Central & Unser Commercial Development

Albuquerque, New Mexico | 7707 West Central Ave.

Traffic Impact Study

May 5, 2025

FINAL

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Central & Unser (Ed Garcia) Commercial Development
7707 West Central Ave., Albuquerque, NM
FINAL Traffic Impact Study

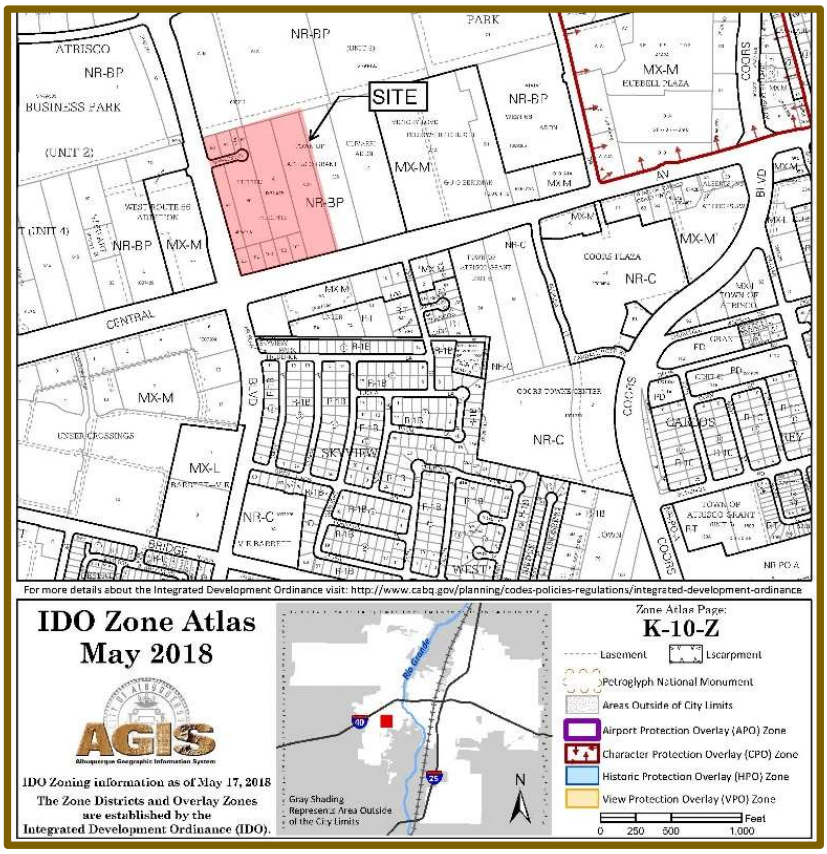
Executive Summary

Purpose

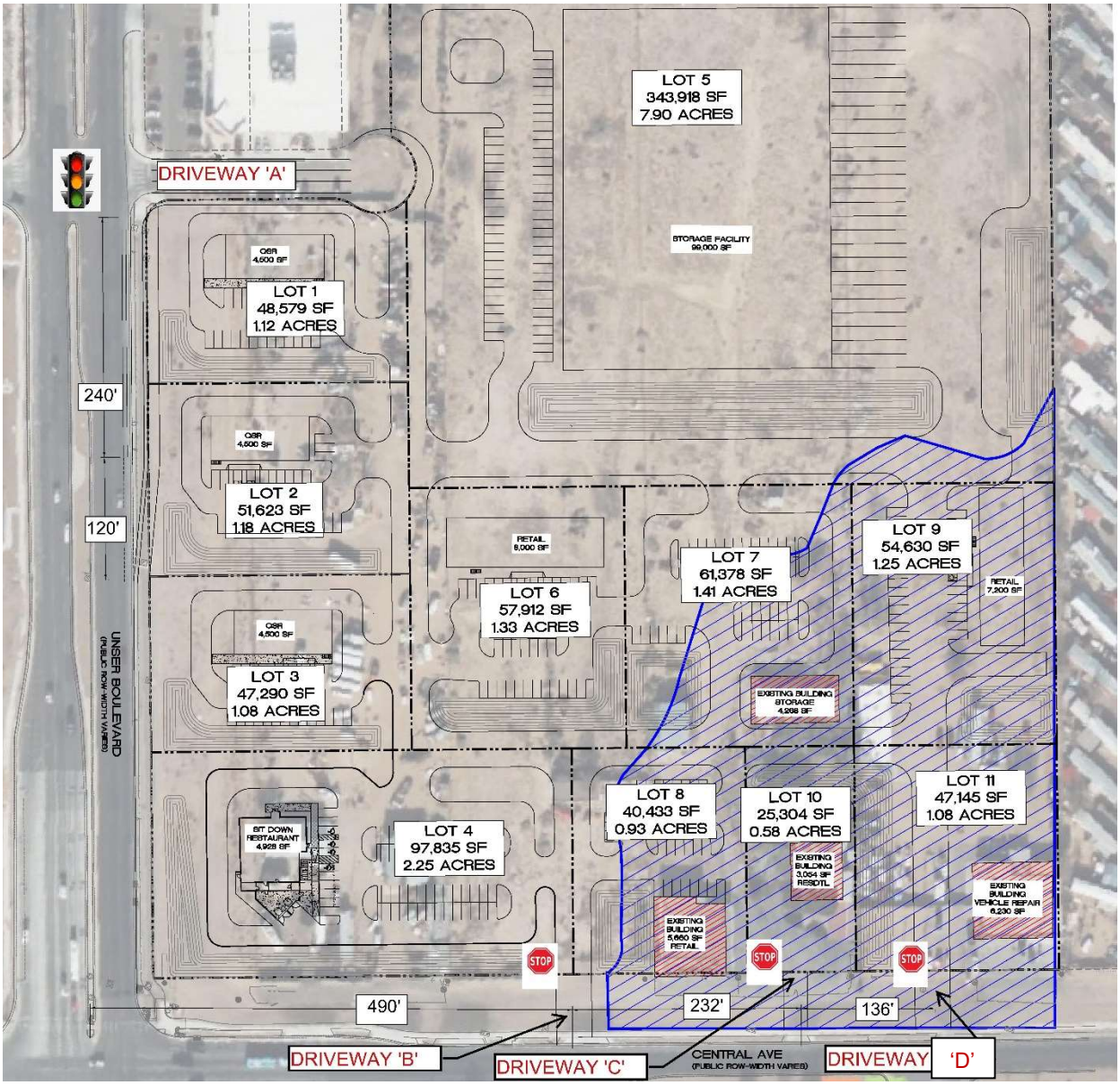
The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed commercial development (by Ed Garcia) to determine the impact of the project on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared in accordance with the requirements of the City of Albuquerque (COA), Traffic Engineering Department.

Project Description

The proposed commercial development is to be located within the City of Albuquerque, New Mexico at the north east corner of Central Ave. and Unser Blvd. at 7707 West Central Ave., NW. See location on the COA zone atlas map.



The development will be comprised of warehousing, an automotive service center, quick-serve restaurants, a sit-down restaurant, and four undefined retail spaces. See the Site Plan below.

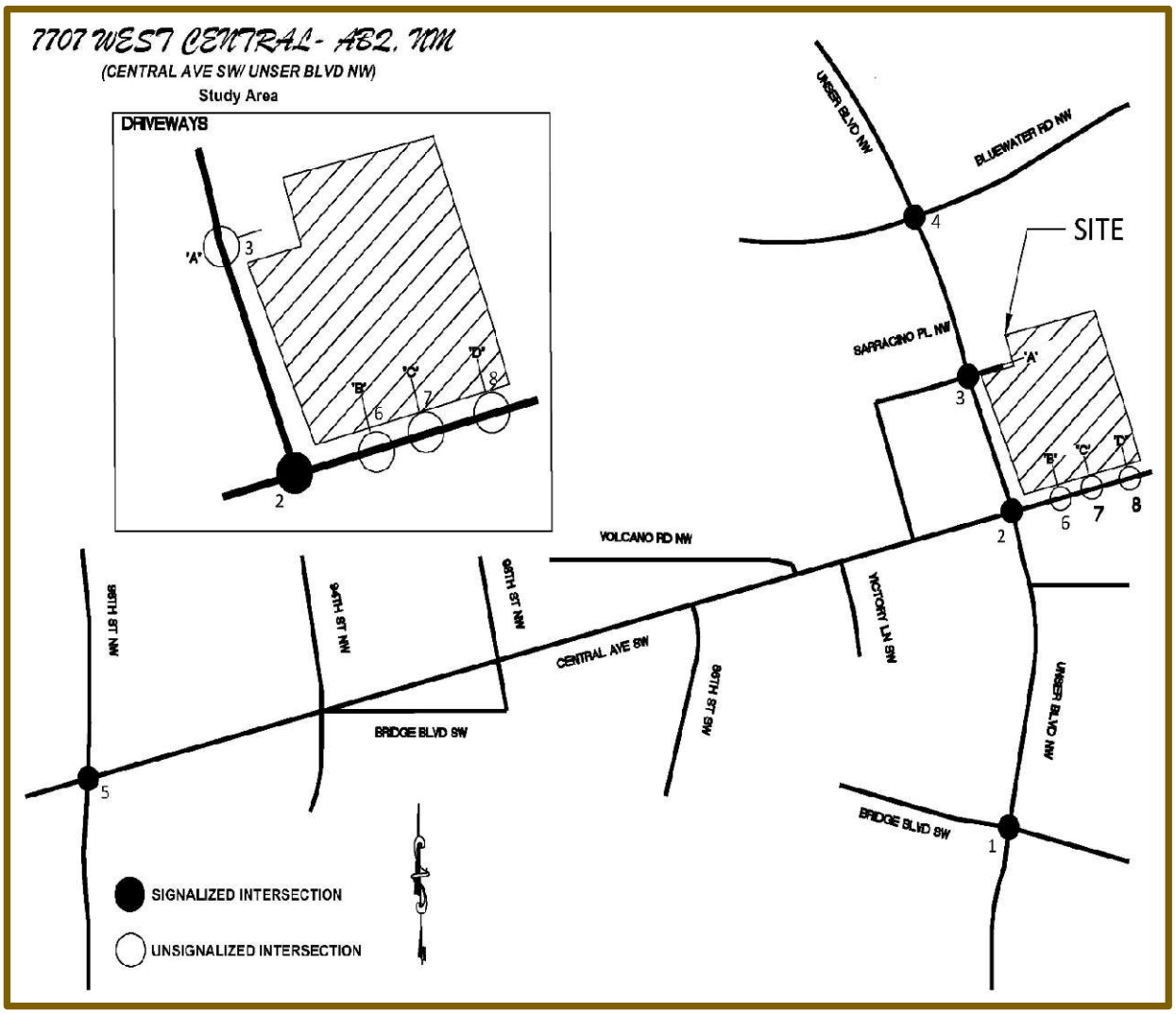


The site is mostly undeveloped except for three small light industrial businesses and one residential home. Four existing structures and one driveway (Driveway ‘C’) will remain on the site. Impacts to the study area intersections by the 11,000 daily weekday trips generated by the new development can be minimized with implementation of the recommended mitigations contained in this report.

The anticipated implementation year for the project is 2025 and the horizon year is 2035.

Study Area

The study area includes four existing signalized intersections (Intersections 1, 2, 4 & 5), one existing unsignalized intersection (Intersection 3), and five proposed unsignalized driveways (Intersections 6 thru 10). See Map below.



Summary of Results

Analysis of the study area for this project was performed using Synchro 11 software developed by Trafficware, Inc., a CUBIC company. Reporting in this Traffic Impact Study are the HCM6 (Highway Capacity Manual, 6th Edition) reports from Synchro 11 software. Results of the analysis of the project's transportation study area are summarized in the following table:

HCM Results Summary Table

7707 W. CENTRAL AVE. COMMERCIAL DEVELOPMENT (ED GARCIA) - Albuquerque,NM

4/22/2025

Intersect. No.	Intersection Name	ACCESS TYPE	Existing Signalization/Control	Case	2025 IMPLEMENTATION YEAR Capacity Analysis LOS, Delay (s/veh)[1] AM Peak	PM Peak	V/C>1	2035 HORIZON YEAR Capacity Analysis LOS, Delay (s/veh)[1] AM Peak	PM Peak	V/C>1
1	Unser Blvd & Bridge Blvd.	N/A	Signalized/ Actuated Coordinated	NO BUILD	C - 20.2	B - 18.6		C - 28.4	C - 28.0	
				BUILD	C - 20.5	B - 18.9		C - 29.4	C - 28.9	
				MITIGATED	C-20.5	B - 18.9		C - 24.0	C - 29.1	
2	Unser Blvd & Central Ave	N/A	Signalized/ Actuated Coordinated	NO BUILD	D - 35.5	D - 49.7	WBT	D-54.9	F - 100.7	EBT, EBR, WBT, SBT
				BUILD	D - 37.2	E - 55.1	WBT	E - 56.6	F - 113.5	EBL, EBT, EBR, WBL, SBT,NBR
				MITIGATED	D - 38.1	D - 45.3		D - 54.7	E-79.4	EBL, WBT, NBR
3	Unser Blvd & Sarracino/Driveway 'A'	FULL ACCESS	Unsignalized/ 2-Way Stop Control	NO BUILD	F - 203.8	F -136.7		F-999	F-999	EBL, WBL
				BUILD	F-999.0	F-999.0	EBL, WBL, WBT	F-999	F-999	EBL, WBL, WBT
			Signalized/	MITIGATED	C - 29.5	C-27.6		C - 33.4	C-31.8	EBL, WBT, NBR
4	Unser Blvd & Bluewater	N/A	Signalized/ Actuated Coordinated	NO BUILD	C - 20.6	C-27.1		D - 35.1	D - 50.9	
				BUILD	C-21.2	C -27.3		D - 40.4	D - 53.2	
5	98th Street & Central Blvd	N/A	Signalized/ Actuated Coordinated	NO BUILD	C - 34.1	E - 75.9		D - 36.1	F-94.8	
				BUILD	C - 34.9	F -81.8	WBL	D - 37.3	F - 101.5	WBL
				MITIGATED	N/A	D - 40.7		N/A	D - 42.0	
6	Central Ave. & Driveway 'B'	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	N/A		N/A	N/A	
				BUILD	A-9.7	C-18.6		A-9.6	C-20.7	
7	Central Ave & Driveway 'C' (Existing Residential Drwy.)	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	A-9.5	C-16.8		A-9.9	C-17.7	
				BUILD	A-9.5	C-16.8		A-9.9	C-17.7	
8	Central Ave. & Driveway 'D'	FULL ACCESS	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	N/A		N/A	N/A	
				BUILD	B-13.1	F-59.6		B-11.3	F-83.2	

1 - LOS = Level of Service as defined in the STATE ACCESS MANAGEMENT MANUAL, New Mexico State Highway and Transportation Department
2 - Data for movement with worst LOS &Delay
3 - HCM Multiple Period Analysis

Summary of Impacts

1. Unser Blvd / Bridge Blvd (Signalized)

Minimal Impact with Mitigation

- Intersection Level of Service (LOS) remains consistent (LOS = C or better) between NO BUILD and BUILD scenarios, with delays increasing by less than 2 seconds per vehicle.
- All movements maintain LOS = D or better, except the eastbound left turn (EBL), which remains LOS = E in 2035 – an existing condition unaffected by the development.
- Storage capacity is inadequate for the EBL and eastbound right (EBR) turn lanes.
- The EBL queue exceeds capacity in all scenarios, with the worst case in the 2035 AM peak, exceeding by 250 ft (total queue length = 340 ft).
- EBR queue capacity is slightly exceeded during the 2035 AM and PM peaks by less than one vehicle length.

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2. Unser Blvd / Central Ave (Signalized)

Moderate Impact with Mitigation

- Seven movements (EBL, EBT, EBR, WBL, WBR, NBL, SBL) experience LOS = E or F in the NO BUILD condition.
- 2025 Intersection AM LOS remains the same while PM LOS degrades from LOS = D (NO BUILD) to LOS = E (BUILD), with delay increases under 6 seconds per vehicle.
- 2035 Intersection AM LOS degrades from LOS = D (NO BUILD) to LOS = E (BUILD), with delay increases under 3 seconds per vehicle while PM LOS remains at LOS F with delays becoming worse by over 12 seconds per vehicle.
- Signal retiming improves LOS and delays to better than pre-development levels for all conditions other than 2025 AM (see Mitigated Condition).
- The storage capacity is insufficient for the EBL, WBL, WBR, NBR, and SBR lanes. In the worst-case scenario (2035 AM), the NBR queue exceeds capacity by approximately 800 feet. Converting the right northbound through (NBT) lane into a shared NBT/right-turn (R) lane would offer slight traffic improvements; however, the COA determined that the potential benefits do not outweigh the increased safety risks to pedestrians.
- Volume-to-capacity (V/C) ratios exceed 1 for EBT, EBL, WBT, and SBT, indicating high congestion.
- Mitigation (signal retiming) reduces all V/C ratios to below 1 and improves queuing for the 2025 Conditions but only slightly improves V/C and queuing for the 2035 Conditions.

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3. Unser Blvd / Sarracino Pl (Driveway A) – Proposed Signalized

Minimal Impact with Mitigation

- Side street LOS = F (EB & WB) in both NO BUILD and BUILD, due to heavy traffic volumes on Unser Blvd limiting acceptable gaps.
- Adding a second WBL lane and signalizing the intersection improves LOS to C overall, with individual movements improving to LOS = E or better.
- Storage capacity is inadequate for EBL, WBL, WBT, and SBL lanes; V/C > 1 even in NO BUILD.
- Mitigation includes signal installation and additional lanes, resulting in acceptable queuing and V/C < 1.
- A northbound right-turn deceleration lane (240-ft storage + 300/150 transition) is warranted.
- Southbound left-turn lane (115-ft storage) is also warranted; existing SBL lane meets requirements.
- Signal warrant analysis supports a traffic signal at this intersection under the BUILD condition.
- Signal approval requires a waiver of the City of Albuquerque DPM spacing standard (1320 ft vs. existing 935 ft). Approval of the signal at this intersection was confirmed by Curtis Cherne (COA Traffic Engineering) on 11/08/2024.

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4. Unser Blvd / Bluewater Rd (Signalized)

Minimal Impact, no Mitigation

- LOS remains C or better in NO BUILD and BUILD for 2025; delay increases are minimal (<1 sec/veh in 2025, <5 sec/veh in 2035).
- LOS degrades from D to F for the NBT movement and from E to F for the SBL.
- Storage capacity is inadequate for EBL, WBL, WBR; V/C > 1 for EBL, WBT, and SBL in 2035 BUILD.
- As shown for the Mitigated case, signal retiming and extending EBL lane (90 ft to 350 ft) helps address delay and capacity issues. However, the EBL remains problematic (LOS = F and 363-ft of spillover in 2035 PM).
- And WBR queues may spill into WBT lane. Potential solution: extend the WBR lane past the adjacent driveway (e.g., UPS access) or add a second right-turn lane. Presented to COA as a future network improvement.
- **The development does not contribute traffic to the EBL and WBR movements.**

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5. Central Ave / 98th St (Signalized)

Minimal Impact

- Intersection LOS remains D or better, except 2035 PM peak (LOS = F).
- Individual movement LOS remains unchanged between NO BUILD and BUILD.
- WB and EB turns operate at LOS = E or F under all conditions.
- Signal retiming improves LOS and reduces delays, especially for WBL during the PM peak hour. No improvement was shown by retiming the signal for the AM peak hour.
- Storage inadequate for WBL and SBL (BUILD); WBL V/C > 1.
- Retiming during PM BUILD restores V/C < 1 for WBL.
- SBL queue exceeds capacity by 85 ft (3 vehicles) after 2035. This is an existing problem which is made only slightly worse (by one vehicle) by traffic from the development and does not occur until 10 years from now, so no mitigation is recommended.

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6. Central Ave / Driveway B (Unsignalized – Right-In/Right-Out Only)

- LOS = D or better for all movements; queue capacities are sufficient.
- No deceleration lanes warranted.

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7. Central Ave / Driveway C (Unsignalized – Right-In/Right-Out Only)

- LOS = D or better for all movements; queue capacities are sufficient.
- No deceleration lanes warranted.

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8. Central Ave / Driveway D (Unsignalized – Full Access)

- SBL movement (traffic exiting the development) has LOS = F. A signal is not warranted and there are no road geometry modifications that would improve the LOS, so no mitigation is recommended. Long delays will likely cause drivers to use alternative routes such as the signalized driveway (Driveway ‘A’).
- SBL lane (BUILD) has adequate storage (100-ft) and V/C < 1 for all movements.
- A westbound right-turn deceleration lane (240-ft storage + 300/150 transition) and eastbound left-turn lane with 50-ft minimum storage capacity are warranted due to the anticipated volume traffic entering the development at Driveway D.

Recommendations

1. Unser Blvd / Bridge Blvd

- **No development-related mitigation recommended.**
- *Optional Improvement:* Extend EBL lane storage from 90 ft to 330 ft to prevent queue spillover into the EBT lane. Presented to COA as a potential future network improvement.

2. Unser Blvd / Central Ave

- Post Development Signal optimization recommended.

