0.07	1.00			
Lane Grp Cap(c), veh/h	936	974	86	2799		
V/C Ratio(X)	0.50	0.50	0.45	0.23		
Avail Cap(c_a), veh/h	1802	1875	429	5214		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	3.2	3.2	9.8	0.6		
Incr Delay (d2), s/veh	0.4	0.4	3.7	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.2	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.6	3.6	13.5	0.6		
LnGrp LOS	A	A	B	A		
Approach Vol, veh/h	947			693		
Approach Delay, s/veh	3.6			1.4		
Approach LOS	A			A		
Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			5.5	15.7		21.2
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s			2.5	5.5		3.0
Green Ext Time (p_c), s			0.0	5.6		4.9
Intersection Summary						
HCM 6th Ctrl Delay			2.7			
HCM 6th LOS			A			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%		0%		0%		0%		0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt	0.850		0.850		0.850		0.850		0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3476	0
Flt Permitted	0.950			0.950			0.090			0.152		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	168	3539	1583	283	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			115			115			20
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	179	699	86	183	746	59	78	950	149	107	1327	183
Future Volume (vph)	179	699	86	183	746	59	78	950	149	107	1327	183
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	188	736	91	193	785	62	82	1000	157	113	1397	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	188	736	91	193	785	62	82	1000	157	113	1590	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

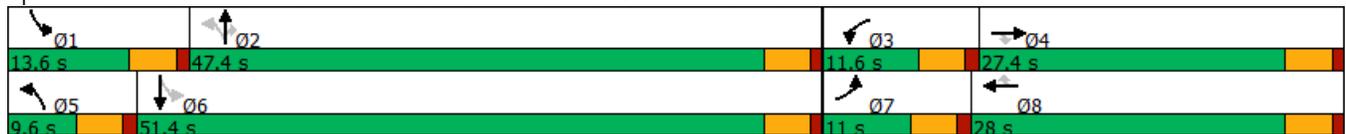
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	179	699	86	183	746	59	78	950	149	107	1327
Future Volume (vph)	179	699	86	183	746	59	78	950	149	107	1327
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.0	27.4	27.4	11.6	28.0	28.0	9.6	47.4	47.4	13.6	51.4
Total Split (%)	11.0%	27.4%	27.4%	11.6%	28.0%	28.0%	9.6%	47.4%	47.4%	13.6%	51.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	6.5	22.9	22.9	7.1	23.5	23.5	48.5	43.4	43.4	55.0	48.3
Actuated g/C Ratio	0.07	0.23	0.23	0.07	0.24	0.24	0.49	0.44	0.44	0.55	0.49
v/c Ratio	0.84	0.90	0.20	0.79	0.94	0.13	0.50	0.65	0.21	0.41	0.94
Control Delay	76.9	53.3	4.7	68.8	57.6	1.4	22.9	24.6	6.5	14.7	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	76.9	53.3	4.7	68.8	57.6	1.4	22.9	25.2	6.5	14.7	36.5
LOS	E	D	A	E	E	A	C	C	A	B	D
Approach Delay		53.3			56.4			22.7			35.1
Approach LOS		D			E			C			D

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 99.4
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 40.1
 Intersection Capacity Utilization 87.6%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	736	91	193	785	62	82	1000	157	113	1590
v/c Ratio	0.84	0.90	0.20	0.79	0.94	0.13	0.50	0.65	0.21	0.41	0.94
Control Delay	76.9	53.3	4.7	68.8	57.6	1.4	22.9	24.6	6.5	14.7	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	76.9	53.3	4.7	68.8	57.6	1.4	22.9	25.2	6.5	14.7	36.5
Queue Length 50th (ft)	62	241	0	63	260	0	22	257	15	31	497
Queue Length 95th (ft)	#123	#350	27	#120	#379	5	49	331	54	58	#676
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	224	815	453	245	836	461	164	1543	755	293	1697
Starvation Cap Reductn	0	0	0	0	0	0	0	215	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.90	0.20	0.79	0.94	0.13	0.50	0.75	0.21	0.39	0.94

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	699	86	183	746	59	78	950	149	107	1327	183
Future Volume (veh/h)	179	699	86	183	746	59	78	950	149	107	1327	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	736	91	193	785	62	82	1000	157	113	1397	193
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	819	365	247	840	375	166	1655	738	288	1482	203
Arrive On Green	0.07	0.23	0.23	0.07	0.24	0.24	0.05	0.47	0.47	0.05	0.47	0.47
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3140	430
Grp Volume(v), veh/h	188	736	91	193	785	62	82	1000	157	113	785	805
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1793
Q Serve(g_s), s	5.3	20.0	4.7	5.5	21.5	3.1	2.3	20.8	5.8	3.3	41.5	42.8
Cycle Q Clear(g_c), s	5.3	20.0	4.7	5.5	21.5	3.1	2.3	20.8	5.8	3.3	41.5	42.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	226	819	365	247	840	375	166	1655	738	288	839	846
V/C Ratio(X)	0.83	0.90	0.25	0.78	0.93	0.17	0.49	0.60	0.21	0.39	0.94	0.95
Avail Cap(c_a), veh/h	226	819	365	247	840	375	177	1655	738	360	839	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	37.1	31.2	45.4	37.2	30.1	22.9	19.7	15.7	15.2	24.8	25.2
Incr Delay (d2), s/veh	22.4	12.8	0.4	14.9	17.2	0.2	2.3	1.6	0.7	0.9	18.9	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	10.0	1.8	2.8	11.2	1.2	1.0	8.6	2.2	1.3	20.8	22.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	49.9	31.6	60.3	54.4	30.4	25.2	21.4	16.4	16.1	43.7	46.4
LnGrp LOS	E	D	C	E	D	C	C	C	B	B	D	D
Approach Vol, veh/h		1015			1040			1239			1703	
Approach Delay, s/veh		51.7			54.1			21.0			43.1	
Approach LOS		D			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	50.8	11.6	27.4	9.0	51.4	11.0	28.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.1	42.9	7.1	22.9	5.1	46.9	6.5	23.5				
Max Q Clear Time (g_c+I1), s	5.3	22.8	7.5	22.0	4.3	44.8	7.3	23.5				
Green Ext Time (p_c), s	0.1	7.9	0.0	0.5	0.0	1.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			41.7									
HCM 6th LOS			D									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.974			0.975			0.982			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3447	0	1770	3451	0	1770	3476	0	1770	3507	0
Flt Permitted	0.207			0.169			0.950			0.121		
Satd. Flow (perm)	386	3447	0	315	3451	0	1770	3476	0	225	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			29			22			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	67	758	159	72	589	116	175	994	134	209	1252	83
Future Volume (vph)	67	758	159	72	589	116	175	994	134	209	1252	83
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	69	781	164	74	607	120	180	1025	138	215	1291	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	945	0	74	727	0	180	1163	0	215	1377	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

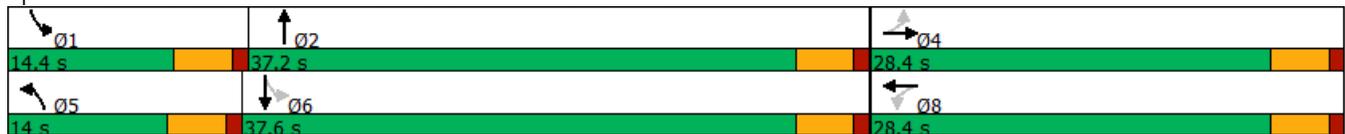


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	67	758	72	589	175	994	209	1252
Future Volume (vph)	67	758	72	589	175	994	209	1252
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	28.4	28.4	28.4	28.4	14.0	37.2	14.4	37.6
Total Split (%)	35.5%	35.5%	35.5%	35.5%	17.5%	46.5%	18.0%	47.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	23.7	23.7	23.7	23.7	9.5	33.4	42.4	33.1
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.12	0.42	0.53	0.41
v/c Ratio	0.61	0.90	0.80	0.70	0.85	0.79	0.72	0.94
Control Delay	49.8	39.7	81.2	28.0	70.7	25.0	28.8	36.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	39.7	81.2	28.0	70.7	25.0	28.8	36.9
LOS	D	D	F	C	E	C	C	D
Approach Delay		40.4		32.9		31.2		35.8
Approach LOS		D		C		C		D

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 79.8
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 35.0
 Intersection Capacity Utilization 92.1%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service F

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	69	945	74	727	180	1163	215	1377
v/c Ratio	0.61	0.90	0.80	0.70	0.85	0.79	0.72	0.94
Control Delay	49.8	39.7	81.2	28.0	70.7	25.0	28.8	36.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	39.7	81.2	28.0	70.7	25.0	28.8	36.9
Queue Length 50th (ft)	29	229	34	161	90	258	49	336
Queue Length 95th (ft)	#92	#345	#111	222	#201	341	#142	#488
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	115	1055	94	1054	211	1465	313	1460
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.90	0.79	0.69	0.85	0.79	0.69	0.94

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	67	758	159	72	589	116	175	994	134	209	1252	83
Future Volume (veh/h)	67	758	159	72	589	116	175	994	134	209	1252	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	781	164	74	607	120	180	1025	138	215	1291	86
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	873	183	116	884	174	212	1381	186	338	1399	93
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.44	0.44	0.09	0.41	0.41
Sat Flow, veh/h	728	2923	614	593	2959	584	1781	3148	423	1781	3382	225
Grp Volume(v), veh/h	69	475	470	74	364	363	180	578	585	215	677	700
Grp Sat Flow(s),veh/h/ln	728	1777	1760	593	1777	1765	1781	1777	1794	1781	1777	1830
Q Serve(g_s), s	7.4	20.5	20.5	3.4	14.5	14.5	7.9	21.7	21.7	5.4	28.9	29.1
Cycle Q Clear(g_c), s	21.9	20.5	20.5	23.9	14.5	14.5	7.9	21.7	21.7	5.4	28.9	29.1
Prop In Lane	1.00		0.35	1.00		0.33	1.00		0.24	1.00		0.12
Lane Grp Cap(c), veh/h	175	531	526	116	531	527	212	780	787	338	735	757
V/C Ratio(X)	0.39	0.89	0.89	0.64	0.69	0.69	0.85	0.74	0.74	0.64	0.92	0.92
Avail Cap(c_a), veh/h	175	531	526	116	531	527	212	780	787	391	735	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	26.8	26.8	39.4	24.7	24.8	34.6	18.7	18.7	15.4	22.2	22.3
Incr Delay (d2), s/veh	1.4	17.5	17.6	11.3	3.7	3.8	26.6	6.3	6.3	2.7	18.7	18.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	10.8	10.7	1.8	6.3	6.3	4.9	9.6	9.7	2.2	14.9	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	44.3	44.5	50.7	28.4	28.5	61.2	25.0	24.9	18.1	40.9	41.0
LnGrp LOS	D	D	D	D	C	C	E	C	C	B	D	D
Approach Vol, veh/h		1014			801			1343			1592	
Approach Delay, s/veh		43.8			30.5			29.8			37.9	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	39.6		28.4	14.0	37.6		28.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.9	32.7		23.9	9.5	33.1		23.9				
Max Q Clear Time (g_c+I1), s	7.4	23.7		23.9	9.9	31.1		25.9				
Green Ext Time (p_c), s	0.1	5.0		0.0	0.0	1.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				35.6								
HCM 6th LOS				D								

Appendix F

Opening Year Without Project Conditions
LOS Analysis Worksheets

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.977			0.985	
Flt Protected	0.950			0.950				0.978			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1780	0	0	1805	0
Flt Permitted	0.148			0.151				0.811			0.838	
Satd. Flow (perm)	276	3539	1583	281	3539	1583	0	1476	0	0	1538	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			56		18			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1907			1445			1456			760	
Travel Time (s)		43.3			32.8			33.1			17.3	

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	20	1082	32	79	1152	55	130	110	48	47	78	16
Future Volume (vph)	20	1082	32	79	1152	55	130	110	48	47	78	16
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	21	1151	34	84	1226	59	138	117	51	50	83	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1151	34	84	1226	59	0	306	0	0	150	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

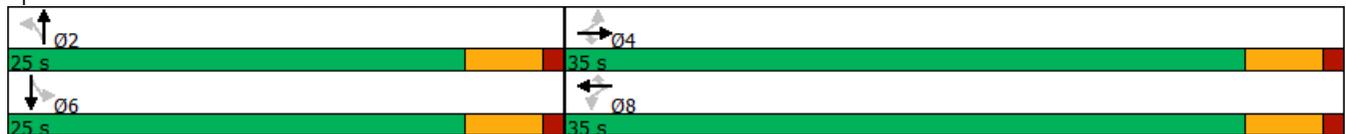
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	1082	32	79	1152	55	130	110	47	78
Future Volume (vph)	20	1082	32	79	1152	55	130	110	47	78
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	27.0	27.0	27.0	27.0	27.0	27.0		20.6		20.6
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48	0.48		0.36		0.36
v/c Ratio	0.16	0.68	0.04	0.63	0.73	0.08		0.56		0.26
Control Delay	11.6	13.8	3.3	36.7	14.7	3.0		19.4		14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	11.6	13.8	3.3	36.7	14.7	3.0		19.4		14.5
LOS	B	B	A	D	B	A		B		B
Approach Delay		13.4			15.5			19.4		14.5
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 56.7
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 15.0
 Intersection Capacity Utilization 69.8%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	21	1151	34	84	1226	59	306	150
v/c Ratio	0.16	0.68	0.04	0.63	0.73	0.08	0.56	0.26
Control Delay	11.6	13.8	3.3	36.7	14.7	3.0	19.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.6	13.8	3.3	36.7	14.7	3.0	19.4	14.5
Queue Length 50th (ft)	4	146	0	20	161	1	84	35
Queue Length 95th (ft)	16	204	11	#85	225	15	156	74
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	149	1915	872	151	1915	883	548	567
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.60	0.04	0.56	0.64	0.07	0.56	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				 
Traffic Volume (veh/h)	20	1082	32	79	1152	55	130	110	48	47	78	16
Future Volume (veh/h)	20	1082	32	79	1152	55	130	110	48	47	78	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1151	34	84	1226	59	138	117	51	50	83	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	1767	788	244	1767	788	302	244	91	233	361	65
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	430	3554	1585	473	3554	1585	611	697	262	434	1033	187
Grp Volume(v), veh/h	21	1151	34	84	1226	59	306	0	0	150	0	0
Grp Sat Flow(s),veh/h/ln	430	1777	1585	473	1777	1585	1570	0	0	1654	0	0
Q Serve(g_s), s	2.3	14.1	0.6	9.4	15.5	1.1	5.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	17.9	14.1	0.6	23.6	15.5	1.1	8.8	0.0	0.0	3.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.17	0.33		0.11
Lane Grp Cap(c), veh/h	223	1767	788	244	1767	788	637	0	0	660	0	0
V/C Ratio(X)	0.09	0.65	0.04	0.34	0.69	0.07	0.48	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	232	1847	824	255	1847	824	637	0	0	660	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	11.0	7.6	19.7	11.3	7.7	15.1	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.8	0.0	0.8	1.1	0.0	2.6	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.7	0.2	1.0	5.2	0.3	3.3	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	11.7	7.6	20.6	12.4	7.7	17.7	0.0	0.0	14.3	0.0	0.0
LnGrp LOS	B	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1206			1369			306			150	
Approach Delay, s/veh		11.7			12.7			17.7			14.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		33.7		25.0		33.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		20.5		30.5		20.5		30.5				
Max Q Clear Time (g_c+I1), s		10.8		19.9		5.4		25.6				
Green Ext Time (p_c), s		1.3		6.1		0.7		3.6				
Intersection Summary												
HCM 6th Ctrl Delay				12.9								
HCM 6th LOS				B								

Lanes and Geometrics
 2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.978				0.955
Flt Protected	0.950			0.950				0.995				0.990
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1813	0	0	1761	0
Flt Permitted	0.134			0.134				0.955				0.906
Satd. Flow (perm)	250	3539	1583	250	3539	1583	0	1740	0	0	1612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			39			17			43
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1445			573			1087				717
Travel Time (s)		32.8			13.0			24.7				16.3

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	96	1255	8	33	1168	37	31	216	48	34	79	56
Future Volume (vph)	96	1255	8	33	1168	37	31	216	48	34	79	56
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	104	1364	9	36	1270	40	34	235	52	37	86	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1364	9	36	1270	40	0	321	0	0	184	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

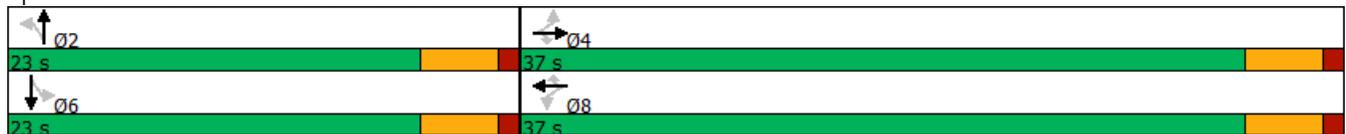
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	96	1255	8	33	1168	37	31	216	34	79
Future Volume (vph)	96	1255	8	33	1168	37	31	216	34	79
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	23.0	23.0	23.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effect Green (s)	29.8	29.8	29.8	29.8	29.8	29.8		18.6		18.6
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52		0.32		0.32
v/c Ratio	0.81	0.74	0.01	0.28	0.69	0.05		0.56		0.33
Control Delay	59.3	13.7	1.1	14.2	12.6	2.8		20.5		14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	59.3	13.7	1.1	14.2	12.6	2.8		20.5		14.2
LOS	E	B	A	B	B	A		C		B
Approach Delay		16.8			12.4			20.5		14.2
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 57.4
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 15.2
 Intersection Capacity Utilization 68.5%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	104	1364	9	36	1270	40	321	184
v/c Ratio	0.81	0.74	0.01	0.28	0.69	0.05	0.56	0.33
Control Delay	59.3	13.7	1.1	14.2	12.6	2.8	20.5	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.3	13.7	1.1	14.2	12.6	2.8	20.5	14.2
Queue Length 50th (ft)	27	174	0	6	155	0	91	38
Queue Length 95th (ft)	#112	243	2	25	217	11	163	83
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	142	2013	912	142	2013	917	575	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.68	0.01	0.25	0.63	0.04	0.56	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				 
Traffic Volume (veh/h)	96	1255	8	33	1168	37	31	216	48	34	79	56
Future Volume (veh/h)	96	1255	8	33	1168	37	31	216	48	34	79	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	1364	9	36	1270	40	34	235	52	37	86	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	1920	856	221	1920	856	98	426	89	135	282	171
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	420	3554	1585	395	3554	1585	102	1378	286	202	912	552
Grp Volume(v), veh/h	104	1364	9	36	1270	40	321	0	0	184	0	0
Grp Sat Flow(s),veh/h/ln	420	1777	1585	395	1777	1585	1767	0	0	1665	0	0
Q Serve(g_s), s	14.1	17.1	0.2	4.5	15.3	0.7	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	29.4	17.1	0.2	21.6	15.3	0.7	8.9	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.11		0.16	0.20		0.33
Lane Grp Cap(c), veh/h	240	1920	856	221	1920	856	613	0	0	587	0	0
V/C Ratio(X)	0.43	0.71	0.01	0.16	0.66	0.05	0.52	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	241	1930	861	222	1930	861	613	0	0	587	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.3	10.3	6.4	18.3	9.8	6.5	17.3	0.0	0.0	15.9	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.2	0.0	0.3	0.8	0.0	3.2	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.6	0.0	0.4	4.9	0.2	3.9	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	11.5	6.4	18.7	10.7	6.5	20.5	0.0	0.0	17.3	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	C	A	A	B	A	A
Approach Vol, veh/h		1477			1346			321			184	
Approach Delay, s/veh		12.2			10.8			20.5			17.3	
Approach LOS		B			B			C			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		36.8		23.0		36.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5				
Max Q Clear Time (g_c+I1), s		10.9		31.4		6.8		23.6				
Green Ext Time (p_c), s		1.1		0.9		0.8		5.9				
Intersection Summary												
HCM 6th Ctrl Delay				12.7								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.991			0.977			0.899	
Flt Protected		0.996			0.999			0.975			0.990	
Satd. Flow (prot)	0	1844	0	0	1844	0	0	1774	0	0	1658	0
Flt Permitted		0.996			0.999			0.975			0.990	
Satd. Flow (perm)	0	1844	0	0	1844	0	0	1774	0	0	1658	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	

Intersection Summary

Area Type: Other

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	24	261	13	4	200	14	21	12	7	7	2	26
Future Volume (vph)	24	261	13	4	200	14	21	12	7	7	2	26
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	28	303	15	5	233	16	24	14	8	8	2	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	346	0	0	254	0	0	46	0	0	40	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	261	13	4	200	14	21	12	7	7	2	26
Future Vol, veh/h	24	261	13	4	200	14	21	12	7	7	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	303	15	5	233	16	24	14	8	8	2	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	249	0	0	318	0	0	634	626	311	629	625	241
Stage 1	-	-	-	-	-	-	367	367	-	251	251	-
Stage 2	-	-	-	-	-	-	267	259	-	378	374	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1317	-	-	1242	-	-	392	401	729	395	401	798
Stage 1	-	-	-	-	-	-	653	622	-	753	699	-
Stage 2	-	-	-	-	-	-	738	694	-	644	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1317	-	-	1242	-	-	367	389	729	371	389	798
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	389	-	371	389	-
Stage 1	-	-	-	-	-	-	636	606	-	733	696	-
Stage 2	-	-	-	-	-	-	704	691	-	606	602	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			14.9			11.2		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	410	1317	-	-	1242	-	-	618
HCM Lane V/C Ratio	0.113	0.021	-	-	0.004	-	-	0.066
HCM Control Delay (s)	14.9	7.8	0	-	7.9	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.2

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998			0.892			0.893	
Flt Protected	0.950			0.950				0.995			0.990	
Satd. Flow (prot)	1770	3539	0	1770	3532	0	0	1653	0	0	1647	0
Flt Permitted	0.950			0.950				0.995			0.990	
Satd. Flow (perm)	1770	3539	0	1770	3532	0	0	1653	0	0	1647	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	

Intersection Summary

Area Type: Other

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	38	1291	4	22	1181	17	1	1	8	5	0	18
Future Volume (vph)	38	1291	4	22	1181	17	1	1	8	5	0	18
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	39	1331	4	23	1218	18	1	1	8	5	0	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	1335	0	23	1236	0	0	10	0	0	24	0
Intersection Summary												

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕		↵	↕			↕			↕	
Traffic Vol, veh/h	38	1291	4	22	1181	17	1	1	8	5	0	18
Future Vol, veh/h	38	1291	4	22	1181	17	1	1	8	5	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	1331	4	23	1218	18	1	1	8	5	0	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1236	0	0	1335	0	0	2066	2693	668	2017	2686	618
Stage 1	-	-	-	-	-	-	1411	1411	-	1273	1273	-
Stage 2	-	-	-	-	-	-	655	1282	-	744	1413	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	559	-	-	513	-	-	31	21	401	34	21	432
Stage 1	-	-	-	-	-	-	145	203	-	177	237	-
Stage 2	-	-	-	-	-	-	421	234	-	373	202	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	559	-	-	513	-	-	27	19	401	29	19	432
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	19	-	29	19	-
Stage 1	-	-	-	-	-	-	135	189	-	165	226	-
Stage 2	-	-	-	-	-	-	385	223	-	338	188	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.2			49.6			48		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	91	559	-	-	513	-	-	107
HCM Lane V/C Ratio	0.113	0.07	-	-	0.044	-	-	0.222
HCM Control Delay (s)	49.6	11.9	-	-	12.3	-	-	48
HCM Lane LOS	E	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.1	-	-	0.8

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3536	0	1770	3539	1621	0
Flt Permitted			0.135		0.998	
Satd. Flow (perm)	3536	0	251	3539	1621	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				36	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1303	5	21	1259	5	93
Future Volume (vph)	1303	5	21	1259	5	93
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1372	5	22	1325	5	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1377	0	22	1325	103	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022

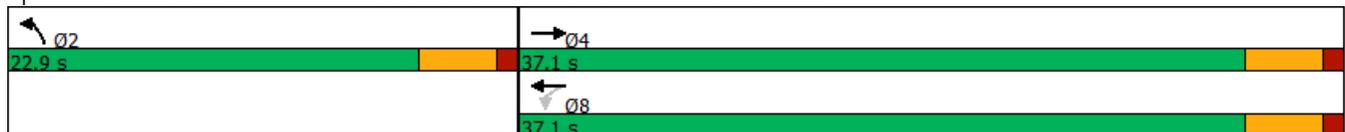


Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1303	21	1259	5
Future Volume (vph)	1303	21	1259	5
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.1	37.1	37.1	22.9
Total Split (%)	61.8%	61.8%	61.8%	38.2%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	29.6	29.6	29.6	18.5
Actuated g/C Ratio	0.52	0.52	0.52	0.32
v/c Ratio	0.75	0.17	0.72	0.19
Control Delay	13.9	10.8	13.2	11.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.9	10.8	13.2	11.9
LOS	B	B	B	B
Approach Delay	13.9		13.2	11.9
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 57.1
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 13.5
 Intersection Capacity Utilization 49.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1377	22	1325	103
v/c Ratio	0.75	0.17	0.72	0.19
Control Delay	13.9	10.8	13.2	11.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.9	10.8	13.2	11.9
Queue Length 50th (ft)	176	4	165	17
Queue Length 95th (ft)	246	16	231	48
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	2029	144	2031	549
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.15	0.65	0.19

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1303	5	21	1259	5	93
Future Volume (veh/h)	1303	5	21	1259	5	93
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1372	5	22	1325	5	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1849	7	212	1809	25	496
Arrive On Green	0.51	0.51	0.51	0.51	0.33	0.33
Sat Flow, veh/h	3725	13	394	3647	77	1504
Grp Volume(v), veh/h	671	706	22	1325	104	0
Grp Sat Flow(s),veh/h/ln	1777	1868	394	1777	1596	0
Q Serve(g_s), s	16.6	16.6	2.6	16.3	2.6	0.0
Cycle Q Clear(g_c), s	16.6	16.6	19.2	16.3	2.6	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	905	951	212	1809	526	0
V/C Ratio(X)	0.74	0.74	0.10	0.73	0.20	0.00
Avail Cap(c_a), veh/h	1038	1091	242	2076	526	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	10.8	18.4	10.7	13.4	0.0
Incr Delay (d2), s/veh	2.5	2.4	0.2	1.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	6.0	0.2	5.3	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	13.2	18.6	11.9	14.3	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1377			1347	104	
Approach Delay, s/veh	13.3			12.0	14.3	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		22.9		32.9		32.9
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.4		32.6		32.6
Max Q Clear Time (g_c+I1), s		4.6		18.6		21.2
Green Ext Time (p_c), s		0.2		8.0		7.2
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.986	
Flt Protected		0.991			0.960							
Satd. Flow (prot)	0	1842	0	0	3398	0	0	3539	1583	0	3490	0
Flt Permitted		0.991			0.960							
Satd. Flow (perm)	0	1842	0	0	3398	0	0	3539	1583	0	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1							299		9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	44	195	4	532	102	0	0	912	470	0	766	79
Future Volume (vph)	44	195	4	532	102	0	0	912	470	0	766	79
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	47	210	4	572	110	0	0	981	505	0	824	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	261	0	0	682	0	0	981	505	0	909	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