3. Unser Blvd / Sarracino Pl (Driveway A) (See Exhibit 1 on the next page)

- Construct a new NBR deceleration lane (240-ft storage + 300/150 transition).
- Install a new traffic signal.
- Add a dedicated westbound left lane (WBL) and restripe the existing lane as a westbound thru/right (WBT/R) lane.

4. Unser Blvd / Bluewater Rd

- Post Development Signal optimization recommended.
- *Optional Improvement:* Extend EBL lane storage from 90 ft to 350 ft. Presented as part of COA future improvements.

5. Central Ave / 98th St

- Post Development Signal optimization recommended for the PM BUILD condition.

6 & 7. Central Ave / Driveways B & C

- **No development-related mitigation recommended.**
- Construct Driveway B as a right-in/right-out limited access driveway with one exiting lane (SBR) and one entering lane (Driveway C is existing – no modifications).

8. Central Ave / Driveway D (See Exhibit 2 on next page)

- Construct Driveway D as a full-access driveway with two exiting lanes (SBR & SBL) and one entering lane.
- Construct a 240-ft (or a long as possible) westbound right-turn deceleration lane including a 300/150 transition from 10-ft west of the Loon Creek Trailer Park driveway to Driveway ‘D”.
- Modify the existing median to construct a left turn deceleration lane with a minimum storage capacity of 50-ft plus a 300/150 transition.

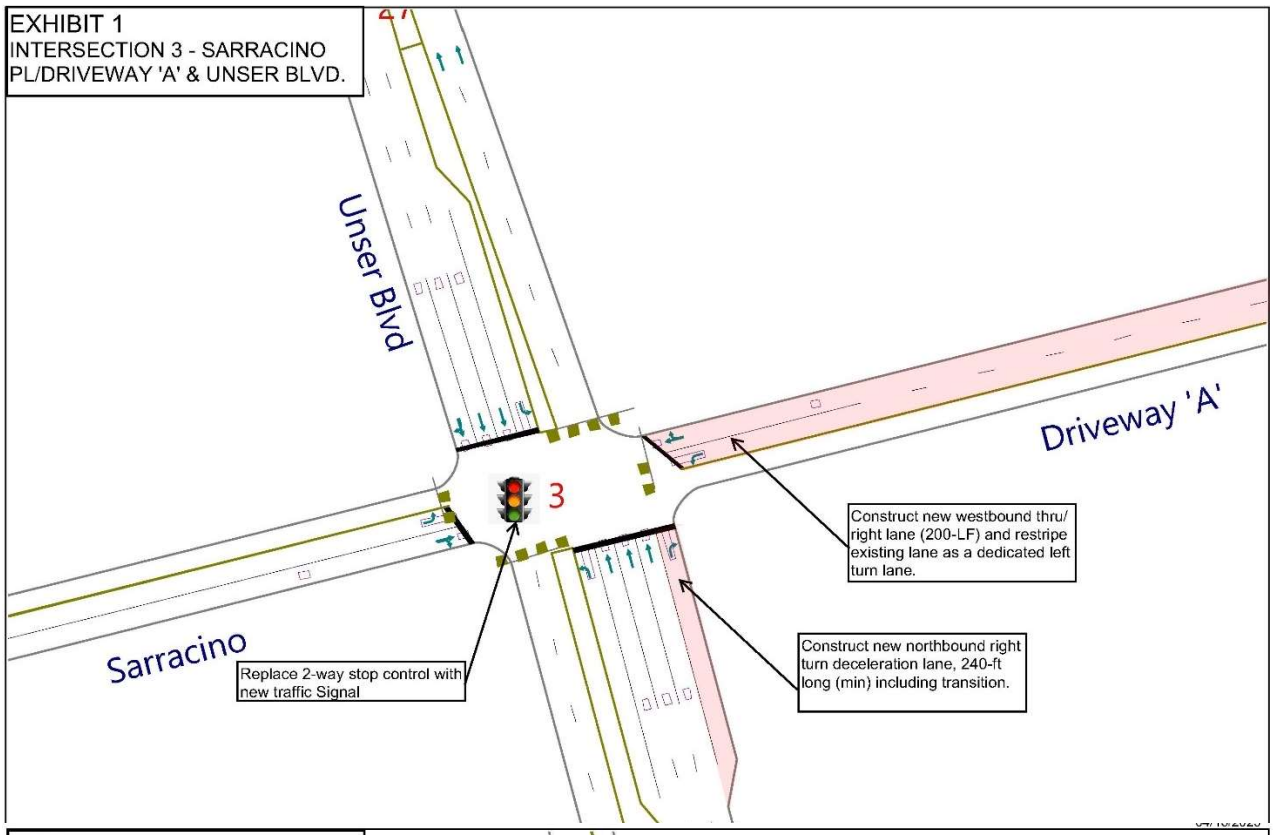
EXHIBIT 1
INTERSECTION 3 - SARRACINO PL/DRIVEWAY 'A' & UNSER BLVD.
Unser Blvd
Driveway 'A'
Sarracino
3
Construct new westbound thru/ right lane (200-LF) and restripe existing lane as a dedicated left turn lane.
Construct new northbound right turn deceleration lane, 240-ft long (min) including transition.
Replace 2-way stop control with new traffic Signal

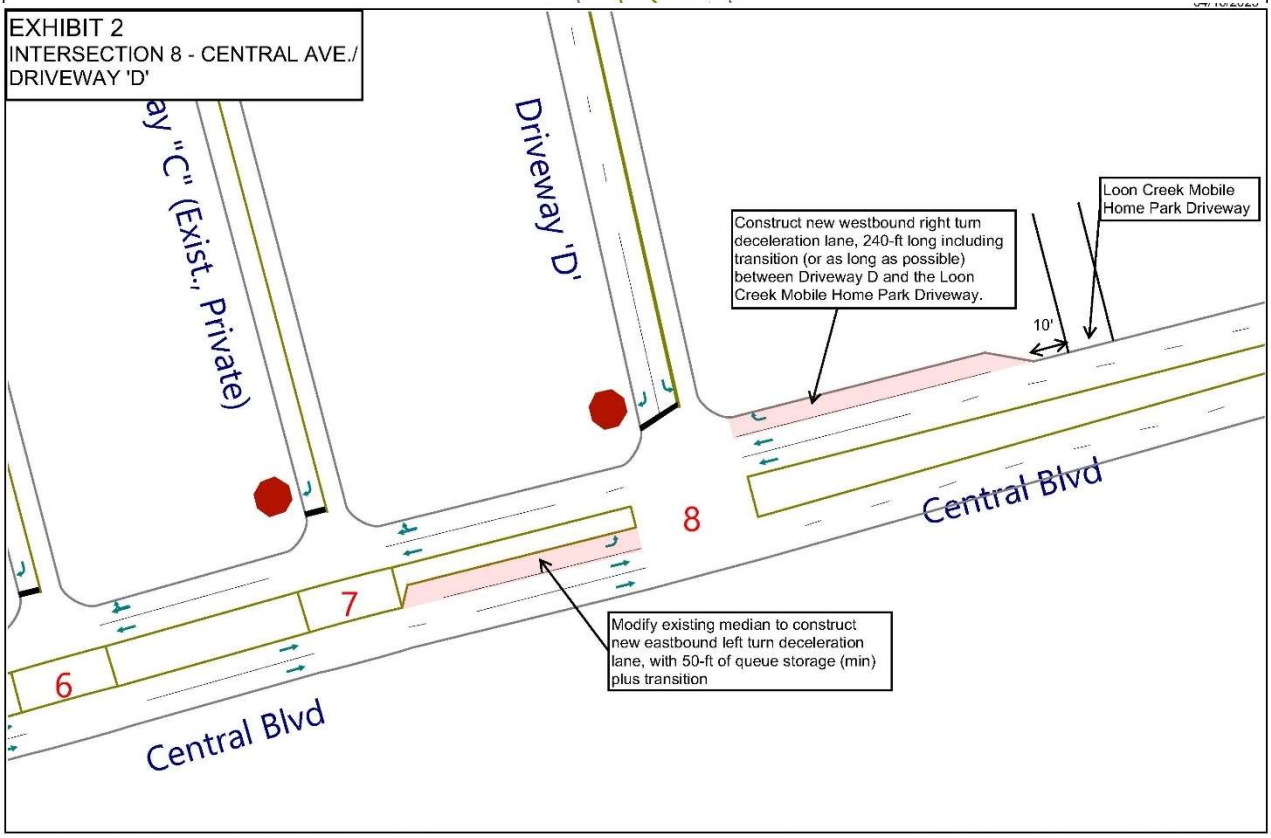
EXHIBIT 2
INTERSECTION 8 - CENTRAL AVE./ DRIVEWAY 'D'
Driveway "C" (Exist., Private)
Driveway 'D'
Loon Creek Mobile Home Park Driveway
Construct new westbound right turn deceleration lane, 240-ft long including transition (or as long as possible) between Driveway D and the Loon Creek Mobile Home Park Driveway.
10'
Central Blvd
8
7
6
Modify existing median to construct new eastbound left turn deceleration lane, with 50-ft of queue storage (min) plus transition
Central Blvd

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7707 West Central Ave., Albuquerque, NM
FINAL Traffic Impact Study

Table of Contents

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7707 West Central Ave., Albuquerque, NM
FINAL Traffic Impact Study

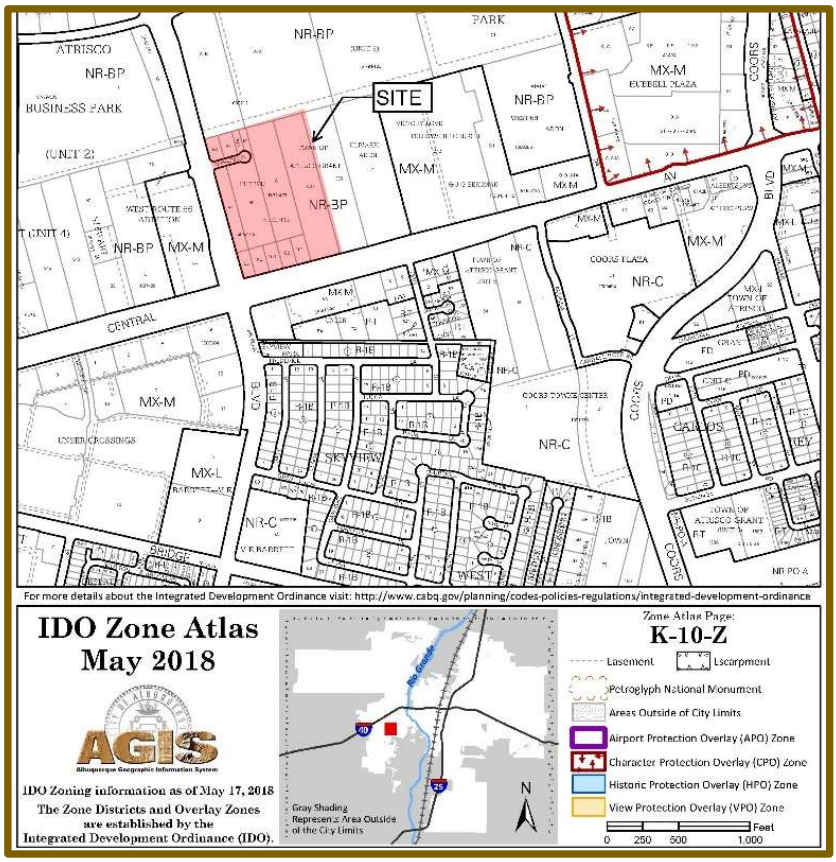
Purpose

The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed commercial development (by Ed Garcia) to determine the impact of the project on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared in accordance with the requirements of the City of Albuquerque (COA), Traffic Engineering Department. The Scope of Work and COA's Comments on the Draft TIS and related correspondence are in Appendix pgs. A-128 thru A-135.

Project Description

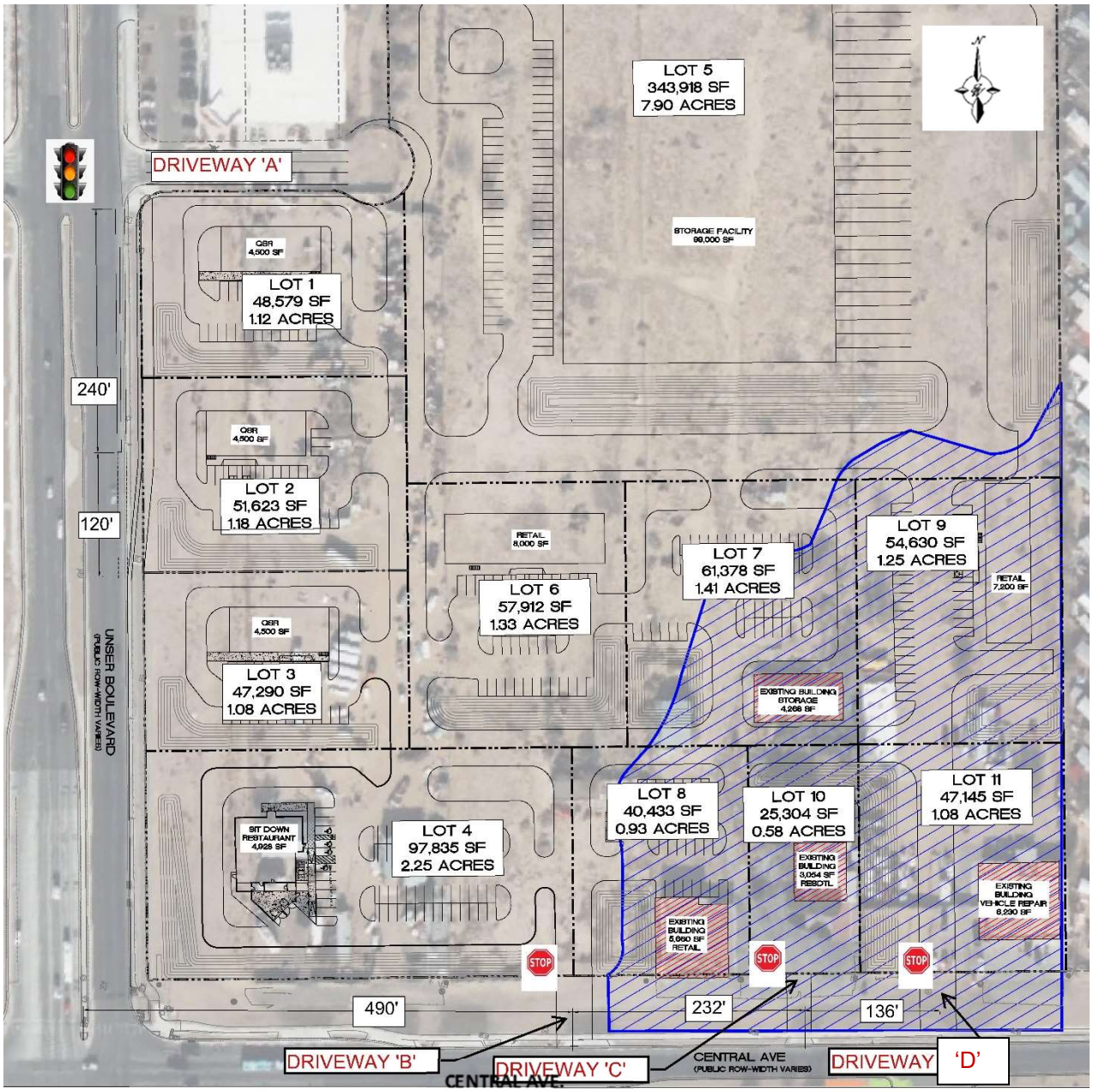
Location

The proposed Commercial Development is located within the City of Albuquerque, New Mexico at the north east corner of Central Ave. and Unser Blvd. at 7707 West Central Ave. See the vicinity map below and Appendix page A-1.



Proposed Land Uses

The proposed commercial development will be comprised of warehousing, an automotive service center, quick-serve restaurants, a sit-down restaurant, and four undefined retail spaces. See the site plan below.



Access

The Central & Unser Commercial Development is to be accessed via five proposed commercial driveways and one existing public roadway. Currently on the site, there are six access driveways so the proposed development will reduce the number of access points. Primary access will be via Sarracino Pl (Driveway A) which is an existing unsignalized full access roadway on Unser Blvd., however, based on the signal warrant analysis presented in this report, it is recommended to replace the two-way stop control with a traffic signal. The secondary access (Driveway E) is proposed to be a full access unsignalized driveway on the south side of the project on Central Blvd. (approximately 850 feet east of Unser Blvd. – centerline to centerline). All other access (Driveways B, C, D, & F) are proposed as restricted access driveways, right-in/right-out only. The site plan on the previous page shows the access locations.

Implementation Year and Horizon Year

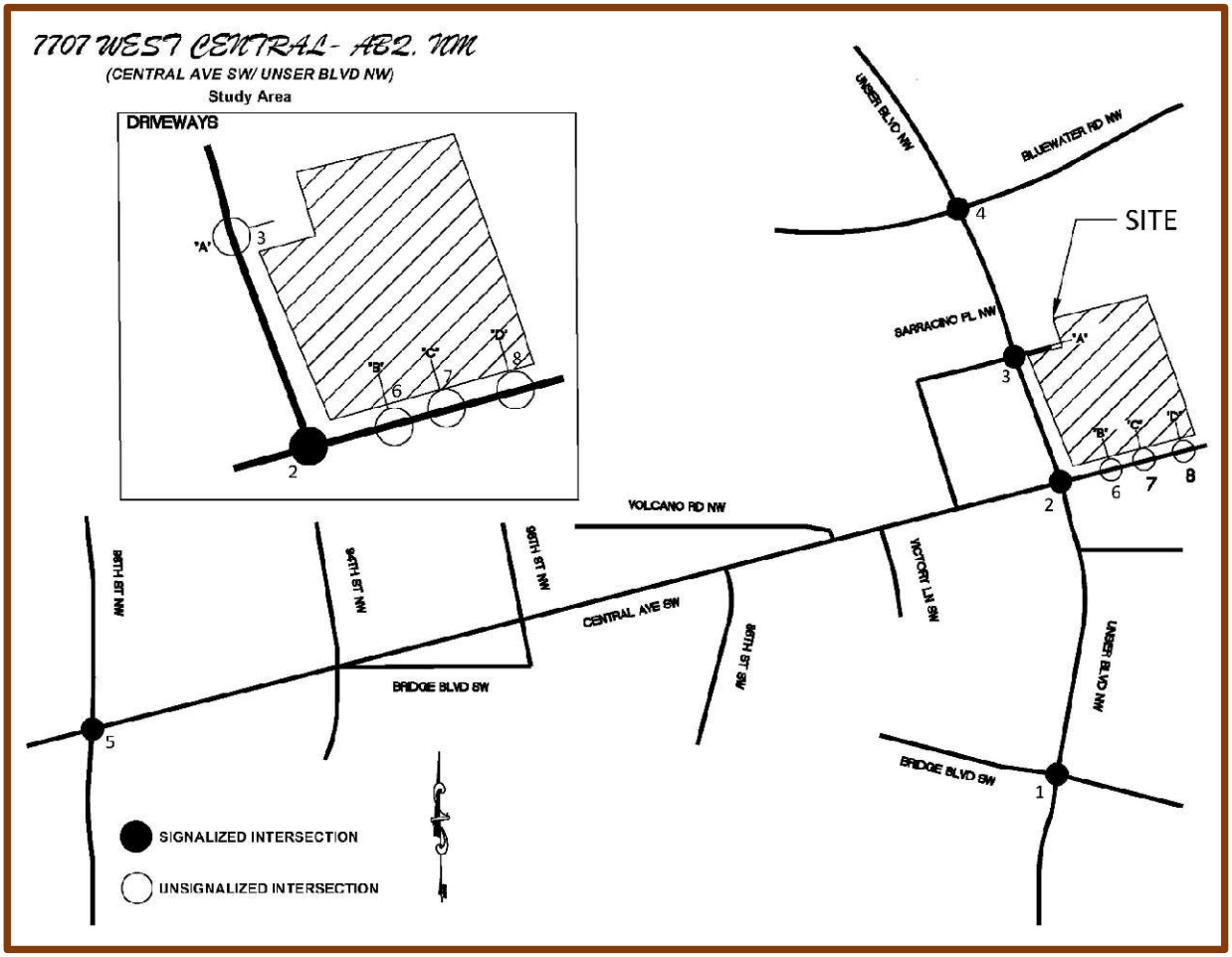
The anticipated implementation year for this project is 2025 and the horizon year is 2035.

Study Area

Intersections

The study area includes four existing signalized intersections, one existing unsignalized intersection (proposed as a signalized access), and five proposed unsignalized driveways as listed below:

1. Unser Blvd / Bridge Blvd (Signalized)
2. Unser Blvd / Central Ave. (Signalized)
3. Unser Blvd / Sarracino Pl. (Driveway A) (Existing: Unsignalized, Proposed: Signalized)
4. Unser Blvd / Bluewater Rd. (Signalized)
5. Central Ave / 98th St. (Signalized)
6. Central Ave / Driveway B (Unsignalized – Right-in, right-out ONLY)
7. Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)
8. Central Ave / Driveway D (Unsignalized – Full Access)



Existing Land Uses

The project spans 19.5 acres across 10 parcels, with 25% developed by three small light industrial businesses and one residential home, most of which will remain. No credit for existing trips is included in the calculations. All adjacent parcels are fully developed, and the influence area extends a 2-mile radius from the development.

The site is zoned NR-BR, Non-residential, Business Park. The purpose of the NR-BP zone district is to accommodate a wide range of nonresidential uses in campus-like settings to buffer potential impacts on surrounding uses and adjacent areas. Allowable uses include a wide variety of office, commercial, research, industrial, distribution, showroom, processing, and institutional uses.

Other Planned or Approved Development and Transportation Improvements

There are no known planned or approved developments or transportation projects in the study area.

Existing Roadways and Bikeways

Unser Blvd. is classified as a **Regional Principal Arterial** roadway on the Mid-Region Council of Governments Long Range Roadway System map. It is a six-lane roadway with a raised divided median, curbs, and gutters. The posted speed limit is 40-mph. There are existing pedestrian facilities (sidewalks) on both sides of Unser Blvd. There are existing bike lanes in both directions and a bike/pedestrian path fronting the project. It has a bi-directional traffic flow of 27,400 Average Annual Weekday Traffic (AAWT).

Central Ave. is classified as a **Community Principal Arterial** roadway on the Mid-Region Council of Governments Long Range Roadway System map. It is a four-lane roadway with curbs and gutters and a raised median. The posted speed limit is 35-mph. There are pedestrian facilities along both sides of the road and bike lanes fronting the project in both directions. It has a bi-directional traffic flow of 18,500 AAWT.

Bridge Blvd. is classified as a **Major Collector** roadway on the Mid-Region Council of Governments Long Range Roadway System map. It is a two-lane roadway with curbs and gutters but no median. The posted speed limit is 40-mph. There are pedestrian facilities along both sides of the road and bike lanes fronting the project in both directions. It has a bi-directional traffic flow of 6,000 AAWT.

Sarracino Place is an unclassified local roadway that only services the commercial developments on the east and west side of Unser Blvd., north of Central Ave. It is a two-lane roadway with curbs and gutters. Sidewalks run along only one side of the street and there are no bike lanes or paths. The posted speed limit is 10-mph. It has a traffic flow of 400 AAWT eastbound and 160 AAWT westbound.

98th Street
is classified as a **Community Principal Arterial** roadway on the Mid-Region Council of Governments Long Range Roadway System map. It is a four-lane roadway with a raised divided median, curbs, and gutters. The posted speed limit is 45-mph. There are existing pedestrian facilities (sidewalks) on both sides of 98th Street. There are existing bike lanes in both directions. It has a bi-directional traffic flow of 36,900 Average Annual Daily Traffic (AAWT).

Bluewater Rd.
is classified as a **Major Collector** roadway on the Mid-Region Council of Governments Long Range Roadway System map. It is a two-lane roadway with curbs and gutters but no median. The posted speed limit is 40-mph. There are pedestrian facilities along both sides of the road and bike lanes on both sides only on the eastern approach at Unser Blvd. The western approach has no bike lanes. It has a bi-directional traffic flow of 7,100 AAWT.

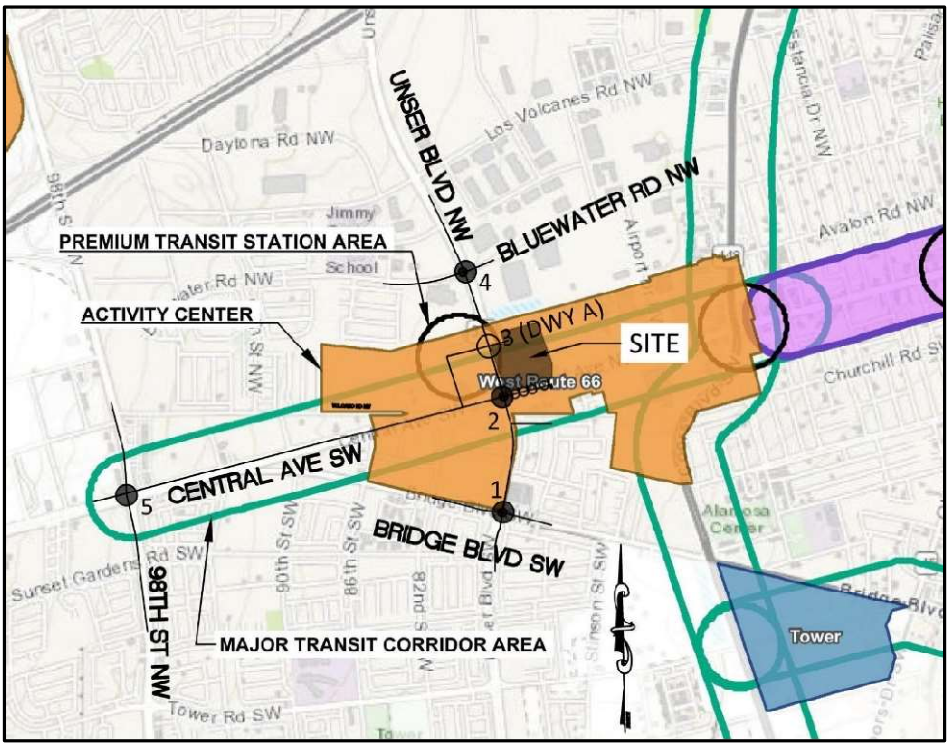
All existing intersections in the study area have adequate **lighting**.

ABC Comprehensive Plan Land Use and Transportation

The Albuquerque/Bernalillo County (ABC) Comprehensive Plan is primarily a land use document for growth and development within Albuquerque's municipal limits and unincorporated portions of Bernalillo County.

The site is located with an Activity Center as defined in the ABC Comprehensive Plan. Activity Centers provide convenient, day-to-day services at a neighborhood scale to serve the surrounding area within a 20-minute walk or a short bike ride. They are intended to provide a mix of neighborhood commercial and residential uses at a slightly higher density than the surrounding single-family homes.

A Premium Transit Station Area fronts the Unser Blvd. side of the site, and a Major Transit Corridor runs along the Central Ave. Premium Transit Station are anticipated to be served by high-quality, high-capacity, and high-frequency public transit. Major Transit Corridors are anticipated to be served by high frequency and local transit (e.g., Rapid Ride, local, and commuter buses). These corridors prioritize transit above other modes to ensure a convenient and efficient transit system. A map of the ABC Plan in the project area is shown below.



Portions of the regional transportation maps are provided in Appendix pages A-25 thru A-27 for information regarding 2019 Traffic Flow, Futures 2040 Long Range Roadway System, and Futures 2040 Long Range Bikeway System. There are no planned roadways or pedestrian/ bike lanes/paths in the vicinity of the site.

Trips Generated by the Development

The Institute of Traffic Engineers' (ITE) Trip Generation Manual classifies this development as having a combination of ITE Land Uses. The land uses for the subject property are as follows:

- 150 (Warehousing) — Lots 5 and 10
- 934 (Fast Food Restaurant w/ Drive-Thru Window) — Lots 1-3
- 932 (High Turnover (Sit-Down) Restaurant) — Lot 4
- 821 (Shopping Plaza 40-150K – No Supermarket) — Lots 6, 7, 8, 9 & 11
- 942 (Automobile Care Center) — Lot 12

Since the first iteration of the trip generation calculations, the site plan has changed. The warehouse component has expanded from 60,500 sq. ft. to 100,000 sq. ft. and the retail component has decreased from 56,800 sq. ft. to 32,3000 sq. ft. and an automobile care center has been added. Because the trip generation using the latest site plan yields slightly less trips than original site plan and to be conservative the trip generation data using the original site plan is used in the analysis.

A summary of the calculated trip generation rate projected for this project is as follows:

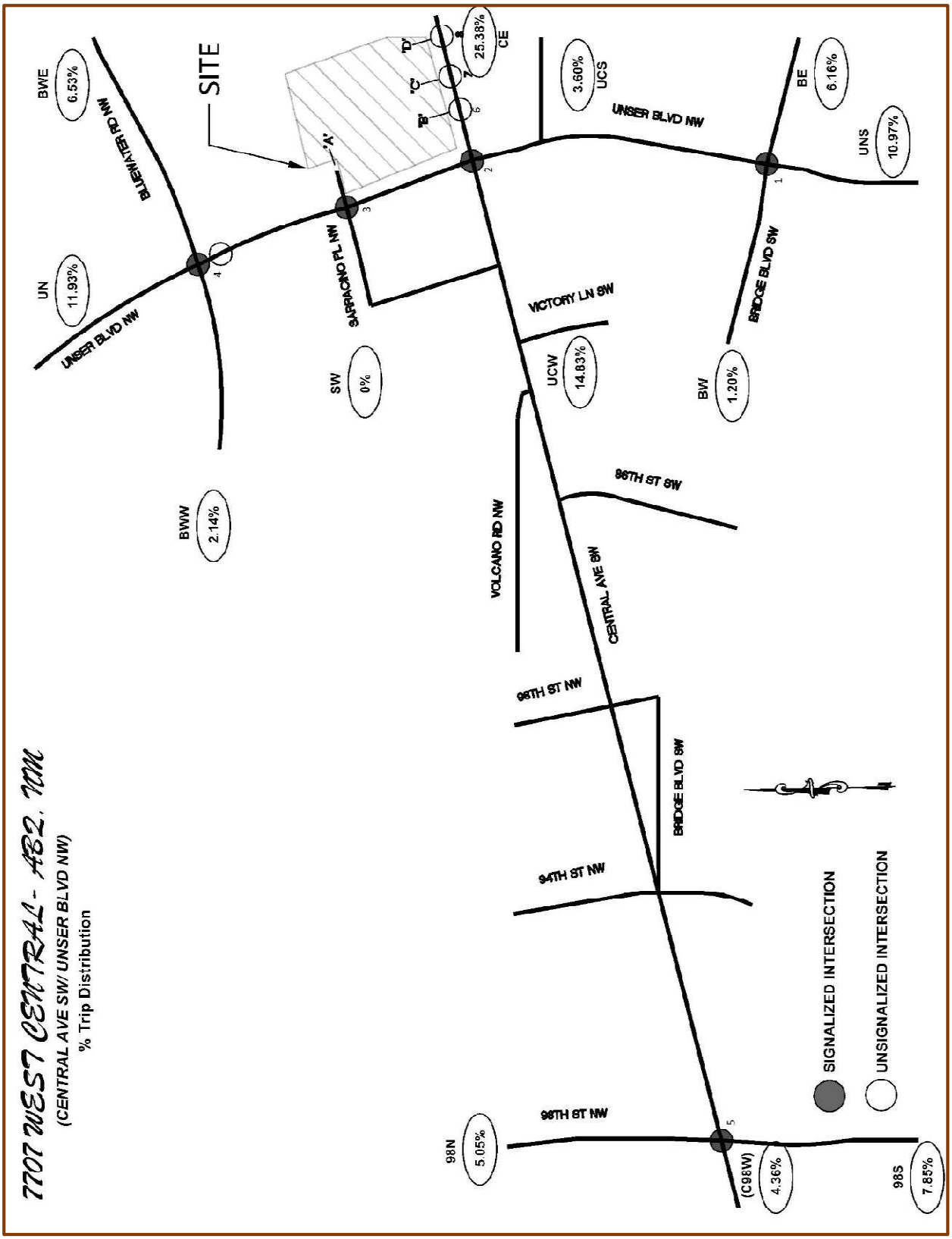
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

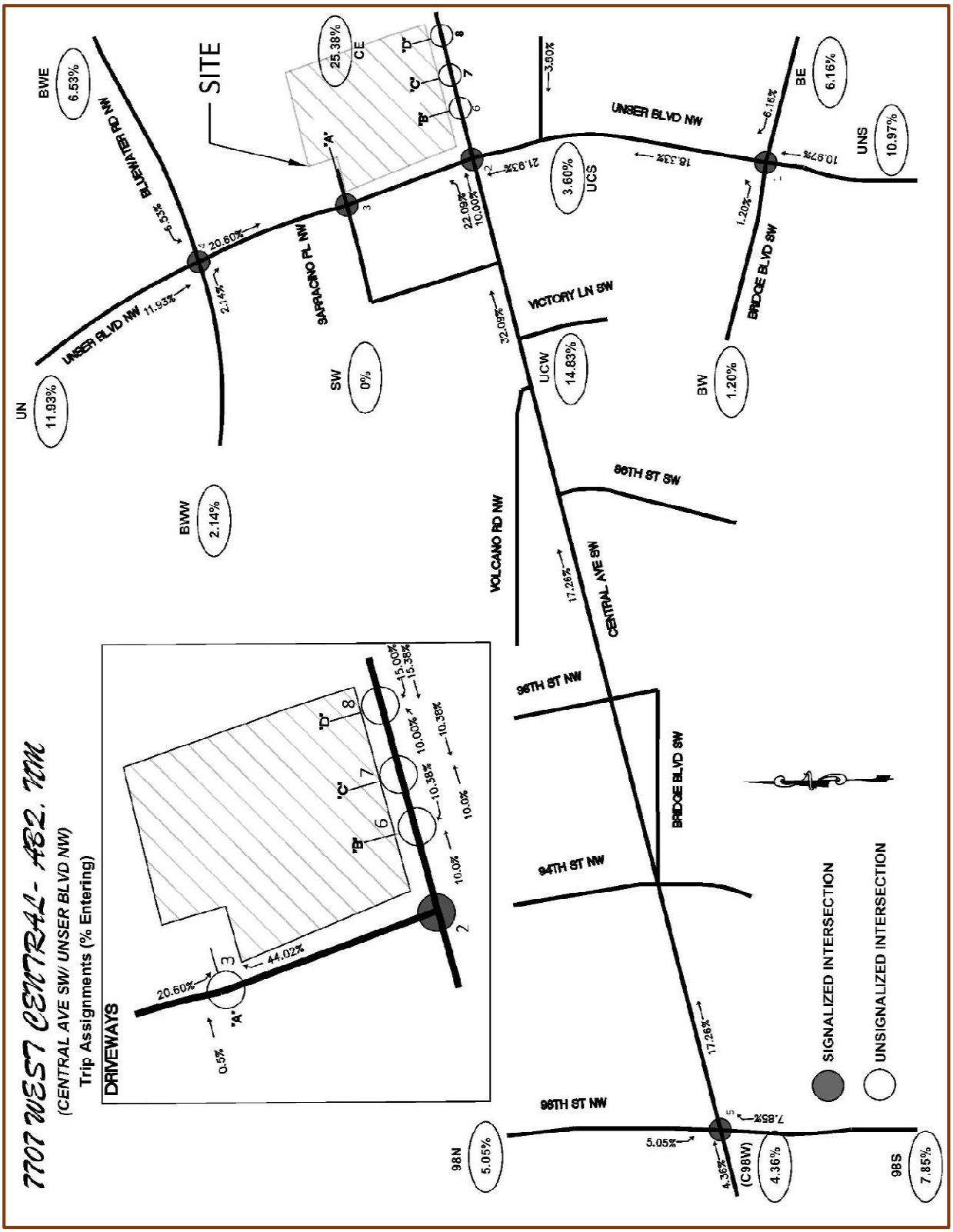
Based on Latest Site Plan with one 100,000 s.f. Warehouse on Lots 5 & 10

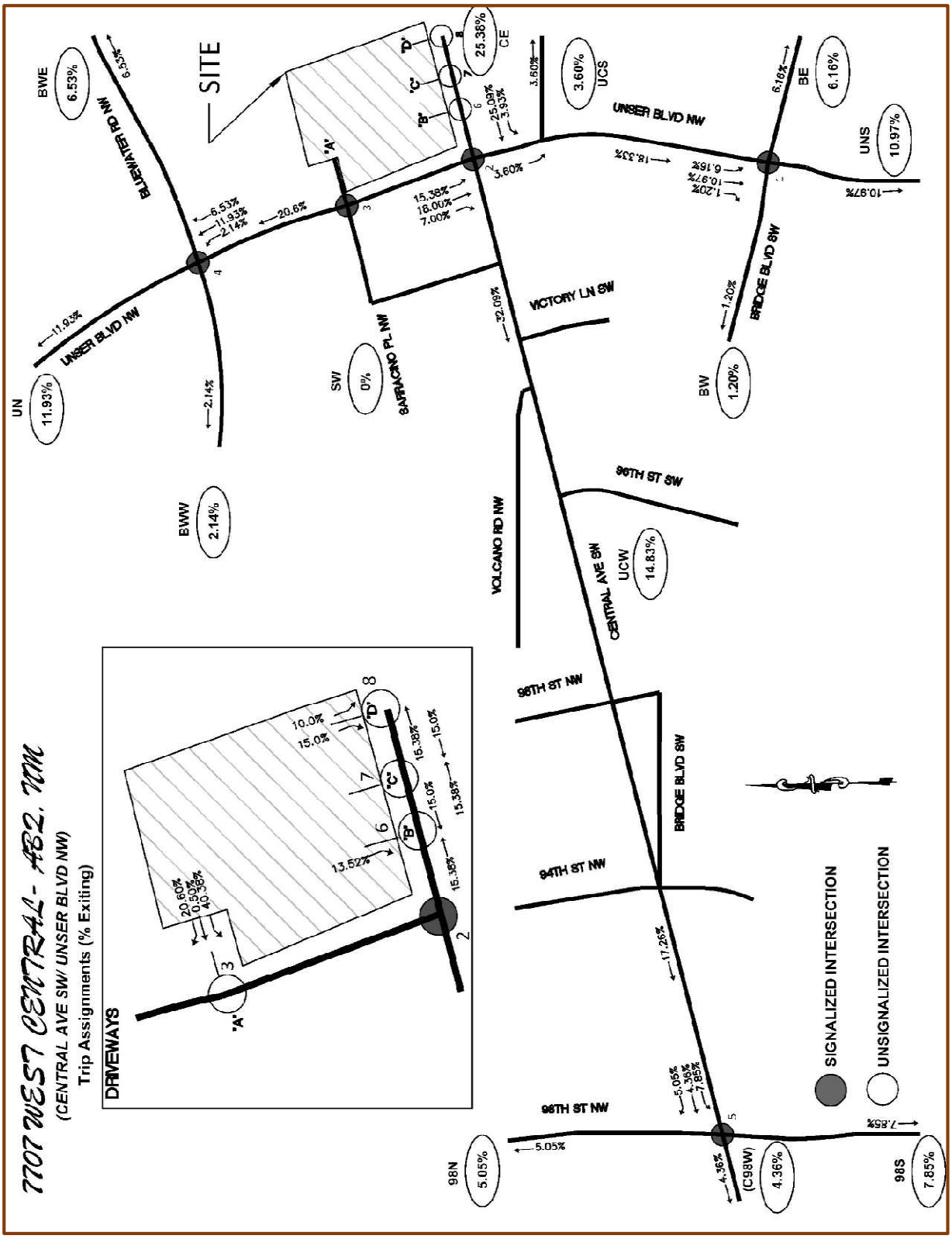
USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
DESCRIPTION		*GROSS*	*ENTER*	*EXIT*	*ENTER*	*EXIT*
Summary Sheet	Units (1k ft^2)					
Warehousing (150)	100.00	171	13	4	5	13
Fast Food Restaurant w/ Drive-Thru Window (934)	13.50	6,311	307	295	232	214
High Turnover (Sit-Down) Restaurant (932)	4.93	528	26	21	27	17
Shopping Plaza 40 - 150K - No Supermarket (821)	32.30	2,181	35	21	82	85
Automobile Care Center (942)	6.30	-	9	5	13	14
Subtotal		**9,191**	**390**	**346**	**359**	**343**
Pass-By Trips	35%		*-137*	*-121*	*-126*	*-120*
Total Primary Trips	Trips based on latest site		**253**	**225**	**233**	**223**
	Trips based on old site plan		**281**	**233**	**266**	**270**
	Difference*		**(28)**	**(8)**	**(33)**	**(47)**

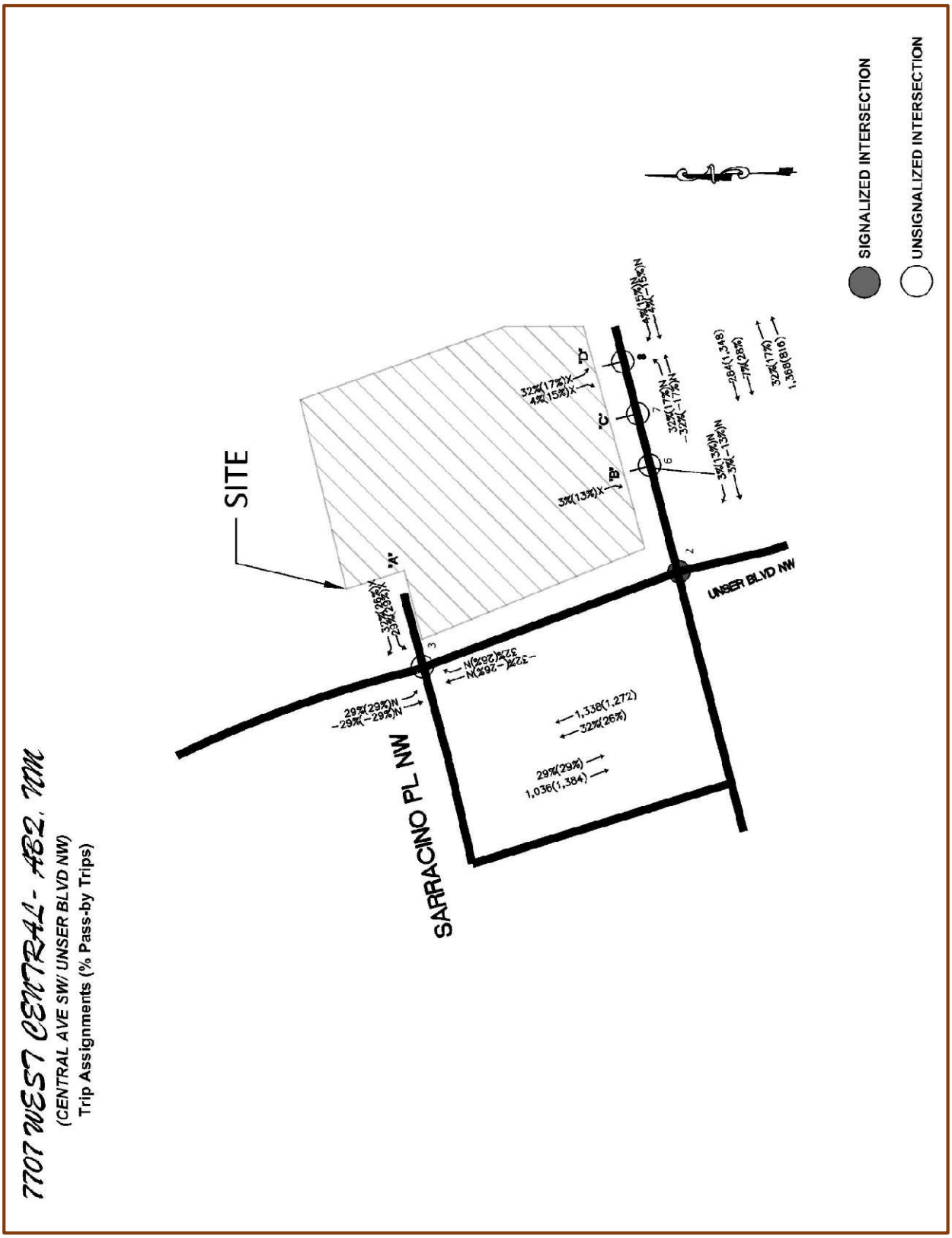
Trip Distribution

Trip Distribution and Trip Assignments of the newly generated traffic are based on interpolated 2016 and 2040 Socioeconomic Forecasts by Data Analysis Subzones (DASZ) for the Mid-Region of New Mexico as published by the Mid-Region Council of Governments (MRCOG). New Trips were distributed proportionally based on distribution of population withing a two-mile radius of the project. See Appendix pages A-8 thru A-18 for trip distribution data and diagrams.