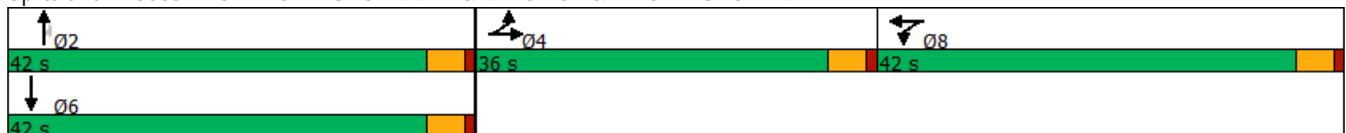
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	195	102	912	470	766
Future Volume (vph)	195	102	912	470	766
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	42.0	42.0	42.0	42.0
Total Split (%)	30.0%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	19.1	26.0	38.1	38.1	38.1
Actuated g/C Ratio	0.20	0.27	0.39	0.39	0.39
v/c Ratio	0.72	1.21dl	0.71	0.63	0.66
Control Delay	48.5	38.4	30.4	14.8	28.9
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	48.5	38.6	30.4	14.8	28.9
LOS	D	D	C	B	C
Approach Delay	48.5	38.6	25.1		28.9
Approach LOS	D	D	C		C

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 96.9
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 30.7
 Intersection Capacity Utilization 78.9%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↘	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	261	682	981	505	909
v/c Ratio	0.72	1.21dl	0.71	0.63	0.66
Control Delay	48.5	38.4	30.4	14.8	28.9
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	48.5	38.6	30.4	14.8	28.9
Queue Length 50th (ft)	149	199	260	92	233
Queue Length 95th (ft)	259	294	446	268	404
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	608	1335	1390	803	1376
Starvation Cap Reductn	0	146	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.57	0.71	0.63	0.66

Intersection Summary

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Volume (veh/h)	44	195	4	532	102	0	0	912	470	0	766	79
Future Volume (veh/h)	44	195	4	532	102	0	0	912	470	0	766	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	47	210	4	572	110	0	0	981	0	0	824	85
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	56	250	5	611	609	0	0	1278		0	1169	121
Arrive On Green	0.17	0.17	0.17	0.34	0.34	0.00	0.00	0.36	0.00	0.00	0.36	0.36
Sat Flow, veh/h	333	1487	28	1781	1870	0	0	3647	1585	0	3345	335
Grp Volume(v), veh/h	261	0	0	572	110	0	0	981	0	0	450	459
Grp Sat Flow(s),veh/h/ln	1849	0	0	1781	1777	0	0	1777	1585	0	1777	1810
Q Serve(g_s), s	14.3	0.0	0.0	32.4	4.5	0.0	0.0	25.5	0.0	0.0	22.7	22.7
Cycle Q Clear(g_c), s	14.3	0.0	0.0	32.4	4.5	0.0	0.0	25.5	0.0	0.0	22.7	22.7
Prop In Lane	0.18		0.02	1.00		0.00	0.00		1.00	0.00		0.19
Lane Grp Cap(c), veh/h	311	0	0	611	609	0	0	1278		0	639	651
V/C Ratio(X)	0.84	0.00	0.00	0.94	0.18	0.00	0.00	0.77		0.00	0.70	0.70
Avail Cap(c_a), veh/h	559	0	0	641	639	0	0	1278		0	639	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	0.0	0.0	33.2	24.0	0.0	0.0	29.5	0.0	0.0	28.6	28.6
Incr Delay (d2), s/veh	6.1	0.0	0.0	21.0	0.1	0.0	0.0	4.5	0.0	0.0	6.4	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	0.0	17.2	1.9	0.0	0.0	11.4	0.0	0.0	10.6	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	0.0	0.0	54.1	24.1	0.0	0.0	34.0	0.0	0.0	35.0	34.9
LnGrp LOS	D	A	A	D	C	A	A	C		A	D	C
Approach Vol, veh/h		261			682			981	A		909	
Approach Delay, s/veh		48.1			49.3			34.0			35.0	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		22.0		42.0		40.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		37.5		31.5		37.5		37.5				
Max Q Clear Time (g_c+I1), s		27.5		16.3		24.7		34.4				
Green Ext Time (p_c), s		4.8		1.3		4.8		1.3				
Intersection Summary												
HCM 6th Ctrl Delay				39.3								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.986			0.974				0.949
Flt Protected	0.950											0.970
Satd. Flow (prot)	1770	3539	0	0	3490	0	0	1814	0	0	1715	0
Flt Permitted	0.208				0.953						0.789	
Satd. Flow (perm)	387	3539	0	0	3326	0	0	1814	0	0	1395	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					25			14				57
Link Speed (mph)		30			30			30				30
Link Distance (ft)		398			997			334				522
Travel Time (s)		9.0			22.7			7.6				11.9

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	42	920	0	2	786	80	0	53	13	108	0	65
Future Volume (vph)	42	920	0	2	786	80	0	53	13	108	0	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	1000	0	2	854	87	0	58	14	117	0	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	1000	0	0	943	0	0	72	0	0	188	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

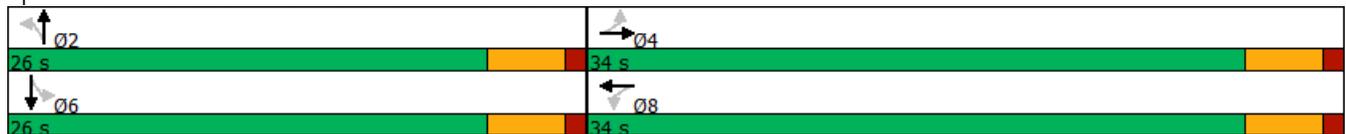
							
Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	920	2	786	53	108	0
Future Volume (vph)	42	920	2	786	53	108	0
Turn Type	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases		4		8	2		6
Permitted Phases	4		8			6	
Detector Phase	4	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	34.0	26.0	26.0	26.0
Total Split (%)	56.7%	56.7%	56.7%	56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	Max	Max	Max
Act Effct Green (s)	22.8	22.8		22.8	21.7		21.7
Actuated g/C Ratio	0.43	0.43		0.43	0.40		0.40
v/c Ratio	0.28	0.66		0.66	0.10		0.31
Control Delay	14.5	14.5		14.1	10.5		10.8
Queue Delay	0.0	0.0		0.0	0.0		0.0
Total Delay	14.5	14.5		14.1	10.5		10.8
LOS	B	B		B	B		B
Approach Delay		14.5		14.1	10.5		10.8
Approach LOS		B		B	B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 53.6
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 13.9
 Intersection Capacity Utilization 59.0%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	46	1000	943	72	188
v/c Ratio	0.28	0.66	0.66	0.10	0.31
Control Delay	14.5	14.5	14.1	10.5	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.5	14.5	14.1	10.5	10.8
Queue Length 50th (ft)	9	125	114	11	27
Queue Length 95th (ft)	29	176	163	36	77
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	215	1967	1860	743	599
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.51	0.51	0.10	0.31
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	42	920	0	2	786	80	0	53	13	108	0	65
Future Volume (veh/h)	42	920	0	2	786	80	0	53	13	108	0	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	1000	0	2	854	87	0	58	14	117	0	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1519	0	68	1362	138	0	588	142	443	25	218
Arrive On Green	0.43	0.43	0.00	0.43	0.43	0.43	0.00	0.40	0.40	0.40	0.00	0.40
Sat Flow, veh/h	596	3647	0	1	3186	324	0	1456	351	826	62	539
Grp Volume(v), veh/h	46	1000	0	502	0	441	0	0	72	188	0	0
Grp Sat Flow(s),veh/h/ln	596	1777	0	1868	0	1644	0	0	1807	1427	0	0
Q Serve(g_s), s	3.5	11.9	0.0	0.0	0.0	11.2	0.0	0.0	1.3	3.3	0.0	0.0
Cycle Q Clear(g_c), s	14.7	11.9	0.0	11.2	0.0	11.2	0.0	0.0	1.3	4.7	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.20	0.00		0.19	0.62		0.38
Lane Grp Cap(c), veh/h	265	1519	0	866	0	703	0	0	729	686	0	0
V/C Ratio(X)	0.17	0.66	0.00	0.58	0.00	0.63	0.00	0.00	0.10	0.27	0.00	0.00
Avail Cap(c_a), veh/h	340	1968	0	1100	0	910	0	0	729	686	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.7	12.2	0.0	11.9	0.0	11.9	0.0	0.0	9.9	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.6	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.0	0.0	4.0	0.0	3.5	0.0	0.0	0.5	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	12.7	0.0	12.5	0.0	12.9	0.0	0.0	10.1	11.8	0.0	0.0
LnGrp LOS	B	B	A	B	A	B	A	A	B	B	A	A
Approach Vol, veh/h		1046			943			72			188	
Approach Delay, s/veh		12.9			12.7			10.1			11.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		27.3		26.0		27.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		29.5		21.5		29.5				
Max Q Clear Time (g_c+I1), s		3.3		16.7		6.7		13.2				
Green Ext Time (p_c), s		0.3		6.1		0.9		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.6								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕↕		↘	↕↕		↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.996					0.865
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	3539	0	1611
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3525	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4					255
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	710	17	25	632	1	72
Future Volume (vph)	710	17	25	632	1	72
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	789	19	28	702	1	80
Shared Lane Traffic (%)						
Lane Group Flow (vph)	808	0	28	702	1	80
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD

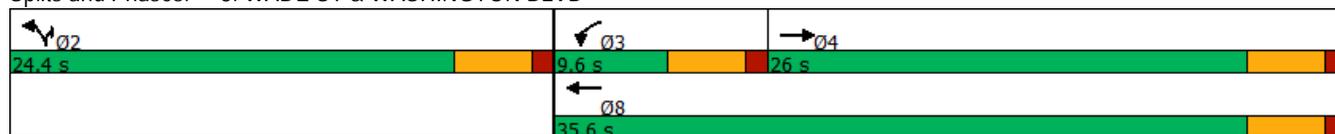
	→	↖	←	↗	↘
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑		↘
Traffic Volume (vph)	710	25	632	1	72
Future Volume (vph)	710	25	632	1	72
Turn Type	NA	Prot	NA	Prot	Prot
Protected Phases	4	3	8	2	2
Permitted Phases					
Detector Phase	4	3	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	Max	Max
Act Effct Green (s)	17.4	5.2	20.6	0.0	20.4
Actuated g/C Ratio	0.35	0.10	0.41	0.00	0.41
v/c Ratio	0.66	0.15	0.48	no cap	0.10
Control Delay	17.3	26.4	11.4		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	17.3	26.4	11.4	Error	0.2
LOS	B	C	B	F	A
Approach Delay	17.3		12.0	Err	
Approach LOS	B		B	F	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 50.3
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err
 Intersection Capacity Utilization Err%
 Analysis Period (min) 15

Intersection LOS: F
 ICU Level of Service H

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	808	28	702	1	80
v/c Ratio	0.66	0.15	0.48	no cap	0.10
Control Delay	17.3	26.4	11.4		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	17.3	26.4	11.4	Error	0.2
Queue Length 50th (ft)	87	7	73	0	0
Queue Length 95th (ft)	177	31	106	0	0
Internal Link Dist (ft)	299		900	446	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1548	184	2245	1	805
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.15	0.31	1.00	0.10
Intersection Summary					

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	710	17	25	632	1	72
Future Volume (veh/h)	710	17	25	632	1	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	789	19	28	702	1	80
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1089	26	57	1522	0	0
Arrive On Green	0.31	0.31	0.03	0.43	0.39	0.39
Sat Flow, veh/h	3640	85	1781	3647	0	0
Grp Volume(v), veh/h	395	413	28	702	0	0
Grp Sat Flow(s),veh/h/ln	1777	1855	1781	1777	0	0
Q Serve(g_s), s	10.0	10.0	0.8	7.1	0.0	0.0
Cycle Q Clear(g_c), s	10.0	10.0	0.8	7.1	0.0	0.0
Prop In Lane		0.05	1.00		0.00	0.00
Lane Grp Cap(c), veh/h	546	570	57	1522	0	0
V/C Ratio(X)	0.72	0.72	0.49	0.46	0.00	0.00
Avail Cap(c_a), veh/h	756	789	180	2186	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	15.6	24.1	10.3	0.0	0.0
Incr Delay (d2), s/veh	2.1	2.1	6.3	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	4.0	0.4	2.3	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.8	17.7	30.4	10.5	0.0	0.0
LnGrp LOS	B	B	C	B	A	A
Approach Vol, veh/h	808			730	0	
Approach Delay, s/veh	17.7			11.3	0.0	
Approach LOS	B			B		
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.4	6.1	20.0		26.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.9	5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s		0.0	2.8	12.0		9.1
Green Ext Time (p_c), s		0.0	0.0	3.5		5.0
Intersection Summary						
HCM 6th Ctrl Delay			14.7			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3465	0
Flt Permitted	0.950			0.950			0.132			0.110		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	246	3539	1583	205	3465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127			24
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	170	793	79	161	644	114	65	1138	175	93	852	139
Future Volume (vph)	170	793	79	161	644	114	65	1138	175	93	852	139
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	181	844	84	171	685	121	69	1211	186	99	906	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	181	844	84	171	685	121	69	1211	186	99	1054	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	170	793	79	161	644	114	65	1138	175	93	852
Future Volume (vph)	170	793	79	161	644	114	65	1138	175	93	852
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.9	29.0	29.0	11.0	28.1	28.1	9.6	40.5	40.5	9.5	40.4
Total Split (%)	13.2%	32.2%	32.2%	12.2%	31.2%	31.2%	10.7%	45.0%	45.0%	10.6%	44.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	7.4	23.5	23.5	6.5	22.6	22.6	40.1	36.2	36.2	40.0	36.1
Actuated g/C Ratio	0.08	0.27	0.27	0.07	0.26	0.26	0.46	0.42	0.42	0.46	0.41
v/c Ratio	0.62	0.89	0.16	0.67	0.75	0.24	0.34	0.82	0.25	0.54	0.73
Control Delay	49.8	43.4	2.5	54.1	35.7	6.0	16.4	29.5	7.5	23.2	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	49.8	43.4	2.5	54.1	35.7	6.0	16.4	29.8	7.5	23.2	25.2
LOS	D	D	A	D	D	A	B	C	A	C	C
Approach Delay		41.4			35.3			26.3			25.1
Approach LOS		D			D			C			C

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 87.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 31.4

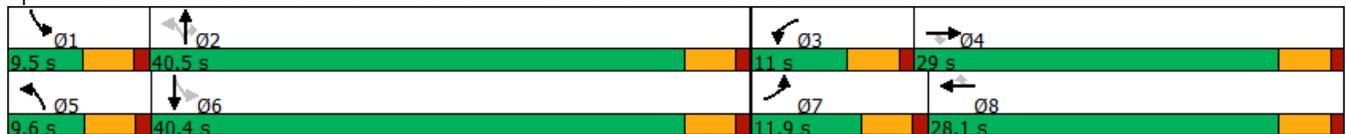
Intersection LOS: C

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	181	844	84	171	685	121	69	1211	186	99	1054
v/c Ratio	0.62	0.89	0.16	0.67	0.75	0.24	0.34	0.82	0.25	0.54	0.73
Control Delay	49.8	43.4	2.5	54.1	35.7	6.0	16.4	29.5	7.5	23.2	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	49.8	43.4	2.5	54.1	35.7	6.0	16.4	29.8	7.5	23.2	25.2
Queue Length 50th (ft)	52	241	0	50	187	0	19	323	20	28	259
Queue Length 95th (ft)	#91	#345	14	#93	251	38	41	#414	63	#57	337
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	293	1000	538	257	964	523	202	1469	731	184	1450
Starvation Cap Reductn	0	0	0	0	0	0	0	35	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.84	0.16	0.67	0.71	0.23	0.34	0.84	0.25	0.54	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	793	79	161	644	114	65	1138	175	93	852	139
Future Volume (veh/h)	170	793	79	161	644	114	65	1138	175	93	852	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	181	844	84	171	685	121	69	1211	186	99	906	148
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	946	422	242	934	417	253	1450	647	213	1264	206
Arrive On Green	0.07	0.27	0.27	0.07	0.26	0.26	0.05	0.41	0.41	0.05	0.41	0.41
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3058	499
Grp Volume(v), veh/h	181	844	84	171	685	121	69	1211	186	99	526	528
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1780
Q Serve(g_s), s	4.5	20.2	3.6	4.3	15.5	5.4	1.9	27.0	6.9	2.8	21.8	21.8
Cycle Q Clear(g_c), s	4.5	20.2	3.6	4.3	15.5	5.4	1.9	27.0	6.9	2.8	21.8	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	254	946	422	242	934	417	253	1450	647	213	734	736
V/C Ratio(X)	0.71	0.89	0.20	0.71	0.73	0.29	0.27	0.84	0.29	0.46	0.72	0.72
Avail Cap(c_a), veh/h	290	987	440	255	950	424	274	1450	647	222	734	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	31.2	25.1	40.1	29.7	26.0	16.6	23.5	17.5	19.2	21.6	21.6
Incr Delay (d2), s/veh	6.8	10.0	0.2	8.1	2.9	0.4	0.6	5.8	1.1	1.6	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.7	1.4	2.1	6.8	2.0	0.8	11.9	2.7	1.2	9.8	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	41.2	25.3	48.3	32.6	26.3	17.2	29.3	18.6	20.8	27.5	27.5
LnGrp LOS	D	D	C	D	C	C	B	C	B	C	C	C
Approach Vol, veh/h		1109			977			1466			1153	
Approach Delay, s/veh		40.9			34.6			27.4			26.9	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	40.5	10.7	28.0	8.6	41.0	11.0	27.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	36.0	6.5	24.5	5.1	35.9	7.4	23.6				
Max Q Clear Time (g_c+I1), s	4.8	29.0	6.3	22.2	3.9	23.8	6.5	17.5				
Green Ext Time (p_c), s	0.0	4.7	0.0	1.3	0.0	5.5	0.1	2.6				
Intersection Summary												
HCM 6th Ctrl Delay			32.0									
HCM 6th LOS			C									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.970			0.983			0.980			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3433	0	1770	3479	0	1770	3468	0	1770	3511	0
Flt Permitted	0.249			0.208			0.950			0.141		
Satd. Flow (perm)	464	3433	0	387	3479	0	1770	3468	0	263	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			19			31			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	70	664	168	73	546	69	142	1224	183	109	896	53
Future Volume (vph)	70	664	168	73	546	69	142	1224	183	109	896	53
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	74	699	177	77	575	73	149	1288	193	115	943	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	876	0	77	648	0	149	1481	0	115	999	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

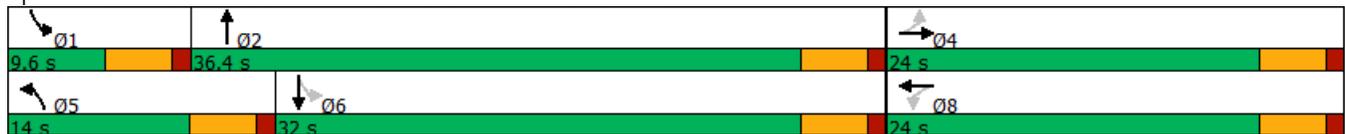
02/13/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	70	664	73	546	142	1224	109	896
Future Volume (vph)	70	664	73	546	142	1224	109	896
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	14.0	36.4	9.6	32.0
Total Split (%)	34.3%	34.3%	34.3%	34.3%	20.0%	52.0%	13.7%	45.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effect Green (s)	19.2	19.2	19.2	19.2	9.0	33.4	32.6	27.5
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.13	0.48	0.47	0.40
v/c Ratio	0.58	0.89	0.73	0.66	0.65	0.88	0.49	0.71
Control Delay	43.2	36.2	63.6	25.4	43.4	24.6	15.7	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.2	36.2	63.6	25.4	43.4	24.6	15.7	21.0
LOS	D	D	E	C	D	C	B	C
Approach Delay		36.8		29.5		26.3		20.4
Approach LOS		D		C		C		C

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 69.2
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 27.6
 Intersection Capacity Utilization 88.6%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	74	876	77	648	149	1481	115	999
v/c Ratio	0.58	0.89	0.73	0.66	0.65	0.88	0.49	0.71
Control Delay	43.2	36.2	63.6	25.4	43.4	24.6	15.7	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.2	36.2	63.6	25.4	43.4	24.6	15.7	21.0
Queue Length 50th (ft)	27	180	30	125	62	296	19	184
Queue Length 95th (ft)	#86	#287	#100	179	#132	#453	43	252
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	131	1000	108	994	243	1691	235	1403
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.88	0.71	0.65	0.61	0.88	0.49	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	70	664	168	73	546	69	142	1224	183	109	896	53
Future Volume (veh/h)	70	664	168	73	546	69	142	1224	183	109	896	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	699	177	77	575	73	149	1288	193	115	943	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	790	200	131	892	113	187	1427	212	244	1428	85
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.46	0.46	0.06	0.42	0.42
Sat Flow, veh/h	783	2808	711	633	3173	402	1781	3102	462	1781	3408	202
Grp Volume(v), veh/h	74	442	434	77	321	327	149	734	747	115	492	507
Grp Sat Flow(s),veh/h/ln	783	1777	1742	633	1777	1798	1781	1777	1787	1781	1777	1834
Q Serve(g_s), s	6.4	16.5	16.5	3.0	11.0	11.1	5.7	26.4	26.9	2.5	15.4	15.4
Cycle Q Clear(g_c), s	17.4	16.5	16.5	19.5	11.0	11.1	5.7	26.4	26.9	2.5	15.4	15.4
Prop In Lane	1.00		0.41	1.00		0.22	1.00		0.26	1.00		0.11
Lane Grp Cap(c), veh/h	199	500	490	131	500	506	187	817	822	244	745	769
V/C Ratio(X)	0.37	0.89	0.89	0.59	0.64	0.65	0.80	0.90	0.91	0.47	0.66	0.66
Avail Cap(c_a), veh/h	199	500	490	131	500	506	244	817	822	260	745	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	23.9	23.9	34.2	21.9	21.9	30.3	17.2	17.4	15.4	16.2	16.2
Incr Delay (d2), s/veh	1.2	17.1	17.4	6.7	2.8	2.8	12.8	14.7	15.8	1.4	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.8	8.7	1.5	4.7	4.8	3.0	12.7	13.3	1.0	6.6	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	40.9	41.3	40.9	24.7	24.7	43.1	31.9	33.2	16.8	20.7	20.6
LnGrp LOS	C	D	D	D	C	C	D	C	C	B	C	C
Approach Vol, veh/h		950			725			1630			1114	
Approach Delay, s/veh		40.3			26.4			33.5			20.3	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	36.4		24.0	11.8	33.6		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	31.9		19.5	9.5	27.5		19.5				
Max Q Clear Time (g_c+I1), s	4.5	28.9		19.4	7.7	17.4		21.5				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.1	4.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				30.5								
HCM 6th LOS				C								

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.960			0.988	
Flt Protected	0.950			0.950				0.983			0.992	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1758	0	0	1826	0
Flt Permitted	0.120			0.169				0.731			0.922	
Satd. Flow (perm)	224	3539	1583	315	3539	1583	0	1307	0	0	1697	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77			32		30			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1907			1445			1456			760	
Travel Time (s)		43.3			32.8			33.1			17.3	

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	22	1106	72	138	1277	33	73	75	63	52	235	28
Future Volume (vph)	22	1106	72	138	1277	33	73	75	63	52	235	28
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	1189	77	148	1373	35	78	81	68	56	253	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	1189	77	148	1373	35	0	227	0	0	339	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

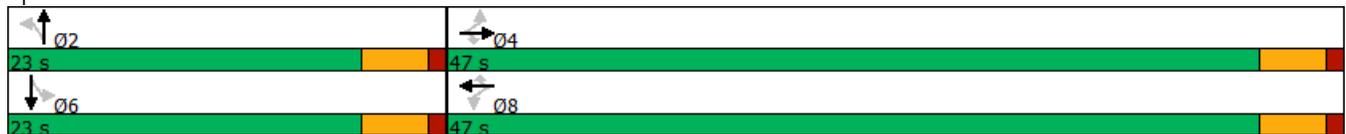
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	1106	72	138	1277	33	73	75	52	235
Future Volume (vph)	22	1106	72	138	1277	33	73	75	52	235
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effect Green (s)	36.0	36.0	36.0	36.0	36.0	36.0		18.8		18.8
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.56	0.56		0.29		0.29
v/c Ratio	0.19	0.60	0.08	0.84	0.69	0.04		0.56		0.67
Control Delay	10.5	10.3	1.8	52.2	11.7	2.5		24.9		30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	10.5	10.3	1.8	52.2	11.7	2.5		24.9		30.1
LOS	B	B	A	D	B	A		C		C
Approach Delay		9.8			15.4			24.9		30.1
Approach LOS		A			B			C		C

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 64
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 15.4
 Intersection Capacity Utilization 72.9%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	24	1189	77	148	1373	35	227	339
v/c Ratio	0.19	0.60	0.08	0.84	0.69	0.04	0.56	0.67
Control Delay	10.5	10.3	1.8	52.2	11.7	2.5	24.9	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.5	10.3	1.8	52.2	11.7	2.5	24.9	30.1
Queue Length 50th (ft)	4	141	0	42	176	1	74	131
Queue Length 95th (ft)	17	190	14	#154	237	10	145	#249
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	151	2392	1095	213	2392	1080	405	504
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.50	0.07	0.69	0.57	0.03	0.56	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	22	1106	72	138	1277	33	73	75	63	52	235	28
Future Volume (veh/h)	22	1106	72	138	1277	33	73	75	63	52	235	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1189	77	148	1373	35	78	81	68	56	253	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	2135	952	280	2135	952	175	176	120	115	379	42
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	382	3554	1585	438	3554	1585	389	656	447	201	1410	156
Grp Volume(v), veh/h	24	1189	77	148	1373	35	227	0	0	339	0	0
Grp Sat Flow(s),veh/h/ln	382	1777	1585	438	1777	1585	1491	0	0	1768	0	0
Q Serve(g_s), s	3.0	13.8	1.4	21.1	17.3	0.6	0.0	0.0	0.0	3.1	0.0	0.0
Cycle Q Clear(g_c), s	20.3	13.8	1.4	34.9	17.3	0.6	8.6	0.0	0.0	11.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.34		0.30	0.17		0.09
Lane Grp Cap(c), veh/h	238	2135	952	280	2135	952	471	0	0	536	0	0
V/C Ratio(X)	0.10	0.56	0.08	0.53	0.64	0.04	0.48	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	244	2192	978	287	2192	978	471	0	0	536	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	8.2	5.8	18.7	8.9	5.6	21.3	0.0	0.0	22.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	1.7	0.6	0.0	3.5	0.0	0.0	5.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.3	0.4	2.1	5.5	0.2	3.4	0.0	0.0	5.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	8.5	5.8	20.5	9.6	5.6	24.9	0.0	0.0	28.2	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1290			1556			227			339	
Approach Delay, s/veh		8.5			10.5			24.9			28.2	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		45.9		23.0		45.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		42.5		18.5		42.5				
Max Q Clear Time (g_c+I1), s		10.6		22.3		13.6		36.9				
Green Ext Time (p_c), s		0.8		9.7		0.9		4.5				
Intersection Summary												
HCM 6th Ctrl Delay				12.5								
HCM 6th LOS				B								