7707 WEST CENTRAL - AB2, 10M
(CENTRAL AVE SW/ UNSER BLVD NW)
% Trip Distribution
SITE
BWE
6.53%
BLUEWATER RD NW
UN
11.93%
UNSER BLVD NW
BWW
2.14%
SW
0%
SARRACINO PL NW
25.38%
CE
UCS
3.60%
UNSER BLVD NW
BE
6.16%
UNS
10.97%
BRIDGE BLVD SW
BW
1.20%
VICTORY LN SW
UCW
14.83%
96TH ST SW
VOLCANO RD NW
CENTRAL AVE SW
98TH ST NW
BRIDGE BLVD SW
94TH ST NW
98N
5.05%
98TH ST NW
(C98W)
4.36%
98S
7.85%
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION


7707 WEST CENTRAL - 482. TCM
(CENTRAL AVE SW/ UNSER BLVD NW)
Trip Assignments (% Entering)
DRIVEWAYS
SITE
BWE
6.53%
BLEMITER RD NW
UNSER BLVD NW
UN
11.93%
BWW
2.14%
SARRACINO PL NW
SW
0%
CE
25.38%
UCS
3.60%
VICTORY LN SW
UCW
14.83%
VOLCANO RD NW
BE
6.16%
UNS
10.97%
BRIDGE BLVD SW
BW
1.20%
96TH ST SW
CENTRAL AVE SW
98TH ST NW
BRIDGE BLVD SW
94TH ST NW
98TH ST NW
98N
5.05%
(C98W)
4.36%
98S
7.85%
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION


7707 WEST CENTRAL - AB2, NM
(CENTRAL AVE SW/ UNSER BLVD NW)
Trip Assignments (% Exiting)
SITE
DRIVEWAYS
UNSER BLVD NW
BLUEWATER RD NW
BARRACINO PL NW
VICTORY LN SW
VOLCANO RD NW
CENTRAL AVE SW
96TH ST SW
98TH ST NW
96TH ST NW
94TH ST NW
BRIDGE BLVD SW
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
BWE 6.53%
UN 11.93%
BWW 2.14%
SVI 0%
CE 25.38%
UCS 3.60%
BE 6.16%
UNS 10.97%
BW 1.20%
UCW 14.83%
98N 5.05%
(C98W) 4.36%
98S 7.85%


7707 WEST CENTRAL - ABQ, NM
(CENTRAL AVE SW/ UNSER BLVD NW)
Trip Assignments (% Pass-by Trips)
SITE
SARRACINO PL NW
UNSER BLVD NW
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
29%(29%)W
29%(29%)N
32%(26%)N
32%(26%)N
1,338(1,272)
32%(26%)
29%(29%)
1,036(1,384)
32%(26%)X
29%(29%)X
3%(13%)X
32%(17%)X
4%(15%)X
3%(13%)N
32%(17%)N
4%(15%)N
29%(1,348)
32%(17%)
1,368(18)

Traffic Volumes

Existing, NO BUILD, and BUILD traffic volumes used in the 2025 and 2035 analysis are presented in the tables in Appendix pages A-28 thru A-37 and A-38 thru A-47, respectively.

Existing Traffic Volumes

Existing traffic volumes are based on traffic counts collected in the field on Wednesday, May 4, 2022 and Thursday, May 5, 2022. Counts were collected at Intersections 1 (Unser Blvd / Bridge Blvd), 2 (Unser Blvd / Central Ave.), 3 (Unser Blvd / Sarracino Pl.) , 4 (Unser Blvd / Bluewater Rd.), and 5 (Central Ave / 98th St.). Existing traffic volumes at the proposed driveways were extrapolated from the traffic counts at Intersections 2 and 3. See Appendix pages A-123 thru A-127 for the traffic count data.

NO BUILD Traffic Volumes

NO BUILD Traffic Volumes equal the sum of existing volumes, background growth volumes, and trips generated by other projects in the study area that have been recently approved or are under construction.

Background growth volumes are traffic volumes generated by applying background growth rates to the existing traffic volumes. Background growth rates are calculated using 2009 -2018 Average Weekday Traffic Flows (AWDT) published by the Mid-Region Council of Governments (MRCoG). Graphs of the AWDT values and the linear regression line shows growth rates at the study area intersections ranging from 1.87% to 4%. The growth rate graphs are presented in Appendix pages A-3 thru A-7.

There are no **trips generated by other developments** in the study area.

BUILD Traffic Volumes

BUILD Traffic Volumes are equal to the sum of the NO BUILD Traffic Volumes and the trips generated by the project. Project trips are distributed to each turning movement according to the trip distribution defined on pages 7 thru 10.

Level of Service

Acceptable Level of Service (LOS) as defined in the City of Albuquerque Development Process Manual (DPM) for a Premium Transit Station (Unser Blvd. project frontage) and a Major Transit Corridor (Central Ave. project frontage) in an Activity Center is shown in the table below. Also refer to page 5 for a map and definition of the center type and functional classification. Driveway A and Driveway F may operate at LOS=E or F because of the anticipated frequency and capacity of public transportation in the Premium Transit Station. All intersections in the study area along Central Ave. may operate at LOS=E since they are in a Major Transit Corridor. Intersection 1, Bridge Blvd./Unser Blvd. is the only intersection not in a defined transit corridor so it should operate at LOS=D or better.

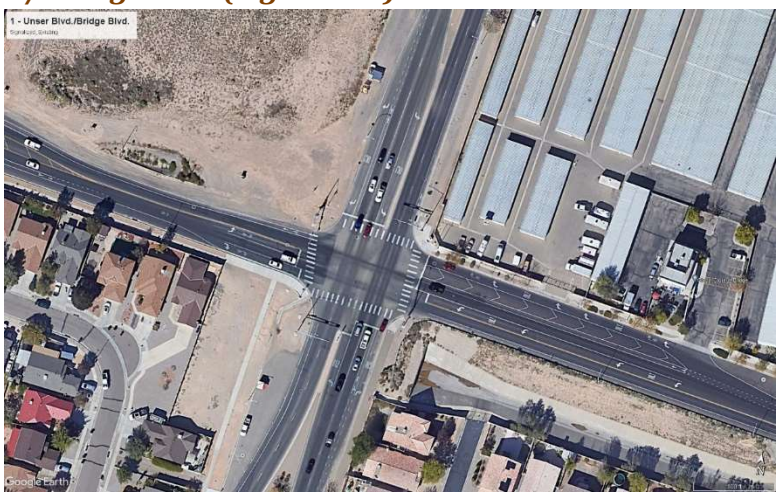
TABLE 7.5.88 **Desired LOS by Location and Corridor Type**

Functional Classification & Roadway Type	ABC Comp Plan Center Type							INTERSECTIONS
	Transit Station Area	Downtown	Urban Center	Activity Center	Village Center	Employment Center	Outside Center	
Premium Transit	E-F	E-F	E-F	E-F	E-F	E-F	E-F	3 &10
Major Transit	E	E-F	E	E	D-E	D-E	D-E	2 , 4, 5, 6, 7, 8, & 9
Multi-modal	E	E	E	E	D-E	D-E	D-E	
Commuter	E	E	D-E	D-E	D-E	D-E	D	
Other Arterial	E	E	E	D-E	D-E	D-E	D	1
Minor Arterial	E	E	D-E	D-E	D-E	D	D	
Collector	E	D-E	D	D	C-D	C-D	C-D	

Capacity and Queuing Analysis Results

A capacity analysis of the study area intersections was conducted in accordance with the Highway Capacity Manual (HCM6) V.6. A single period analysis was conducted on the two driveway intersections using Synchro 11 (Build 11.1.2.9) modeling software. See Appendix pages A-48 thru A-119 for detailed results of the analysis. Summaries of the analysis results for the 2023 Implementation Year are presented in the following sections:

1 - Unser Blvd / Bridge Blvd (Signalized)



Intersection 1 - Capacity Analysis

2025 and 2035 LOS (Capacity) Analysis of this intersection demonstrates that the proposed development will have minimal impact on the LOS and delays for the 2025 AM and PM BUILD conditions. The Intersection Level of Service (LOS) remains consistent at LOS C or better between the NO BUILD and BUILD scenarios, with vehicle delays increasing by less than two seconds. All turning movements maintain LOS D or better, except for the eastbound left turn (EBL), which continues to operate at LOS E in 2035—a condition that exists today and is not impacted by the proposed development. However, storage capacity is inadequate for both the EBL and the eastbound right (EBR) turn lanes. The EBL queue exceeds available storage in all scenarios, with the most significant overage occurring during the 2035 AM peak, where the queue surpasses capacity by approximately 250 feet, reaching a total length of 340 feet. Additionally, the EBR queue slightly exceeds capacity during the 2035 AM and PM peak periods, though only by less than the length of one vehicle. Refer to Appendix A-48 thru A-59 for Synchro analysis reports.

Intersection 1 - Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacity is adequate at all movements in the study area during the **2025** implementation year and **2035** horizon year except the eastbound left (EBL), eastbound right (EBR), and westbound left (WBL) lanes. The queue capacity of the EBL lane is exceeded for all conditions with the worst case being the **2035** AM peak hour when the queue lengths for the NO BUILD and BUILD conditions exceed the existing lane capacity by 230-ft. to a total queue length of 320-ft. ***The development does not contribute traffic to these movements, so no mitigation on behalf of the development is recommended. However, the City of Albuquerque should consider restriping the EBL lane to extend the lane from 90-ft to 330-ft to provide adequate queuing capacity in the EBL lane through 2035.*** The EBR and WBL queue capacities are only exceeded by less than 1-vehicle length during the **2035** AM and PM peak hours so no mitigation is recommended for these lanes either.

1: Unser Blvd & Bridge Blvd.

2025 LVAM

Signalized

Bridge Blvd.	EB (Bridge Blvd.)			WB (Bridge Blvd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	166	125	99	54	134	85	40	1,277	90	81	694	40
V/C Ratio	0.66	0.30	0.28	0.21	0.32	0.24	0.08	0.59	0.09	0.30	0.31	0.04
Level-of-Service	D	D	D	D	D	D	A	B	A	B	B	A
Control Delay (Seconds)	54.1	39.1	38.9	43.9	39.3	38.5	8.9	15.3	9.8	12.5	10.8	8.7
Intersection LOS	**C - 20.2**											
95th Percentile Queue (veh)	8.8	5.5	4.4	2.6	6.0	3.7	0.7	15.2	1.7	1.4	7.3	0.7
Queue Storage Ratio	2.44		0.73	0.41		0.25	0.18		0.34	0.22		0.10
Existing Queue Capacity (ft)	90		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	130		0	0		0	0		0	0		0
BUILD VOLUMES	166	125	116	57	134	85	40	1,308	90	95	720	43
V/C Ratio	0.66	0.30	0.33	0.23	0.32	0.24	0.09	0.61	0.09	0.35	0.33	0.04
Level-of-Service	D	D	D	D	D	D	A	B	B	B	B	A
Control Delay (Seconds)	54.0	39.0	39.5	44.1	39.3	38.4	9.1	16.0	10.0	13.4	11.0	8.7
Intersection LOS	**C - 20.5**											
95th Percentile Queue (veh)	8.8	5.5	5.2	2.7	6.0	3.7	0.7	15.8	1.8	1.7	7.6	0.8
Queue Storage Ratio	2.44		0.87	0.42		0.25	0.18		0.36	0.27		0.11
Existing Queue Capacity (ft)	90		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	130		0	0		0	0		0	0		0
Mitigage Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
Restripe West Leg of Intersection to extend EBL lane from 90' to 230'												
BUILD VOLUMES	166	125	116	57	134	85	40	1,308	90	95	720	43
V/C Ratio	0.65	0.29	0.32	0.22	0.32	0.24	0.09	0.61	0.09	0.36	0.33	0.04
Level-of-Service	D	D	D	D	D	D	A	B	B	B	B	A
Control Delay (Seconds)	53.0	38.8	39.3	43.9	39.1	38.2	9.1	16.1	10.0	13.6	11.1	8.8
Intersection LOS	**C-20.5**											
95th Percentile Queue (veh)	8.7	5.5	5.2	2.7	5.9	3.7	0.7	15.9	1.8	1.7	7.7	0.8
Queue Storage Ratio	0.95		0.87	0.42		0.25	0.18		0.36	0.27		0.11
Existing Queue Capacity (ft)	230		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	0		0	0		0	0		0	0		0
PM Peak Hour												
NO BUILD VOLUMES	125	139	54	90	130	121	49	1,004	22	90	1,371	137
V/C Ratio	0.59	0.38	0.17	0.42	0.36	0.39	0.20	0.44	0.02	0.23	0.60	0.13
Level-of-Service	D	D	D	D	D	D	B	B	A	A	B	A
Control Delay (Seconds)	54.1	42.8	40.5	50.8	42.5	43.1	10.6	11.4	7.9	8.6	13.0	8.2
Intersection LOS	**B - 18.6**											
95th Percentile Queue (veh)	6.8	6.5	2.4	4.7	6.0	5.7	0.8	10.4	0.4	1.4	14.7	2.4
Queue Storage Ratio	1.89		0.40	0.73		0.38	0.20		0.08	0.22		0.34
Existing Queue Capacity (ft)	90		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	80		0	0		0	0		0	0		0
BUILD VOLUMES	125	139	70	93	130	121	49	1,033	22	107	1,401	137
V/C Ratio	0.59	0.38	0.23	0.44	0.36	0.39	0.20	0.46	0.02	0.28	0.61	0.13
Level-of-Service	D	D	D	D	D	D	B	B	A	A	B	A
Control Delay (Seconds)	54.0	42.7	41.0	51.1	42.4	43.1	11.0	11.9	8.1	9.1	13.2	8.2
Intersection LOS	**B - 18.9**											
95th Percentile Queue (veh)	6.8	6.5	3.2	4.9	6.0	5.7	0.8	10.8	0.4	1.6	15.2	2.4
Queue Storage Ratio	1.89		0.5	0.8		0.4	0.2		0.1	0.3		0.3
Existing Queue Capacity (ft)	90		150.0	160.0		375.0	100.0		125.0	160.0		175.0
Additional Queue Length Required (ft)	80		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Mitigated Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
Restripe West Leg of Intersection to extend EBL lane from 90' to 230'												
BUILD VOLUMES	125	139	70	93	130	121	49	1,033	22	107	1,401	137
V/C Ratio	0.58	0.38	0.22	0.43	0.35	0.39	0.21	0.46	0.02	0.28	0.61	0.13
Level-of-Service	D	D	D	D	D	D	B	B	A	A	B	A
Control Delay (Seconds)	53.8	42.6	40.9	50.9	42.3	42.9	11.1	12.0	8.1	9.1	13.3	8.3
Intersection LOS	**B - 18.9**											
95th Percentile Queue (veh)	6.8	6.5	3.2	4.9	6.0	5.7	0.8	10.9	0.4	1.7	15.2	2.4
Queue Storage Ratio	0.7		0.5	0.8		0.4	0.2		0.1	0.3		0.3
Existing Queue Capacity (ft)	230.0		150.0	160.0		375.0	100.0		125.0	160.0		175.0
Additional Queue Length Required (ft)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0

1: Unser Blvd & Bridge Blvd.