Lanes and Geometrics
 2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.963			0.966	
Flt Protected	0.950			0.950				0.993			0.991	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1781	0	0	1783	0
Flt Permitted	0.129			0.129				0.929			0.911	
Satd. Flow (perm)	240	3539	1583	240	3539	1583	0	1666	0	0	1639	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			27		33			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	62	1296	29	52	1492	25	25	96	46	66	203	90
Future Volume (vph)	62	1296	29	52	1492	25	25	96	46	66	203	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	65	1364	31	55	1571	26	26	101	48	69	214	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	1364	31	55	1571	26	0	175	0	0	378	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

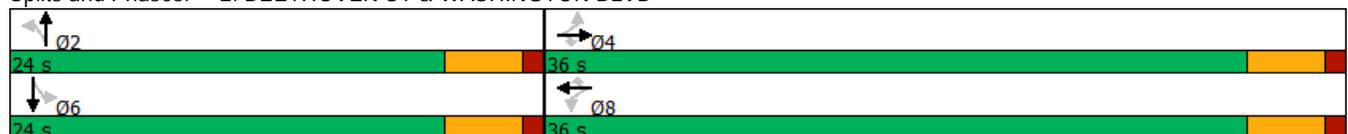
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	62	1296	29	52	1492	25	25	96	66	203
Future Volume (vph)	62	1296	29	52	1492	25	25	96	66	203
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.0	24.0	24.0	24.0
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	30.9	30.9	30.9	30.9	30.9	30.9		19.5		19.5
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52		0.33		0.33
v/c Ratio	0.52	0.74	0.04	0.44	0.85	0.03		0.31		0.69
Control Delay	29.1	14.2	3.6	22.9	18.4	3.2		14.0		24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	29.1	14.2	3.6	22.9	18.4	3.2		14.0		24.7
LOS	C	B	A	C	B	A		B		C
Approach Delay		14.6			18.3			14.0		24.7
Approach LOS		B			B			B		C

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 59.4
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 17.3
 Intersection Capacity Utilization 85.1%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service E

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	65	1364	31	55	1571	26	175	378
v/c Ratio	0.52	0.74	0.04	0.44	0.85	0.03	0.31	0.69
Control Delay	29.1	14.2	3.6	22.9	18.4	3.2	14.0	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	14.2	3.6	22.9	18.4	3.2	14.0	24.7
Queue Length 50th (ft)	14	182	1	11	232	0	37	111
Queue Length 95th (ft)	#69	255	11	#55	#330	9	80	#210
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	127	1876	851	127	1876	851	568	549
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.73	0.04	0.43	0.84	0.03	0.31	0.69

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	62	1296	29	52	1492	25	25	96	46	66	203	90
Future Volume (veh/h)	62	1296	29	52	1492	25	25	96	46	66	203	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1364	31	55	1571	26	26	101	48	69	214	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	1866	832	209	1866	832	112	363	153	140	341	138
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	319	3554	1585	387	3554	1585	132	1116	472	213	1048	424
Grp Volume(v), veh/h	65	1364	31	55	1571	26	175	0	0	378	0	0
Grp Sat Flow(s),veh/h/ln	319	1777	1585	387	1777	1585	1721	0	0	1685	0	0
Q Serve(g_s), s	8.9	17.8	0.6	7.7	22.6	0.5	0.0	0.0	0.0	5.8	0.0	0.0
Cycle Q Clear(g_c), s	31.5	17.8	0.6	25.4	22.6	0.5	4.4	0.0	0.0	11.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		0.27	0.18		0.25
Lane Grp Cap(c), veh/h	167	1866	832	209	1866	832	628	0	0	619	0	0
V/C Ratio(X)	0.39	0.73	0.04	0.26	0.84	0.03	0.28	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	167	1866	832	209	1866	832	628	0	0	619	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.8	11.0	6.9	20.8	12.1	6.9	15.2	0.0	0.0	17.4	0.0	0.0
Incr Delay (d2), s/veh	1.5	1.5	0.0	0.7	3.7	0.0	1.1	0.0	0.0	4.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	5.9	0.2	0.7	8.0	0.1	1.8	0.0	0.0	4.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	12.5	6.9	21.4	15.8	6.9	16.3	0.0	0.0	21.9	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	C	A	A
Approach Vol, veh/h		1460			1652			175			378	
Approach Delay, s/veh		13.1			15.9			16.3			21.9	
Approach LOS		B			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		36.0		24.0		36.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.5		31.5		19.5		31.5				
Max Q Clear Time (g_c+I1), s		6.4		33.5		13.5		27.4				
Green Ext Time (p_c), s		0.8		0.0		1.2		3.4				
Intersection Summary												
HCM 6th Ctrl Delay				15.4								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.993			0.983			0.968	
Flt Protected		0.996			0.999			0.983			0.973	
Satd. Flow (prot)	0	1833	0	0	1848	0	0	1800	0	0	1754	0
Flt Permitted		0.996			0.999			0.983			0.973	
Satd. Flow (perm)	0	1833	0	0	1848	0	0	1800	0	0	1754	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	21	243	27	3	145	9	11	16	4	22	9	10
Future Volume (vph)	21	243	27	3	145	9	11	16	4	22	9	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	22	253	28	3	151	9	11	17	4	23	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	303	0	0	163	0	0	32	0	0	42	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	243	27	3	145	9	11	16	4	22	9	10
Future Vol, veh/h	21	243	27	3	145	9	11	16	4	22	9	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	253	28	3	151	9	11	17	4	23	9	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	160	0	0	281	0	0	482	477	267	484	487	156
Stage 1	-	-	-	-	-	-	311	311	-	162	162	-
Stage 2	-	-	-	-	-	-	171	166	-	322	325	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1419	-	-	1282	-	-	495	487	772	493	481	890
Stage 1	-	-	-	-	-	-	699	658	-	840	764	-
Stage 2	-	-	-	-	-	-	831	761	-	690	649	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1419	-	-	1282	-	-	474	477	772	470	471	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	474	477	-	470	471	-
Stage 1	-	-	-	-	-	-	686	646	-	825	762	-
Stage 2	-	-	-	-	-	-	809	759	-	657	637	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.1			12.7			12.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	501	1419	-	-	1282	-	-	531
HCM Lane V/C Ratio	0.064	0.015	-	-	0.002	-	-	0.08
HCM Control Delay (s)	12.7	7.6	0	-	7.8	0	-	12.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.999			0.881			0.911	
Flt Protected	0.950			0.950				0.994			0.984	
Satd. Flow (prot)	1770	3536	0	1770	3536	0	0	1631	0	0	1670	0
Flt Permitted	0.950			0.950				0.994			0.984	
Satd. Flow (perm)	1770	3536	0	1770	3536	0	0	1631	0	0	1670	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	

Intersection Summary

Area Type: Other

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	40	1379	7	35	1431	7	2	0	15	17	1	36
Future Volume (vph)	40	1379	7	35	1431	7	2	0	15	17	1	36
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	41	1422	7	36	1475	7	2	0	15	18	1	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1429	0	36	1482	0	0	17	0	0	56	0
Intersection Summary												

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↘			↕↘	
Traffic Vol, veh/h	40	1379	7	35	1431	7	2	0	15	17	1	36
Future Vol, veh/h	40	1379	7	35	1431	7	2	0	15	17	1	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	1422	7	36	1475	7	2	0	15	18	1	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1482	0	0	1429	0	0	2318	3062	715	2344	3062	741
Stage 1	-	-	-	-	-	-	1508	1508	-	1551	1551	-
Stage 2	-	-	-	-	-	-	810	1554	-	793	1511	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	450	-	-	472	-	-	20	12	373	19	12	359
Stage 1	-	-	-	-	-	-	126	182	-	119	173	-
Stage 2	-	-	-	-	-	-	340	173	-	348	181	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	450	-	-	472	-	-	15	10	373	~ 16	10	359
Mov Cap-2 Maneuver	-	-	-	-	-	-	15	10	-	~ 16	10	-
Stage 1	-	-	-	-	-	-	115	165	-	108	160	-
Stage 2	-	-	-	-	-	-	280	160	-	303	165	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			49.6			\$ 385.6		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	98	450	-	-	472	-	-	43
HCM Lane V/C Ratio	0.179	0.092	-	-	0.076	-	-	1.295
HCM Control Delay (s)	49.6	13.8	-	-	13.3	-	-	\$ 385.6
HCM Lane LOS	E	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.6	0.3	-	-	0.2	-	-	5.4

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.997	
Satd. Flow (prot)	3536	0	1770	3539	1619	0
Flt Permitted			0.127		0.997	
Satd. Flow (perm)	3536	0	237	3539	1619	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				31	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1384	6	35	1544	4	72
Future Volume (vph)	1384	6	35	1544	4	72
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1427	6	36	1592	4	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1433	0	36	1592	78	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022

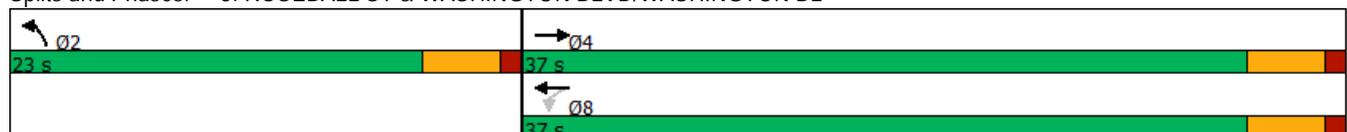


Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↵	↑↑	↵
Traffic Volume (vph)	1384	35	1544	4
Future Volume (vph)	1384	35	1544	4
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	31.6	31.6	31.6	18.5
Actuated g/C Ratio	0.53	0.53	0.53	0.31
v/c Ratio	0.76	0.29	0.84	0.15
Control Delay	14.0	14.7	17.1	11.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.0	14.7	17.1	11.1
LOS	B	B	B	B
Approach Delay	14.0		17.0	11.1
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 59.1
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 15.5
 Intersection Capacity Utilization 54.9%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1433	36	1592	78
v/c Ratio	0.76	0.29	0.84	0.15
Control Delay	14.0	14.7	17.1	11.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.0	14.7	17.1	11.1
Queue Length 50th (ft)	189	6	227	12
Queue Length 95th (ft)	264	26	319	38
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	1945	130	1946	528
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.74	0.28	0.82	0.15

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1384	6	35	1544	4	72
Future Volume (veh/h)	1384	6	35	1544	4	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1427	6	36	1592	4	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1917	8	207	1878	26	475
Arrive On Green	0.53	0.53	0.53	0.53	0.32	0.32
Sat Flow, veh/h	3723	15	373	3647	81	1496
Grp Volume(v), veh/h	699	734	36	1592	79	0
Grp Sat Flow(s),veh/h/ln	1777	1868	373	1777	1597	0
Q Serve(g_s), s	17.8	17.8	4.8	22.3	2.1	0.0
Cycle Q Clear(g_c), s	17.8	17.8	22.7	22.3	2.1	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	939	987	207	1878	507	0
V/C Ratio(X)	0.74	0.74	0.17	0.85	0.16	0.00
Avail Cap(c_a), veh/h	990	1041	217	1981	507	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	10.7	19.5	11.7	14.3	0.0
Incr Delay (d2), s/veh	2.9	2.8	0.4	3.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	0.4	7.7	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.6	13.5	19.9	15.3	14.9	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1433			1628	79	
Approach Delay, s/veh	13.5			15.4	14.9	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		23.0		35.3		35.3
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		32.5		32.5
Max Q Clear Time (g_c+I1), s		4.1		19.8		24.7
Green Ext Time (p_c), s		0.1		7.8		6.1
Intersection Summary						
HCM 6th Ctrl Delay			14.5			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.990	
Flt Protected		0.992			0.958							
Satd. Flow (prot)	0	1844	0	0	3391	0	0	3539	1583	0	3504	0
Flt Permitted		0.992			0.958							
Satd. Flow (perm)	0	1844	0	0	3391	0	0	3539	1583	0	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1							531		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	45	224	4	584	83	0	0	769	728	0	989	70
Future Volume (vph)	45	224	4	584	83	0	0	769	728	0	989	70
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	231	4	602	86	0	0	793	751	0	1020	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	688	0	0	793	751	0	1092	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

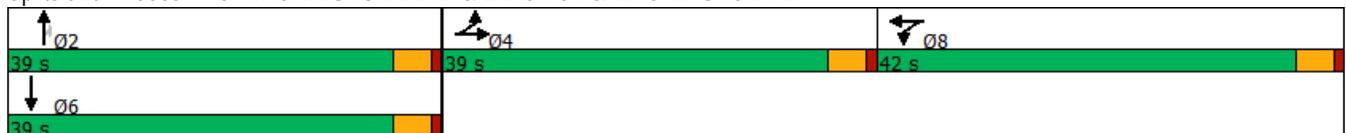
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	224	83	769	728	989
Future Volume (vph)	224	83	769	728	989
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	42.0	39.0	39.0	39.0
Total Split (%)	32.5%	35.0%	32.5%	32.5%	32.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	19.9	25.7	35.1	35.1	35.1
Actuated g/C Ratio	0.21	0.27	0.37	0.37	0.37
v/c Ratio	0.72	1.25dl	0.60	0.81	0.84
Control Delay	46.5	37.2	28.6	17.4	36.0
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	46.5	37.3	28.6	17.4	36.0
LOS	D	D	C	B	D
Approach Delay	46.5	37.3	23.2		36.0
Approach LOS	D	D	C		D

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 94.4
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 31.6
 Intersection Capacity Utilization 87.7%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↘	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	281	688	793	751	1092
v/c Ratio	0.72	1.25dl	0.60	0.81	0.84
Control Delay	46.5	37.2	28.6	17.4	36.0
Queue Delay	0.0	0.2	0.0	0.0	0.0
Total Delay	46.5	37.3	28.6	17.4	36.0
Queue Length 50th (ft)	155	194	197	112	305
Queue Length 95th (ft)	270	292	347	#440	#584
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	686	1370	1315	922	1306
Starvation Cap Reductn	0	139	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.56	0.60	0.81	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	224	4	584	83	0	0	769	728	0	989	70
Future Volume (veh/h)	45	224	4	584	83	0	0	769	728	0	989	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	46	231	4	602	86	0	0	793	0	0	1020	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	55	274	5	633	631	0	0	1186		0	1124	79
Arrive On Green	0.18	0.18	0.18	0.36	0.36	0.00	0.00	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h	303	1521	26	1781	1870	0	0	3647	1585	0	3460	238
Grp Volume(v), veh/h	281	0	0	602	86	0	0	793	0	0	538	554
Grp Sat Flow(s),veh/h/ln	1850	0	0	1781	1777	0	0	1777	1585	0	1777	1828
Q Serve(g_s), s	15.2	0.0	0.0	34.0	3.4	0.0	0.0	19.8	0.0	0.0	29.9	29.9
Cycle Q Clear(g_c), s	15.2	0.0	0.0	34.0	3.4	0.0	0.0	19.8	0.0	0.0	29.9	29.9
Prop In Lane	0.16		0.01	1.00		0.00	0.00		1.00	0.00		0.13
Lane Grp Cap(c), veh/h	334	0	0	633	631	0	0	1186		0	593	610
V/C Ratio(X)	0.84	0.00	0.00	0.95	0.14	0.00	0.00	0.67		0.00	0.91	0.91
Avail Cap(c_a), veh/h	618	0	0	646	645	0	0	1186		0	593	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	0.0	32.5	22.6	0.0	0.0	29.5	0.0	0.0	32.9	32.9
Incr Delay (d2), s/veh	5.7	0.0	0.0	23.8	0.1	0.0	0.0	3.0	0.0	0.0	20.1	19.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	18.4	1.4	0.0	0.0	8.8	0.0	0.0	15.9	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	0.0	0.0	56.3	22.7	0.0	0.0	32.5	0.0	0.0	53.0	52.6
LnGrp LOS	D	A	A	E	C	A	A	C		A	D	D
Approach Vol, veh/h		281			688			793	A		1092	
Approach Delay, s/veh		46.7			52.1			32.5			52.8	
Approach LOS		D			D			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		23.1		39.0		41.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		34.5		34.5		37.5				
Max Q Clear Time (g_c+I1), s		21.8		17.2		31.9		36.0				
Green Ext Time (p_c), s		4.5		1.5		1.6		0.7				
Intersection Summary												
HCM 6th Ctrl Delay				46.4								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.991			0.950			0.929	
Flt Protected	0.950							0.999			0.977	
Satd. Flow (prot)	1770	3539	0	0	3507	0	0	1768	0	0	1691	0
Flt Permitted	0.172				0.950			0.994			0.821	
Satd. Flow (perm)	320	3539	0	0	3332	0	0	1759	0	0	1421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15			29			74	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			997			334			522	
Travel Time (s)		9.0			22.7			7.6			11.9	

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	26	793	0	6	920	61	2	46	28	127	0	139
Future Volume (vph)	26	793	0	6	920	61	2	46	28	127	0	139
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	27	826	0	6	958	64	2	48	29	132	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	826	0	0	1028	0	0	79	0	0	277	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

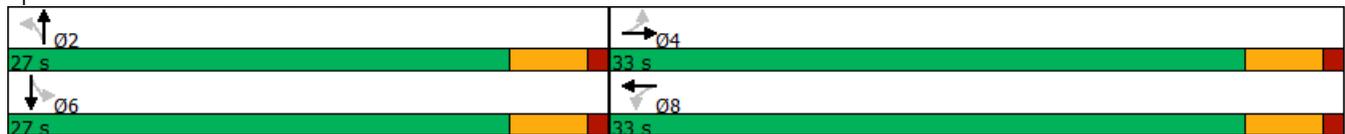


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗		↖		↗		↖
Traffic Volume (vph)	26	793	6	920	2	46	127	0
Future Volume (vph)	26	793	6	920	2	46	127	0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	23.9	23.9		23.9		22.7		22.7
Actuated g/C Ratio	0.43	0.43		0.43		0.41		0.41
v/c Ratio	0.20	0.54		0.71		0.11		0.45
Control Delay	13.5	13.0		15.8		8.9		12.4
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	13.5	13.0		15.8		8.9		12.4
LOS	B	B		B		A		B
Approach Delay		13.1		15.8		8.9		12.4
Approach LOS		B		B		A		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 55.6
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 14.1
 Intersection Capacity Utilization 61.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	27	826	1028	79	277
v/c Ratio	0.20	0.54	0.71	0.11	0.45
Control Delay	13.5	13.0	15.8	8.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	13.0	15.8	8.9	12.4
Queue Length 50th (ft)	5	100	136	10	47
Queue Length 95th (ft)	20	143	194	34	111
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	165	1826	1726	733	622
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.45	0.60	0.11	0.45
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	26	793	0	6	920	61	2	46	28	127	0	139
Future Volume (veh/h)	26	793	0	6	920	61	2	46	28	127	0	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	826	0	6	958	64	2	48	29	132	0	145
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	1454	0	70	1350	90	73	464	271	363	34	326
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.00	0.42
Sat Flow, veh/h	552	3647	0	5	3300	220	8	1100	643	623	79	771
Grp Volume(v), veh/h	27	826	0	543	0	485	79	0	0	277	0	0
Grp Sat Flow(s),veh/h/ln	552	1777	0	1862	0	1663	1751	0	0	1473	0	0
Q Serve(g_s), s	2.3	9.5	0.0	0.0	0.0	13.0	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	15.3	9.5	0.0	12.9	0.0	13.0	1.5	0.0	0.0	6.8	0.0	0.0
Prop In Lane	1.00		0.00	0.01		0.13	0.03		0.37	0.48		0.52
Lane Grp Cap(c), veh/h	227	1454	0	830	0	680	808	0	0	722	0	0
V/C Ratio(X)	0.12	0.57	0.00	0.65	0.00	0.71	0.10	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	296	1900	0	1060	0	889	808	0	0	722	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.5	12.1	0.0	13.1	0.0	13.1	9.3	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.0	1.0	0.0	1.9	0.2	0.0	0.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.2	0.0	4.7	0.0	4.4	0.5	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	12.5	0.0	14.1	0.0	15.0	9.6	0.0	0.0	12.3	0.0	0.0
LnGrp LOS	B	B	A	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		853			1028			79			277	
Approach Delay, s/veh		12.7			14.5			9.6			12.3	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		26.3		27.0		26.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		28.5		22.5		28.5				
Max Q Clear Time (g_c+I1), s		3.5		17.3		8.8		15.0				
Green Ext Time (p_c), s		0.3		4.6		1.4		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				13.4								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.994					0.865
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3518	0	1770	3539	0	1611
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3518	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					234
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	913	36	43	650	5	54
Future Volume (vph)	913	36	43	650	5	54
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	941	37	44	670	5	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	978	0	44	670	5	56
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

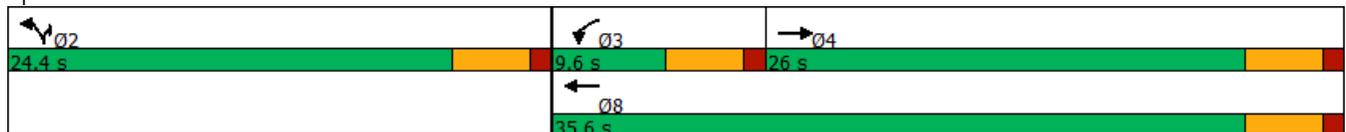
	→	↖	←	↗	↘
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑		↘
Traffic Volume (vph)	913	43	650	5	54
Future Volume (vph)	913	43	650	5	54
Turn Type	NA	Prot	NA	Prot	Prot
Protected Phases	4	3	8	2	2
Permitted Phases					
Detector Phase	4	3	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	Max	Max
Act Effect Green (s)	19.6	5.2	22.9	0.0	20.2
Actuated g/C Ratio	0.37	0.10	0.44	0.00	0.39
v/c Ratio	0.74	0.25	0.43	no cap	0.07
Control Delay	18.9	28.5	10.6		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	18.9	28.5	10.6	Error	0.2
LOS	B	C	B	F	A
Approach Delay	18.9		11.7	Err	
Approach LOS	B		B	F	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 52.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err
 Intersection Capacity Utilization Err%
 Analysis Period (min) 15

Intersection LOS: F
 ICU Level of Service H

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	978	44	670	5	56
v/c Ratio	0.74	0.25	0.43	no cap	0.07
Control Delay	18.9	28.5	10.6		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	18.9	28.5	10.6	Error	0.2
Queue Length 50th (ft)	112	12	68	0	0
Queue Length 95th (ft)	225	42	101	0	0
Internal Link Dist (ft)	299		900	446	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1473	175	2138	1	766
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.66	0.25	0.31	5.00	0.07
Intersection Summary					

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY
02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	913	36	43	650	5	54
Future Volume (veh/h)	913	36	43	650	5	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	941	37	44	670	5	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1184	47	80	1661	0	0
Arrive On Green	0.34	0.34	0.04	0.47	0.37	0.37
Sat Flow, veh/h	3579	137	1781	3647	0	0
Grp Volume(v), veh/h	480	498	44	670	0	0
Grp Sat Flow(s),veh/h/ln	1777	1846	1781	1777	0	0
Q Serve(g_s), s	13.2	13.2	1.3	6.7	0.0	0.0
Cycle Q Clear(g_c), s	13.2	13.2	1.3	6.7	0.0	0.0
Prop In Lane		0.07	1.00		0.00	0.00
Lane Grp Cap(c), veh/h	604	627	80	1661	0	0
V/C Ratio(X)	0.79	0.79	0.55	0.40	0.00	0.00
Avail Cap(c_a), veh/h	704	731	167	2037	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.2	16.2	25.4	9.5	0.0	0.0
Incr Delay (d2), s/veh	5.5	5.3	5.9	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	5.7	0.6	2.2	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.7	21.5	31.3	9.6	0.0	0.0
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	978			714	0	
Approach Delay, s/veh	21.6			11.0	0.0	
Approach LOS	C			B		
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.4	6.9	22.9		29.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.9	5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s		0.0	3.3	15.2		8.7
Green Ext Time (p_c), s		0.0	0.0	3.2		4.8
Intersection Summary						
HCM 6th Ctrl Delay			17.1			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3476	0
Flt Permitted	0.950			0.950			0.090			0.145		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	168	3539	1583	270	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			115			115			20
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	180	719	101	199	766	60	94	970	165	108	1349	184
Future Volume (vph)	180	719	101	199	766	60	94	970	165	108	1349	184
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	189	757	106	209	806	63	99	1021	174	114	1420	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	757	106	209	806	63	99	1021	174	114	1614	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

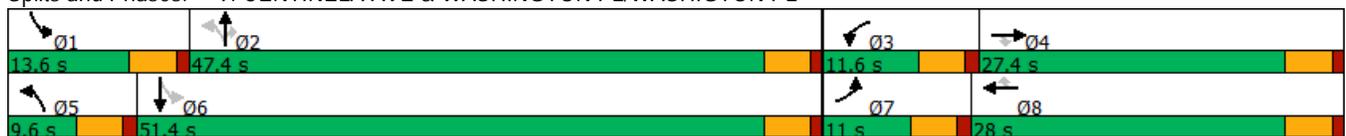
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	180	719	101	199	766	60	94	970	165	108	1349
Future Volume (vph)	180	719	101	199	766	60	94	970	165	108	1349
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.0	27.4	27.4	11.6	28.0	28.0	9.6	47.4	47.4	13.6	51.4
Total Split (%)	11.0%	27.4%	27.4%	11.6%	28.0%	28.0%	9.6%	47.4%	47.4%	13.6%	51.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	6.5	22.9	22.9	7.1	23.5	23.5	48.4	43.3	43.3	55.1	48.3
Actuated g/C Ratio	0.07	0.23	0.23	0.07	0.24	0.24	0.49	0.44	0.44	0.55	0.49
v/c Ratio	0.84	0.93	0.23	0.86	0.96	0.14	0.60	0.66	0.23	0.42	0.95
Control Delay	77.5	56.8	6.7	76.8	62.2	1.5	29.9	25.0	7.6	15.1	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	77.5	56.8	6.7	76.8	62.2	1.5	29.9	25.6	7.6	15.1	38.5
LOS	E	E	A	E	E	A	C	C	A	B	D
Approach Delay		55.5			61.4			23.5			37.0
Approach LOS		E			E			C			D

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 99.4
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay: 42.5
 Intersection Capacity Utilization 89.7%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	189	757	106	209	806	63	99	1021	174	114	1614
v/c Ratio	0.84	0.93	0.23	0.86	0.96	0.14	0.60	0.66	0.23	0.42	0.95
Control Delay	77.5	56.8	6.7	76.8	62.2	1.5	29.9	25.0	7.6	15.1	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	77.5	56.8	6.7	76.8	62.2	1.5	29.9	25.6	7.6	15.1	38.5
Queue Length 50th (ft)	62	250	0	69	268	0	27	264	22	32	512
Queue Length 95th (ft)	#124	#365	37	#134	#394	6	#78	340	63	58	#693
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	224	815	453	244	836	461	164	1543	755	287	1698
Starvation Cap Reductn	0	0	0	0	0	0	0	214	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.93	0.23	0.86	0.96	0.14	0.60	0.77	0.23	0.40	0.95

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	719	101	199	766	60	94	970	165	108	1349	184
Future Volume (veh/h)	180	719	101	199	766	60	94	970	165	108	1349	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	189	757	106	209	806	63	99	1021	174	114	1420	194
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	817	365	246	839	374	165	1657	739	282	1481	200
Arrive On Green	0.07	0.23	0.23	0.07	0.24	0.24	0.05	0.47	0.47	0.05	0.47	0.47
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3145	425
Grp Volume(v), veh/h	189	757	106	209	806	63	99	1021	174	114	796	818
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1794
Q Serve(g_s), s	5.4	20.8	5.5	6.0	22.3	3.1	2.9	21.4	6.6	3.3	42.7	44.2
Cycle Q Clear(g_c), s	5.4	20.8	5.5	6.0	22.3	3.1	2.9	21.4	6.6	3.3	42.7	44.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	226	817	365	246	839	374	165	1657	739	282	837	845
V/C Ratio(X)	0.84	0.93	0.29	0.85	0.96	0.17	0.60	0.62	0.24	0.40	0.95	0.97
Avail Cap(c_a), veh/h	226	817	365	246	839	374	172	1657	739	353	837	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	37.5	31.6	45.7	37.6	30.3	23.2	19.9	15.9	15.4	25.2	25.6
Incr Delay (d2), s/veh	23.3	16.4	0.4	23.2	22.0	0.2	5.4	1.7	0.7	0.9	21.3	24.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	10.7	2.1	3.3	12.1	1.2	1.3	8.9	0.2	1.3	21.9	23.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.3	53.9	32.1	68.9	59.6	30.5	28.5	21.6	16.7	16.3	46.5	49.8
LnGrp LOS	E	D	C	E	E	C	C	C	B	B	D	D
Approach Vol, veh/h		1052			1078			1294			1728	
Approach Delay, s/veh		54.5			59.7			21.5			46.1	
Approach LOS		D			E			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	50.9	11.6	27.4	9.2	51.4	11.0	28.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.1	42.9	7.1	22.9	5.1	46.9	6.5	23.5				
Max Q Clear Time (g_c+I1), s	5.3	23.4	8.0	22.8	4.9	46.2	7.4	24.3				
Green Ext Time (p_c), s	0.1	8.0	0.0	0.1	0.0	0.6	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			44.5									
HCM 6th LOS			D									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.975			0.974			0.982			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3451	0	1770	3447	0	1770	3476	0	1770	3497	0
Flt Permitted	0.183			0.167			0.950			0.121		
Satd. Flow (perm)	341	3451	0	311	3447	0	1770	3476	0	225	3497	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			32			22			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	95	787	159	73	614	131	175	1011	135	224	1273	113
Future Volume (vph)	95	787	159	73	614	131	175	1011	135	224	1273	113
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	98	811	164	75	633	135	180	1042	139	231	1312	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	975	0	75	768	0	180	1181	0	231	1428	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

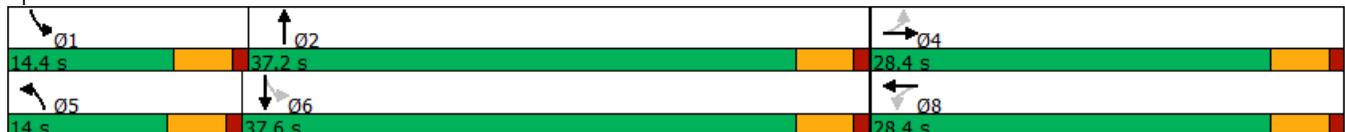
02/13/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	95	787	73	614	175	1011	224	1273
Future Volume (vph)	95	787	73	614	175	1011	224	1273
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	28.4	28.4	28.4	28.4	14.0	37.2	14.4	37.6
Total Split (%)	35.5%	35.5%	35.5%	35.5%	17.5%	46.5%	18.0%	47.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	23.9	23.9	23.9	23.9	9.5	33.1	42.6	33.1
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.12	0.41	0.53	0.41
v/c Ratio	0.97	0.93	0.82	0.73	0.86	0.81	0.76	0.98
Control Delay	116.4	42.6	85.7	28.9	71.2	26.1	32.7	43.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.4	42.6	85.7	28.9	71.2	26.1	32.7	43.9
LOS	F	D	F	C	E	C	C	D
Approach Delay		49.3		33.9		32.1		42.4
Approach LOS		D		C		C		D

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 39.6
 Intersection Capacity Utilization 94.5%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service F

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	98	975	75	768	180	1181	231	1428
v/c Ratio	0.97	0.93	0.82	0.73	0.86	0.81	0.76	0.98
Control Delay	116.4	42.6	85.7	28.9	71.2	26.1	32.7	43.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.4	42.6	85.7	28.9	71.2	26.1	32.7	43.9
Queue Length 50th (ft)	48	240	34	172	90	264	59	356
Queue Length 95th (ft)	#143	#363	#114	237	#201	349	#164	#519
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	101	1052	92	1052	210	1451	312	1455
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.93	0.82	0.73	0.86	0.81	0.74	0.98

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	787	159	73	614	131	175	1011	135	224	1273	113
Future Volume (veh/h)	95	787	159	73	614	131	175	1011	135	224	1273	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	811	164	75	633	135	180	1042	139	231	1312	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	880	178	109	871	185	212	1367	182	339	1367	120
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.43	0.43	0.10	0.41	0.41
Sat Flow, veh/h	700	2945	595	577	2915	621	1781	3152	420	1781	3304	291
Grp Volume(v), veh/h	98	489	486	75	385	383	180	587	594	231	704	724
Grp Sat Flow(s),veh/h/ln	700	1777	1763	577	1777	1759	1781	1777	1795	1781	1777	1818
Q Serve(g_s), s	8.3	21.3	21.3	2.6	15.5	15.6	7.9	22.3	22.4	5.8	30.7	31.1
Cycle Q Clear(g_c), s	23.9	21.3	21.3	23.9	15.5	15.6	7.9	22.3	22.4	5.8	30.7	31.1
Prop In Lane	1.00		0.34	1.00		0.35	1.00		0.23	1.00		0.16
Lane Grp Cap(c), veh/h	163	531	527	109	531	525	212	771	778	339	735	752
V/C Ratio(X)	0.60	0.92	0.92	0.69	0.73	0.73	0.85	0.76	0.76	0.68	0.96	0.96
Avail Cap(c_a), veh/h	163	531	527	109	531	525	212	771	778	383	735	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	27.1	27.1	39.7	25.1	25.1	34.6	19.2	19.2	15.8	22.8	22.9
Incr Delay (d2), s/veh	6.1	21.7	21.8	17.0	4.9	5.1	26.6	7.0	7.0	4.2	24.2	24.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	11.8	11.7	2.0	7.0	6.9	4.9	10.0	10.1	2.5	16.8	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	48.9	49.0	56.7	30.1	30.2	61.2	26.2	26.2	20.0	47.0	47.8
LnGrp LOS	D	D	D	E	C	C	E	C	C	B	D	D
Approach Vol, veh/h		1073			843			1361			1659	
Approach Delay, s/veh		48.4			32.5			30.8			43.6	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	39.2		28.4	14.0	37.6		28.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.9	32.7		23.9	9.5	33.1		23.9				
Max Q Clear Time (g_c+I1), s	7.8	24.4		25.9	9.9	33.1		25.9				
Green Ext Time (p_c), s	0.1	4.7		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				39.2								
HCM 6th LOS				D								

Appendix G

Opening Year With Project Conditions
LOS Analysis Worksheets

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.977				0.985
Flt Protected	0.950			0.950				0.978				0.983
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1780	0	0	1804	0
Flt Permitted	0.147			0.148				0.812				0.840
Satd. Flow (perm)	274	3539	1583	276	3539	1583	0	1478	0	0	1541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			56		19				12
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1907			1445			1456				760
Travel Time (s)		43.3			32.8			33.1				17.3

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	20	1093	32	80	1168	56	130	110	49	48	78	16
Future Volume (vph)	20	1093	32	80	1168	56	130	110	49	48	78	16
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	21	1163	34	85	1243	60	138	117	52	51	83	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1163	34	85	1243	60	0	307	0	0	151	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

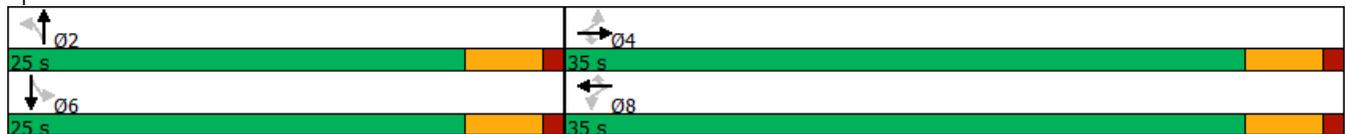
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	1093	32	80	1168	56	130	110	48	78
Future Volume (vph)	20	1093	32	80	1168	56	130	110	48	78
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	27.3	27.3	27.3	27.3	27.3	27.3		20.6		20.6
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48	0.48		0.36		0.36
v/c Ratio	0.16	0.69	0.04	0.64	0.73	0.08		0.56		0.27
Control Delay	11.6	13.8	3.2	38.5	14.8	3.1		19.6		14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	11.6	13.8	3.2	38.5	14.8	3.1		19.6		14.6
LOS	B	B	A	D	B	A		B		B
Approach Delay		13.5			15.7			19.6		14.6
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 57
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 15.2
 Intersection Capacity Utilization 70.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	21	1163	34	85	1243	60	307	151
v/c Ratio	0.16	0.69	0.04	0.64	0.73	0.08	0.56	0.27
Control Delay	11.6	13.8	3.2	38.5	14.8	3.1	19.6	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.6	13.8	3.2	38.5	14.8	3.1	19.6	14.6
Queue Length 50th (ft)	4	148	0	20	164	1	84	36
Queue Length 95th (ft)	16	207	11	#87	229	15	156	75
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	147	1905	868	148	1905	878	547	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.61	0.04	0.57	0.65	0.07	0.56	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1093	32	80	1168	56	130	110	49	48	78	16
Future Volume (veh/h)	20	1093	32	80	1168	56	130	110	49	48	78	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1163	34	85	1243	60	138	117	52	51	83	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	1774	791	242	1774	791	300	242	93	235	356	65
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	423	3554	1585	468	3554	1585	609	696	266	440	1023	186
Grp Volume(v), veh/h	21	1163	34	85	1243	60	307	0	0	151	0	0
Grp Sat Flow(s),veh/h/ln	423	1777	1585	468	1777	1585	1571	0	0	1649	0	0
Q Serve(g_s), s	2.4	14.4	0.6	9.7	15.9	1.2	5.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.2	14.4	0.6	24.1	15.9	1.2	8.9	0.0	0.0	3.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.17	0.34		0.11
Lane Grp Cap(c), veh/h	219	1774	791	242	1774	791	635	0	0	656	0	0
V/C Ratio(X)	0.10	0.66	0.04	0.35	0.70	0.08	0.48	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	227	1840	821	250	1840	821	635	0	0	656	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.4	11.0	7.5	20.0	11.4	7.7	15.3	0.0	0.0	13.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.8	0.0	0.9	1.2	0.0	2.6	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.8	0.2	1.0	5.3	0.3	3.4	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	11.8	7.6	20.8	12.5	7.7	17.9	0.0	0.0	14.5	0.0	0.0
LnGrp LOS	B	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1218			1388			307			151	
Approach Delay, s/veh		11.8			12.8			17.9			14.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		33.9		25.0		33.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		20.5		30.5		20.5		30.5				
Max Q Clear Time (g_c+I1), s		10.9		20.2		5.4		26.1				
Green Ext Time (p_c), s		1.3		6.0		0.7		3.3				
Intersection Summary												
HCM 6th Ctrl Delay				13.0								
HCM 6th LOS				B								

Lanes and Geometrics
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.978			0.955	
Flt Protected	0.950			0.950				0.995			0.990	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1813	0	0	1761	0
Flt Permitted	0.132			0.132				0.954			0.904	
Satd. Flow (perm)	246	3539	1583	246	3539	1583	0	1738	0	0	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			39		17			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	96	1271	8	33	1189	38	31	216	48	35	79	56
Future Volume (vph)	96	1271	8	33	1189	38	31	216	48	35	79	56
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	104	1382	9	36	1292	41	34	235	52	38	86	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1382	9	36	1292	41	0	321	0	0	185	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

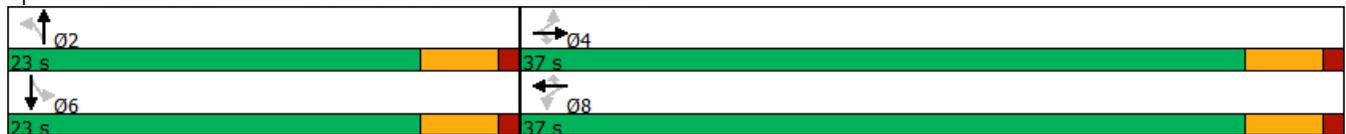
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	96	1271	8	33	1189	38	31	216	35	79
Future Volume (vph)	96	1271	8	33	1189	38	31	216	35	79
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	23.0	23.0	23.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	30.3	30.3	30.3	30.3	30.3	30.3		18.6		18.6
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52		0.32		0.32
v/c Ratio	0.81	0.75	0.01	0.28	0.70	0.05		0.56		0.34
Control Delay	60.8	13.8	1.1	14.4	12.7	2.9		20.9		14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	60.8	13.8	1.1	14.4	12.7	2.9		20.9		14.4
LOS	E	B	A	B	B	A		C		B
Approach Delay		17.0			12.5			20.9		14.4
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 57.9
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 15.4
 Intersection Capacity Utilization 68.9%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	104	1382	9	36	1292	41	321	185
v/c Ratio	0.81	0.75	0.01	0.28	0.70	0.05	0.56	0.34
Control Delay	60.8	13.8	1.1	14.4	12.7	2.9	20.9	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	13.8	1.1	14.4	12.7	2.9	20.9	14.4
Queue Length 50th (ft)	27	178	0	6	160	0	91	38
Queue Length 95th (ft)	#112	248	2	26	223	11	163	84
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	138	1995	904	138	1995	909	569	545
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.69	0.01	0.26	0.65	0.05	0.56	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				 
Traffic Volume (veh/h)	96	1271	8	33	1189	38	31	216	48	35	79	56
Future Volume (veh/h)	96	1271	8	33	1189	38	31	216	48	35	79	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	1382	9	36	1292	41	34	235	52	38	86	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	1924	858	217	1924	858	98	425	88	137	280	169
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	411	3554	1585	389	3554	1585	102	1378	286	208	907	549
Grp Volume(v), veh/h	104	1382	9	36	1292	41	321	0	0	185	0	0
Grp Sat Flow(s),veh/h/ln	411	1777	1585	389	1777	1585	1767	0	0	1665	0	0
Q Serve(g_s), s	14.7	17.5	0.2	4.6	15.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	30.4	17.5	0.2	22.1	15.7	0.7	8.9	0.0	0.0	4.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.11		0.16	0.21		0.33
Lane Grp Cap(c), veh/h	235	1924	858	217	1924	858	611	0	0	586	0	0
V/C Ratio(X)	0.44	0.72	0.01	0.17	0.67	0.05	0.53	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	235	1925	859	217	1925	859	611	0	0	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.8	10.3	6.3	18.6	9.9	6.5	17.4	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	1.3	0.0	0.4	0.9	0.0	3.2	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.7	0.0	0.4	5.1	0.2	3.9	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	11.6	6.3	19.0	10.8	6.5	20.6	0.0	0.0	17.4	0.0	0.0
LnGrp LOS	C	B	A	B	B	A	C	A	A	B	A	A
Approach Vol, veh/h		1495			1369			321			185	
Approach Delay, s/veh		12.3			10.9			20.6			17.4	
Approach LOS		B			B			C			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		37.0		23.0		37.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5				
Max Q Clear Time (g_c+I1), s		10.9		32.4		6.9		24.1				
Green Ext Time (p_c), s		1.1		0.1		0.8		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.8								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.991			0.925			0.899	
Flt Protected		0.996			0.999			0.985			0.990	
Satd. Flow (prot)	0	1844	0	0	1844	0	0	1697	0	0	1658	0
Flt Permitted		0.996			0.999			0.985			0.990	
Satd. Flow (perm)	0	1844	0	0	1844	0	0	1697	0	0	1658	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	24	266	14	4	200	14	27	12	48	7	2	26
Future Volume (vph)	24	266	14	4	200	14	27	12	48	7	2	26
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	28	309	16	5	233	16	31	14	56	8	2	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	353	0	0	254	0	0	101	0	0	40	0
Intersection Summary												

Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	266	14	4	200	14	27	12	48	7	2	26
Future Vol, veh/h	24	266	14	4	200	14	27	12	48	7	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	309	16	5	233	16	31	14	56	8	2	30

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	249	0	0	325
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.12	-	-	4.12
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.218	-	-	2.218
Pot Cap-1 Maneuver	1317	-	-	1235
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1317	-	-	1235
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	13.9	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	507	1317	-	-	1235	-	-	593
HCM Lane V/C Ratio	0.2	0.021	-	-	0.004	-	-	0.069
HCM Control Delay (s)	13.9	7.8	0	-	7.9	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0	-	-	0.2

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.989			0.892			0.878	
Flt Protected	0.950			0.950				0.995			0.995	
Satd. Flow (prot)	1770	3539	0	1770	3500	0	0	1653	0	0	1627	0
Flt Permitted	0.950			0.950				0.995			0.995	
Satd. Flow (perm)	1770	3539	0	1770	3500	0	0	1653	0	0	1627	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	
Intersection Summary												
Area Type:	Other											

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	64	1291	4	22	1181	90	1	1	8	5	0	47
Future Volume (vph)	64	1291	4	22	1181	90	1	1	8	5	0	47
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	66	1331	4	23	1218	93	1	1	8	5	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	1335	0	23	1311	0	0	10	0	0	53	0
Intersection Summary												

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	64	1291	4	22	1181	90	1	1	8	5	0	47
Future Vol, veh/h	64	1291	4	22	1181	90	1	1	8	5	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	1331	4	23	1218	93	1	1	8	5	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1311	0	0	1335	0	0	2120	2822	668	2109	2778	656
Stage 1	-	-	-	-	-	-	1465	1465	-	1311	1311	-
Stage 2	-	-	-	-	-	-	655	1357	-	798	1467	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	524	-	-	513	-	-	29	18	401	29	19	408
Stage 1	-	-	-	-	-	-	134	191	-	168	227	-
Stage 2	-	-	-	-	-	-	421	215	-	346	190	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	524	-	-	513	-	-	22	15	401	24	16	408
Mov Cap-2 Maneuver	-	-	-	-	-	-	22	15	-	24	16	-
Stage 1	-	-	-	-	-	-	117	167	-	147	217	-
Stage 2	-	-	-	-	-	-	354	205	-	294	166	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.2			59.7			38.1		
HCM LOS							F			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	76	524	-	-	513	-	-	161
HCM Lane V/C Ratio	0.136	0.126	-	-	0.044	-	-	0.333
HCM Control Delay (s)	59.7	12.9	-	-	12.3	-	-	38.1
HCM Lane LOS	F	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.4	0.4	-	-	0.1	-	-	1.4

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3536	0	1770	3539	1621	0
Flt Permitted			0.134		0.998	
Satd. Flow (perm)	3536	0	250	3539	1621	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				36	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1303	5	21	1332	5	93
Future Volume (vph)	1303	5	21	1332	5	93
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1372	5	22	1402	5	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1377	0	22	1402	103	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022

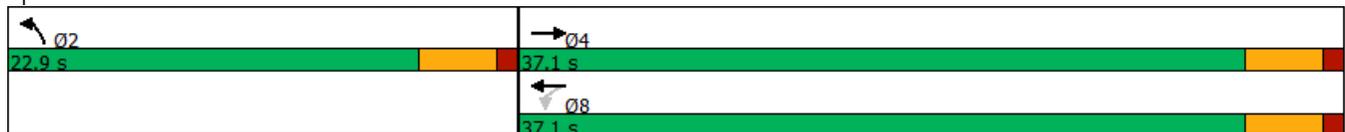


Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1303	21	1332	5
Future Volume (vph)	1303	21	1332	5
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.1	37.1	37.1	22.9
Total Split (%)	61.8%	61.8%	61.8%	38.2%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effect Green (s)	29.9	29.9	29.9	18.5
Actuated g/C Ratio	0.52	0.52	0.52	0.32
v/c Ratio	0.75	0.17	0.76	0.19
Control Delay	13.7	10.8	14.1	11.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.7	10.8	14.1	11.9
LOS	B	B	B	B
Approach Delay	13.7		14.0	11.9
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 57.5
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 13.8
 Intersection Capacity Utilization 50.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1377	22	1402	103
v/c Ratio	0.75	0.17	0.76	0.19
Control Delay	13.7	10.8	14.1	11.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.7	10.8	14.1	11.9
Queue Length 50th (ft)	176	4	181	17
Queue Length 95th (ft)	246	16	253	48
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	2016	142	2017	546
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.15	0.70	0.19

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1303	5	21	1332	5	93
Future Volume (veh/h)	1303	5	21	1332	5	93
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1372	5	22	1402	5	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1860	7	213	1820	25	493
Arrive On Green	0.51	0.51	0.51	0.51	0.33	0.33
Sat Flow, veh/h	3725	13	394	3647	77	1504
Grp Volume(v), veh/h	671	706	22	1402	104	0
Grp Sat Flow(s),veh/h/ln	1777	1868	394	1777	1596	0
Q Serve(g_s), s	16.6	16.6	2.6	17.9	2.6	0.0
Cycle Q Clear(g_c), s	16.6	16.6	19.2	17.9	2.6	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	910	957	213	1820	523	0
V/C Ratio(X)	0.74	0.74	0.10	0.77	0.20	0.00
Avail Cap(c_a), veh/h	1031	1084	240	2063	523	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	10.7	18.3	11.0	13.6	0.0
Incr Delay (d2), s/veh	2.5	2.3	0.2	1.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	6.0	0.2	5.9	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	13.1	18.5	12.7	14.4	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1377			1424	104	
Approach Delay, s/veh	13.1			12.8	14.4	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		22.9		33.3		33.3
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.4		32.6		32.6
Max Q Clear Time (g_c+I1), s		4.6		18.6		21.2
Green Ext Time (p_c), s		0.2		8.0		7.5
Intersection Summary						
HCM 6th Ctrl Delay			13.0			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor		0.998						0.850			0.986	
Flt Protected		0.989			0.959							
Satd. Flow (prot)	0	1839	0	0	3394	0	0	3539	1583	0	3490	0
Flt Permitted		0.989			0.959							
Satd. Flow (perm)	0	1839	0	0	3394	0	0	3539	1583	0	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									299			9
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	74	247	4	578	102	0	0	912	470	0	793	79
Future Volume (vph)	74	247	4	578	102	0	0	912	470	0	793	79
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	266	4	622	110	0	0	981	505	0	853	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	350	0	0	732	0	0	981	505	0	938	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

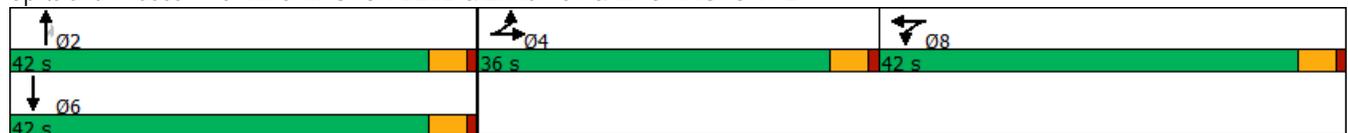
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	247	102	912	470	793
Future Volume (vph)	247	102	912	470	793
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	42.0	42.0	42.0	42.0
Total Split (%)	30.0%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	24.4	29.2	38.0	38.0	38.0
Actuated g/C Ratio	0.23	0.28	0.36	0.36	0.36
v/c Ratio	0.82	1.27dl	0.77	0.66	0.74
Control Delay	55.6	41.8	36.7	17.4	35.5
Queue Delay	0.0	0.7	0.0	0.0	0.0
Total Delay	55.6	42.5	36.7	17.4	35.5
LOS	E	D	D	B	D
Approach Delay	55.6	42.5	30.2		35.5
Approach LOS	E	D	C		D

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 105.3
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 36.7
 Intersection Capacity Utilization 85.8%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↘	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	350	732	981	505	938
v/c Ratio	0.82	1.27dl	0.77	0.66	0.74
Control Delay	55.6	41.8	36.7	17.4	35.5
Queue Delay	0.0	0.7	0.0	0.0	0.0
Total Delay	55.6	42.5	36.7	17.4	35.5
Queue Length 50th (ft)	224	240	308	113	288
Queue Length 95th (ft)	359	331	#495	279	441
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	557	1225	1277	762	1265
Starvation Cap Reductn	0	201	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.71	0.77	0.66	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	247	4	578	102	0	0	912	470	0	793	79
Future Volume (veh/h)	74	247	4	578	102	0	0	912	470	0	793	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	80	266	4	622	110	0	0	981	0	0	853	85
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	90	300	5	593	592	0	0	1184		0	1087	108
Arrive On Green	0.21	0.21	0.21	0.33	0.33	0.00	0.00	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h	422	1403	21	1781	1870	0	0	3647	1585	0	3357	325
Grp Volume(v), veh/h	350	0	0	622	110	0	0	981	0	0	464	474
Grp Sat Flow(s),veh/h/ln	1845	0	0	1781	1777	0	0	1777	1585	0	1777	1812
Q Serve(g_s), s	20.7	0.0	0.0	37.5	5.0	0.0	0.0	28.6	0.0	0.0	26.6	26.6
Cycle Q Clear(g_c), s	20.7	0.0	0.0	37.5	5.0	0.0	0.0	28.6	0.0	0.0	26.6	26.6
Prop In Lane	0.23		0.01	1.00		0.00	0.00		1.00	0.00		0.18
Lane Grp Cap(c), veh/h	395	0	0	593	592	0	0	1184		0	592	604
V/C Ratio(X)	0.89	0.00	0.00	1.05	0.19	0.00	0.00	0.83		0.00	0.78	0.78
Avail Cap(c_a), veh/h	516	0	0	593	592	0	0	1184		0	592	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	0.0	37.5	26.7	0.0	0.0	34.6	0.0	0.0	33.9	33.9
Incr Delay (d2), s/veh	13.9	0.0	0.0	50.2	0.1	0.0	0.0	6.8	0.0	0.0	10.0	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	0.0	24.3	2.1	0.0	0.0	13.3	0.0	0.0	12.9	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	0.0	87.7	26.8	0.0	0.0	41.3	0.0	0.0	43.9	43.8
LnGrp LOS	E	A	A	F	C	A	A	D		A	D	D
Approach Vol, veh/h		350			732			981	A		938	
Approach Delay, s/veh		56.8			78.6			41.3			43.8	
Approach LOS		E			E			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		28.6		42.0		42.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		37.5		31.5		37.5		37.5				
Max Q Clear Time (g_c+I1), s		30.6		22.7		28.6		39.5				
Green Ext Time (p_c), s		3.7		1.4		4.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				53.0								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt					0.986			0.974			0.949	
Flt Protected	0.950										0.970	
Satd. Flow (prot)	1770	3539	0	0	3490	0	0	1814	0	0	1715	0
Flt Permitted	0.201				0.953						0.788	
Satd. Flow (perm)	374	3539	0	0	3326	0	0	1814	0	0	1393	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					24			14			57	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			997			334			522	
Travel Time (s)		9.0			22.7			7.6			11.9	

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	42	944	0	2	805	80	0	53	13	108	0	65
Future Volume (vph)	42	944	0	2	805	80	0	53	13	108	0	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	46	1026	0	2	875	87	0	58	14	117	0	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	1026	0	0	964	0	0	72	0	0	188	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