2035 LVAM

Bridge Blvd.	EB (Bridge Blvd.)			WB (Bridge Blvd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	225	170	134	73	182	116	55	1,733	122	109	942	55
V/C Ratio	0.88	0.35	0.32	0.28	0.37	0.28	0.16	0.87	0.14	0.64	0.46	0.06
Level-of-Service	E	C	C	D	D	C	B	C	B	C	B	B
Control Delay (Seconds)	78.8	36.5	36.3	43.3	36.9	35.8	11.9	27.6	12.6	31.7	15.0	10.9
Intersection LOS	**C - 28.4**											
95th Percentile Queue (veh)	13.6	7.3	5.7	3.5	7.8	0.1	1.1	27.9	2.8	3.5	11.3	1.1
Queue Storage Ratio	3.78		0.95	0.55		0.01	0.28		0.56	0.55		0.16
Existing Queue Capacity (ft)	90		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	250		0	0		0	0		0	0		0
BUILD VOLUMES	225	170	151	76	182	116	55	1,764	122	123	968	58
V/C Ratio	0.88	0.35	0.37	0.30	0.37	0.28	0.16	0.89	0.14	0.72	0.47	0.06
Level-of-Service	E	D	D	D	D	D	B	C	B	D	B	B
Control Delay (Seconds)	78.8	36.5	36.9	43.5	36.9	35.8	12.1	29.5	12.8	37.3	15.2	11.0
Intersection LOS	**C - 29.4**											
95th Percentile Queue (veh)	13.6	7.3	6.5	3.6	7.8	0.1	1.1	29.3	2.8	4.3	11.7	1.2
Queue Storage Ratio	3.78		1.08	0.56		0.01	0.28		0.56	0.67		0.17
Existing Queue Capacity (ft)	90		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	250		13	0		0	0		0	0		0
Mitigage Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
Restripe West Leg of Intersection to extend EBL lane from 90' to 330'												
BUILD VOLUMES	225	170	151	76	182	116	55	1,764	122	123	968	58
V/C Ratio	0.82	0.33	0.34	0.27	0.35	0.26	0.15	0.82	0.13	0.66	0.44	0.06
Level-of-Service	E	C	D	D	D	C	A	C	B	C	B	A
Control Delay (Seconds)	66.4	34.8	35.1	41.5	35.1	34.1	9.5	21.8	10.1	33.3	12.0	8.7
Intersection LOS	**C - 24.0**											
95th Percentile Queue (veh)	12.6	7.1	6.4	3.5	7.6	4.8	1.0	25.1	2.4	4.6	10.3	1.0
Queue Storage Ratio	0.95		1.07	0.55		0.32	0.25		0.48	0.72		0.14
Existing Queue Capacity (ft)	330		150	160		375	100		125	160		175
Additional Queue Length Required (ft)	0		10	0		0	0		0	0		0
PM Peak Hour												
NO BUILD VOLUMES	170	188	73	122	176	164	67	1,362	30	122	1,860	182
V/C Ratio	0.69	0.39	0.18	0.48	0.37	0.40	0.49	0.68	0.03	0.48	0.90	0.20
Level-of-Service	E	D	C	D	D	D	C	C	B	B	C	B
Control Delay (Seconds)	56.8	37.5	34.9	48.0	37.2	37.8	30.8	20.2	11.5	18.2	29.1	12.2
Intersection LOS	**C - 28.0**											
95th Percentile Queue (veh)	9.3	8.1	3.0	6.2	7.6	7.2	2.1	18.7	0.6	2.5	30.6	4.1
Queue Storage Ratio	2.58		0.50	1.0		0.48	0.53		0.12	0.39		0.59
Existing Queue Capacity (ft)	90		150	160.0		375	100		125	160		175
Additional Queue Length Required (ft)	143		0	0.0		0	0		0	0		0
BUILD VOLUMES	170	188	89	125	176	164	67	1,391	30	139	1,890	185
V/C Ratio	0.69	0.39	0.22	0.50	0.37	0.40	0.51	0.70	0.03	0.55	0.92	0.20
Level-of-Service	E	D	D	D	D	D	C	C	B	C	C	B
Control Delay (Seconds)	56.8	37.5	35.4	48.4	37.2	37.8	31.8	21.1	11.8	20.2	30.6	12.3
Intersection LOS	**C - 28.9**											
95th Percentile Queue (veh)	9.3	8.1	3.7	6.4	7.6	7.2	2.1	19.5	0.6	2.9	31.8	4.2
Queue Storage Ratio	2.58		0.6	1.0		0.5	0.5		0.1	0.5		0.6
Existing Queue Capacity (ft)	90		150.0	160.0		375.0	100.0		125.0	160.0		175.0
Additional Queue Length Required (ft)	143		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Mitigated Lane Geometry	1	1	1	1	1	1	1	2	1	1	2	1
Restripe West Leg of Intersection to extend EBL lane from 90' to 330'												
BUILD VOLUMES	170	188	89	125	176	164	67	1,391	30	139	1,890	185
V/C Ratio	0.68	0.39	0.22	0.49	0.36	0.40	0.51	0.70	0.03	0.57	0.92	0.20
Level-of-Service	D	D	D	D	D	D	C	C	B	C	C	B
Control Delay (Seconds)	54.9	37.1	35.0	47.8	36.8	37.4	32.2	21.0	11.7	21.4	31.5	12.5
Intersection LOS	**C - 29.1**											
95th Percentile Queue (veh)	9.1	8.0	3.7	6.4	7.6	7.2	2.1	19.5	0.6	3.1	32.3	4.3
Queue Storage Ratio	0.7		0.6	1.0		0.5	0.5		0.1	0.5		0.6
Existing Queue Capacity (ft)	330.0		150.0	160.0		375.0	100.0		125.0	160.0		175.0
Additional Queue Length Required (ft)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0

2 – Unser Blvd / Central Ave. (Signalized)

Intersection 2 – Capacity Analysis

2025 and 2035 LOS Analysis of this intersection demonstrates that the proposed development will have moderate impact on the LOS and delays for the 2025 and 2035 AM and PM BUILD conditions. In the NO BUILD condition, seven movements—EBL, EBT, EBR, WBL, WBR, NBL, and SBL—operate at LOS E or F, indicating significant operational challenges. In 2025, the intersection LOS remains unchanged for the AM peak, while PM peak LOS degrades from D (NO BUILD) to E (BUILD), with delay increases of less than 6 seconds per vehicle. By 2035, AM peak LOS declines from D (NO BUILD) to E (BUILD), with delays increasing by under 3 seconds per vehicle. PM peak conditions remain at LOS F, with BUILD scenario delays worsening by more than 12 seconds per vehicle. Signal retiming mitigates these impacts, improving LOS and delay metrics to levels better than pre-development conditions across all periods, except for the 2025 AM peak (see Mitigated Condition). Refer to Appendix A-60 thru A-71 for Synchro analysis reports. See a summary of the capacity analysis for 2025 and 2035 in the following tables.

Intersection 2 – Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacity remains inadequate for the EBL, WBL, WBR, NBR, and SBR lanes. In the worst-case scenario—2035 AM—the NBR queue exceeds available storage by approximately 800 feet. A potential mitigation involving conversion of the NBT lane into a shared NBT/right-turn (R) lane was evaluated, but the COA determined that the minimal operational benefit does not justify the increased pedestrian safety risks. Additionally, V/C ratios exceed 1.0 for the EBT, EBL, WBT, and SBT movements, indicating oversaturation. While mitigation through signal retiming reduces all V/C ratios below 1.0 for the 2025 conditions and improves queuing performance, benefits for the 2035 conditions are more limited.

2: Unser Blvd & Central Ave

2025 LVAM

Signalized

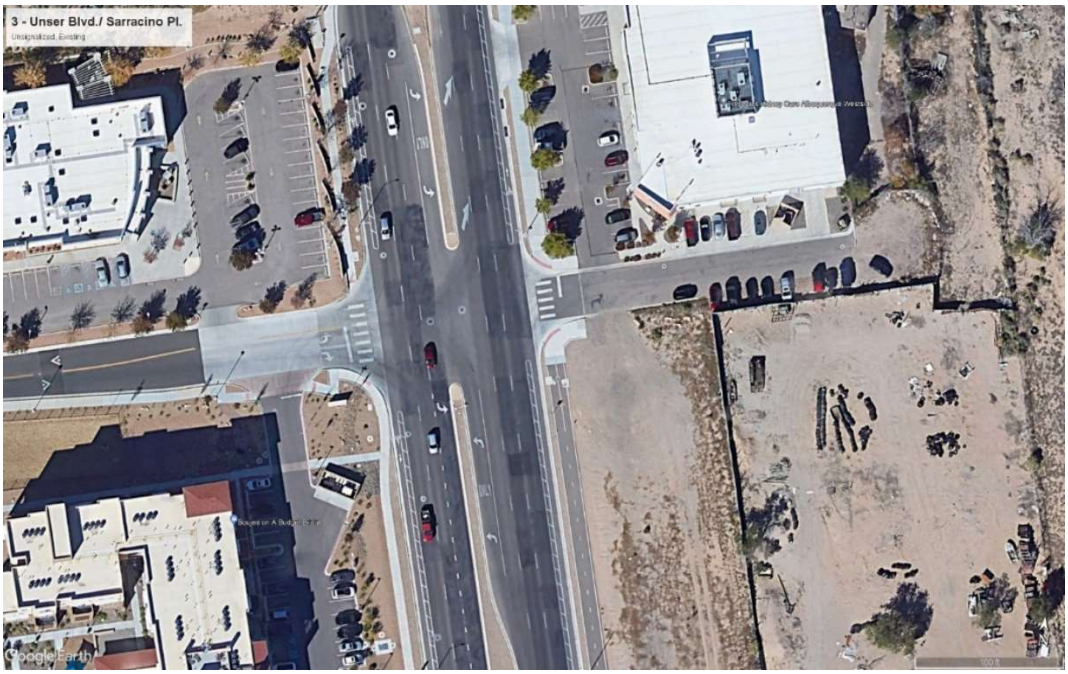
Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Unser Blvd)			SB (Unser Blvd)		
Unser Blvd	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
AM Peak Hour												
NO BUILD VOLUMES	502	900	13	40	197	81	22	972	515	116	793	251
V/C Ratio	0.84	0.89	0.89	0.32	0.38	0.26	0.25	0.42	0.66	0.68	0.47	0.24
Level-of-Service	D	E	E	E	D	D	E	C	C	E	C	A
Control Delay (Seconds)	54.6	55.9	55.4	58.3	46.8	41.3	59.3	22.1	26.7	62.5	21.6	9.0
Intersection LOS	**D - 35.5**											
95th Percentile Queue (veh)	11.9	20.1	20.8	1.1	4.8	3.7	0.6	10.0	16.7	3.3	11.8	4.6
Queue Storage Ratio	0.89		0.52	0.10		0.53	0.08		2.61	0.17		0.43
Existing Queue Capacity (ft)	335		1,000	280		175	180		160	500		270
Additional Queue Length Required (ft)	0		0	0		0	0		258	0		0
BUILD VOLUMES	564	928	13	49	250	86	22	1,034	515	152	835	267
V/C Ratio	0.86	0.90	0.90	0.36	0.51	0.27	0.25	0.46	0.68	0.73	0.50	0.26
Level-of-Service	E	E	E	E	D	D	E	C	C	E	C	A
Control Delay (Seconds)	55.3	57.3	56.7	58.3	49.0	41.2	59.3	24.1	28.7	63.8	22.7	8.7
Intersection LOS	**D - 37.2**											
95th Percentile Queue (veh)	13.2	20.9	21.6	1.4	6.3	3.9	0.6	11.0	17.3	4.4	12.6	4.8
Queue Storage Ratio	0.99		0.54	0.13		0.56	0.08		2.70	0.22		0.44
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	0		0	0		0	0		273	0		0
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
Retime the signal.												
BUILD VOLUMES	564	928	13	49	250	86	22	1,034	515	152	835	267
V/C Ratio	0.86	0.89	0.89	0.36	0.50	0.27	0.25	0.46	0.68	0.73	0.50	0.26
Level-of-Service	E	E	D	E	D	D	E	C	C	E	D	B
Control Delay (Seconds)	55.3	55.1	54.5	58.3	48.5	40.9	59.3	24.4	29.1	69.3	38.7	14.6
Intersection LOS	**D - 38.1**											
95th Percentile Queue (veh)	13.2	20.5	21.3	1.4	6.2	3.9	0.6	11.0	17.4	4.8	17.9	8.2
Queue Storage Ratio	0.99		0.53	0.13		0.56	0.08		2.72	0.24		0.76
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	0		0	0		0	0		275	0		0
PM Peak Hour												
NO BUILD VOLUMES	439	627	49	336	986	188	81	797	157	130	981	439
V/C Ratio	0.82	0.65	0.65	0.81	1.08	0.38	0.51	0.43	0.21	0.70	0.75	0.53
Level-of-Service	D	D	D	E	F	C	E	C	B	E	D	C
Control Delay (Seconds)	54.4	39.8	39.8	57.7	99.3	32.9	59.4	29.4	18.2	62.3	37.0	21.1
Intersection LOS	**D - 49.7**											
95th Percentile Queue (veh)	10.7	13.4	13.7	8.9	28.7	7.7	2.3	9.7	4.6	3.7	18.6	12.8
Queue Storage Ratio	0.80		0.34	0.79		1.10	0.32		0.72	0.19		1.19
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	0		0	0		18	0		0	0		50
BUILD VOLUMES	498	654	49	347	1,035	207	81	855	157	171	1,030	458
V/C Ratio	0.84	0.64	0.64	0.81	1.14	0.41	0.51	0.50	0.22	0.75	0.83	0.55
Level-of-Service	D	D	D	E	F	C	E	C	C	E	D	C
Control Delay (Seconds)	54.8	38.6	38.6	57.9	119.4	32.2	59.4	32.9	20.1	65.7	41.8	21.7
Intersection LOS	**E - 55.1**											
95th Percentile Queue (veh)	12.0	13.6	14.0	9.2	32.7	8.2	2.3	10.8	4.8	5.1	20.5	13.5
Queue Storage Ratio	0.90		0.35	0.82		1.17	0.32		0.75	0.26		1.25
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	0		0	0		30	0		0	0		68
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
Retime the signal.												
BUILD VOLUMES	498	654	49	347	1,035	207	81	855	157	171	1,030	458
V/C Ratio	0.94	0.58	0.58	0.83	0.95	0.35	0.51	0.43	0.19	0.74	0.71	0.52
Level-of-Service	E	C	C	E	E	C	E	C	B	E	D	C
Control Delay (Seconds)	73.6	34.0	34.0	61.3	58.2	27.5	59.4	27.5	16.4	64.7	47.7	26.4
Intersection LOS	**D - 45.3**											
95th Percentile Queue (veh)	13.5	12.7	13.0	9.4	23.9	7.6	2.3	9.9	4.3	5.1	22.4	15.6
Queue Storage Ratio	1.01		0.33	0.84		1.09	0.32		0.67	0.26		1.44
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	2		0	0		15	0		0	0		120

2: Unser Blvd & Central Ave

2035 LVAM

Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Unser Blvd)			SB (Unser Blvd)		
Unser Blvd	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
AM Peak Hour												
NO BUILD VOLUMES	681	1,222	18	55	268	109	30	1,319	699	158	1,076	340
V/C Ratio	0.91	1.13	1.13	0.38	0.59	0.36	0.28	0.61	0.95	0.73	0.67	0.32
Level-of-Service	E	F	F	E	D	D	E	C	D	E	C	A
Control Delay (Seconds)	58.2	118.1	117.6	58.3	51.1	43.3	58.7	28.2	54.3	64.4	28.1	9.1
Intersection LOS	**D-54.9**											
95th Percentile Queue (veh)	15.8	37.0	38.5	1.5	6.9	5.1	0.8	14.8	30.8	4.6	17.7	6.4
Queue Storage Ratio	1.18		0.96	0.13		0.73	0.11		4.81	0.23		0.59
Existing Queue Capacity (ft)	335		1,000	280		175	180		160	500		270
Additional Queue Length Required (ft)	60		0	0		0	0		610	0		0
BUILD VOLUMES	743	1,250	18	64	321	114	30	1,381	699	194	1,118	356
V/C Ratio	0.95	1.12	1.12	0.42	0.70	0.36	0.28	0.68	1.00	0.78	0.72	0.34
Level-of-Service	E	F	F	E	D	D	E	C	E	E	C	A
Control Delay (Seconds)	62.7	112.1	111.6	58.5	52.9	42.2	58.7	31.3	66.2	68.1	30.4	9.3
Intersection LOS	**E - 56.6**											
95th Percentile Queue (veh)	17.6	36.8	38.3	1.8	8.3	5.3	0.8	16.2	33.7	5.9	19.1	6.8
Queue Storage Ratio	1.31		0.96	0.16		0.76	0.11		5.27	0.30		0.63
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	105		0	0		0	0		683	0		0
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
Retime the signal.												
BUILD VOLUMES	743	1,250	18	64	321	114	30	1,381	699	194	1,118	356
V/C Ratio	0.91	0.99	0.99	0.42	0.57	0.33	0.28	0.73	1.07	0.91	0.79	0.35
Level-of-Service	E	E	E	E	D	D	E	D	F	F	D	B
Control Delay (Seconds)	55.3	68.5	67.9	58.5	48.2	39.9	58.7	35.0	89.3	90.1	50.8	16.1
Intersection LOS	**D - 54.7**											
95th Percentile Queue (veh)	16.7	29.4	30.6	1.8	8.0	5.1	0.8	17.1	38.4	6.8	24.3	10.2
Queue Storage Ratio	1.25		0.77	0.16		0.73	0.11		6.00	0.34		0.94
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	83		0	0		0	0		800	0		0
PM Peak Hour												
NO BUILD VOLUMES	596	851	67	456	1,338	255	109	1,082	213	176	1,332	596
V/C Ratio	0.88	0.85	0.85	0.86	1.47	0.50	0.65	0.69	0.29	0.76	1.16	0.72
Level-of-Service	E	D	D	E	F	C	E	D	C	E	F	C
Control Delay (Seconds)	56.1	50.6	50.4	61.1	261.6	33.6	62.9	39.0	21.0	66.2	123.1	27.4
Intersection LOS	**F - 100.7**											
95th Percentile Queue (veh)	14.1	19.6	20.0	11.8	61.7	10.0	3.2	14.4	6.8	5.3	42.1	19.3
Queue Storage Ratio	1.05		0.50	1.05		1.43	0.44		1.06	0.27		1.79
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	18		0	15		75	0		10	0		213
BUILD VOLUMES	655	878	67	467	1,387	274	109	1,140	213	217	1,381	615
V/C Ratio	0.90	0.84	0.84	0.87	1.52	0.52	0.65	0.79	0.31	0.80	1.26	0.75
Level-of-Service	E	D	D	E	F	C	E	D	C	E	F	C
Control Delay (Seconds)	57.8	48.8	48.5	61.6	285.4	33.1	62.9	44.3	22.9	70.8	164.9	28.5
Intersection LOS	**F - 113.5**											
95th Percentile Queue (veh)	15.4	19.7	20.1	12.1	66.7	10.5	3.2	16.0	7.2	6.8	50.5	20.2
Queue Storage Ratio	1.15		0.50	1.08		1.50	0.44		1.13	0.34		1.87
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	50		0	23		88	0		20	0		235
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	2	1
Retime the signal.												
BUILD VOLUMES	649	883	67	518	1,371	332	109	1,084	269	258	1,330	650
V/C Ratio	1.31	0.86	0.86	0.93	1.28	0.45	0.65	0.47	0.22	0.80	0.77	0.60
Level-of-Service	F	D	D	E	F	C	E	C	B	E	D	C
Control Delay (Seconds)	201.9	49.9	49.6	75.8	172.9	28.0	65.1	21.4	10.1	69.3	45.4	23.1
Intersection LOS	**E-79.4**											
95th Percentile Queue (veh)	26.9	19.6	20.0	13.3	51.9	9.7	3.2	11.3	4.3	6.5	28.1	18.5
Queue Storage Ratio	2.01		0.50	1.19		1.39	0.44		0.67	0.33		1.71
Existing Queue Capacity (ft)	335	0	1,000	280	0	175	180	0	160	500	0	270
Additional Queue Length Required (ft)	338		0	53		68	0		0	0		193

3 - Unser Blvd / Sarracino Pl. (Driveway A) (Existing: Unsignalized, Proposed: Signalized)



Refer to Appendix A-72 thru A-83 for Synchro analysis reports.

Intersection 3 – Capacity Analysis

2025 and 2035 LOS Analysis of this intersection demonstrates that the proposed development will have moderate impact on the LOS and delays for the 2025 AM and PM BUILD conditions. Under both the NO BUILD and BUILD conditions, side street approaches (eastbound and westbound) operate at LOS F due to limited acceptable gaps caused by heavy volumes on Unser Boulevard. Mitigation measures, including the addition of a dedicated westbound left-turn lane and signalization of the intersection, improve overall LOS to C, with all individual movements improving to LOS E or better. See a summary of the capacity analysis for 2025 and 2035 in the following tables.

Intersection 3 – Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacities are adequate except for the EBL and SBL lanes and volume to capacity ratios (V/C's) exceed 1 for the EBL, WBT, and SBL lanes for most conditions indicating a high level of congestion for the side street traffic at this intersection even for the NO BUILD condition. Mitigating the intersection by adding a dedicated WBL lane and signalizing the intersection improves queuing capacity and V/C<1 for all lanes.

A right-turn and left-turn deceleration lanes are warranted at this driveway. See COA Deceleration Lane Warrant Analysis on page 31.