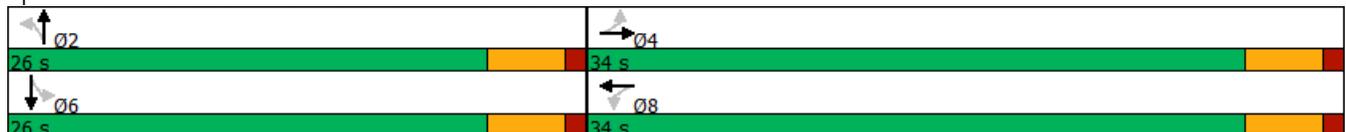
Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	944	2	805	53	108	0
Future Volume (vph)	42	944	2	805	53	108	0
Turn Type	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases		4		8	2		6
Permitted Phases	4		8			6	
Detector Phase	4	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	34.0	26.0	26.0	26.0
Total Split (%)	56.7%	56.7%	56.7%	56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	Max	Max	Max
Act Effct Green (s)	23.3	23.3		23.3	21.7		21.7
Actuated g/C Ratio	0.43	0.43		0.43	0.40		0.40
v/c Ratio	0.29	0.67		0.67	0.10		0.32
Control Delay	14.8	14.5		14.2	10.7		11.0
Queue Delay	0.0	0.0		0.0	0.0		0.0
Total Delay	14.8	14.5		14.2	10.7		11.0
LOS	B	B		B	B		B
Approach Delay		14.5		14.2	10.7		11.0
Approach LOS		B		B	B		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 54.1
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 14.0
 Intersection Capacity Utilization 59.0%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	46	1026	964	72	188
v/c Ratio	0.29	0.67	0.67	0.10	0.32
Control Delay	14.8	14.5	14.2	10.7	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	14.5	14.2	10.7	11.0
Queue Length 50th (ft)	9	129	117	11	27
Queue Length 95th (ft)	30	182	170	36	77
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	205	1946	1840	735	592
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.53	0.52	0.10	0.32
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	42	944	0	2	805	80	0	53	13	108	0	65
Future Volume (veh/h)	42	944	0	2	805	80	0	53	13	108	0	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	1026	0	2	875	87	0	58	14	117	0	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1536	0	68	1381	137	0	583	141	439	25	215
Arrive On Green	0.43	0.43	0.00	0.43	0.43	0.43	0.00	0.40	0.40	0.40	0.00	0.40
Sat Flow, veh/h	584	3647	0	1	3194	317	0	1456	351	826	62	538
Grp Volume(v), veh/h	46	1026	0	513	0	451	0	0	72	188	0	0
Grp Sat Flow(s),veh/h/ln	584	1777	0	1868	0	1645	0	0	1807	1426	0	0
Q Serve(g_s), s	3.6	12.4	0.0	0.0	0.0	11.5	0.0	0.0	1.3	3.4	0.0	0.0
Cycle Q Clear(g_c), s	15.1	12.4	0.0	11.5	0.0	11.5	0.0	0.0	1.3	4.7	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.19	0.00		0.19	0.62		0.38
Lane Grp Cap(c), veh/h	261	1536	0	875	0	711	0	0	723	679	0	0
V/C Ratio(X)	0.18	0.67	0.00	0.59	0.00	0.63	0.00	0.00	0.10	0.28	0.00	0.00
Avail Cap(c_a), veh/h	329	1951	0	1091	0	903	0	0	723	679	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	12.2	0.0	11.9	0.0	11.9	0.0	0.0	10.1	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.0	0.6	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.2	0.0	4.1	0.0	3.7	0.0	0.0	0.5	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	12.8	0.0	12.6	0.0	12.9	0.0	0.0	10.3	12.0	0.0	0.0
LnGrp LOS	B	B	A	B	A	B	A	A	B	B	A	A
Approach Vol, veh/h		1072			964			72			188	
Approach Delay, s/veh		13.0			12.7			10.3			12.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		27.7		26.0		27.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		29.5		21.5		29.5				
Max Q Clear Time (g_c+I1), s		3.3		17.1		6.7		13.5				
Green Ext Time (p_c), s		0.3		6.1		0.9		5.8				
Intersection Summary												
HCM 6th Ctrl Delay				12.7								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.997					0.865
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3529	0	1770	3539	0	1611
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3529	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4					248
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	751	17	25	665	1	72
Future Volume (vph)	751	17	25	665	1	72
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	834	19	28	739	1	80
Shared Lane Traffic (%)						
Lane Group Flow (vph)	853	0	28	739	1	80
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD

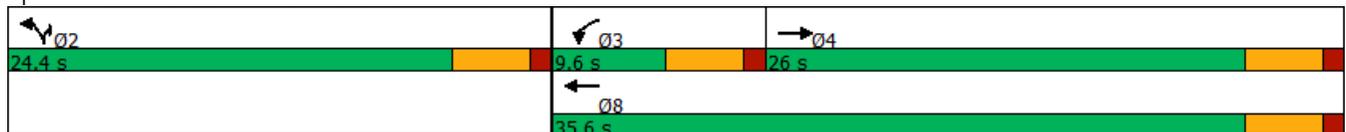
	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑		↗
Traffic Volume (vph)	751	25	665	1	72
Future Volume (vph)	751	25	665	1	72
Turn Type	NA	Prot	NA	Prot	Prot
Protected Phases	4	3	8	2	2
Permitted Phases					
Detector Phase	4	3	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	Max	Max
Act Effect Green (s)	17.8	5.2	21.0	0.0	20.4
Actuated g/C Ratio	0.35	0.10	0.42	0.00	0.40
v/c Ratio	0.69	0.15	0.50	no cap	0.10
Control Delay	17.7	26.5	11.6		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	17.7	26.5	11.6	Error	0.2
LOS	B	C	B	F	A
Approach Delay	17.7		12.1	Err	
Approach LOS	B		B	F	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 50.6
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err
 Intersection Capacity Utilization Err%
 Analysis Period (min) 15

Intersection LOS: F
 ICU Level of Service H

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	853	28	739	1	80
v/c Ratio	0.69	0.15	0.50	no cap	0.10
Control Delay	17.7	26.5	11.6		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	17.7	26.5	11.6	Error	0.2
Queue Length 50th (ft)	93	7	78	0	0
Queue Length 95th (ft)	190	31	113	0	0
Internal Link Dist (ft)	299		900	446	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1536	182	2225	1	796
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.56	0.15	0.33	1.00	0.10
Intersection Summary					

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY
02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	751	17	25	665	1	72
Future Volume (veh/h)	751	17	25	665	1	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	834	19	28	739	1	80
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1127	26	57	1553	0	0
Arrive On Green	0.32	0.32	0.03	0.44	0.39	0.39
Sat Flow, veh/h	3645	81	1781	3647	0	0
Grp Volume(v), veh/h	417	436	28	739	0	0
Grp Sat Flow(s),veh/h/ln	1777	1856	1781	1777	0	0
Q Serve(g_s), s	10.8	10.8	0.8	7.6	0.0	0.0
Cycle Q Clear(g_c), s	10.8	10.8	0.8	7.6	0.0	0.0
Prop In Lane		0.04	1.00		0.00	0.00
Lane Grp Cap(c), veh/h	564	589	57	1553	0	0
V/C Ratio(X)	0.74	0.74	0.49	0.48	0.00	0.00
Avail Cap(c_a), veh/h	744	777	177	2153	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	15.6	24.4	10.3	0.0	0.0
Incr Delay (d2), s/veh	2.8	2.7	6.4	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.3	0.4	2.4	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	18.3	30.8	10.5	0.0	0.0
LnGrp LOS	B	B	C	B	A	A
Approach Vol, veh/h	853			767	0	
Approach Delay, s/veh	18.3			11.2	0.0	
Approach LOS	B			B		
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.4	6.1	20.8		26.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.9	5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s		0.0	2.8	12.8		9.6
Green Ext Time (p_c), s		0.0	0.0	3.5		5.3
Intersection Summary						
HCM 6th Ctrl Delay			15.0			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		50	125		50	200		50	100		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3461	0
Flt Permitted	0.950			0.950			0.128			0.111		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	238	3539	1583	207	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127			26
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		997			600			519			584	
Travel Time (s)		22.7			13.6			11.8			13.3	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	179	807	79	161	656	114	65	1138	175	93	852	147
Future Volume (vph)	179	807	79	161	656	114	65	1138	175	93	852	147
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	190	859	84	171	698	121	69	1211	186	99	906	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	859	84	171	698	121	69	1211	186	99	1062	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

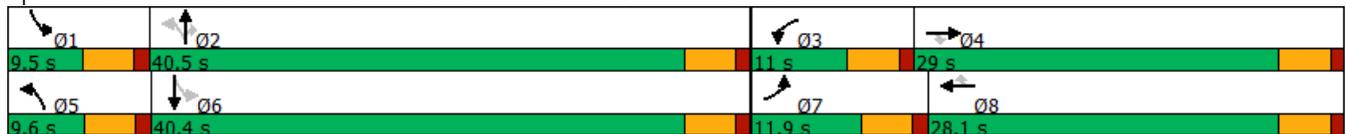
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	179	807	79	161	656	114	65	1138	175	93	852
Future Volume (vph)	179	807	79	161	656	114	65	1138	175	93	852
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.9	29.0	29.0	11.0	28.1	28.1	9.6	40.5	40.5	9.5	40.4
Total Split (%)	13.2%	32.2%	32.2%	12.2%	31.2%	31.2%	10.7%	45.0%	45.0%	10.6%	44.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	7.4	23.6	23.6	6.5	22.7	22.7	40.1	36.1	36.1	39.9	36.1
Actuated g/C Ratio	0.08	0.27	0.27	0.07	0.26	0.26	0.46	0.41	0.41	0.46	0.41
v/c Ratio	0.65	0.90	0.16	0.67	0.76	0.24	0.35	0.83	0.25	0.54	0.73
Control Delay	51.2	44.5	2.5	54.2	36.1	6.0	16.6	29.6	7.5	23.2	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	51.2	44.5	2.5	54.2	36.1	6.0	16.6	29.9	7.5	23.2	25.4
LOS	D	D	A	D	D	A	B	C	A	C	C
Approach Delay		42.5			35.6			26.4			25.2
Approach LOS		D			D			C			C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 87.2
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 31.9
 Intersection Capacity Utilization 78.5%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	859	84	171	698	121	69	1211	186	99	1062
v/c Ratio	0.65	0.90	0.16	0.67	0.76	0.24	0.35	0.83	0.25	0.54	0.73
Control Delay	51.2	44.5	2.5	54.2	36.1	6.0	16.6	29.6	7.5	23.2	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	51.2	44.5	2.5	54.2	36.1	6.0	16.6	29.9	7.5	23.2	25.4
Queue Length 50th (ft)	55	246	0	50	192	0	19	323	20	28	262
Queue Length 95th (ft)	#97	#356	14	#93	257	38	41	#414	63	#56	340
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	292	998	537	256	962	522	199	1466	730	184	1446
Starvation Cap Reductn	0	0	0	0	0	0	0	35	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.86	0.16	0.67	0.73	0.23	0.35	0.85	0.25	0.54	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	807	79	161	656	114	65	1138	175	93	852	147
Future Volume (veh/h)	179	807	79	161	656	114	65	1138	175	93	852	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	859	84	171	698	121	69	1211	186	99	906	156
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	953	425	242	932	416	249	1445	645	212	1249	215
Arrive On Green	0.08	0.27	0.27	0.07	0.26	0.26	0.05	0.41	0.41	0.05	0.41	0.41
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3031	522
Grp Volume(v), veh/h	190	859	84	171	698	121	69	1211	186	99	531	531
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1776
Q Serve(g_s), s	4.8	20.6	3.6	4.3	16.0	5.4	2.0	27.1	7.0	2.8	22.2	22.2
Cycle Q Clear(g_c), s	4.8	20.6	3.6	4.3	16.0	5.4	2.0	27.1	7.0	2.8	22.2	22.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	263	953	425	242	932	416	249	1445	645	212	732	732
V/C Ratio(X)	0.72	0.90	0.20	0.71	0.75	0.29	0.28	0.84	0.29	0.47	0.73	0.73
Avail Cap(c_a), veh/h	289	984	439	254	948	423	270	1445	645	221	732	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	31.2	25.0	40.3	30.0	26.1	16.8	23.6	17.6	19.3	21.8	21.8
Incr Delay (d2), s/veh	7.8	11.0	0.2	8.2	3.3	0.4	0.6	5.9	1.1	1.6	6.2	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	10.0	1.4	2.1	7.0	2.0	0.8	12.0	2.7	1.2	10.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	42.3	25.2	48.5	33.3	26.5	17.4	29.6	18.8	20.9	28.0	28.0
LnGrp LOS	D	D	C	D	C	C	B	C	B	C	C	C
Approach Vol, veh/h		1133			990			1466			1161	
Approach Delay, s/veh		41.9			35.1			27.6			27.4	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	40.5	10.7	28.2	8.6	41.0	11.2	27.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	36.0	6.5	24.5	5.1	35.9	7.4	23.6				
Max Q Clear Time (g_c+I1), s	4.8	29.1	6.3	22.6	4.0	24.2	6.8	18.0				
Green Ext Time (p_c), s	0.0	4.6	0.0	1.1	0.0	5.4	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay			32.5									
HCM 6th LOS			C									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.968			0.984			0.980			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3426	0	1770	3483	0	1770	3468	0	1770	3511	0
Flt Permitted	0.238			0.205			0.950			0.140		
Satd. Flow (perm)	443	3426	0	382	3483	0	1770	3468	0	261	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			19			31			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

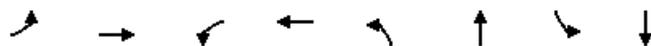
02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	70	685	184	73	563	69	154	1224	183	109	896	53
Future Volume (vph)	70	685	184	73	563	69	154	1224	183	109	896	53
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	74	721	194	77	593	73	162	1288	193	115	943	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	915	0	77	666	0	162	1481	0	115	999	0
Intersection Summary												

Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	74	915	77	666	162	1481	115	999
v/c Ratio	0.60	0.92	0.72	0.67	0.70	0.88	0.50	0.72
Control Delay	45.9	39.5	63.6	25.7	47.1	24.9	16.0	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	39.5	63.6	25.7	47.1	24.9	16.0	21.2
Queue Length 50th (ft)	28	191	30	129	67	296	19	184
Queue Length 95th (ft)	#88	#307	#101	184	#148	#453	44	252
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	124	994	107	989	241	1683	232	1393
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.92	0.72	0.67	0.67	0.88	0.50	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	70	685	184	73	563	69	154	1224	183	109	896	53
Future Volume (veh/h)	70	685	184	73	563	69	154	1224	183	109	896	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	721	194	77	593	73	162	1288	193	115	943	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	778	209	121	896	110	202	1427	212	244	1401	83
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.46	0.46	0.06	0.41	0.41
Sat Flow, veh/h	770	2768	745	610	3185	391	1781	3102	462	1781	3408	202
Grp Volume(v), veh/h	74	463	452	77	330	336	162	734	747	115	492	507
Grp Sat Flow(s),veh/h/ln	770	1777	1736	610	1777	1800	1781	1777	1787	1781	1777	1834
Q Serve(g_s), s	6.5	17.6	17.6	1.9	11.4	11.4	6.2	26.4	26.9	2.5	15.6	15.6
Cycle Q Clear(g_c), s	17.9	17.6	17.6	19.5	11.4	11.4	6.2	26.4	26.9	2.5	15.6	15.6
Prop In Lane	1.00		0.43	1.00		0.22	1.00		0.26	1.00		0.11
Lane Grp Cap(c), veh/h	193	500	488	121	500	506	202	817	822	244	730	754
V/C Ratio(X)	0.38	0.93	0.93	0.64	0.66	0.66	0.80	0.90	0.91	0.47	0.67	0.67
Avail Cap(c_a), veh/h	193	500	488	121	500	506	244	817	822	260	730	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	24.2	24.2	34.5	22.0	22.0	30.0	17.2	17.4	15.5	16.6	16.6
Incr Delay (d2), s/veh	1.2	23.4	23.9	10.6	3.2	3.2	14.8	14.7	15.8	1.4	4.9	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	10.1	9.9	1.6	4.9	5.0	3.4	12.7	13.3	1.0	6.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	47.7	48.1	45.0	25.2	25.3	44.8	31.9	33.2	16.9	21.5	21.4
LnGrp LOS	C	D	D	D	C	C	D	C	C	B	C	C
Approach Vol, veh/h		989			743			1643			1114	
Approach Delay, s/veh		46.6			27.3			33.7			21.0	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	36.4		24.0	12.3	33.0		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	31.9		19.5	9.5	27.5		19.5				
Max Q Clear Time (g_c+I1), s	4.5	28.9		19.9	8.2	17.6		21.5				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.1	4.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				32.4								
HCM 6th LOS				C								

Lanes and Geometrics
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.959				0.988
Flt Protected	0.950			0.950				0.983				0.992
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1756	0	0	1826	0
Flt Permitted	0.118			0.166				0.728				0.920
Satd. Flow (perm)	220	3539	1583	309	3539	1583	0	1300	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77			33		30				7
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1907			1445			1456				760
Travel Time (s)		43.3			32.8			33.1				17.3

Intersection Summary

Area Type: Other

Volume
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	22	1120	72	139	1288	34	73	75	64	53	235	28
Future Volume (vph)	22	1120	72	139	1288	34	73	75	64	53	235	28
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	1204	77	149	1385	37	78	81	69	57	253	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	1204	77	149	1385	37	0	228	0	0	340	0
Intersection Summary												

Timings
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

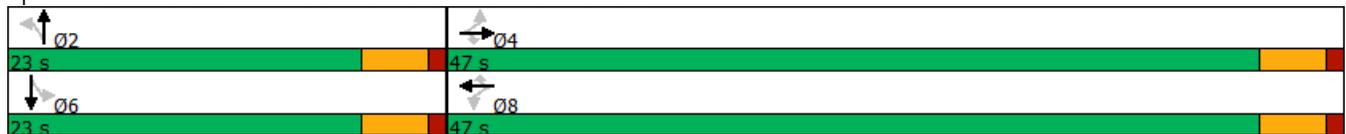
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	1120	72	139	1288	34	73	75	53	235
Future Volume (vph)	22	1120	72	139	1288	34	73	75	53	235
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	36.5	36.5	36.5	36.5	36.5	36.5		18.8		18.8
Actuated g/C Ratio	0.57	0.57	0.57	0.57	0.57	0.57		0.29		0.29
v/c Ratio	0.19	0.60	0.08	0.86	0.69	0.04		0.57		0.68
Control Delay	10.6	10.3	1.8	55.7	11.7	2.6		25.5		30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	10.6	10.3	1.8	55.7	11.7	2.6		25.5		30.7
LOS	B	B	A	E	B	A		C		C
Approach Delay		9.8			15.7			25.5		30.7
Approach LOS		A			B			C		C

Intersection Summary

Cycle Length: 70
 Actuated Cycle Length: 64.4
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 15.6
 Intersection Capacity Utilization 73.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 1: REDWOOD AVE & WASHINGTON BLVD



Queues
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	24	1204	77	149	1385	37	228	340
v/c Ratio	0.19	0.60	0.08	0.86	0.69	0.04	0.57	0.68
Control Delay	10.6	10.3	1.8	55.7	11.7	2.6	25.5	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	10.3	1.8	55.7	11.7	2.6	25.5	30.7
Queue Length 50th (ft)	4	143	0	43	178	1	74	131
Queue Length 95th (ft)	17	194	14	#156	241	10	146	#252
Internal Link Dist (ft)		1827			1365		1376	680
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	147	2372	1086	207	2372	1072	400	498
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.51	0.07	0.72	0.58	0.03	0.57	0.68

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: REDWOOD AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1120	72	139	1288	34	73	75	64	53	235	28
Future Volume (veh/h)	22	1120	72	139	1288	34	73	75	64	53	235	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1204	77	149	1385	37	78	81	69	57	253	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	2141	955	276	2141	955	173	175	121	116	376	42
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	377	3554	1585	432	3554	1585	386	653	451	206	1406	156
Grp Volume(v), veh/h	24	1204	77	149	1385	37	228	0	0	340	0	0
Grp Sat Flow(s),veh/h/ln	377	1777	1585	432	1777	1585	1490	0	0	1767	0	0
Q Serve(g_s), s	3.1	14.1	1.4	21.9	17.6	0.7	0.0	0.0	0.0	3.1	0.0	0.0
Cycle Q Clear(g_c), s	20.6	14.1	1.4	36.0	17.6	0.7	8.7	0.0	0.0	11.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.34		0.30	0.17		0.09
Lane Grp Cap(c), veh/h	236	2141	955	276	2141	955	468	0	0	533	0	0
V/C Ratio(X)	0.10	0.56	0.08	0.54	0.65	0.04	0.49	0.00	0.00	0.64	0.00	0.00
Avail Cap(c_a), veh/h	240	2183	974	281	2183	974	468	0	0	533	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.7	8.3	5.7	19.1	9.0	5.6	21.5	0.0	0.0	22.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	2.0	0.7	0.0	3.6	0.0	0.0	5.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.4	0.4	2.1	5.6	0.2	3.4	0.0	0.0	5.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	8.6	5.8	21.1	9.6	5.6	25.1	0.0	0.0	28.5	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1305			1571			228			340	
Approach Delay, s/veh		8.6			10.6			25.1			28.5	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		46.2		23.0		46.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		42.5		18.5		42.5				
Max Q Clear Time (g_c+I1), s		10.7		22.6		13.7		38.0				
Green Ext Time (p_c), s		0.8		9.7		0.9		3.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.6								
HCM 6th LOS				B								

Lanes and Geometrics
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		100	50		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.963			0.966	
Flt Protected	0.950			0.950				0.993			0.991	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	0	1781	0	0	1783	0
Flt Permitted	0.129			0.129				0.929			0.908	
Satd. Flow (perm)	240	3539	1583	240	3539	1583	0	1666	0	0	1634	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27			27		31			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1445			573			1087			717	
Travel Time (s)		32.8			13.0			24.7			16.3	

Intersection Summary

Area Type: Other

Volume
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	62	1313	29	52	1506	26	25	96	46	67	203	90
Future Volume (vph)	62	1313	29	52	1506	26	25	96	46	67	203	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	65	1382	31	55	1585	27	26	101	48	71	214	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	1382	31	55	1585	27	0	175	0	0	380	0
Intersection Summary												

Timings
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

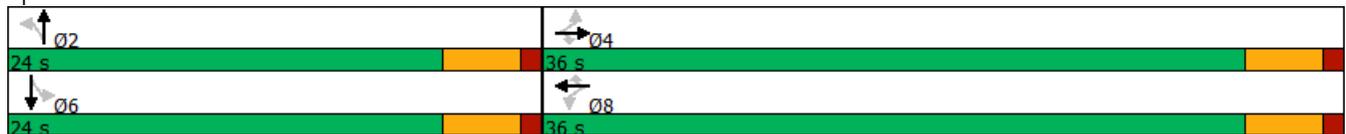
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	62	1313	29	52	1506	26	25	96	67	203
Future Volume (vph)	62	1313	29	52	1506	26	25	96	67	203
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.0	24.0	24.0	24.0
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	31.0	31.0	31.0	31.0	31.0	31.0		19.5		19.5
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52		0.33		0.33
v/c Ratio	0.52	0.75	0.04	0.44	0.86	0.03		0.31		0.69
Control Delay	29.1	14.4	3.6	22.9	18.8	3.2		14.2		25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	29.1	14.4	3.6	22.9	18.8	3.2		14.2		25.1
LOS	C	B	A	C	B	A		B		C
Approach Delay		14.8			18.7			14.2		25.1
Approach LOS		B			B			B		C

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 59.5
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 17.6
 Intersection Capacity Utilization 85.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service E

Splits and Phases: 2: BEETHOVEN ST & WASHINGTON BLVD



Queues
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	65	1382	31	55	1585	27	175	380
v/c Ratio	0.52	0.75	0.04	0.44	0.86	0.03	0.31	0.69
Control Delay	29.1	14.4	3.6	22.9	18.8	3.2	14.2	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	14.4	3.6	22.9	18.8	3.2	14.2	25.1
Queue Length 50th (ft)	14	186	1	11	236	0	38	112
Queue Length 95th (ft)	#69	260	11	#55	#341	9	81	#224
Internal Link Dist (ft)		1365			493		1007	637
Turn Bay Length (ft)	50		100	50		100		
Base Capacity (vph)	127	1874	850	127	1874	850	567	548
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.74	0.04	0.43	0.85	0.03	0.31	0.69

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
2: BEETHOVEN ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	62	1313	29	52	1506	26	25	96	46	67	203	90
Future Volume (veh/h)	62	1313	29	52	1506	26	25	96	46	67	203	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1382	31	55	1585	27	26	101	48	71	214	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	1866	832	205	1866	832	112	363	154	143	339	137
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	314	3554	1585	380	3554	1585	133	1117	472	220	1042	421
Grp Volume(v), veh/h	65	1382	31	55	1585	27	175	0	0	380	0	0
Grp Sat Flow(s),veh/h/ln	314	1777	1585	380	1777	1585	1722	0	0	1682	0	0
Q Serve(g_s), s	8.6	18.1	0.6	7.9	22.9	0.5	0.0	0.0	0.0	6.1	0.0	0.0
Cycle Q Clear(g_c), s	31.5	18.1	0.6	26.0	22.9	0.5	4.4	0.0	0.0	11.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		0.27	0.19		0.25
Lane Grp Cap(c), veh/h	165	1866	832	205	1866	832	629	0	0	618	0	0
V/C Ratio(X)	0.39	0.74	0.04	0.27	0.85	0.03	0.28	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	165	1866	832	205	1866	832	629	0	0	618	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.1	11.1	6.9	21.2	12.2	6.9	15.2	0.0	0.0	17.5	0.0	0.0
Incr Delay (d2), s/veh	1.5	1.6	0.0	0.7	3.9	0.0	1.1	0.0	0.0	4.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.1	0.2	0.7	8.2	0.1	1.8	0.0	0.0	4.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	12.7	6.9	21.9	16.2	6.9	16.3	0.0	0.0	22.0	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	C	A	A
Approach Vol, veh/h		1478			1667			175			380	
Approach Delay, s/veh		13.3			16.2			16.3			22.0	
Approach LOS		B			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		36.0		24.0		36.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.5		31.5		19.5		31.5				
Max Q Clear Time (g_c+I1), s		6.4		33.5		13.6		28.0				
Green Ext Time (p_c), s		0.8		0.0		1.2		3.0				
Intersection Summary												
HCM 6th Ctrl Delay				15.6								
HCM 6th LOS				B								

Lanes and Geometrics
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987			0.993			0.931			0.968	
Flt Protected		0.996			0.999			0.988			0.973	
Satd. Flow (prot)	0	1831	0	0	1848	0	0	1713	0	0	1754	0
Flt Permitted		0.996			0.999			0.988			0.973	
Satd. Flow (perm)	0	1831	0	0	1848	0	0	1713	0	0	1754	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		225			196			282			846	
Travel Time (s)		5.1			4.5			6.4			19.2	
Intersection Summary												
Area Type:	Other											

Volume
3: MEIER ST & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	21	246	29	3	145	9	15	16	33	22	9	10
Future Volume (vph)	21	246	29	3	145	9	15	16	33	22	9	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	22	256	30	3	151	9	16	17	34	23	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	0	0	163	0	0	67	0	0	42	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	246	29	3	145	9	15	16	33	22	9	10
Future Vol, veh/h	21	246	29	3	145	9	15	16	33	22	9	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	256	30	3	151	9	16	17	34	23	9	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	160	0	0	286	0	0	486	481	271	503	492	156
Stage 1	-	-	-	-	-	-	315	315	-	162	162	-
Stage 2	-	-	-	-	-	-	171	166	-	341	330	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1419	-	-	1276	-	-	492	485	768	479	478	890
Stage 1	-	-	-	-	-	-	696	656	-	840	764	-
Stage 2	-	-	-	-	-	-	831	761	-	674	646	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1419	-	-	1276	-	-	471	474	768	438	467	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	471	474	-	438	467	-
Stage 1	-	-	-	-	-	-	683	644	-	824	762	-
Stage 2	-	-	-	-	-	-	809	759	-	615	634	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.1			11.9			12.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	589	1419	-	-	1276	-	-	508
HCM Lane V/C Ratio	0.113	0.015	-	-	0.002	-	-	0.084
HCM Control Delay (s)	11.9	7.6	0	-	7.8	0	-	12.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.3

Lanes and Geometrics
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.992			0.881			0.898	
Flt Protected	0.950			0.950				0.994			0.989	
Satd. Flow (prot)	1770	3536	0	1770	3511	0	0	1631	0	0	1654	0
Flt Permitted	0.950			0.950				0.994			0.989	
Satd. Flow (perm)	1770	3536	0	1770	3511	0	0	1631	0	0	1654	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		573			199			451			159	
Travel Time (s)		13.0			4.5			10.3			3.6	
Intersection Summary												
Area Type:	Other											

Volume
4: MEIER ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	65	1379	7	35	1431	77	2	0	15	17	1	57
Future Volume (vph)	65	1379	7	35	1431	77	2	0	15	17	1	57
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	67	1422	7	36	1475	79	2	0	15	18	1	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	1429	0	36	1554	0	0	17	0	0	78	0
Intersection Summary												

Intersection												
Int Delay, s/veh	13.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↘			↕↘	
Traffic Vol, veh/h	65	1379	7	35	1431	77	2	0	15	17	1	57
Future Vol, veh/h	65	1379	7	35	1431	77	2	0	15	17	1	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	1422	7	36	1475	79	2	0	15	18	1	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1554	0	0	1429	0	0	2370	3186	715	2432	3150	777
Stage 1	-	-	-	-	-	-	1560	1560	-	1587	1587	-
Stage 2	-	-	-	-	-	-	810	1626	-	845	1563	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	422	-	-	472	-	-	18	10	373	~ 16	11	340
Stage 1	-	-	-	-	-	-	117	171	-	113	166	-
Stage 2	-	-	-	-	-	-	340	159	-	324	171	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	422	-	-	472	-	-	11	8	373	~ 13	9	340
Mov Cap-2 Maneuver	-	-	-	-	-	-	11	8	-	~ 13	9	-
Stage 1	-	-	-	-	-	-	98	144	-	95	153	-
Stage 2	-	-	-	-	-	-	258	147	-	261	144	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.3			65			\$ 505.6		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	77	422	-	-	472	-	-	47
HCM Lane V/C Ratio	0.228	0.159	-	-	0.076	-	-	1.645
HCM Control Delay (s)	65	15.1	-	-	13.3	-	-	\$ 505.6
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.8	0.6	-	-	0.2	-	-	7.6

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	60		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.872	
Flt Protected			0.950		0.997	
Satd. Flow (prot)	3536	0	1770	3539	1619	0
Flt Permitted			0.124		0.997	
Satd. Flow (perm)	3536	0	231	3539	1619	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	1				31	
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			380	423	
Travel Time (s)	4.5			8.6	9.6	

Intersection Summary

Area Type: Other

Volume
5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	1384	6	35	1614	4	72
Future Volume (vph)	1384	6	35	1614	4	72
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1427	6	36	1664	4	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1433	0	36	1664	78	0
Intersection Summary						

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022

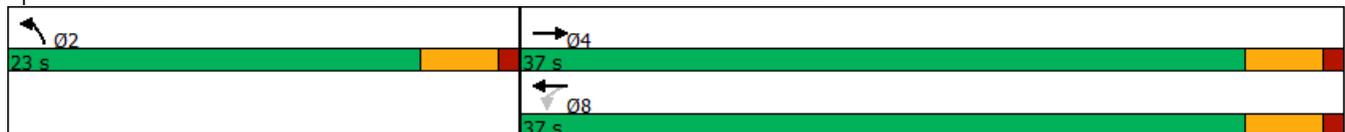


Lane Group	EBT	WBL	WBT	NBL
Lane Configurations	↑↑	↑	↑↑	↑
Traffic Volume (vph)	1384	35	1614	4
Future Volume (vph)	1384	35	1614	4
Turn Type	NA	Perm	NA	Prot
Protected Phases	4		8	2
Permitted Phases		8		
Detector Phase	4	8	8	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	23.0
Total Split (%)	61.7%	61.7%	61.7%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Max
Act Effct Green (s)	32.2	32.2	32.2	18.5
Actuated g/C Ratio	0.54	0.54	0.54	0.31
v/c Ratio	0.75	0.29	0.87	0.15
Control Delay	13.8	15.1	18.8	11.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.8	15.1	18.8	11.2
LOS	B	B	B	B
Approach Delay	13.8		18.8	11.2
Approach LOS	B		B	B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 59.7
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 16.4
 Intersection Capacity Utilization 56.8%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

5: ROSEBALL ST & WASHINGTON BLVD/WASHINGTON BL

02/13/2022



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1433	36	1664	78
v/c Ratio	0.75	0.29	0.87	0.15
Control Delay	13.8	15.1	18.8	11.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.8	15.1	18.8	11.2
Queue Length 50th (ft)	189	6	247	12
Queue Length 95th (ft)	264	27	#368	38
Internal Link Dist (ft)	119		300	343
Turn Bay Length (ft)		60		
Base Capacity (vph)	1925	126	1926	523
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.74	0.29	0.86	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Volume (veh/h)	1384	6	35	1614	4	72
Future Volume (veh/h)	1384	6	35	1614	4	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1427	6	36	1664	4	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1934	8	208	1894	25	470
Arrive On Green	0.53	0.53	0.53	0.53	0.31	0.31
Sat Flow, veh/h	3723	15	373	3647	81	1496
Grp Volume(v), veh/h	699	734	36	1664	79	0
Grp Sat Flow(s),veh/h/ln	1777	1868	373	1777	1597	0
Q Serve(g_s), s	17.8	17.8	4.8	24.2	2.1	0.0
Cycle Q Clear(g_c), s	17.8	17.8	22.7	24.2	2.1	0.0
Prop In Lane		0.01	1.00		0.05	0.94
Lane Grp Cap(c), veh/h	947	996	208	1894	502	0
V/C Ratio(X)	0.74	0.74	0.17	0.88	0.16	0.00
Avail Cap(c_a), veh/h	981	1031	215	1961	502	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	10.6	19.3	12.1	14.6	0.0
Incr Delay (d2), s/veh	2.9	2.7	0.4	4.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	0.4	8.7	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.4	13.3	19.7	16.9	15.2	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1433			1700	79	
Approach Delay, s/veh	13.4			16.9	15.2	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		23.0		35.9		35.9
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		32.5		32.5
Max Q Clear Time (g_c+I1), s		4.1		19.8		26.2
Green Ext Time (p_c), s		0.1		7.8		5.2
Intersection Summary						
HCM 6th Ctrl Delay			15.3			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.998							0.850		0.990	
Flt Protected		0.990			0.958							
Satd. Flow (prot)	0	1840	0	0	3391	0	0	3539	1583	0	3504	0
Flt Permitted		0.990			0.958							
Satd. Flow (perm)	0	1840	0	0	3391	0	0	3539	1583	0	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									531		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			379			509			359	
Travel Time (s)		7.8			8.6			11.6			8.2	

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	67	261	4	628	83	0	0	769	728	0	1015	70
Future Volume (vph)	67	261	4	628	83	0	0	769	728	0	1015	70
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	69	269	4	647	86	0	0	793	751	0	1046	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	342	0	0	733	0	0	793	751	0	1118	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

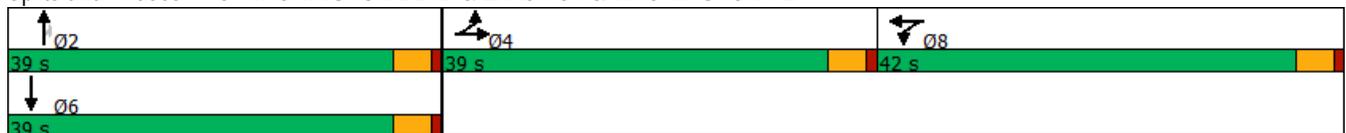
02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Configurations	↔	↔↑	↑↑	↗	↑↔
Traffic Volume (vph)	261	83	769	728	1015
Future Volume (vph)	261	83	769	728	1015
Turn Type	NA	NA	NA	Perm	NA
Protected Phases	4	8	2		6
Permitted Phases				2	
Detector Phase	4	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	42.0	39.0	39.0	39.0
Total Split (%)	32.5%	35.0%	32.5%	32.5%	32.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	24.0	28.4	35.1	35.1	35.1
Actuated g/C Ratio	0.24	0.28	0.35	0.35	0.35
v/c Ratio	0.78	1.30dl	0.65	0.84	0.92
Control Delay	50.1	40.0	33.2	19.9	46.3
Queue Delay	0.0	0.4	0.0	0.0	0.0
Total Delay	50.1	40.4	33.2	19.9	46.3
LOS	D	D	C	B	D
Approach Delay	50.1	40.4	26.7		46.3
Approach LOS	D	D	C		D

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 101.2
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 37.4
 Intersection Capacity Utilization 94.0%
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

	→	←	↑	↗	↓
Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	342	733	793	751	1118
v/c Ratio	0.78	1.30dl	0.65	0.84	0.92
Control Delay	50.1	40.0	33.2	19.9	46.3
Queue Delay	0.0	0.4	0.0	0.0	0.0
Total Delay	50.1	40.4	33.2	19.9	46.3
Queue Length 50th (ft)	205	225	223	133	357
Queue Length 95th (ft)	337	331	373	#462	#656
Internal Link Dist (ft)	264	299	429		279
Turn Bay Length (ft)				150	
Base Capacity (vph)	638	1278	1227	895	1219
Starvation Cap Reductn	0	184	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.67	0.65	0.84	0.92

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

6: WASHINGTON BLVD & ZANJA ST & WASHINGTON PL

02/13/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Volume (veh/h)	67	261	4	628	83	0	0	769	728	0	1015	70
Future Volume (veh/h)	67	261	4	628	83	0	0	769	728	0	1015	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	69	269	4	647	86	0	0	793	0	0	1046	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0	0	2	2	0	2	2
Cap, veh/h	79	309	5	615	614	0	0	1129		0	1072	74
Arrive On Green	0.21	0.21	0.21	0.35	0.35	0.00	0.00	0.32	0.00	0.00	0.32	0.32
Sat Flow, veh/h	373	1453	22	1781	1870	0	0	3647	1585	0	3467	232
Grp Volume(v), veh/h	342	0	0	647	86	0	0	793	0	0	551	567
Grp Sat Flow(s),veh/h/ln	1848	0	0	1781	1777	0	0	1777	1585	0	1777	1829
Q Serve(g_s), s	19.4	0.0	0.0	37.5	3.6	0.0	0.0	21.3	0.0	0.0	33.3	33.3
Cycle Q Clear(g_c), s	19.4	0.0	0.0	37.5	3.6	0.0	0.0	21.3	0.0	0.0	33.3	33.3
Prop In Lane	0.20		0.01	1.00		0.00	0.00		1.00	0.00		0.13
Lane Grp Cap(c), veh/h	393	0	0	615	614	0	0	1129		0	565	581
V/C Ratio(X)	0.87	0.00	0.00	1.05	0.14	0.00	0.00	0.70		0.00	0.98	0.98
Avail Cap(c_a), veh/h	587	0	0	615	614	0	0	1129		0	565	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	0.0	0.0	35.5	24.4	0.0	0.0	32.5	0.0	0.0	36.6	36.6
Incr Delay (d2), s/veh	9.2	0.0	0.0	50.6	0.1	0.0	0.0	3.7	0.0	0.0	32.3	31.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	24.5	1.5	0.0	0.0	9.6	0.0	0.0	19.2	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	0.0	0.0	86.1	24.6	0.0	0.0	36.2	0.0	0.0	69.0	68.5
LnGrp LOS	D	A	A	F	C	A	A	D		A	E	E
Approach Vol, veh/h		342			733			793	A		1118	
Approach Delay, s/veh		50.5			78.9			36.2			68.7	
Approach LOS		D			E			D			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		27.6		39.0		42.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		34.5		34.5		37.5				
Max Q Clear Time (g_c+I1), s		23.3		21.4		35.3		39.5				
Green Ext Time (p_c), s		4.2		1.7		0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				60.5								
HCM 6th LOS				E								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes and Geometrics
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.991			0.950			0.929	
Flt Protected	0.950							0.999			0.977	
Satd. Flow (prot)	1770	3539	0	0	3507	0	0	1768	0	0	1691	0
Flt Permitted	0.166				0.950			0.994			0.820	
Satd. Flow (perm)	309	3539	0	0	3332	0	0	1759	0	0	1419	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15			29			70	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			997			334			522	
Travel Time (s)		9.0			22.7			7.6			11.9	

Intersection Summary

Area Type: Other

Volume
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	26	808	0	6	939	61	2	46	28	127	0	139
Future Volume (vph)	26	808	0	6	939	61	2	46	28	127	0	139
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	27	842	0	6	978	64	2	48	29	132	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	842	0	0	1048	0	0	79	0	0	277	0
Intersection Summary												

Timings
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

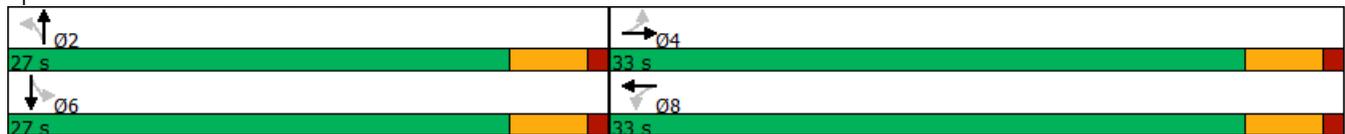


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗		↖		↗		↖
Traffic Volume (vph)	26	808	6	939	2	46	127	0
Future Volume (vph)	26	808	6	939	2	46	127	0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	24.1	24.1		24.1		22.6		22.6
Actuated g/C Ratio	0.43	0.43		0.43		0.41		0.41
v/c Ratio	0.20	0.55		0.72		0.11		0.45
Control Delay	13.8	13.1		16.0		8.9		12.7
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	13.8	13.1		16.0		8.9		12.7
LOS	B	B		B		A		B
Approach Delay		13.1		16.0		8.9		12.7
Approach LOS		B		B		A		B

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 55.8
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 14.3
 Intersection Capacity Utilization 61.9%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 7: WADE ST & WASHINGTON PL



Queues
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	27	842	1048	79	277
v/c Ratio	0.20	0.55	0.72	0.11	0.45
Control Delay	13.8	13.1	16.0	8.9	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	13.1	16.0	8.9	12.7
Queue Length 50th (ft)	5	103	140	10	49
Queue Length 95th (ft)	20	146	200	34	113
Internal Link Dist (ft)		318	917	254	442
Turn Bay Length (ft)	50				
Base Capacity (vph)	158	1819	1720	731	617
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.46	0.61	0.11	0.45
Intersection Summary					

HCM 6th Signalized Intersection Summary
7: WADE ST & WASHINGTON PL

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	808	0	6	939	61	2	46	28	127	0	139
Future Volume (veh/h)	26	808	0	6	939	61	2	46	28	127	0	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	842	0	6	978	64	2	48	29	132	0	145
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2	2	2	2	2	2	2
Cap, veh/h	224	1469	0	70	1366	89	72	461	269	360	33	323
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.00	0.42
Sat Flow, veh/h	541	3647	0	5	3305	215	8	1100	643	623	79	771
Grp Volume(v), veh/h	27	842	0	554	0	494	79	0	0	277	0	0
Grp Sat Flow(s),veh/h/ln	541	1777	0	1862	0	1663	1751	0	0	1473	0	0
Q Serve(g_s), s	2.4	9.8	0.0	0.0	0.0	13.3	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear(g_c), s	15.7	9.8	0.0	13.2	0.0	13.3	1.5	0.0	0.0	6.9	0.0	0.0
Prop In Lane	1.00		0.00	0.01		0.13	0.03		0.37	0.48		0.52
Lane Grp Cap(c), veh/h	224	1469	0	837	0	688	802	0	0	716	0	0
V/C Ratio(X)	0.12	0.57	0.00	0.66	0.00	0.72	0.10	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	287	1886	0	1052	0	883	802	0	0	716	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.7	12.1	0.0	13.1	0.0	13.1	9.5	0.0	0.0	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.0	1.1	0.0	2.0	0.2	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.3	0.0	4.8	0.0	4.5	0.5	0.0	0.0	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	12.5	0.0	14.2	0.0	15.2	9.7	0.0	0.0	12.6	0.0	0.0
LnGrp LOS	B	B	A	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		869			1048			79			277	
Approach Delay, s/veh		12.7			14.7			9.7			12.6	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		26.7		27.0		26.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		28.5		22.5		28.5				
Max Q Clear Time (g_c+I1), s		3.5		17.7		8.9		15.3				
Green Ext Time (p_c), s		0.3		4.5		1.4		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				13.5								
HCM 6th LOS				B								

Lanes and Geometrics
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	125		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.994					0.865
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3518	0	1770	3539	0	1611
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3518	0	1770	3539	0	1611
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					232
Link Speed (mph)	30			30	30	
Link Distance (ft)	379			980	526	
Travel Time (s)	8.6			22.3	12.0	

Intersection Summary

Area Type: Other

Volume
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Volume (vph)	940	36	43	683	5	54
Future Volume (vph)	940	36	43	683	5	54
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	969	37	44	704	5	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1006	0	44	704	5	56
Intersection Summary						

Timings
8: WADE ST & WASHINGTON BLVD

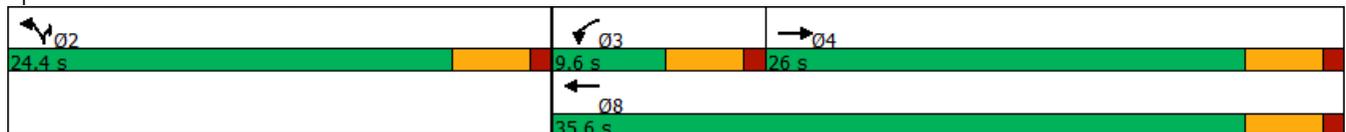
	→	↖	←	↗	↘
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑		↘
Traffic Volume (vph)	940	43	683	5	54
Future Volume (vph)	940	43	683	5	54
Turn Type	NA	Prot	NA	Prot	Prot
Protected Phases	4	3	8	2	2
Permitted Phases					
Detector Phase	4	3	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	9.6	35.6	24.4	24.4
Total Split (%)	43.3%	16.0%	59.3%	40.7%	40.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	Max	Max
Act Effct Green (s)	19.8	5.2	23.2	0.0	20.2
Actuated g/C Ratio	0.38	0.10	0.44	0.00	0.38
v/c Ratio	0.76	0.25	0.45	no cap	0.07
Control Delay	19.5	28.5	10.8		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	19.5	28.5	10.8	Error	0.2
LOS	B	C	B	F	A
Approach Delay	19.5		11.8	Err	
Approach LOS	B		B	F	

Intersection Summary

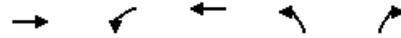
Cycle Length: 60
 Actuated Cycle Length: 52.5
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err
 Intersection Capacity Utilization Err%
 Analysis Period (min) 15

Intersection LOS: F
 ICU Level of Service H

Splits and Phases: 8: WADE ST & WASHINGTON BLVD



Queues
8: WADE ST & WASHINGTON BLVD



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1006	44	704	5	56
v/c Ratio	0.76	0.25	0.45	no cap	0.07
Control Delay	19.5	28.5	10.8		0.2
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	19.5	28.5	10.8	Error	0.2
Queue Length 50th (ft)	117	12	73	0	0
Queue Length 95th (ft)	#235	42	107	0	0
Internal Link Dist (ft)	299		900	446	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1465	174	2127	1	762
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.25	0.33	5.00	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
8: WADE ST & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY
02/13/2022

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑		↑
Traffic Volume (veh/h)	940	36	43	683	5	54
Future Volume (veh/h)	940	36	43	683	5	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	969	37	44	704	5	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1202	46	79	1675	0	0
Arrive On Green	0.34	0.34	0.04	0.47	0.36	0.36
Sat Flow, veh/h	3583	133	1781	3647	0	0
Grp Volume(v), veh/h	493	513	44	704	0	0
Grp Sat Flow(s),veh/h/ln	1777	1846	1781	1777	0	0
Q Serve(g_s), s	13.8	13.8	1.3	7.1	0.0	0.0
Cycle Q Clear(g_c), s	13.8	13.8	1.3	7.1	0.0	0.0
Prop In Lane		0.07	1.00		0.00	0.00
Lane Grp Cap(c), veh/h	612	636	79	1675	0	0
V/C Ratio(X)	0.81	0.81	0.55	0.42	0.00	0.00
Avail Cap(c_a), veh/h	699	726	166	2022	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	16.3	25.6	9.5	0.0	0.0
Incr Delay (d2), s/veh	6.2	5.9	5.9	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.1	0.7	2.3	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.4	22.2	31.5	9.7	0.0	0.0
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	1006			748	0	
Approach Delay, s/veh	22.3			11.0	0.0	
Approach LOS	C			B		
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.4	6.9	23.3		30.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.9	5.1	21.5		31.1
Max Q Clear Time (g_c+I1), s		0.0	3.3	15.8		9.1
Green Ext Time (p_c), s		0.0	0.0	3.0		5.0
Intersection Summary						
HCM 6th Ctrl Delay			17.5			
HCM 6th LOS			B			

Lanes and Geometrics

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)	0%		0%		0%		0%		0%		0%		
Storage Length (ft)	100		50	125		50	200		50	100		0	
Storage Lanes	2		1	2		1	1		1	1		0	
Taper Length (ft)	25			25			25			25			
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	
Ped Bike Factor													
Frt			0.850				0.850				0.850		0.981
Flt Protected	0.950				0.950				0.950				0.950
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3539	1583	1770	3472	0	
Flt Permitted	0.950				0.950				0.090				0.145
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	168	3539	1583	270	3472	0	
Right Turn on Red			Yes				Yes				Yes		Yes
Satd. Flow (RTOR)			115				115				115		21
Link Speed (mph)	30				30				30		30		
Link Distance (ft)	997				600				519		584		
Travel Time (s)	22.7				13.6				11.8		13.3		

Intersection Summary

Area Type: Other

Volume

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	186	728	101	199	777	60	94	970	165	108	1349	191
Future Volume (vph)	186	728	101	199	777	60	94	970	165	108	1349	191
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	196	766	106	209	818	63	99	1021	174	114	1420	201
Shared Lane Traffic (%)												
Lane Group Flow (vph)	196	766	106	209	818	63	99	1021	174	114	1621	0
Intersection Summary												

Timings

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

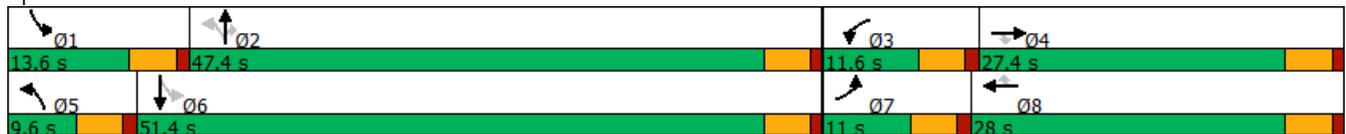
02/13/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	186	728	101	199	777	60	94	970	165	108	1349
Future Volume (vph)	186	728	101	199	777	60	94	970	165	108	1349
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	11.0	27.4	27.4	11.6	28.0	28.0	9.6	47.4	47.4	13.6	51.4
Total Split (%)	11.0%	27.4%	27.4%	11.6%	28.0%	28.0%	9.6%	47.4%	47.4%	13.6%	51.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes										
Recall Mode	None	Max	Max	None	Max						
Act Effct Green (s)	6.5	22.9	22.9	7.1	23.5	23.5	48.4	43.3	43.3	55.1	48.3
Actuated g/C Ratio	0.07	0.23	0.23	0.07	0.24	0.24	0.49	0.44	0.44	0.55	0.49
v/c Ratio	0.88	0.94	0.23	0.86	0.98	0.14	0.60	0.66	0.23	0.42	0.96
Control Delay	82.1	58.5	6.7	76.8	65.1	1.5	29.9	25.0	7.6	15.1	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	82.1	58.5	6.7	76.8	65.1	1.5	29.9	25.6	7.6	15.1	39.3
LOS	F	E	A	E	E	A	C	C	A	B	D
Approach Delay		57.7			63.7			23.5			37.7
Approach LOS		E			E			C			D

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 99.4
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 43.7
 Intersection Capacity Utilization 90.4%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL



Queues

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	196	766	106	209	818	63	99	1021	174	114	1621
v/c Ratio	0.88	0.94	0.23	0.86	0.98	0.14	0.60	0.66	0.23	0.42	0.96
Control Delay	82.1	58.5	6.7	76.8	65.1	1.5	29.9	25.0	7.6	15.1	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	82.1	58.5	6.7	76.8	65.1	1.5	29.9	25.6	7.6	15.1	39.3
Queue Length 50th (ft)	64	254	0	69	274	0	27	264	22	32	515
Queue Length 95th (ft)	#130	#372	37	#134	#403	6	#78	340	63	58	#697
Internal Link Dist (ft)		917			520			439			504
Turn Bay Length (ft)	100		50	125		50	200		50	100	
Base Capacity (vph)	224	815	453	244	836	461	164	1543	755	287	1697
Starvation Cap Reductn	0	0	0	0	0	0	0	214	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.94	0.23	0.86	0.98	0.14	0.60	0.77	0.23	0.40	0.96

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

CULVER CITY TRIANGLE TRAFFIC STUDY

9: CENTINELA AVE & WASHINGTON PL/WASHIGTON PL

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	728	101	199	777	60	94	970	165	108	1349	191
Future Volume (veh/h)	186	728	101	199	777	60	94	970	165	108	1349	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	766	106	209	818	63	99	1021	174	114	1420	201
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	817	365	246	839	374	163	1657	739	282	1474	206
Arrive On Green	0.07	0.23	0.23	0.07	0.24	0.24	0.05	0.47	0.47	0.05	0.47	0.47
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3130	438
Grp Volume(v), veh/h	196	766	106	209	818	63	99	1021	174	114	800	821
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1791
Q Serve(g_s), s	5.6	21.1	5.5	6.0	22.7	3.1	2.9	21.4	6.6	3.3	43.1	44.6
Cycle Q Clear(g_c), s	5.6	21.1	5.5	6.0	22.7	3.1	2.9	21.4	6.6	3.3	43.1	44.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	226	817	365	246	839	374	163	1657	739	282	837	844
V/C Ratio(X)	0.87	0.94	0.29	0.85	0.98	0.17	0.61	0.62	0.24	0.40	0.96	0.97
Avail Cap(c_a), veh/h	226	817	365	246	839	374	171	1657	739	353	837	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	37.6	31.6	45.7	37.8	30.3	23.2	19.9	15.9	15.4	25.3	25.7
Incr Delay (d2), s/veh	28.4	18.1	0.4	23.2	25.1	0.2	5.6	1.7	0.7	0.9	22.0	25.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	11.0	2.1	3.3	12.6	1.2	1.4	8.9	0.2	1.3	22.2	23.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	55.7	32.1	68.9	62.8	30.5	28.9	21.6	16.7	16.3	47.3	50.9
LnGrp LOS	E	E	C	E	E	C	C	C	B	B	D	D
Approach Vol, veh/h		1068			1090			1294			1735	
Approach Delay, s/veh		56.8			62.1			21.5			47.0	
Approach LOS		E			E			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	50.9	11.6	27.4	9.2	51.4	11.0	28.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.1	42.9	7.1	22.9	5.1	46.9	6.5	23.5				
Max Q Clear Time (g_c+I1), s	5.3	23.4	8.0	23.1	4.9	46.6	7.6	24.7				
Green Ext Time (p_c), s	0.1	8.0	0.0	0.0	0.0	0.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			45.8									
HCM 6th LOS			D									