3: Unser Blvd & Sarracino/Driveway 'A'

2025 LVAM

Unsignalized

Sarrcino/Driveway 'A'	EB (Sarrcino/Driveway 'A')			WB (Sarrcino/Driveway 'A')			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1	1	0	<1>	0	1	3	1	1	3>	0
AM Peak Hour												
NO BUILD VOLUMES	40	0	31	22	0	4	31	1,693	4	9	1,116	36
V/C Ratio	0.65	0.08		0.61	0.02		0.10			0.05		
Level-of-Service	F	B		F	C		C			D		
Control Delay (Seconds)	135.6	15.0		203.8	19.0		17.1			26.6		
Intersection LOS	**F - 203.8**											
95th Percentile Queue (veh)	2.7	0.3		2.1	0.0		0.3			0.2		
Queue Storage Ratio	0.54				0.00		0.05			0.04		
Existing Queue Capacity (ft)	125				100		150			135		
Additional Queue Length Required (ft)	0				0		0			0		
BUILD VOLUMES	40	1	31	288	2	124	31	1,649	53	53	1,072	36
V/C Ratio	1.94	0.19		12.10	0.67		0.09			0.30		
Level-of-Service	F	D		F	F		C			D		
Control Delay (Seconds)	999.0			999.0	56.9		16.5			34.3		
Intersection LOS	**F-999.0**											
95th Percentile Queue (veh)	5.3	0.7		36.0	4.1		0.3			1.2		
Queue Storage Ratio	1.06				1.03		0.05			0.22		
Existing Queue Capacity (ft)	125				100		150			135		
Additional Queue Length Required (ft)	8				2		0			0		
Mitigated Lane Geometry	1	1>	0	2	1>	0	1	3	1	1	3>	0
Add WBT/R Lane & Signalize Intersection												
BUILD VOLUMES	55	1	43	160	2	94	43	2,249	179	114	1,470	49
V/C Ratio	0.20	0.00	0.30	0.70	0.00	0.40	0.10	0.57	0.06	0.29	0.37	0.37
Level-of-Service	D		E	D		D	A	D	C	D	B	B
Control Delay (Seconds)	50.5	0.0	55.6	46.6	0.0	43.1	11.3	35.8	22.3	17.8	14.0	14.4
Intersection LOS	**C - 29.5**											
95th Percentile Queue (veh)	2.1	0.0	1.8	13.1	0.0	6.1	0.6	21.5	2.3	1.1	8.7	9.4
Queue Storage Ratio	0.42		0.36				0.10			0.20		
Existing Queue Capacity (ft)	125		125				150			135		
Additional Queue Length Required (ft)	0		0				0			0		
PM Peak Hour												
NO BUILD VOLUMES	18	1	27	0	0	1	4	1,649	0	0	1,568	0
V/C Ratio	0.41	0.20			0.00		0.02					
Level-of-Service	F	E		A	C		C			A		
Control Delay (Seconds)	136.7	37.8		0.0	18.4		23.0			0.0		
Intersection LOS	**F -136.7**											
95th Percentile Queue (veh)	1.5	0.7			0.0		0.1			0.0		
Queue Storage Ratio	0.30						0.02			0.00		
Existing Queue Capacity (ft)	125						150			135		
Additional Queue Length Required (ft)	0						0			0		
BUILD VOLUMES	18	1	27	284	2	120	4	1,617	37	41	1,527	31
V/C Ratio	1.32	0.25		11.84	0.73		0.02			0.22		
Level-of-Service	F	E		F	F		C			D		
Control Delay (Seconds)	999.0	47.2		999.0	999.0		22.8			29.9		
Intersection LOS	**F-999.0**											
95th Percentile Queue (veh)	2.9	0.9		35.5	4.5		0.1			0.8		
Queue Storage Ratio	0.58						0.02			0.15		
Existing Queue Capacity (ft)	125						150			135		
Additional Queue Length Required (ft)	0						0		0	0		
Mitigated Lane Geometry	1	1>	0	2	1>	0	1	3>	0	1	3>	0
Add WBT/R Lane & Signalize Intersection												
BUILD VOLUMES	18	1	27	284	2	120	4	1,617	37	41	1,527	31
V/C Ratio	0.10	0.00	0.25	0.68	0.00	0.37	0.02	0.55	0.04	0.23	0.50	0.50
Level-of-Service	D		D	D		D	B	D	C	B	B	B
Control Delay (Seconds)	51.0	0.0	54.9	45.9	0.0	41.7	12.1	35.1	21.5	16.7	15.0	15.8
Intersection LOS	**C-27.6**											
95th Percentile Queue (veh)	0.9	0.0	1.4	12.9	0.0	5.8	0.1	21.0	1.5	0.8	12.1	13.3
Queue Storage Ratio	0.28						0.00			0.00		
Existing Queue Capacity (ft)	125						150			135		
Additional Queue Length Required (ft)	0						0			0		

3: Unser Blvd & Sarracino/Driveway 'A'

2035 LVAM

Unsignalized

Sarrcino/Driveway 'A'	EB (Sarrcino/Driveway 'A')			WB (Sarrcino/Driveway 'A')			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	0	<1>	0	1	3>	0	1	3>	0
AM Peak Hour												
NO BUILD VOLUMES	55	0	43	30	0	6	43	2,298	6	12	1,514	49
V/C Ratio	3.06	0.15		3.68	0.04		0.21			0.14		
Level-of-Service	F	C		F	D		D			F		
Control Delay (Seconds)	999.0	19.7		999.0	27.8		27.2			53.5		
Intersection LOS	**F-999**											
95th Percentile Queue (veh)	7.4	0.5		5.0	0.1		0.8			0.5		
Queue Storage Ratio	1.48			1.25	0.03		0.13			0.09		
Existing Queue Capacity (ft)	125		100	100	100		150			135		
Additional Queue Length Required (ft)	60			25	0		0			0		
BUILD VOLUMES	55	0	43	296	2	126	43	2,254	55	56	1,470	49
V/C Ratio	3.06	0.15		92.15	3.23		0.20			0.65		
Level-of-Service	F	C		F	F		D			F		
Control Delay (Seconds)	999.0	19.2		999.0	999.0		25.8			104.8		
Intersection LOS	**F-999**											
95th Percentile Queue (veh)	7.2	0.5		39.4	14.4		0.7			3.1		
Queue Storage Ratio	1.44			9.85	3.60		0.12			0.57		
Existing Queue Capacity (ft)	125			100	100		150			135		
Additional Queue Length Required (ft)	55			885	260		0			0		
Mitigated Lane Geometry	1	1>	0	1	1>	0	1	3>	0	1	3>	0
Retime the signal.												
BUILD VOLUMES	55	0	43	296	2	126	43	2,254	55	56	1,470	49
V/C Ratio	0.26	0.00	0.41	0.74	0.00	0.43	0.18	0.78	0.06	0.44	0.51	0.51
Level-of-Service	D		E	D		D	B	D	C	C	B	B
Control Delay (Seconds)	50.3	0.0	57.4	48.6	0.0	44.1	12.6	42.1	22.4	29.3	16.2	17.1
Intersection LOS	**C - 33.4**											
95th Percentile Queue (veh)	2.8	0.0	2.5	13.7	0.0	6.3	0.8	26.9	2.2	1.8	12.3	13.5
Queue Storage Ratio	0.56		0.50				0.13			0.33		
Existing Queue Capacity (ft)	125		125				150			135		
Additional Queue Length Required (ft)	0		0				0			0		
PM Peak Hour												
NO BUILD VOLUMES	24	0	36	0	0	2	6	2,237	0	0	2,128	43
V/C Ratio	1.96	0.20			0.01		0.06					
Level-of-Service	F	D		A	D		E			A		
Control Delay (Seconds)	999.0	29.8			26.2		42.9			0.0		
Intersection LOS	**F-999**											
95th Percentile Queue (veh)	3.8	0.7			0.0		0.2			0.0		
Queue Storage Ratio	0.76						0.03			0.00		
Existing Queue Capacity (ft)	125						150			135		
Additional Queue Length Required (ft)	0						0			0		
BUILD VOLUMES	24	0	36	284	2	121	6	2,205	37	41	2,087	43
V/C Ratio	1.85	0.19		56.94	3.41		0.06			0.44		
Level-of-Service	F	D		F	F		E			F		
Control Delay (Seconds)	999.0	28.9		999.0	999.0		41.0			71.4		
Intersection LOS	**F-999**											
95th Percentile Queue (veh)	3.8	0.7					0.2			6.6		
Queue Storage Ratio	0.76						0.03			1.22		
Existing Queue Capacity (ft)	125						150			135		
Additional Queue Length Required (ft)	0						0			30		
Mitigated Lane Geometry	1	1>	0	1	1>	0	1	3>	0	1	3>	0
Retime the signal.												
BUILD VOLUMES	24	0	36	284	2	121	6	2,205	37	41	2,087	43
V/C Ratio	0.13	0.00	0.33	0.70	0.00	0.38	0.05	0.75	0.04	0.33	0.69	0.69
Level-of-Service	D		E	D		D	B	D	C	C	B	C
Control Delay (Seconds)	50.7	0.0	56.0	46.5	0.0	42.2	15.0	41.0	21.5	25.6	18.8	20.5
Intersection LOS	**C-31.8**											
95th Percentile Queue (veh)	1.2	0.0	1.9	13.0	0.0	5.9	0.1	26.3	1.5	1.2	18.3	20.3
Queue Storage Ratio	0.24		0.38				0.02			0.22		
Existing Queue Capacity (ft)	125		125				150			135		
Additional Queue Length Required (ft)	0		0				0			0		

4 - Unser Blvd / Bluewater Rd. (Signalized)

Refer to Appendix A-84 thru A-95 for Synchro analysis reports.

Intersection 4 – Capacity Analysis

2025 and 2035 LOS Analysis of this intersection demonstrates that the proposed development will have minimal impact on the LOS and delays for the 2025 AM and PM BUILD conditions. For the 2025 horizon year, overall intersection LOS remains at C or better under both NO BUILD and BUILD scenarios, with minimal delay increases—less than 1 second per vehicle in 2025 and less than 5 seconds per vehicle by 2035. However, certain movements experience degradation, with the northbound through (NBT) dropping from LOS D to F, and the southbound left-turn (SBL) declining from LOS E to F. See a summary of the capacity analysis for 2025 and 2035 in the following tables.

Intersection 4 – Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacities are adequate except for the EBL, WBL, and WBR lanes for the NO BUILD and BUILD conditions and volume-to-capacity (V/C) ratios exceed 1.0 for the EBL, WBT, and SBL movements in the 2035 BUILD condition. Mitigation measures, including signal retiming and extending the EBL storage from 90 feet to 350 feet, reduce some delay and capacity issues. Nonetheless, the EBL remains a critical constraint, operating at LOS F in the 2035 PM peak with approximately 363 feet of spillback. Additionally, westbound right-turn (WBR) queues may spill into the adjacent WBT lane. A potential solution—extending the WBR lane beyond the adjacent driveway (e.g., UPS access) or adding a second right-turn lane—has been presented to the COA as a future network improvement. It should be noted that the proposed development does not generate traffic volumes contributing to the EBL or WBR movement, so no recommendations are made on behalf of the development.

4: Unser Blvd & Bluewater

2025 LVAM

Signalized

Bluewater	EB (Bluewater)			WB (Bluewater)			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	161	161	99	18	90	121	112	1,443	139	108	981	139
V/C Ratio	0.73	0.00	0.81	0.17	0.48	0.56	0.27	0.63		0.39	0.43	
Level-of-Service	E		D	E	D	D	A	B		B	B	
Control Delay (Seconds)	60.7		53.6	57.1	53.5	51.4	8.0	13.5		12.3	10.7	0.0
Intersection LOS	**C - 20.6**											
BUILD VOLUMES	161	161	105	36	90	121	117	1,471	154	108	1,015	139
V/C Ratio	0.66	0.00	0.76	0.29	0.41	0.49	0.29	0.66		0.42	0.46	
Level-of-Service	D		D	E	D	D	A	B		B	B	
Control Delay (Seconds)	53.7		49.8	56.9	50.6	48.3	9.2	15.3		14.2	12.1	0.0
Intersection LOS	**C-21.2**											
95th Percentile Queue (veh)	3.4	0.0	12.2	2.0	4.6	6.1	1.8	17.2	0.0	1.8	10.8	0.0
Queue Storage Ratio	0.94		0.54	0.31		0.92	0.35		0.00	0.26		0.00
Existing Queue Capacity (ft)	90	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	0	0	0	0		0	0		0	0		0
Mitigated Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
Re-time Signal and restripe West leg to extend EBL lane from 90' to 350'												
BUILD VOLUMES	161	161	105	36	90	121	117	1,471	154	108	1,015	139
V/C Ratio	0.68	0.00	0.77	0.30	0.42	0.50	0.29	0.65		0.41	0.45	
Level-of-Service	D		D	E	D	D	A	B		B	B	
Control Delay (Seconds)	54.9		53.8	57.5	51.2	48.9	9.0	15.0		14.0	11.9	0.0
Intersection LOS	**C-21.4**											
95th Percentile Queue (veh)	3.6	0.0	12.7	2.0	4.6	6.1	1.8	17.0	0.0	1.7	10.7	0.0
Queue Storage Ratio	0.26		0.56	0.31		0.92	0.35		0.00	0.25		0.00
Existing Queue Capacity (ft)	350	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	0		0	0		0	0		0	0		0

PM Peak Hour												
NO BUILD VOLUMES	233	67	36	85	143	152	27	1,362	72	108	1,564	121
V/C Ratio	1.12	0.00	0.29	0.39	0.63	0.61	0.13	0.61		0.38	0.68	
Level-of-Service	F		D	D	D	D	B	B		B	B	
Control Delay (Seconds)	147.5		40.8	51.1	54.1	50.3	12.2	14.5		12.6	14.5	0.0
Intersection LOS	**C-27.1**											
95th Percentile Queue (veh)	14.0	0.0	4.6	4.4	7.6	7.8	0.5	15.6	0.0	1.7	17.7	0.0
Queue Storage Ratio	3.89		0.20	0.69		1.18	0.10		0.00	0.25		0.00
Existing Queue Capacity (ft)	90		565	160		165	130		245	170		170
Additional Queue Length Required (ft)	260		0	0		30	0		0	0		0
BUILD VOLUMES	233	67	42	102	143	152	33	1,394	90	108	1,596	121
V/C Ratio	1.11	0.00	0.30	0.47	0.63	0.60	0.16	0.63		0.39	0.69	
Level-of-Service	F		D	D	D	D	B	B		B	B	
Control Delay (Seconds)	146.1	0.0	41.0	52.4	54.0	50.1	12.9	14.8	0.0	13.1	15.0	0.0
Intersection LOS	**C -27.3**											
95th Percentile Queue (veh)	13.9	0.0	4.9	5.4	7.6	7.8	0.6	16.1	0.0	1.7	18.4	0.0
Queue Storage Ratio	3.86		0.22	0.84		1.18	0.12		0.00	0.25		0.00
Existing Queue Capacity (ft)	90	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	258		0	0		30	0		0	0		0
Mitigated Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
Re-time Signal and restripe West leg to extend EBL lane from 90' to 350'												
BUILD VOLUMES	233	67	42	102	143	152	33	1,394	90	108	1,596	121
V/C Ratio	1.14	0.00	0.31	0.48	0.65	0.62	0.16	0.62		0.39	0.69	
Level-of-Service	F		D	D	E	D	B	B		B	B	
Control Delay (Seconds)	156.9	0.0	41.5	53.1	55.1	51.0	12.5	14.4	0.0	12.8	14.6	0.0
Intersection LOS	**C - 27.8**											
95th Percentile Queue (veh)	14.0	0.0	4.9	5.4	7.7	7.8	0.5	15.9	0.0	1.7	18.2	0.0
Queue Storage Ratio	1.00		0.22	0.84		1.18	0.10		0.00	0.25		0.00
Existing Queue Capacity (ft)	350	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	0		0	0		30	0		0	0		0

Synchro Results Summary Sheet

4: Unser Blvd & Bluewater

2035 LVAM

Bluewater	EB (Bluewater)			WB (Bluewater)			NB (Unser Blvd.)			SB (Unser Blvd.)		
Unser Blvd.	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	219	219	134	24	122	164	152	1,986	188	146	1,332	188
V/C Ratio	0.83	0.00	0.84	0.22	0.41	0.49	0.53	0.96		0.87	0.65	
Level-of-Service	E		D	E	D	D	B	D		E	B	
Control Delay (Seconds)	66.2	0.0	53.3	56.9	46.7	43.0	17.3	36.7	0.0	70.3	18.7	0.0
Intersection LOS	**D - 35.1**											
95th Percentile Queue (veh)	4.7	0.0	15.3	1.3	6.1	8.4	2.8	37.9	0.0	8.0	17.3	0.0
Queue Storage Ratio	1.31		0.68	0.20		1.27	0.54		0.00	1.18		0.00
Existing Queue Capacity (ft)	90		565	160		165	130		245	170		170
Additional Queue Length Required (ft)	28		0	0		45	0		0	30		0
BUILD VOLUMES	219	219	140	42	122	164	157	1,986	203	146	1,366	188
V/C Ratio	0.77	0.00	0.80	0.33	0.37	0.45	0.58	1.00		0.94	0.69	
Level-of-Service	E		D	E	D	D	C	F		F	C	
Control Delay (Seconds)	57.3	0.0	49.4	56.7	44.6	40.9	20.3	47.4	0.0	90.3	21.0	0.0
Intersection LOS	**D - 40.4**											
95th Percentile Queue (veh)	7.4	0.0	15.9	2.3	5.8	7.5	3.3	40.6	0.0	10.9	19.2	0.0
Queue Storage Ratio	2.06		0.70	0.36		1.14	0.63		0.00	1.60		0.00
Existing Queue Capacity (ft)	90	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	95	0	0	0		23	0		0	103		0
Mitigated Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
Retime the signal.												
BUILD VOLUMES	219	219	140	42	122	164	157	1,986	203	146	1,366	188
V/C Ratio	0.83	0.00	0.86	0.40	0.42	0.49	0.54	0.94		0.84	0.65	
Level-of-Service	E		E	E	D	D	B	C		E	B	
Control Delay (Seconds)	66.9	0.0	59.9	60.8	46.8	43.1	16.6	32.1	0.0	59.8	17.2	0.0
Intersection LOS	**C - 32.9**											
95th Percentile Queue (veh)	8.3	0.0	17.4	2.4	5.9	7.7	2.9	34.2	0.0	6.8	17.2	0.0
Queue Storage Ratio	0.59		0.77	0.38		1.17	0.56		0.00	1.00		0.00
Existing Queue Capacity (ft)	350	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	0		0	0		28	0		0	0		0
PM Peak Hour												
NO BUILD VOLUMES	316	91	49	116	195	207	36	1,848	97	146	2,122	164
V/C Ratio	1.49	0.00	0.33	0.46	0.67	0.64	0.37	0.89		0.82	0.98	
Level-of-Service	F		D	D	D	D	C	C		D	D	
Control Delay (Seconds)	292.2	0.0	38.3	48.9	51.4	46.7	33.0	27.9	0.0	52.8	36.3	0.0
Intersection LOS	**D - 50.9**											
95th Percentile Queue (veh)	27.2	0.0	6.1	5.9	9.6	9.7	1.2	29.8	0.0	6.6	38.4	0.0
Queue Storage Ratio	7.56		0.27	0.92		1.47	0.23		0.00	0.97		0.00
Existing Queue Capacity (ft)	90		565	160		165	130		245	170		170
Additional Queue Length Required (ft)	590		0	0		78	0		0	0		0
BUILD VOLUMES	316	91	55	133	195	207	42	1,880	115	146	2,154	164
V/C Ratio	1.49	0.00	0.35	0.52	0.67	0.64	0.43	0.91		0.84	0.99	
Level-of-Service	F		D	D	D	D	C	C		E	D	
Control Delay (Seconds)	290.4	0.0	38.5	50.1	51.3	46.6	34.4	29.5	0.0	57.6	41.1	0.0
Intersection LOS	**D - 53.2**											
95th Percentile Queue (veh)	27.1	0.0	6.4	6.9	9.5	9.7	1.4	31.2	0.0	6.9	41.0	0.0
Queue Storage Ratio	7.53		0.28	1.08		1.47	0.27		0.00	1.01		0.00
Existing Queue Capacity (ft)	90	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	588		0	13		78	0		0	2		0
Mitigated Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
Retime the signal.												
BUILD VOLUMES	316	91	55	133	195	207	42	1,880	115	146	2,154	164
V/C Ratio	1.56	0.00	0.36	0.55	0.71	0.67	0.42	0.89		0.83	0.98	
Level-of-Service	F		D	D	E	D	C	C		D	D	
Control Delay (Seconds)	88.2	0.0	35.6	58.9	67.0	103.0	31.3	21.3	0.0	46.3	25.3	0.0
Intersection LOS	**D- 52.8**											
95th Percentile Queue (veh)	28.5	0.0	6.5	7.0	10.0	10.0	1.4	30.0	0.0	6.7	39.1	0.0
Queue Storage Ratio	2.04		0.29	1.09		1.52	0.27		0.00	0.99		0.00
Existing Queue Capacity (ft)	350	0	565	160	0	165	130	0	245	170	0	170
Additional Queue Length Required (ft)	363		0	15		85	0		0	0		0

5 - Central Ave / 98th St. (Signalized)

Refer to Appendix A-96 thru A-107 for Synchro analysis reports.

Intersection 5 – Capacity Analysis

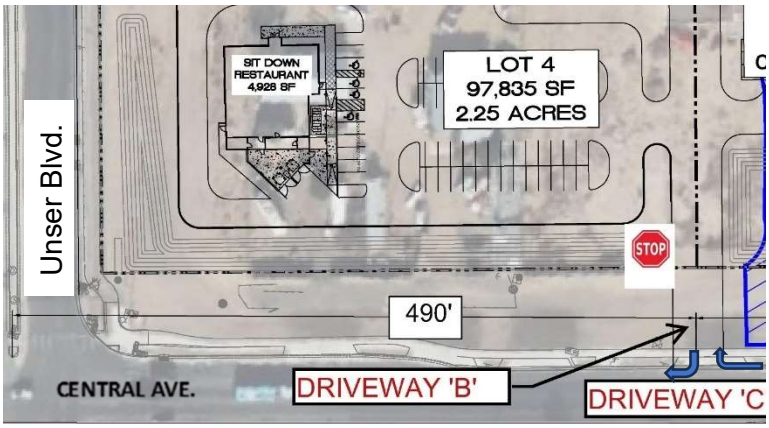
2025 and 2035 LOS Analysis of this intersection demonstrates that the proposed development will have minimal impact on the LOS and delays for the 2025 and 2035 AM and PM BUILD conditions. Intersection Level of Service (LOS) remains at D or better under all scenarios, except for the 2035 PM peak hour, during which overall LOS drops to F. Individual movement LOS remains unchanged between the NO BUILD and BUILD conditions. The westbound and eastbound turn movements operate at LOS E or F under all scenarios. Signal retiming is effective in improving LOS and reducing delays, particularly for the westbound left-turn (WBL) during the PM peak hour; however, no notable improvements were observed from retiming during the AM peak hour.

See a summary of the capacity analysis for 2025 and 2035 in the following tables.

Intersection 5 – Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacity is inadequate for both the WBL and southbound left-turn (SBL) lanes in the BUILD condition, with the WBL movement exhibiting a V/C ratio greater than 1.0. Retiming during the 2035 PM peak under the BUILD scenario restores the WBL V/C ratio to below 1.0. The SBL queue exceeds available storage by approximately 85 feet after 2035. This queueing issue is an existing condition, and the development contributes only marginally—by approximately three vehicles —to the total queue. Given that the exceedance does not occur until 10 years into the future and the impact from the development is minimal, mitigation is not recommended.