Lanes and Geometrics
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	200		0	150		0	140		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.974			0.974			0.982			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3447	0	1770	3447	0	1770	3476	0	1770	3497	0
Flt Permitted	0.173			0.167			0.950			0.121		
Satd. Flow (perm)	322	3447	0	311	3447	0	1770	3476	0	225	3497	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			31			22			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		980			661			656			519	
Travel Time (s)		22.3			15.0			14.9			11.8	

Intersection Summary

Area Type: Other

Volume
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	95	801	170	73	631	131	188	1011	135	224	1273	113
Future Volume (vph)	95	801	170	73	631	131	188	1011	135	224	1273	113
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	98	826	175	75	651	135	194	1042	139	231	1312	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	1001	0	75	786	0	194	1181	0	231	1428	0
Intersection Summary												

Timings
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

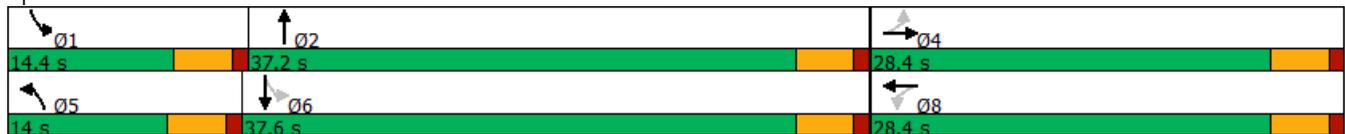


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↖↗	↖	↖↗	↖	↖↗	↖	↖↗
Traffic Volume (vph)	95	801	73	631	188	1011	224	1273
Future Volume (vph)	95	801	73	631	188	1011	224	1273
Turn Type	Perm	NA	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8				6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	28.4	28.4	28.4	28.4	14.0	37.2	14.4	37.6
Total Split (%)	35.5%	35.5%	35.5%	35.5%	17.5%	46.5%	18.0%	47.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	23.9	23.9	23.9	23.9	9.5	33.1	42.6	33.1
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.12	0.41	0.53	0.41
v/c Ratio	1.02	0.95	0.82	0.75	0.92	0.81	0.76	0.98
Control Delay	132.5	46.3	85.7	29.5	83.2	26.1	32.7	43.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	132.5	46.3	85.7	29.5	83.2	26.1	32.7	43.9
LOS	F	D	F	C	F	C	C	D
Approach Delay		54.0		34.4		34.2		42.4
Approach LOS		D		C		C		D

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.02
 Intersection Signal Delay: 41.3
 Intersection Capacity Utilization 95.9%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service F

Splits and Phases: 10: CENTINELA AVE & WASHINGTON BLVD



Queues
10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	98	1001	75	786	194	1181	231	1428
v/c Ratio	1.02	0.95	0.82	0.75	0.92	0.81	0.76	0.98
Control Delay	132.5	46.3	85.7	29.5	83.2	26.1	32.7	43.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	132.5	46.3	85.7	29.5	83.2	26.1	32.7	43.9
Queue Length 50th (ft)	~50	249	34	178	98	264	59	356
Queue Length 95th (ft)	#146	#378	#114	243	#220	349	#164	#519
Internal Link Dist (ft)		900		581		576		439
Turn Bay Length (ft)	165		200		150		140	
Base Capacity (vph)	96	1052	92	1051	210	1451	312	1455
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.95	0.82	0.75	0.92	0.81	0.74	0.98

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
 10: CENTINELA AVE & WASHINGTON BLVD

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	95	801	170	73	631	131	188	1011	135	224	1273	113
Future Volume (veh/h)	95	801	170	73	631	131	188	1011	135	224	1273	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	826	175	75	651	135	194	1042	139	231	1312	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	872	185	102	876	181	212	1367	182	339	1367	120
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.43	0.43	0.10	0.41	0.41
Sat Flow, veh/h	689	2918	618	563	2931	607	1781	3152	420	1781	3304	291
Grp Volume(v), veh/h	98	503	498	75	394	392	194	587	594	231	704	724
Grp Sat Flow(s),veh/h/ln	689	1777	1759	563	1777	1761	1781	1777	1795	1781	1777	1818
Q Serve(g_s), s	7.9	22.2	22.2	1.7	16.0	16.0	8.6	22.3	22.4	5.8	30.7	31.1
Cycle Q Clear(g_c), s	23.9	22.2	22.2	23.9	16.0	16.0	8.6	22.3	22.4	5.8	30.7	31.1
Prop In Lane	1.00		0.35	1.00		0.34	1.00		0.23	1.00		0.16
Lane Grp Cap(c), veh/h	158	531	526	102	531	526	212	771	778	339	735	752
V/C Ratio(X)	0.62	0.95	0.95	0.73	0.74	0.74	0.92	0.76	0.76	0.68	0.96	0.96
Avail Cap(c_a), veh/h	158	531	526	102	531	526	212	771	778	383	735	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	27.4	27.4	39.9	25.3	25.3	34.9	19.2	19.2	15.8	22.8	22.9
Incr Delay (d2), s/veh	7.3	26.5	26.7	23.5	5.6	5.7	39.7	7.0	7.0	4.2	24.2	24.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	12.8	12.7	2.1	7.3	7.2	6.0	10.0	10.1	2.5	16.8	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	53.9	54.1	63.4	30.9	31.0	74.6	26.2	26.2	20.0	47.0	47.8
LnGrp LOS	D	D	D	E	C	C	E	C	C	B	D	D
Approach Vol, veh/h		1099			861			1375			1659	
Approach Delay, s/veh		53.2			33.8			33.0			43.6	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	39.2		28.4	14.0	37.6		28.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.9	32.7		23.9	9.5	33.1		23.9				
Max Q Clear Time (g_c+I1), s	7.8	24.4		25.9	10.6	33.1		25.9				
Green Ext Time (p_c), s	0.1	4.7		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				41.1								
HCM 6th LOS				D								

Appendix H

Driveway Access HCM 95th Percentile Vehicular Queue Analysis Worksheets

Lanes and Geometrics
 11: MEIER ST & PROJECT ACCESS 1

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

														
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12		
Grade (%)	0%		0%		0%		0%		0%		0%			
Storage Length (ft)	0		0	0		0	0		0	0		0		
Storage Lanes	0		0	0		0	0		0	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor														
Frt					0.918					0.911				
Flt Protected					0.981					0.998				
Satd. Flow (prot)	0	0	0	0	1678	0	0	1697	0	0	1859	0		
Flt Permitted					0.981					0.998				
Satd. Flow (perm)	0	0	0	0	1678	0	0	1697	0	0	1859	0		
Link Speed (mph)	30		30		30		30		30		30			
Link Distance (ft)	63		301		200		282							
Travel Time (s)	1.4		6.8		4.5		6.4							
Intersection Summary														
Area Type:	Other													

Volume
11: MEIER ST & PROJECT ACCESS 1

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	35	0	54	0	39	74	1	22	0
Future Volume (vph)	0	0	0	35	0	54	0	39	74	1	22	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	41	0	63	0	45	86	1	26	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	104	0	0	131	0	0	27	0
Intersection Summary												

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	35	0	54	0	39	74	1	22	0
Future Vol, veh/h	0	0	0	35	0	54	0	39	74	1	22	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	41	0	63	0	45	86	1	26	0

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	116	116	88	-	0	0	131	0	0
Stage 1	88	88	-	-	-	-	-	-	-
Stage 2	28	28	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	880	774	970	0	-	-	1454	-	0
Stage 1	935	822	-	0	-	-	-	-	0
Stage 2	995	872	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	879	0	970	-	-	-	1454	-	-
Mov Cap-2 Maneuver	879	0	-	-	-	-	-	-	-
Stage 1	935	0	-	-	-	-	-	-	-
Stage 2	994	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	932	1454
HCM Lane V/C Ratio	-	-	0.111	0.001
HCM Control Delay (s)	-	-	9.3	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Lanes and Geometrics
 12: MEIER ST & ALLEY/PROJECT ACCESS 2

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.932			0.952				
Flt Protected		0.950			0.976							
Satd. Flow (prot)	0	1770	0	0	1694	0	0	1773	0	0	1863	0
Flt Permitted		0.950			0.976							
Satd. Flow (perm)	0	1770	0	0	1694	0	0	1773	0	0	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		377			330			159			200	
Travel Time (s)		8.6			7.5			3.6			4.5	

Intersection Summary

Area Type: Other

Volume
12: MEIER ST & ALLEY/PROJECT ACCESS 2

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	2	0	0	1	0	1	0	103	57	0	47	0
Future Volume (vph)	2	0	0	1	0	1	0	103	57	0	47	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	2	0	0	1	0	1	0	120	66	0	55	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	0	2	0	0	186	0	0	55	0
Intersection Summary												

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	0	1	0	1	0	103	57	0	47	0
Future Vol, veh/h	2	0	0	1	0	1	0	103	57	0	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	1	0	1	0	120	66	0	55	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	209	241	55	208	208	153	55	0	0	186	0	0
Stage 1	55	55	-	153	153	-	-	-	-	-	-	-
Stage 2	154	186	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	748	660	1012	749	689	893	1550	-	-	1388	-	-
Stage 1	957	849	-	849	771	-	-	-	-	-	-	-
Stage 2	848	746	-	957	849	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	747	660	1012	749	689	893	1550	-	-	1388	-	-
Mov Cap-2 Maneuver	747	660	-	749	689	-	-	-	-	-	-	-
Stage 1	957	849	-	849	771	-	-	-	-	-	-	-
Stage 2	847	746	-	957	849	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.8		9.4		0		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	747	815	1388	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.003	-	-	-
HCM Control Delay (s)	0	-	-	9.8	9.4	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Lanes and Geometrics
 13: PROJECT ACCESS 3 & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.997						0.865			0.925	
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1855	0	0	1863	0	0	1611	0	0	1685	0
Flt Permitted		0.999									0.978	
Satd. Flow (perm)	0	1855	0	0	1863	0	0	1611	0	0	1685	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		196			287			227			813	
Travel Time (s)		4.5			6.5			5.2			18.5	

Intersection Summary

Area Type: Other

Volume
13: PROJECT ACCESS 3 & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	4	222	6	0	208	0	0	0	54	3	0	4
Future Volume (vph)	4	222	6	0	208	0	0	0	54	3	0	4
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	5	274	7	0	257	0	0	0	67	4	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	286	0	0	257	0	0	67	0	0	9	0
Intersection Summary												

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	222	6	0	208	0	0	0	54	3	0	4
Future Vol, veh/h	4	222	6	0	208	0	0	0	54	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	274	7	0	257	0	0	0	67	4	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	-	-	0	548	545	278	578	548	257
Stage 1	-	-	-	-	-	-	288	288	-	257	257	-
Stage 2	-	-	-	-	-	-	260	257	-	321	291	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1308	-	-	0	-	-	447	446	761	427	444	782
Stage 1	-	-	-	0	-	-	720	674	-	748	695	-
Stage 2	-	-	-	0	-	-	745	695	-	691	672	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1308	-	-	-	-	-	443	444	761	388	442	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	443	444	-	388	442	-
Stage 1	-	-	-	-	-	-	716	671	-	744	695	-
Stage 2	-	-	-	-	-	-	740	695	-	627	669	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	10.2	11.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	761	1308	-	-	-	-	545
HCM Lane V/C Ratio	0.088	0.004	-	-	-	-	0.016
HCM Control Delay (s)	10.2	7.8	0	-	-	-	11.7
HCM Lane LOS	B	A	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	-	-	0

Lanes and Geometrics
 11: MEIER ST & PROJECT ACCESS 1

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

														
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12		
Grade (%)	0%				0%				0%		0%			
Storage Length (ft)	0		0	0		0	0		0	0		0		
Storage Lanes	0		0	0		0	0		0	0		0		
Taper Length (ft)	25			25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor														
Frt					0.920					0.894				
Flt Protected					0.980						0.999			
Satd. Flow (prot)	0	0	0	0	1679	0	0	1665	0	0	1861	0		
Flt Permitted					0.980						0.999			
Satd. Flow (perm)	0	0	0	0	1679	0	0	1665	0	0	1861	0		
Link Speed (mph)	30				30				30		30			
Link Distance (ft)	63				301				200		282			
Travel Time (s)	1.4				6.8				4.5		6.4			
Intersection Summary														
Area Type:	Other													

Volume
11: MEIER ST & PROJECT ACCESS 1

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	30	0	43	0	24	88	2	76	0
Future Volume (vph)	0	0	0	30	0	43	0	24	88	2	76	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	38	0	55	0	31	113	3	97	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	93	0	0	144	0	0	100	0
Intersection Summary												

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	30	0	43	0	24	88	2	76	0
Future Vol, veh/h	0	0	0	30	0	43	0	24	88	2	76	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	38	0	55	0	31	113	3	97	0

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	191	191	88	-	0	0	144	0	0
Stage 1	88	88	-	-	-	-	-	-	-
Stage 2	103	103	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	798	704	970	0	-	-	1438	-	0
Stage 1	935	822	-	0	-	-	-	-	0
Stage 2	921	810	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	796	0	970	-	-	-	1438	-	-
Mov Cap-2 Maneuver	796	0	-	-	-	-	-	-	-
Stage 1	935	0	-	-	-	-	-	-	-
Stage 2	919	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	1438
HCM Lane V/C Ratio	-	-	0.105	0.002
HCM Control Delay (s)	-	-	9.5	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Lanes and Geometrics
 12: MEIER ST & ALLEY/PROJECT ACCESS 2

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973			0.932			0.959			0.999	
Flt Protected		0.962			0.976			0.999				
Satd. Flow (prot)	0	1744	0	0	1694	0	0	1785	0	0	1861	0
Flt Permitted		0.962			0.976			0.999				
Satd. Flow (perm)	0	1744	0	0	1694	0	0	1785	0	0	1861	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		377			330			159			200	
Travel Time (s)		8.6			7.5			3.6			4.5	
Intersection Summary												
Area Type:	Other											

Volume
12: MEIER ST & ALLEY/PROJECT ACCESS 2

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	3	0	1	1	0	1	2	106	47	0	97	1
Future Volume (vph)	3	0	1	1	0	1	2	106	47	0	97	1
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	4	0	1	1	0	1	3	136	60	0	124	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	0	0	2	0	0	199	0	0	125	0
Intersection Summary												

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	1	1	0	1	2	106	47	0	97	1
Future Vol, veh/h	3	0	1	1	0	1	2	106	47	0	97	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	1	1	0	1	3	136	60	0	124	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	298	327	125	297	297	166	125	0	0	196	0	0
Stage 1	125	125	-	172	172	-	-	-	-	-	-	-
Stage 2	173	202	-	125	125	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	654	591	926	655	615	878	1462	-	-	1377	-	-
Stage 1	879	792	-	830	756	-	-	-	-	-	-	-
Stage 2	829	734	-	879	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	652	590	926	653	614	878	1462	-	-	1377	-	-
Mov Cap-2 Maneuver	652	590	-	653	614	-	-	-	-	-	-	-
Stage 1	877	792	-	828	754	-	-	-	-	-	-	-
Stage 2	826	733	-	878	792	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.2		9.8		0.1		0	
HCM LOS	B		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1462	-	-	704	749	1377	-	-
HCM Lane V/C Ratio	0.002	-	-	0.007	0.003	-	-	-
HCM Control Delay (s)	7.5	0	-	10.2	9.8	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Lanes and Geometrics
 13: PROJECT ACCESS 3 & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.997			0.999			0.865			0.865	
Flt Protected												
Satd. Flow (prot)	0	1857	0	0	1861	0	0	1611	0	0	1611	0
Flt Permitted												
Satd. Flow (perm)	0	1857	0	0	1861	0	0	1611	0	0	1611	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		196			287			227			813	
Travel Time (s)		4.5			6.5			5.2			18.5	

Intersection Summary

Area Type: Other

Volume
13: PROJECT ACCESS 3 & ZANJA ST

CULVER CITY TRIANGLE TRAFFIC STUDY

02/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	2	244	5	0	167	2	0	0	49	0	0	3
Future Volume (vph)	2	244	5	0	167	2	0	0	49	0	0	3
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	2	262	5	0	180	2	0	0	53	0	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	269	0	0	182	0	0	53	0	0	3	0
Intersection Summary												

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	244	5	0	167	2	0	0	49	0	0	3
Future Vol, veh/h	2	244	5	0	167	2	0	0	49	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	262	5	0	180	2	0	0	53	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	182	0	0	-	-	0	452	451	265	476	452	181
Stage 1	-	-	-	-	-	-	269	269	-	181	181	-
Stage 2	-	-	-	-	-	-	183	182	-	295	271	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1393	-	-	0	-	-	518	504	774	499	503	862
Stage 1	-	-	-	0	-	-	737	687	-	821	750	-
Stage 2	-	-	-	0	-	-	819	749	-	713	685	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1393	-	-	-	-	-	515	503	774	465	502	862
Mov Cap-2 Maneuver	-	-	-	-	-	-	515	503	-	465	502	-
Stage 1	-	-	-	-	-	-	736	686	-	819	750	-
Stage 2	-	-	-	-	-	-	816	749	-	663	684	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	10	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	774	1393	-	-	-	-	862
HCM Lane V/C Ratio	0.068	0.002	-	-	-	-	0.004
HCM Control Delay (s)	10	7.6	0	-	-	-	9.2
HCM Lane LOS	B	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	-	-	0

Appendix I

Bus Route Details

1 Washington Blvd.

Route Map

Map not to scale



1 Washington Blvd.

Monday - Friday Lunes - Viernes

EFFECTIVE JANUARY 3, 2022

Westbound Oeste

WLATC Washington & Fairfax	Washington/Expo Line	Washington & Overland	Washington & Sepulveda	Washington & Inglewood	Washington & Lincoln	Venice Beach Windward & Main
6:00AM	6:04AM	6:10AM	6:13AM	6:18AM	6:23AM	6:30AM
6:20	6:24	6:30	6:33	6:38	6:43	6:50
6:37	6:41	6:47	6:50	6:55	7:03	7:10
6:55	6:59	7:05	7:08	7:13	7:21	7:28
7:10	7:14	7:19	7:22	7:27	7:35	7:42
7:25	7:29	7:34	7:37	7:42	7:50	7:57
7:40	7:44	7:49	7:52	7:57	8:05	8:12
7:54	7:58	8:03	8:07	8:12	8:20	8:27
8:08	8:12	8:17	8:21	8:26	8:34	8:41
8:22	8:26	8:31	8:35	8:40	8:48	8:55
8:37	8:41	8:46	8:50	8:55	9:03	9:10
8:52	8:56	9:01	9:05	9:10	9:18	9:25
9:07	9:11	9:16	9:20	9:25	9:34	9:42
9:21	9:25	9:30	9:34	9:39	9:48	9:56
9:38	9:42	9:47	9:51	9:56	10:05	10:13
9:56	10:00	10:07	10:11	10:16	10:25	10:33
10:14	10:18	10:25	10:29	10:34	10:44	10:52
10:33	10:37	10:44	10:48	10:53	11:03	11:11
10:53	10:57	11:04	11:08	11:13	11:23	11:31
11:13	11:17	11:24	11:28	11:33	11:43	11:53
11:33	11:37	11:44	11:48	11:53	12:04PM	12:14PM
11:53	11:57	12:04PM	12:08PM	12:13PM	12:24	12:34
12:12PM	12:16PM	12:23	12:27	12:32	12:43	12:53
12:31	12:35	12:42	12:46	12:51	1:02	1:12
12:50	12:54	1:01	1:05	1:10	1:21	1:31
1:09	1:13	1:20	1:24	1:29	1:40	1:50
1:28	1:32	1:39	1:43	1:48	1:59	2:09
1:47	1:51	1:58	2:02	2:07	2:18	2:28
2:06	2:10	2:17	2:21	2:26	2:37	2:47
2:25	2:29	2:36	2:40	2:45	2:56	3:06
2:44	2:48	2:55	2:59	3:04	3:15	3:25
3:02	3:06	3:13	3:17	3:22	3:33	3:42
3:19	3:23	3:30	3:34	3:39	3:49	3:58
3:33	3:37	3:44	3:48	3:53	4:03	4:12
3:49	3:53	4:00	4:04	4:09	4:19	4:28
4:04	4:08	4:15	4:19	4:24	4:33	4:42
4:19	4:23	4:30	4:34	4:39	4:48	4:57
4:34	4:38	4:45	4:49	4:54	5:03	5:12
4:50	4:54	5:01	5:05	5:10	5:19	5:28
5:05	5:09	5:16	5:20	5:25	5:33	5:42
5:20	5:24	5:31	5:35	5:40	5:48	5:57
5:35	5:39	5:46	5:50	5:55	6:03	6:12
5:50	5:54	6:00	6:04	6:09	6:17	6:26
6:05	6:09	6:15	6:19	6:24	6:32	6:41
6:25	6:29	6:35	6:39	6:44	6:52	7:01
6:50	6:54	7:00	7:04	7:09	7:16	7:25
7:20	7:24	7:30	7:33	7:38	7:45	7:52
7:50	7:54	8:00	8:03	8:08	8:15	8:22
8:23	8:27	8:33	8:36	8:41	8:47	8:54
8:53	8:57	9:03	9:06	9:11	9:17	9:24
9:20	9:24	9:30	9:33	9:38	9:44	9:51
9:52	9:56	10:02	10:05	10:10	10:16	10:23

Eastbound Este

Venice Beach Windward & Main	Washington & Lincoln	Washington & Inglewood	Washington & Sepulveda	Washington & Overland	Washington/Expo Line	WLATC Washington & Fairfax
6:38AM	6:45AM	6:52AM	6:55AM	6:59AM	7:04AM	7:08AM
6:56	7:03	7:10	7:13	7:17	7:22	7:26
7:16	7:23	7:30	7:33	7:37	7:42	7:46
7:37	7:44	7:51	7:54	7:58	8:03	8:07
7:51	7:58	8:06	8:09	8:13	8:18	8:23
8:05	8:12	8:20	8:23	8:27	8:32	8:37
8:19	8:27	8:35	8:39	8:43	8:48	8:53
8:33	8:41	8:49	8:53	8:57	9:02	9:07
8:48	8:56	9:04	9:08	9:12	9:17	9:24
9:06	9:14	9:22	9:26	9:30	9:35	9:42
9:24	9:32	9:40	9:44	9:48	9:53	10:00
9:42	9:50	9:58	10:02	10:06	10:11	10:18
10:02	10:10	10:18	10:22	10:26	10:31	10:38
10:20	10:28	10:36	10:40	10:44	10:49	10:56
10:39	10:47	10:55	10:59	11:03	11:08	11:15
10:58	11:08	11:17	11:21	11:25	11:30	11:37
11:17	11:27	11:36	11:40	11:44	11:49	11:56
11:35	11:45	11:54	11:58	12:02PM	12:07PM	12:14PM
11:53	12:03PM	12:12PM	12:16PM	12:20	12:25	12:32
12:11PM	12:21	12:30	12:34	12:38	12:43	12:50
12:29	12:39	12:48	12:52	12:56	1:01	1:08
12:47	12:58	1:08	1:13	1:17	1:22	1:29
1:06	1:17	1:27	1:32	1:36	1:41	1:48
1:25	1:36	1:46	1:51	1:55	2:00	2:07
1:44	1:55	2:05	2:10	2:14	2:19	2:26
2:03	2:14	2:24	2:29	2:33	2:38	2:45
2:22	2:33	2:43	2:48	2:52	2:57	3:04
2:41	2:53	3:03	3:08	3:12	3:17	3:24
3:00	3:12	3:22	3:27	3:31	3:36	3:43
3:19	3:31	3:41	3:46	3:50	3:55	4:02
3:36	3:48	3:58	4:03	4:07	4:12	4:19
3:52	4:04	4:14	4:19	4:23	4:28	4:35
4:07	4:19	4:29	4:34	4:38	4:43	4:50
4:22	4:34	4:44	4:49	4:53	4:58	5:05
4:37	4:49	4:59	5:04	5:08	5:13	5:20
4:52	5:04	5:14	5:19	5:23	5:28	5:35
5:07	5:19	5:29	5:34	5:38	5:43	5:50
5:22	5:34	5:44	5:49	5:53	5:58	6:05
5:38	5:50	6:00	6:05	6:09	6:14	6:21
5:52	6:04	6:14	6:19	6:23	6:28	6:35
6:07	6:19	6:29	6:34	6:38	6:43	6:50
6:22	6:31	6:39	6:42	6:46	6:51	6:58
6:37	6:46	6:54	6:57	7:01	7:06	7:13
6:52	7:01	7:09	7:12	7:16	7:21	7:28
7:11	7:20	7:28	7:31	7:35	7:40	7:44
7:35	7:44	7:52	7:55	7:59	8:04	8:08
8:05	8:14	8:22	8:25	8:29	8:34	8:38
8:35	8:42	8:49	8:52	8:56	9:01	9:05
9:05	9:12	9:19	9:22	9:26	9:31	9:35
9:35	9:42	9:49	9:52	9:56	10:01	10:05
10:34	10:41	10:47	10:50	10:54	10:59	11:03
-	-	-	-	-	-	-

LINE 1 EFFECTIVE DATES: JANUARY 3, 2022

Times are approximate and may vary due to traffic and weather conditions. Times shown are subject to change without notice. Los tiempos son aproximados y pueden variar debido a tráfico y condiciones de clima. Los tiempos demostrados son conforme a c bio sin aviso.

For the safety, comfort and convenience of all passengers...

Culver CityBus Operators will not open the front doors after pulling away from bus stops. Please offer priority seating, at the front of the bus, to senior and disabled passengers. We DO NOT allow smoking, eating, drinking, or surfboards on the bus. All radios, games, cell phones and other electronic devices shall be listened to through earphones only. Shirt and shoes shall be worn while on-board. Carts, strollers and boogie boards may be brought on-board and shall be stored out of the aisle. For your convenience, all Culver CityBuses are equipped with bike racks.

Transfers

You will need to purchase a Local Transfer when transferring from one Culver CityBus to another Culver CityBus and an Inter-Agency Transfer (IAT) when connecting to any other bus or rail system. Please inform the operator when boarding if you need a Local or Inter-Agency Transfer. Transfers are valid for two (2) hours and must be properly punched.

Holidays

Limited bus service is provided on Lines 1, 3 and local 6 on the following holidays:

New Year's Day	Independence Day	Thanksgiving Day
Memorial Day	Labor Day	Christmas Day

Culver CityBus Office

4343 Duquesne Ave, Culver City, CA 90232
Monday – Friday • 7:30 am – 5:30 pm

Automated Schedule Information:	(310) 253-6510
Lost & Found, Commendations & Complaints:	(310) 253-6500
Connecting Agencies' Schedule Information:	(323) 466-3876

Para la seguridad, comodidad y conveniencia de todos los pasajeros...