6 - Central Ave / Driveway B (Unsignalized – Right-in, right-out ONLY)



Refer to Appendix A-108 thru A-111 for Synchro analysis reports.

2025 and 2035 LOS and Queueing Analysis shows that LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient. No deceleration lanes are warranted. See a summary of the capacity analysis for 2025 and 2035 in the following tables.

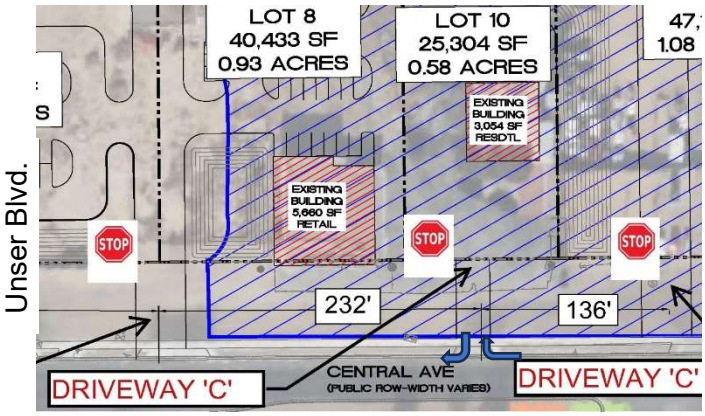
6: Central Ave. & Driveway 'B'
2025 LVAM
Unsignalized

Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'B')			SB (Driveway 'B')		
Driveway 'B'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,641			358	34				0		36
V/C Ratio												0.04
Level-of-Service												A
Control Delay (Seconds)												9.7
Intersection LOS	**A-9.7**											
95th Percentile Queue (veh)												0.1
PM Peak Hour												
BUILD VOLUMES	0	1,010			1,577	47				0		56
V/C Ratio												0.18
Level-of-Service												C
Control Delay (Seconds)												18.6
Intersection LOS	**C-18.6**											

6: Central Ave. & Driveway 'B'
2035 LVAM

Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'B')			SB (Driveway 'B')		
Driveway 'B'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,794			423	2				0		2
V/C Ratio												0.00
Level-of-Service												A
Control Delay (Seconds)												9.6
Intersection LOS	**A-9.6**											
Retime the signal.												
PM Peak Hour												
BUILD VOLUMES	0	1,102			1,728	47				0		56
V/C Ratio												0.20
Level-of-Service												C
Control Delay (Seconds)												20.7
Intersection LOS	**C-20.7**											

7- Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)



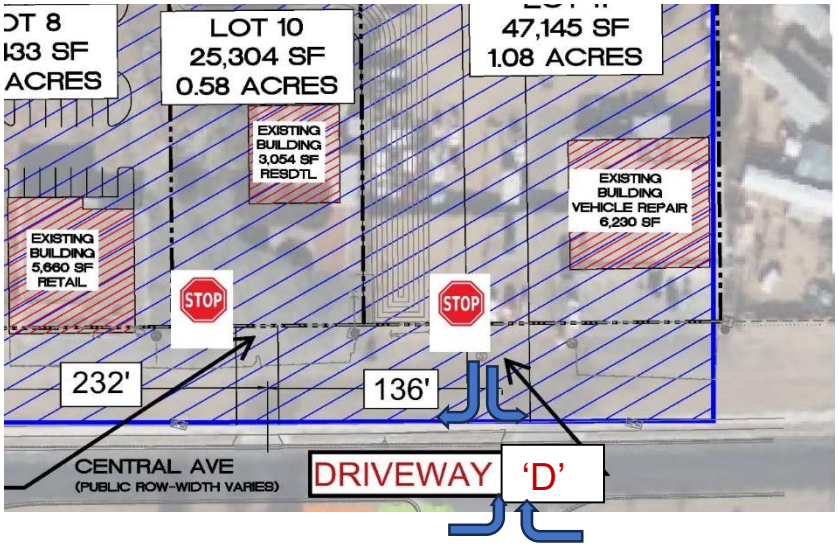
Refer to Appendix A-112 thru A-115 for Synchro analysis reports.

2025 and 2035 LOS and Queueing Analysis shows that LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient. And no deceleration lanes are warranted. See results of the capacity analysis for 2025 and 2035 in the following tables.

7: Central Ave & Driveway'C'												
2025 LVAM												
Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'C')			SB (Driveway 'C')		
Driveway 'C'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,622			397	9				0		8
V/C Ratio												0.01
Level-of-Service												A
Control Delay (Seconds)												9.5
Intersection LOS	**A-9.5**											
PM Peak Hour												
BUILD VOLUMES	0	1,008			1,583	20				0		20
V/C Ratio												0.06
Level-of-Service												C
Control Delay (Seconds)												16.8
Intersection LOS	**C-16.8**											

7: Central Ave & Driveway'C'												
2035 LVAM												
Central Ave.	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'C')			SB (Driveway 'C')		
Driveway 'C'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	2,170			511	9				0		8
V/C Ratio												0.01
Level-of-Service												A
Control Delay (Seconds)												9.9
Intersection LOS	**A-9.9**											
PM Peak Hour												
BUILD VOLUMES	0	1,102			1,775	2				0		2
V/C Ratio												0.01
Level-of-Service												C
Control Delay (Seconds)												17.7
Intersection LOS	**C-17.7**											

8 - Central Ave / Driveway D (Unsignalized – Full Access)



Refer to Appendix A-116 thru A-119 for Synchro analysis reports.

Intersection 8 – Capacity Analysis

2025 and 2035 LOS Analysis shows that LOS and delays are acceptable (LOS=D or better) for all movements except the southbound left-turn (SBL) movement, which serves eastbound vehicles exiting the development. The SBL is projected to operate at LOS F during the PM peak hour when westbound traffic volumes on Central Ave. are at a maximum and gaps in the traffic flow in the westbound lane are low. A traffic signal is not warranted at this location, and no feasible roadway geometry modifications would improve operational performance. As such, no mitigation is recommended for this movement. During the PM peak hour, it is expected that some eastbound drivers will naturally divert to alternative routes, such as the signalized access at Driveway 'A' or going right and making a U-turn, which offers improved operational efficiency and safer turning opportunities.

Intersection 8 – Queuing Analysis

2025 and 2035 Queueing analysis shows that 100-ft of storage capacity for the SBL lane is sufficient under the BUILD condition, with a volume-to-capacity (V/C) ratio less than 1.0.
A right-turn and left-turn deceleration lanes are warranted at this driveway. See COA Deceleration Lane Warrant Analysis on page 31.See results of the capacity analysis for 2025 and 2035 in the following tables.

8: Central Ave. & Driveway 'D'

2025 LVAM

Unsignalized

	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'D')			SB (Driveway 'D')		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				1		1
AM Peak Hour												
BUILD VOLUMES	77	1,564			365	48				28		75
V/C Ratio	0.07									0.06		0.09
Level-of-Service	A									B		A
Control Delay (Seconds)	8.4									12.8		9.8
Intersection LOS	**B-12.8**											
95th Percentile Queue (veh)	0.2									0.2		0.0
Queue Storage Ratio	0.10									0.05		0.00
Existing Queue Capacity (ft)	50									100		100
Additional Queue Length Required (ft)	0									0		0
PM Peak Hour												
BUILD VOLUMES	51	959			1,575	61				49		66
V/C Ratio	0.13									0.44		0.20
Level-of-Service	C									F		C
Control Delay (Seconds)	15.7									59.6		18.5
Intersection LOS	**F-59.6**											
95th Percentile Queue (veh)	0.4									1.9		0.1
Queue Storage Ratio	0.20									0.48		0.03
Existing Queue Capacity (ft)	50									100		100
Additional Queue Length Required (ft)	0									0		0

8: Central Ave. & Driveway 'D'

2035 LVAM

	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'D')			SB (Driveway 'D')		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				1		1
AM Peak Hour												
BUILD VOLUMES	77	1,717			396	48				28		75
V/C Ratio	0.07									0.06		0.09
Level-of-Service	A									B		A
Control Delay (Seconds)	8.5									13.1		9.9
Intersection LOS	**B-11.3**											
95th Percentile Queue (veh)	0.2									0.2		0.1
Queue Storage Ratio	0.10									0.1		0.03
Existing Queue Capacity (ft)	50									100		100
Additional Queue Length Required (ft)	0									0		0
PM Peak Hour												
BUILD VOLUMES	51	1,051			1,726	61				49		66
V/C Ratio	0.15									0.54		0.22
Level-of-Service	C									F		C
Control Delay (Seconds)	17.5									83.2		22.9
Intersection LOS	**F-83.2**											
95th Percentile Queue (veh)	0.5									1.9		0.1
Queue Storage Ratio	0.25									0.5		0.03
Existing Queue Capacity (ft)	50									100		100
Additional Queue Length Required (ft)	0									0		0

Deceleration Lane Warrants

The City of Albuquerque Deceleration Lane Warrant Analysis of the Driveways 'A' thru 'E' demonstrates that deceleration lanes are warranted only at Driveway 'A' (Intersection 3, Unser Blvd / Sarracino Pl.) and Driveway 'D' on Central Ave. See table of results and the COA DPM Turn Lane Warrants Table 7.4.67 below.

City of Albuquerque Turn Lane Warrant
7707 W. Central Ave. Development (Ed Garacia)

			Left Turn Warrant				Right Turn Warrant				
Access	Major Street	Speed Limit (Mph)	Left Turn Warrant Volume (veh/hr)[1]	Maximum Left Turn Volume (Veh/hr)	Left Turn Lane Warranted?	Minimum Left-turn Transition Length (ft)[2]	Right Turn Warrant Volume (veh/hr)[1]	Maximum Right Turn Volume (Veh/hr)	Right Turn Lane Warranted?	Minimum Storage Length (ft)[3]	Minimum Left-turn Transition Length (ft)[2]
Driveway 'A'	Unser Blvd.	40	40	56	Yes	300/150	50	55	Yes	240	300/150
Driveway 'B'	Central Ave	40	40	0	No	-	50	47	No		-
Driveway 'C'	Central Ave.	40	40	0	No	-	50	2	No	-	-
Driveway 'D'	Central Ave.	40	40	77	Yes	300/150	50	61	Yes	240	300/150

1. City of Albuquerque DPM, Table 7.4.67
2. City of Albuquerque DPM, Table 7.4.70
3. City of Albuquerque DPM, Table 7.4.68

TABLE 7.4.67 **Turn Lane Warrants**

Left Turn		Right Turn	
Design Speed (MPH)	**Turning Volume per Hour**	**Design Speed (MPH)**	**Turning Volume per Hour**
25	50	25	60
30-40	40	30-40	50
45	30	45	45

Driveway 'A'

At the Driveway 'A' intersection, the development is responsible for constructing a new northbound right (NBR) deceleration lane with a minimum storage capacity of 240-ft, not including a 300/150 transition. A southbound left turn lane with 115-ft queue capacity is also warranted but the existing SBL lane has adequate capacity so no modifications to the SBL lane are required.

Driveway 'D'

At the Driveway 'D' intersection, the development is responsible for constructing a new westbound right (WBR) turn deceleration lane with a minimum storage capacity of 240-ft, not including a 300/150 transition and an eastbound left (EBL) deceleration lane with a minimum storage capacity of 50-ft (based on maximum anticipated queue length), not including a 300/150 transition.

Signal Warrant

The Manual on Uniform Traffic Control Devices (MUTCD) Signal Warrant Analysis was conducted using the HCS 2023 MUTCD Warrants software to determine if installation of a traffic control signal is justified at Intersection 3, Unser Blvd / Sarracino Pl. (Driveway A).

Twelve-hour (6am-6pm) weekday distribution of traffic volumes on Unser Blvd. were used in the model and represent 2025 BUILD conditions (existing traffic volumes plus traffic generated by the development). Peak Hour data was taken from TURNS spreadsheet which is based on 2022 traffic counts. All other data based on 2021 MRCOG tube count data (MRCOG ID 250502, Unser Blvd. north of Sarracino Place) and distributed to turning movements based on existing traffic count distribution. Traffic generated by the development was distributed according to published ITE hourly distribution rates of traffic generated by the Shopping Center (ITE 821) and Fast-Food Restaurant (ITE 934) and added to the existing hourly traffic volumes.

The results of the signal warrant analysis for the Existing and BUILD conditions indicate that a signal is warranted at the intersection of Unser Blvd./ Sarracino Pl. (Driveway A) for the BUILD condition; existing volumes do not trigger a signal warrant. A summary of the results are shown in the following table. Warrant 6 (Coordinated Signal System) does not apply since the new traffic signal will be less than 1000-ft from the signal at Central Ave./Unser Blvd .

Data used in the signal warrant analysis and the full result reports of the analysis can be found in Appendix pages A-120 thru A-122.

The City of Albuquerque DPM specifies in Table 7.4.42 that the minimum standard spacing for signalized intersections in a Major Transit Corridor, such as Unser Blvd. in the vicinity of the site, is 1320-ft. The minimum distance between existing signalized intersections along Unser Blvd. is 1700-ft. The distance between the Sarracino Pl. and Central Ave. intersections is only 935-ft., centerline to centerline. Therefore, approval of the proposed signal requires a waiver of the COA DPM minimum standard spacing by the City of Albuquerque. This waiver was granted by Curtis Cherne, COA Traffic Engineer, as part of his review of the Draft TIS.

SIGNAL WARRANT ANALYSIS RESULTS (BUILD Condition)

Warrants	
Warrant 1: Eight-Hour Vehicular Volume	✔
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	✓
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	✓
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 2: Four-Hour Vehicular Volume	✔
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	✓
Warrant 3: Peak Hour	✔
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	✔
Degree of Platooning (Predominant direction or both directions)	✓
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	✓
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

 HCS™ Warrants Version 2023 Generated: 5/21/2024 7:28:38 AM

Access Spacing

According to the COA DPM, Table 7.4.45, the minimum distance between a commercial street access and an intersection on a principal arterial with an arterial cross street is 300-ft for the departure lane and 200-ft for the approach lane. All access points to the site meet these criteria. The closest approach driveway (Driveway B) is 300-ft from the intersection of Unser Blvd./Central Ave. and the closest departure driveway (Driveway F) is 440-ft from Unser Blvd./Central Ave.

The maximum number of commercial site access points along a principal arterial is 1-2 access points per 300-ft. of frontage. The site has 1730-ft of frontage allowing at least 5 and up to 10 access points. Six access are proposed for the site which is within the allowable criteria. See Table 7.4.46 from the COA DPM below.

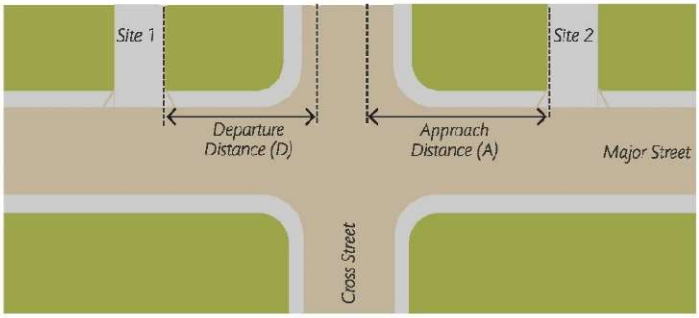


TABLE 7.4.45 **Minimum Distance Between Commercial Site Access and Intersection**

Type of Street	Cross Street Classes					
	Arterial		Collector		Local	
	A	D	A	D	A	D
Principal Arterial	300 ft.	200 ft.	200 ft.	150 ft.	150 ft.	100 ft.
Minor Arterial	200 ft.	150 ft.	150 ft.	100 ft.	100 ft.	100 ft.
Major Collector	150 ft.	150 ft.	100 ft.	100 ft.	75 ft.	75 ft.
Minor Collector	150 ft.	150 ft.	100 ft.	100 ft.	75 ft.	75 ft.
Local (additional distance may be required for queuing)	75 ft.	75 ft.	50 ft.	50 ft.	25 ft.	25 ft.

TABLE 7.4.46 **Maximum Number of Commercial Site Access Points per Site**

Type of Street	
Principal Arterials	1-2 access points per 300 ft. frontage
Minor Arterials	1-2 access points per 200 ft. frontage
Collectors	1 access point per 100 ft. frontage

Crash Analysis

Intersection 2 – Central Ave./Unser Blvd.

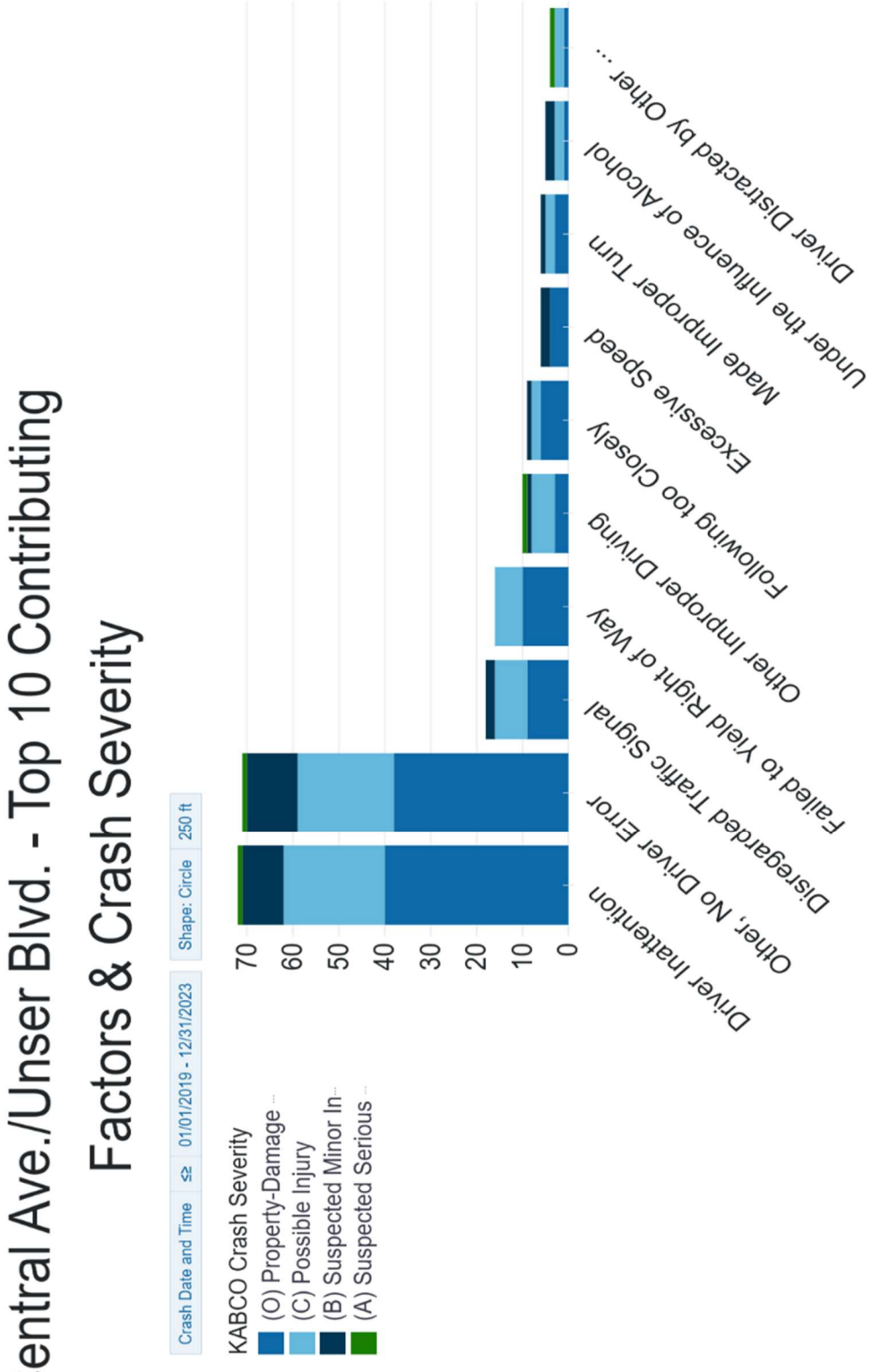
As requested by COA, five years(2019 thru 2023) of Crash data for the Intersection of Central Ave. & Unser Blvd. was extracted from the New Mexico Department of Transportation's AASHTOWare Safety Transportation Application. Below is a summary of some of the pertinent data and the graph on the following page shows the top ten contributing factors and Crash Severity.

As the data indicates, out of the 175 crashes at the intersection, 4% involved pedestrians and only 3% involved alcohol. More than half of the crashes resulted in only property damage and there were no crashes that resulted in a fatality. Almost half of the crashes were caused by driver inattention and almost fourth were caused by improper turning. Left turns also accounted for about a fourth of the crashes but 83% occurred while the vehicles were going straight. Rear end collisions and front to side collisions were the most common manner of impact reported.

5-year (2019-2023) Crash Data Summary

Intersection: Central Ave. & Unser Blvd.