Los operadores de Culver CityBus no abrirán las puertas principales después de alejarse de la parada. Favor de ofrecer los asientos de prioridad en frente del autobús a las personas mayores o discapacitadas. No se permite fumar, comer, beber o las tablas hawaianas en el autobús. Todos los radios, juegos, teléfonos celulares y otros dispositivos electrónicos deberán ser escuchados a través de audífonos solamente. Camisa y zapatos deberán ser usados mientras este a bordo del autobús. Los carros de compras, cochecitos de niños y las tablas de boogie se pueden traer a bordo y deberán ser almacenados fuera del pasillo. Para su conveniencia todos los autobuses de Culver CityBus están equipados con estantes para bicicletas.

Transbordos

Usted necesitará comprar un Transbordo Local para transbordar de un Culver CityBus a otro Culver Citybus y un Transbordo Entre-Agencia (IAT) para conectar con cualquier otra agencia o sistema ferroviario. Si usted necesita un Transbordo Local o Entre-Agencia, favor de informarle al operador al abordar. Los transbordos son válidos por dos horas y deben ser perforados correctamente.

Bus Fares Tarifas

Blind - Free Ciegos - Gratis	Base Fare Tarifa Regular	Student (K-12) Estudiante (K-12)	Senior (62+ yrs.) Disabled/Medicare Mayores (+62 años) / Discapacitados
Fare / Tarifas	1.00	75¢	35¢
Local Transfer (Culver CityBus - Culver CityBus) Transbordo Local	25¢	25¢	10¢
Inter-Agency Transfer Transbordo Entre-Agencia	40¢	40¢	20¢

Culver CityBus fareboxes accept dollar bills, coins, EZ transit passes and TAP; however, they DO NOT make change. Las cajas de tarifa de Culver CityBus aceptan billetes de dólar, monedas, EZ transit passes y TAP. Sin embargo, no dan cambio.

Senior citizens 62 and over, disabled, or Medicare recipients must show their ID in order to pay a reduced fare. Mayores de edad +62, discapacitados y beneficiarios de Medicare deben demostrar su identificación para pagar la tarifa reducida.

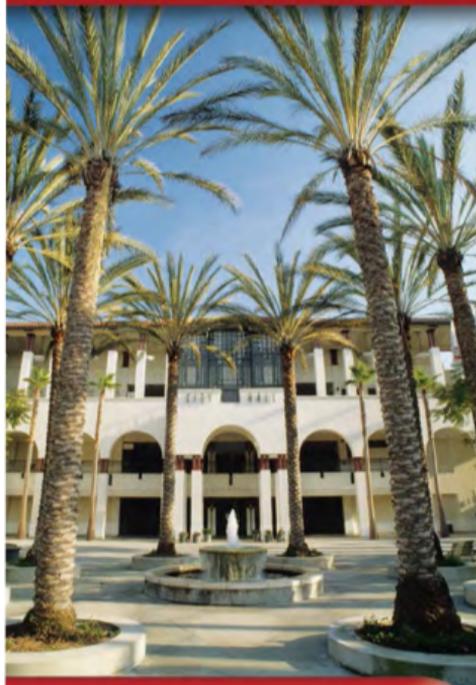
High School Students may be required to show their student ID as proof of age. Puede requerirse que estudiantes de escuela preparatoria muestren su identificación para prueba de edad.

Culver CITYBUS

1

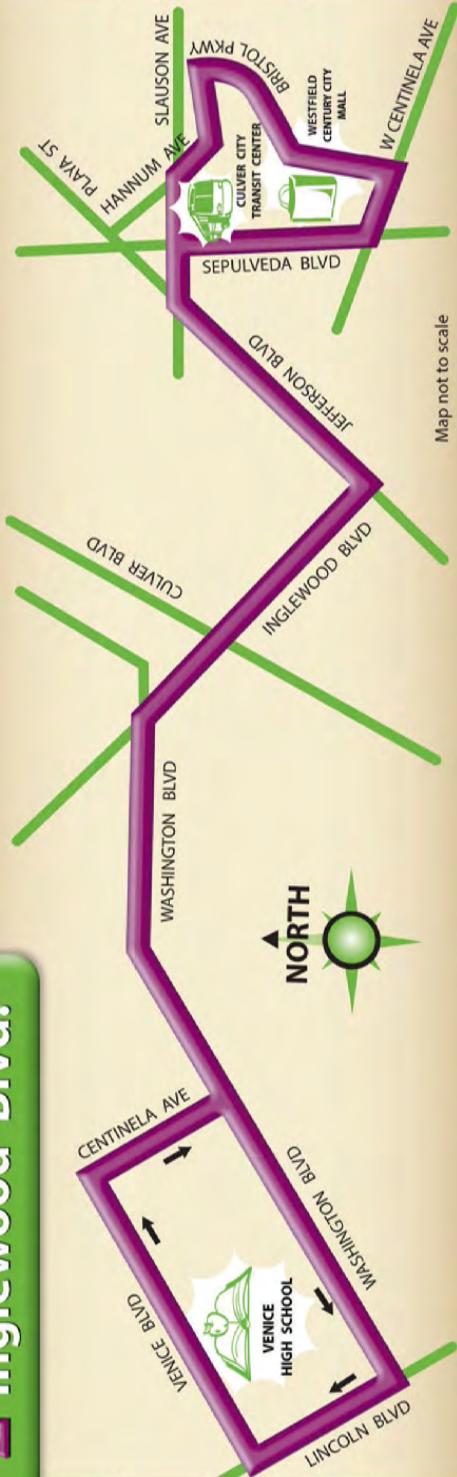


Washington Blvd.



- West LA Transit Center
- Expo Culver City
- Culver City City Hall
- Venice Beach

Route Map 2 Inglewood Blvd.



2 Inglewood Blvd. Monday - Friday Lunes - Viernes

Westbound		Oeste	
Bristol Pkwy/ Centinela	Slauson/ Sepulveda	Washington/ Inglewood	Venice High School
6:00AM	6:03AM	6:13AM	6:23AM
7:00	7:05	7:20	7:36
8:10	8:15	8:32	8:48
9:20	9:25	9:35	9:51
2:35PM	2:39PM	2:49PM	3:05PM
3:45	3:49	4:01	4:17
4:55	4:59	5:11	5:27

Eastbound		Este	
Venice High School	Washington/ Inglewood	Slauson/ Sepulveda	Bristol Pkwy/ Centinela
6:30AM	6:36AM	6:43AM	6:49AM
7:40	7:47	7:54	8:00
8:50	8:57	9:05	9:11
10:00	10:07	10:15	10:21
3:11PM	3:20PM	3:31PM	3:38PM
4:21	4:30	4:42	4:50
5:31	5:40	5:52	6:00

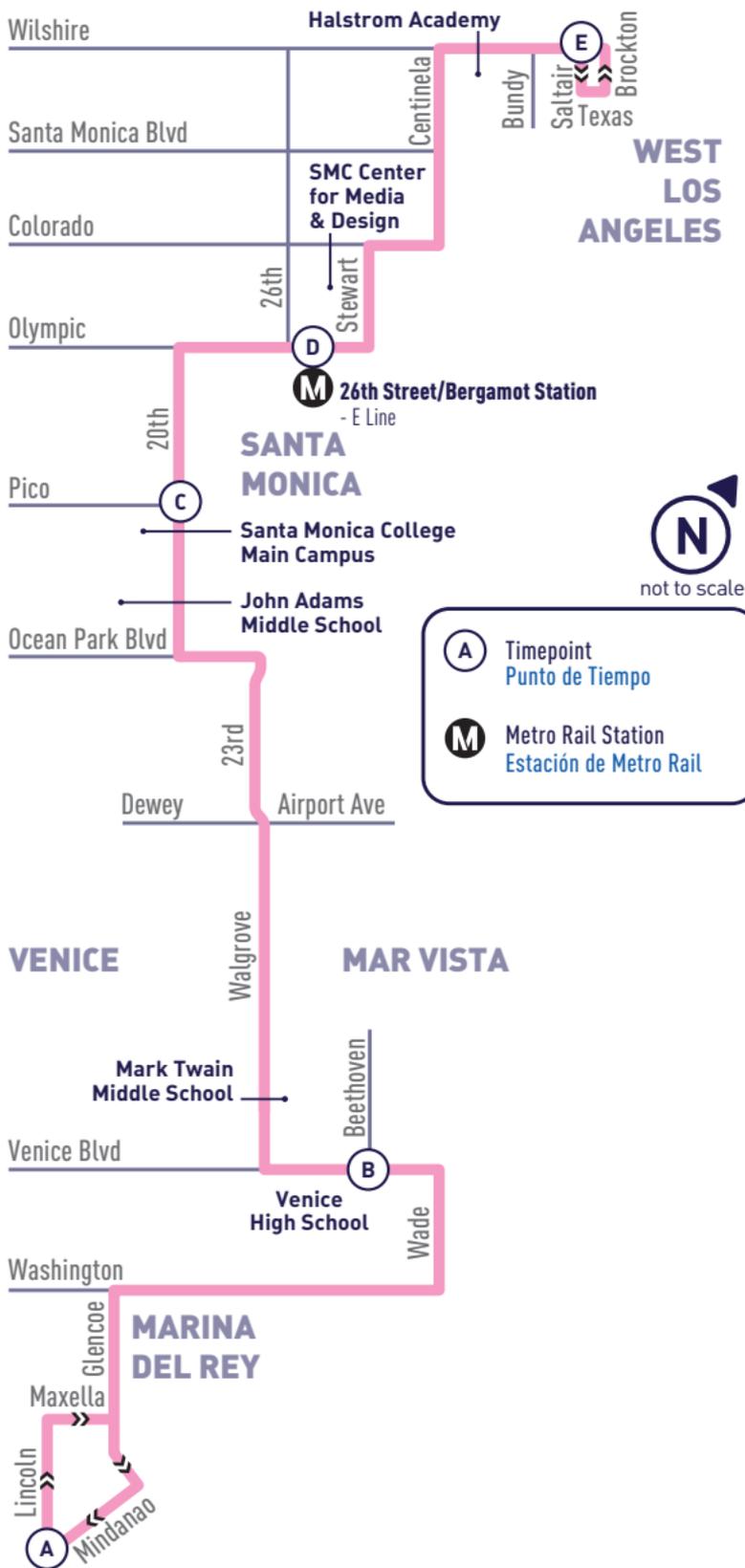
Sorry, no weekend or holiday service.
Lo sentimos, no hay servicio los fines de semana o días festivos.

Times are approximate and may vary due to traffic and weather conditions. Times shown are subject to change without notice. Los tiempos son aproximados y pueden variar debido a tráfico y condiciones de clima. Los tiempos demostrados son conforme a cambio sin aviso.

MARINA DEL REY -
WILSHIRE BLVD/
BUNDY DR

16

MONDAY - FRIDAY SERVICE ONLY
SERVICIO DE LUNES - VIERNES
SOLAMENTE



MARINA DEL REY TO WILSHIRE BLVD/BUNDY DR

WEEKDAY
DURANTE LA SEMANA

A	B	C	D	E
Lincoln & Mindanao	Venice & Beethoven	20th & Pico (SMC)	Olympic & 26th (Bergamot Station)	Saltair & Wilshire
6:20	6:30	6:40	6:44	6:53
6:45	6:55	7:05	7:09	7:18
7:10	7:21	7:32	7:36	7:46
7:35	7:47	7:59	8:04	8:15
8:00	8:12	8:24	8:29	8:40
8:25	8:37	8:49	8:54	9:05
8:50	9:02	9:14	9:19	9:30
9:15	9:26	9:37	9:43	9:53
9:40	9:50	10:00	10:05	10:16
10:05	10:15	10:25	10:30	10:41
10:30	10:40	10:50	10:55	11:06
10:55	11:05	11:15	11:20	11:31
11:20	11:30	11:40	11:45	11:56
11:45	11:55	12:05	12:10	12:21
12:10	12:20	12:30	12:35	12:46
12:35	12:45	12:55	1:00	1:11
1:00	1:10	1:20	1:25	1:36
1:25	1:35	1:45	1:50	2:01
1:50	2:00	2:10	2:15	2:26
2:18	2:29	2:39	2:44	2:57
2:45	2:56	3:06	3:11	3:24
3:15	3:26	3:36	3:41	3:54
3:45	3:56	4:06	4:11	4:24
4:15	4:26	4:36	4:41	4:54
4:45	4:56	5:06	5:11	5:24
5:15	5:26	5:36	5:41	5:54
5:50	6:00	6:10	6:14	6:25
6:25	6:35	6:45	6:49	7:00

Route 16 does not operate on weekends or the following holidays:/La Ruta 16 no opera los fines de semana ni en los siguientes días festivos:

New Year's Eve	New Year's Day	Martin Luther King Jr. Day
Presidents' Day	Memorial Day	Independence Day
Labor Day	Thanksgiving Day	Day After Thanksgiving
Christmas Eve	Christmas Day	

ALL PM
TIMES IN
BOLD

ROUTE
16

WILSHIRE BLVD/BUNDY DR TO MARINA DEL REY

**WEEKDAY
DURANTE LA SEMANA**

E Saltair & Wilshire	D Olympic & 26th (26th/ Bergamot Station)	C 20th & Pico (SMC)	B Venice & Beethoven	A Lincoln & Mindanao
7:10	7:18	7:22	7:34	7:44
7:35	7:43	7:48	8:00	8:11
8:00	8:08	8:13	8:25	8:36
8:25	8:33	8:38	8:50	9:01
8:50	8:59	9:04	9:16	9:28
9:15	9:24	9:29	9:41	9:53
9:40	9:49	9:54	10:06	10:18
10:05	10:14	10:19	10:31	10:43
10:30	10:39	10:44	10:56	11:08
10:55	11:04	11:09	11:21	11:33
11:20	11:29	11:34	11:46	11:58
11:45	11:54	11:59	12:11	12:23
12:10	12:19	12:24	12:36	12:48
12:35	12:44	12:49	1:01	1:13
1:00	1:09	1:14	1:26	1:38
1:25	1:35	1:40	1:54	2:07
1:50	2:00	2:05	2:19	2:32
2:15	2:26	2:31	2:48	3:02
2:40	2:51	2:56	3:13	3:27
3:10	3:21	3:26	3:45	4:00
3:35	3:47	3:52	4:14	4:30
4:05	4:17	4:22	4:44	5:00
4:35	4:47	4:52	5:19	5:35
5:05	5:17	5:22	5:54	6:11
5:35	5:47	5:52	6:19	6:34
6:05	6:17	6:22	6:49	7:04

Route 16 does not operate on weekends or the following holidays:/La Ruta 16 no opera los fines de semana ni en los siguientes días festivos:

New Year's Eve	New Year's Day	Martin Luther King Jr. Day
Presidents' Day	Memorial Day	Independence Day
Labor Day	Thanksgiving Day	Day After Thanksgiving
Christmas Eve	Christmas Day	

ALL PM
TIMES IN
BOLD

ROUTE
16

Appendix J

Culver City Code of Ordinance Section 7.05.005

CHAPTER 7.05: MOTOR VEHICLE AIR QUALITY MANAGEMENT

Section

Transportation and Air Quality Management

- 7.05.005 Definitions
- 7.05.010 Transit provider environmental review requirements
- 7.05.015 Transportation demand and trip reduction measures
- 7.05.020 Maintenance
- 7.05.025 Monitoring
- 7.05.030 Violations; penalties

Mobile Source Air Pollution Reduction Fund

- 7.05.100 Purpose
- 7.05.105 Definition
- 7.05.110 Trust fund
- 7.05.115 Expenditure of trust fund revenues
- 7.05.120 Audits

TRANSPORTATION AND AIR QUALITY MANAGEMENT

§ 7.05.005 DEFINITIONS.

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ALTERNATIVE TRANSPORTATION. The use of modes of transportation other than the single passenger motor vehicle, including but not limited to carpools, vanpools, buspools, public transit, walking and bicycling.

BUSPOOL. A vehicle carrying sixteen (16) or more passengers commuting on a regular basis to and from work on a fixed route, according to a fixed schedule.

CARPOOL. A vehicle carrying two (2) to six (6) persons commuting together to and from work on a regular basis.

THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA). The statute, being Cal. Pub. Res. Code §§ 21000 et seq., and its amendments that require all jurisdictions in the State of California to evaluate the extent of environmental degradation posed by proposed development.

EMPLOYEE PARKING AREA. The portion of total required parking used by on-site employees. For the purposes of this subchapter, employee parking shall be calculated using the following presumptions:

<i>Type of Use</i>	<i>Percent of Total Required Parking Devoted to Employees</i>
Retail/Commercial	30%
Office/Professional	85%
Industrial/Manufacturing	90%

GROSS FLOOR AREA. The floor area measured between the interior of the exterior walls of every floor and partial floor within a building at, above, and below grade, based on final detailed plans.

NET INCREASE IN GROSS FLOOR AREA. The difference between the amount of gross floor area on a new development site immediately before and after completion of a new development, as defined herein, including the amount of demolished and newly constructed gross floor area.

NEW DEVELOPMENT. The new construction of nonresidential building square footage which results in a net increase in gross floor area, as defined herein, that equals or exceeds the project size threshold criteria set forth in § 7.05.015 below.

PREFERENTIAL PARKING. On-site parking spaces designated or assigned through use of a sign or painted space markings for carpool and vanpool vehicles carrying commute passengers on a regular basis, that are provided in a location more convenient to a place of employment than parking spaces provided for single occupant vehicles.

PROPERTY OWNER. The legal owner of a development who may serve as the lessor to a tenant.

SERVICE AREA. The area surrounding a development project within a one (1) mile radius of local fixed route bus

operator(s) and a two (2) mile radius of express and rail transit operators which may constitute the area serviced by potentially impacted transit operators.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD). The regional authority appointed by the California State Legislature to meet federal standards and otherwise improve air quality in the South Coast Air Basin (the non-desert portions of Los Angeles, Orange, Riverside, and San Bernardino Counties).

TENANT. The lessee or sublessee of facility space at an applicable development project.

TRANSPORTATION DEMAND MANAGEMENT (TDM). The alteration of travel behavior—usually on the part of commuters—through programs of incentives, services, and policies. TDM addresses alternatives to single occupant vehicles such as carpooling and vanpooling, and changes in work schedules that move trips out of the peak period or eliminate them altogether (as is the case in telecommuting or compressed work weeks).

TRIP REDUCTION. Reduction in the number of work-related trips made by single occupant vehicles.

VANPOOL. A vehicle carrying seven (7) to fifteen (15) persons commuting together to and from work on a regular basis, usually in a vehicle with a seating arrangement designed to carry seven (7) to fifteen (15) adult passengers, and on a prepaid subscription basis.

VEHICLE. Any motorized form of transportation, including but not limited to automobiles, vans, buses and motorcycles. ('65 Code, § 39-1) (Ord. No. 93-004 § 1 (part))

§ 7.05.010 TRANSIT PROVIDER ENVIRONMENTAL REVIEW REQUIREMENTS.

Prior to certification of any Environmental Impact Report (EIR) prepared for a development project pursuant to the requirements of the California Environmental Quality Act (CEQA), as amended, the EIR preparer shall identify and consult with regional and municipal fixed-route transit operators providing service to the project. The EIR preparer shall use the "Transit Impact Review Worksheet," contained in the Los Angeles County Congestion Management Program Manual, or a similar worksheet, to assess transit impacts. Pursuant to the provisions of CEQA, fixed-route transit operators providing service to the service area of the project shall be sent a Notice of Preparation (NOP) for all EIR's and shall, as part of the NOP process, be given an opportunity to comment on the impacts of the project, to identify recommended transit service or capital improvements which may be required as a result of the project, and to recommend mitigation measures which minimize automobile trips on the CMP network. Impacts and recommended mitigation measures identified by the transit operator shall be evaluated in the Draft EIR prepared for the project. Transit mitigation measures which are adopted shall be monitored pursuant to the mitigation monitoring requirements of CEQA.

('65 Code, § 39-2) (Ord. No. 93-004 § 1 (part))

§ 7.05.015 TRANSPORTATION DEMAND AND TRIP REDUCTION MEASURES.

A. Applicability of requirements.

1. Prior to occupancy of any new development, the property owner or applicable heirs, assigns or successors in interest, shall make lasting provisions for, at a minimum, all of the following transportation demand management and trip reduction measures, found in Subsection B. below.

2. The requirements of this Section shall apply to any new development that results in a net increase of twenty-five thousand (25,000) or more gross square feet of floor area.

3. This Section shall not apply to projects for which an application for new development has been deemed "complete" by the City pursuant to Cal. Gov't Code § 65943, or for which an application for a building permit has been filed, prior to the effective date of this Section.

B. Development standards.

1. Prior to issuance of a certificate of occupancy for any new development that equals or exceeds twenty-five thousand (25,000) gross square feet, the developer shall provide and continuously maintain the following which shall be met to the satisfaction of the City Planner and Director of Transportation:

a. A bulletin board, display case, or kiosk displaying transportation information in a prominent area accessible to the greatest number of employees shall be installed. Such required information shall include, but is not limited to, the following:

(1) Current maps, routes and schedules for public transit routes serving the site;

(2) Telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency, transportation management associations, and local transit operators;

(3) Ridesharing promotional material supplied by commuter-oriented organizations;

(4) Bicycle route and facility information, including regional/local bicycle maps and bicycle safety information; and

(5) A listing of any other facilities and resources that may be available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.

All information required by this Section shall be regularly stocked on a periodic basis.

2. Prior to issuance of a certificate of occupancy for any new development that equals or exceeds fifty thousand (50,000) gross square feet, the developer shall comply with Subsection B.1. of this Section and shall comply with the following requirements to the satisfaction of the City Planner and Director of Transportation:

a. Not less than ten percent (10%) of the employee parking area shall be located as close as is practical to the employee entrance(s) without displacing handicapped and customer parking needs. These spaces shall be reserved for use by potential carpool or vanpool vehicles. This preferential parking shall be identified on the site plan accompanying the application for a building permit. Spaces shall have signs that designate them for employee carpool and vanpool vehicles.

b. Preferential parking spaces reserved for employee vanpool shall be accessible to vanpool vehicles. When located within a parking structure, a minimum interior vertical clearance of eight (8) feet two (2) inches shall be provided for those spaces and accessways to be used by vanpool vehicles. Adequate turning radii and a minimum parking space dimension of nine (9) feet wide by eighteen (18) feet in length shall be provided for vanpool parking areas.

c. Bicycle racks or other secure bicycle parking shall be provided to accommodate four (4) bicycles for the first fifty thousand (50,000) gross square feet of new development, and one (1) bicycle for each additional fifty thousand (50,000) gross square feet of new development. Calculations which result in a fraction of one-half ($\frac{1}{2}$) or higher shall be rounded up to the nearest whole number. Secure bicycle parking may consist of a fully enclosed space or a locker accessible only to the owner or operator of the bicycle which protects the bicycle from inclement weather. Specific facilities and their location (e.g., provision of racks, bicycle storage lockers or locked room) shall be provided to the satisfaction of the City Planner and Director of Transportation or designee.

3. Prior to issuance of a certificate of occupancy for any new development that equals or exceeds one hundred thousand (100,000) gross square feet, the developer shall comply with Subsections B.1. and 2. of this Section, and shall comply with the following requirements to the satisfaction of the City Planner and Director of Transportation:

a. The new development shall include sidewalks or other designated pedestrian pathways following direct and safe routes from the external pedestrian circulation system, vehicle and bicycle parking areas and transit facilities, to each building in the development.

b. If determined necessary by the City to mitigate the impacts of the new development, bus stop improvements shall be provided to the satisfaction of the Director of Transportation. The Director, in consultation with other local bus service providers, will determine appropriate improvements. When locating bus stops and/or planning building entrances, the City shall consider that commuters should be afforded entrances that are safe, efficient and that have direct access to nearby transit stations or stops.

c. A safe and convenient zone in which vanpool and carpool vehicles may deliver or board their passengers.

('65 Code, § 39-3) (Ord. No. 93-004 § 1 (part); Ord. No. 93-014 § 1)

§ 7.05.020 MAINTENANCE.

All facilities and improvements required by this subchapter shall be maintained in a state of good repair.

('65 Code, § 39-4) (Ord. No. 93-004 § 1 (part))

§ 7.05.025 MONITORING.

All facilities and improvements required to be constructed pursuant to this subchapter shall be shown on building plans for the development and shall be monitored by the Planning Division and Transportation Department in the same manner that other CCMC requirements are currently monitored.

('65 Code, § 39-5) (Ord. No. 93-004 § 1 (part))

§ 7.05.030 VIOLATIONS; PENALTIES.

A. Criminal violations.

1. Any person or business that violates any provision of this subchapter shall be guilty of an infraction, except as otherwise provided in this Section, which shall be punishable in accordance with §§ 1.01.035 et seq. of this Code.

2. Any violation which would otherwise be an infraction shall constitute a misdemeanor which shall be punishable in accordance with §§ 1.01.040 et seq. of this Code if a defendant has been convicted of three (3) or more violations of this subchapter within the twelve (12) month period immediately preceding the violation. For this purpose, a bail forfeiture shall be deemed a conviction of the offense charged.

B. *Civil liability.* Any person or business found to be in violation of this subchapter shall be liable for a civil penalty in accordance with § 1.01.050 of the Culver City Municipal Code.

('65 Code, § 39-6) (Ord. No. 93-004 § 1 (part))

MOBILE SOURCE AIR POLLUTION REDUCTION FUND

§ 7.05.100 PURPOSE.

This subchapter is intended to support the South Coast Air Quality Management District's (SCAQMD) imposition of the vehicle registration fee authorized by Cal. Health & Safety Code § 44223 and to bring the City into compliance with the requirements set forth in Cal. Health & Safety Code § 44243 in order to receive revenues generated by such fees for the purpose of implementing programs to reduce air pollution from motor vehicles.

('65 Code, § 33K-1) (Ord. No. 91-019 § 1)

§ 7.05.105 DEFINITION.

For purposes of this subchapter, the following words and terms shall be defined as follows:

MOBILE SOURCE POLLUTION REDUCTION PROGRAMS. Any program or project implemented by the City to reduce air pollution from Motor Vehicles which it determines will be consistent with the California Clean Air Act of 1988 or the plan proposed pursuant to Cal. Health & Safety Code §§ 40460 et seq.

('65 Code, § 33K-2) (Ord. No. 91-019 § 1)

§ 7.05.110 TRUST FUND.

The City Treasurer shall establish a separate interest bearing trust fund account to receive all monies remitted to City pursuant to this subchapter. All interest earned by the trust fund account shall be credited only to that account.

('65 Code, § 33K-3) (Ord. No. 91-019 § 1)

§ 7.05.115 EXPENDITURE OF TRUST FUND REVENUES.

All revenues received from the SCAQMD pursuant to this subchapter shall be exclusively expended on mobile source emission reduction programs. Such revenues and any interest earned on the revenues shall be expended within one (1) year of completion of such programs.

('65 Code, § 33K-4) (Ord. No. 91-019 § 1)

§ 7.05.120 AUDITS.

The City consents to an audit of all programs and projects funded by the trust fund account established pursuant to § 7.05.115, as required by Cal. Health & Safety Code § 44244.1.

('65 Code, § 33K-5) (Ord. No. 91-019 § 1)