	# of Crashes	% of Total Crashes
New Mexico Summary		
Total Crashes	175	
Avg. Crashes per year	35	
Pedestrian Involved	7	4%
Alchohol Involved	5	3%
KABCO Crash Severity		
(O)Property Damage Only	121	69%
(C) Possible Injury	36	21%
(B)Suspected Minor Injury	15	9%
(A)Suspected Major Injury	3	2%
(K)Fatal Injury	0	0%
Manner of Impact		
Front to Rear	29	17%
Front to Side	22	13%
Side Swipe	8	5%
Front to Front	1	1%
Contributing Factors		
Driver Inattention	74	42%
Improper Turn	38	22%
Disregard for Traffic Signal	19	11%
Failed to Yeild Right of Way	16	9%
Following too Closely	12	7%
Driver Actions		
Going Straight	146	83%
Left Turn	41	23%
Stopped at Signal	22	13%
Stopped for Traffic	13	7%


Central Ave./Unser Blvd. - Top 10 Contributing Factors & Crash Severity
Crash Date and Time ≤ 01/01/2019 - 12/31/2023
Shape: Circle 250 ft
KABCO Crash Severity
(O) Property-Damage ...
(C) Possible Injury
(B) Suspected Minor In...
(A) Suspected Serious ...
70
60
50
40
30
20
10
0
Driver Inattention
Other, No Driver Error
Disregarded Traffic Signal
Failed to Yield Right of Way
Other Improper Driving
Following too Closely
Excessive Speed
Made Improper Turn
Under the Influence of Alcohol
Driver Distracted by Other ...

Summary of Impacts

1. Unser Blvd / Bridge Blvd (Signalized)

Minimal Impact with Mitigation

- Intersection Level of Service (LOS) remains consistent (LOS = C or better) between NO BUILD and BUILD scenarios, with delays increasing by less than 2 seconds per vehicle.
- All movements maintain LOS = D or better, except the eastbound left turn (EBL), which remains LOS = E in 2035 – an existing condition unaffected by the development.
- Storage capacity is inadequate for the EBL and eastbound right (EBR) turn lanes.
- The EBL queue exceeds capacity in all scenarios, with the worst case in the 2035 AM peak, exceeding by 250 ft (total queue length = 340 ft).
- EBR queue capacity is slightly exceeded during the 2035 AM and PM peaks by less than one vehicle length.

---

2. Unser Blvd / Central Ave (Signalized)

Moderate Impact with Mitigation

- Seven movements (EBL, EBT, EBR, WBL, WBR, NBL, SBL) experience LOS = E or F in the NO BUILD condition.
- 2025 Intersection AM LOS remains the same while PM LOS degrades from LOS = D (NO BUILD) to LOS = E (BUILD), with delay increases under 6 seconds per vehicle.
- 2035 Intersection AM LOS degrades from LOS = D (NO BUILD) to LOS = E (BUILD), with delay increases under 3 seconds per vehicle while PM LOS remains at LOS F with delays becoming worse by over 12 seconds per vehicle.
- Signal retiming improves LOS and delays to better than pre-development levels for all conditions other than 2025 AM (see Mitigated Condition).
- The storage capacity is insufficient for the EBL, WBL, WBR, NBR, and SBR lanes. In the worst-case scenario (2035 AM), the NBR queue exceeds capacity by approximately 800 feet. Converting the right northbound through (NBT) lane into a shared NBT/right-turn (R) lane would offer slight traffic improvements; however, the COA determined that the potential benefits do not outweigh the increased safety risks to pedestrians.
- Volume-to-capacity (V/C) ratios exceed 1 for EBT, EBL, WBT, and SBT, indicating high congestion.
- Mitigation (signal retiming) reduces all V/C ratios to below 1 and improves queuing for the 2025 Conditions but only slightly improves V/C and queuing for the 2035 Conditions.

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3. Unser Blvd / Sarracino Pl (Driveway A) – Proposed Signalized

Minimal Impact with Mitigation

- Side street LOS = F (EB & WB) in both NO BUILD and BUILD, due to heavy traffic volumes on Unser Blvd limiting acceptable gaps.
- Adding a second WBL lane and signalizing the intersection improves LOS to C overall, with individual movements improving to LOS = E or better.
- Storage capacity is inadequate for EBL, WBL, WBT, and SBL lanes; V/C > 1 even in NO BUILD.
- Mitigation includes signal installation and additional lanes, resulting in acceptable queuing and V/C < 1.
- A northbound right-turn deceleration lane (240-ft storage + 300/150 transition) is warranted.
- Southbound left-turn lane (115-ft storage) is also warranted; existing SBL lane meets requirements.
- Signal warrant analysis supports a traffic signal at this intersection under the BUILD condition.
- Signal approval requires a waiver of the City of Albuquerque DPM spacing standard (1320 ft vs. existing 935 ft). Approval of the signal at this intersection was confirmed by Curtis Cherne (COA Traffic Engineering) on 11/08/2024.

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4. Unser Blvd / Bluewater Rd (Signalized)

Minimal Impact, no Mitigation

- LOS remains C or better in NO BUILD and BUILD for 2025; delay increases are minimal (<1 sec/veh in 2025, <5 sec/veh in 2035).
- LOS degrades from D to F for the NBT movement and from E to F for the SBL.
- Storage capacity is inadequate for EBL, WBL, WBR; V/C > 1 for EBL, WBT, and SBL in 2035 BUILD.
- As shown for the Mitigated case, signal retiming and extending EBL lane (90 ft to 350 ft) helps address some delay and capacity issues. However, the EBL remains problematic (LOS = F and 363-ft of spillover in 2035 PM).
- And WBR queues may spill into WBT lane. Potential solution: extend the WBR lane past the adjacent driveway (e.g., UPS access) or add a second right-turn lane. Presented to COA as a future network improvement.
- **The development does not contribute traffic to the EBL and WBR movements.**

---

5. Central Ave / 98th St (Signalized)

Minimal Impact

- Intersection LOS remains D or better, except 2035 PM peak (LOS = F).
- Individual movement LOS remains unchanged between NO BUILD and BUILD.
- WB and EB turns operate at LOS = E or F under all conditions.
- Signal retiming improves LOS and reduces delays, especially for WBL during the PM peak hour. No improvement was shown by retiming the signal for the AM peak hour.
- Storage inadequate for WBL and SBL (BUILD); WBL V/C > 1.
- Retiming during PM BUILD restores V/C < 1 for WBL.
- SBL queue exceeds capacity by 85 ft (3 vehicles) after 2035. This is an existing problem which is made only slightly worse (by one vehicle) by traffic from the development and does not occur until 10 years from now, so no mitigation is recommended.

---

6. Central Ave / Driveway B (Unsignalized – Right-In/Right-Out Only)

- LOS = D or better for all movements; queue capacities are sufficient.
- No deceleration lanes warranted.

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7. Central Ave / Driveway C (Unsignalized – Right-In/Right-Out Only)

- LOS = D or better for all movements; queue capacities are sufficient.
- No deceleration lanes warranted.

---

8. Central Ave / Driveway D (Unsignalized – Full Access)

- SBL movement (traffic exiting the development) has LOS = F. A signal is not warranted and there are no road geometry modifications that would improve the LOS, so no mitigation is recommended. Long delays will likely cause drivers to use alternative routes such as the signalized driveway (Driveway ‘A’).
- SBL lane (BUILD) has adequate storage (100-ft) and V/C < 1 for all movements.
- A westbound right-turn deceleration lane (240-ft storage + 300/150 transition) and eastbound left-turn lane with 50-ft minimum storage capacity are warranted due to the anticipated volume traffic entering the development at Driveway D.

Recommendations

1. Unser Blvd / Bridge Blvd

- **No development-related mitigation recommended.**
- *Optional Improvement:* Extend EBL lane storage from 90 ft to 330 ft to prevent queue spillover into the EBT lane. Presented to COA as a potential future network improvement.

2. Unser Blvd / Central Ave

- Post Development Signal optimization recommended.

3. Unser Blvd / Sarracino Pl (Driveway A) (See Exhibit 1 on the next page)

- Construct a new NBR deceleration lane (240-ft storage + 300/150 transition).
- Install a new traffic signal.
- Add a dedicated westbound left lane (WBL) and restripe the existing lane as a westbound thru/right (WBT/R) lane.

4. Unser Blvd / Bluewater Rd

- Post Development Signal optimization recommended.
- *Optional Improvement:* Extend EBL lane storage from 90 ft to 350 ft. Presented as part of COA future improvements.

5. Central Ave / 98th St

- Post Development Signal optimization recommended for the PM BUILD condition.

6 & 7. Central Ave / Driveways B & C

- **No development-related mitigation recommended.**
- Construct Driveway B as a right-in/right-out limited access driveway with one exiting lane (SBR) and one entering lane (Driveway C is existing – no modifications).

8. Central Ave / Driveway D (See Exhibit 2 on next page)

- Construct Driveway D as a full-access driveway with two exiting lanes (SBR & SBL) and one entering lane.
- Construct a 240-ft (or a long as possible) westbound right-turn deceleration lane including a 300/150 transition from 10-ft west of the Loon Creek Trailer Park driveway to Driveway ‘D”.
- Modify the existing median to construct a left turn deceleration lane with a minimum storage capacity of 50-ft plus a 300/150 transition.

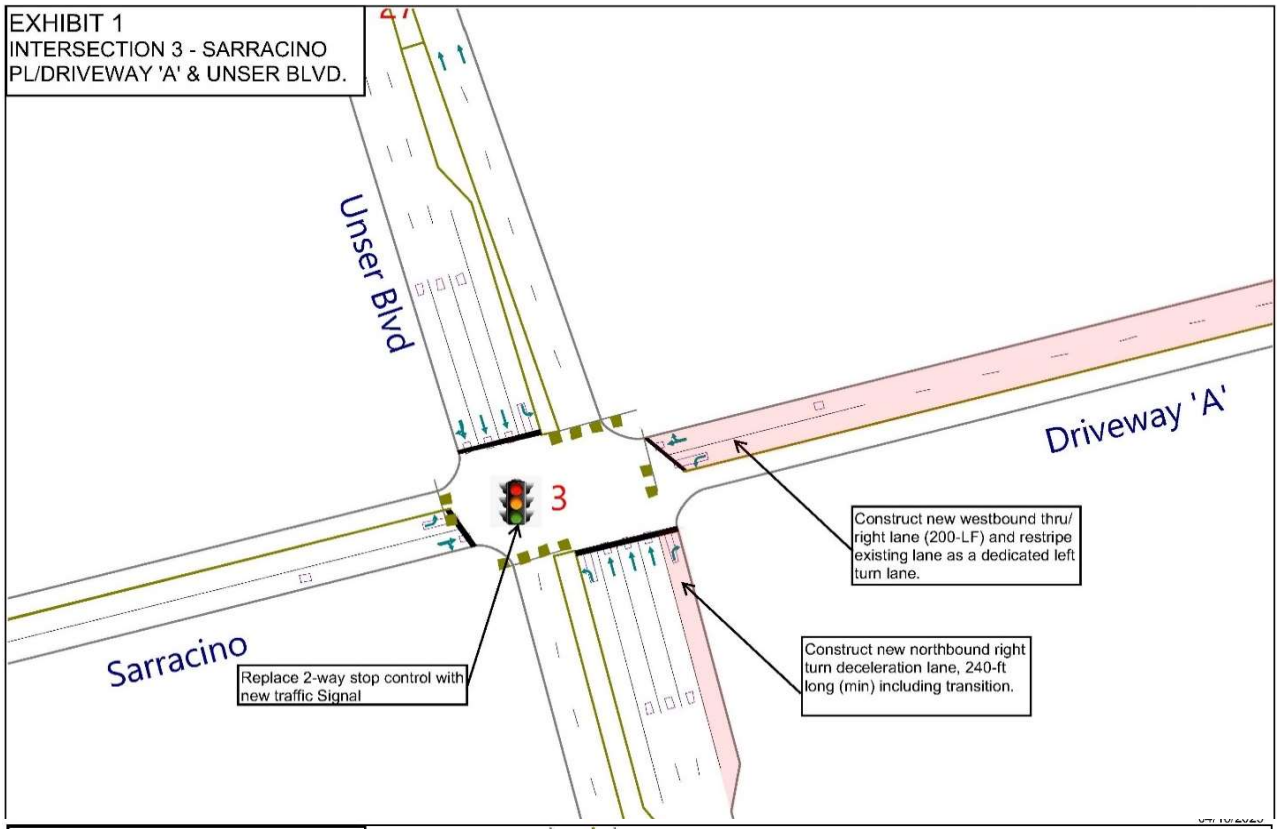


EXHIBIT 1
INTERSECTION 3 - SARRACINO PL/DRIVEWAY 'A' & UNSER BLVD.
Unser Blvd
Driveway 'A'
Sarracino
3
Construct new westbound thru/ right lane (200-LF) and restripe existing lane as a dedicated left turn lane.
Construct new northbound right turn deceleration lane, 240-ft long (min) including transition.
Replace 2-way stop control with new traffic Signal

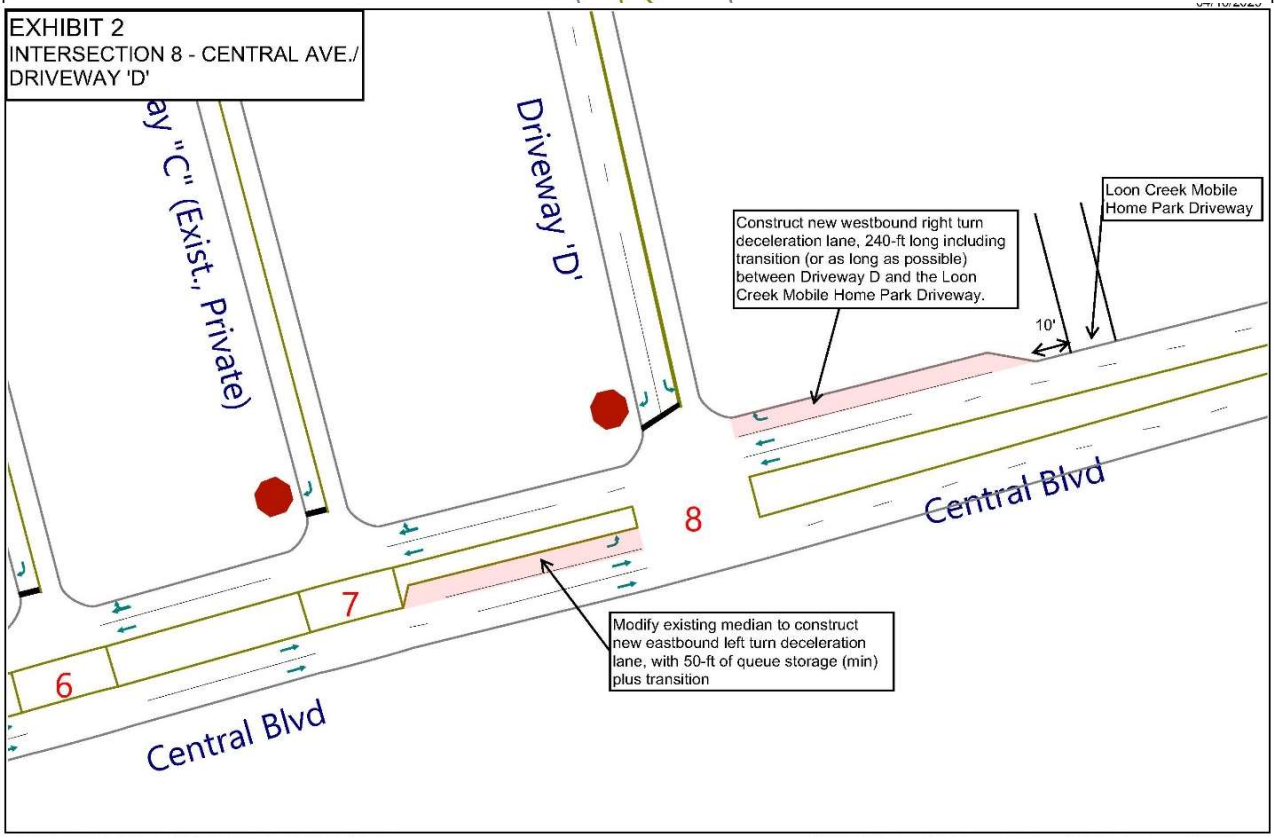
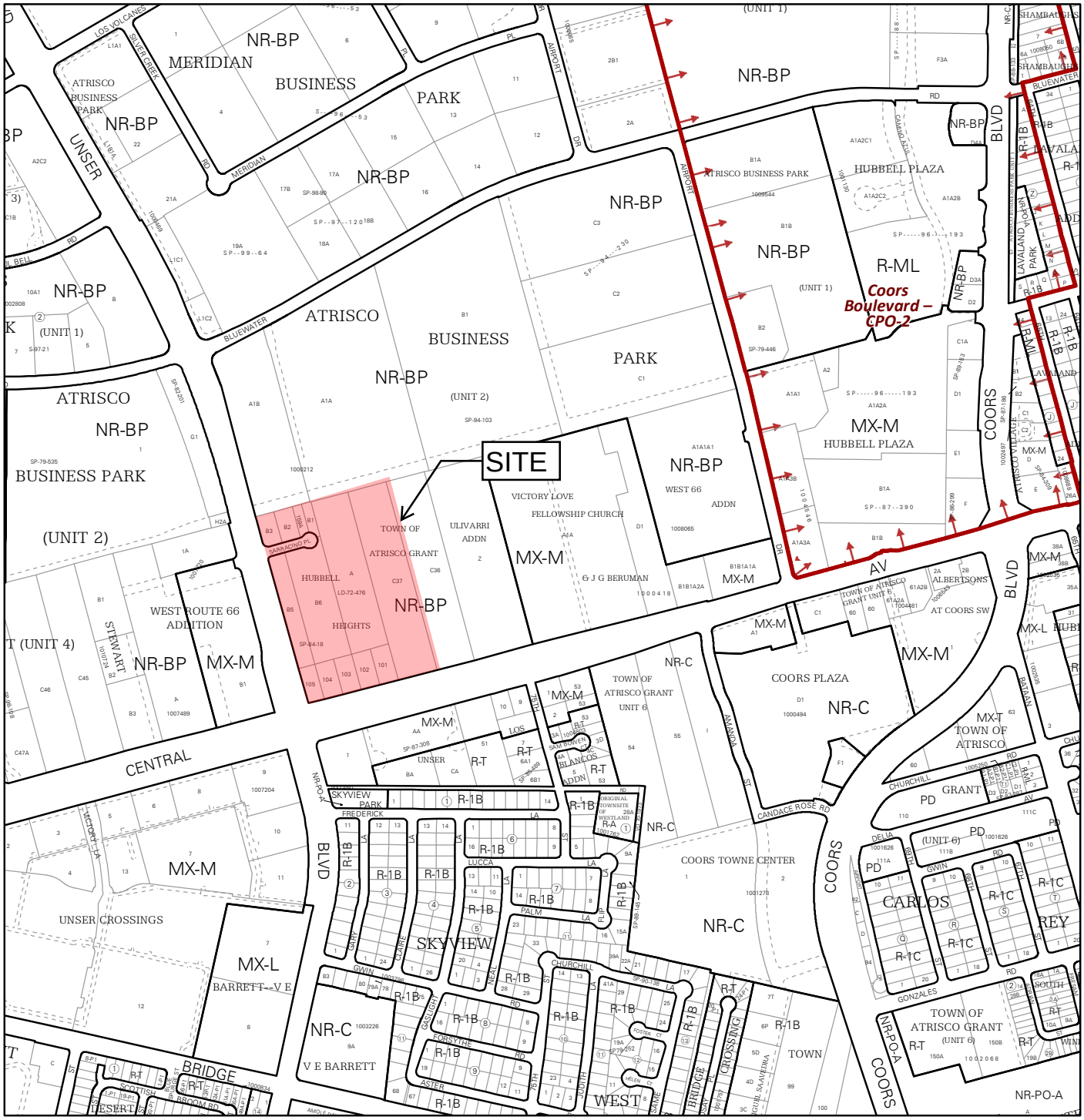


EXHIBIT 2
INTERSECTION 8 - CENTRAL AVE./ DRIVEWAY 'D'
ay "C" (Exist., Private)
Driveway 'D'
Loon Creek Mobile Home Park Driveway
Construct new westbound right turn deceleration lane, 240-ft long including transition (or as long as possible) between Driveway D and the Loon Creek Mobile Home Park Driveway.
10'
Central Blvd
8
7
6
Modify existing median to construct new eastbound left turn deceleration lane, with 50-ft of queue storage (min) plus transition
Central Blvd

Appendix



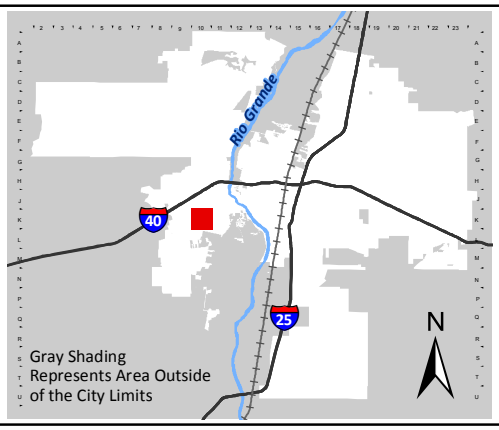
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

IDO Zone Atlas
May 2018

Albuquerque Geographic Information System

IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).

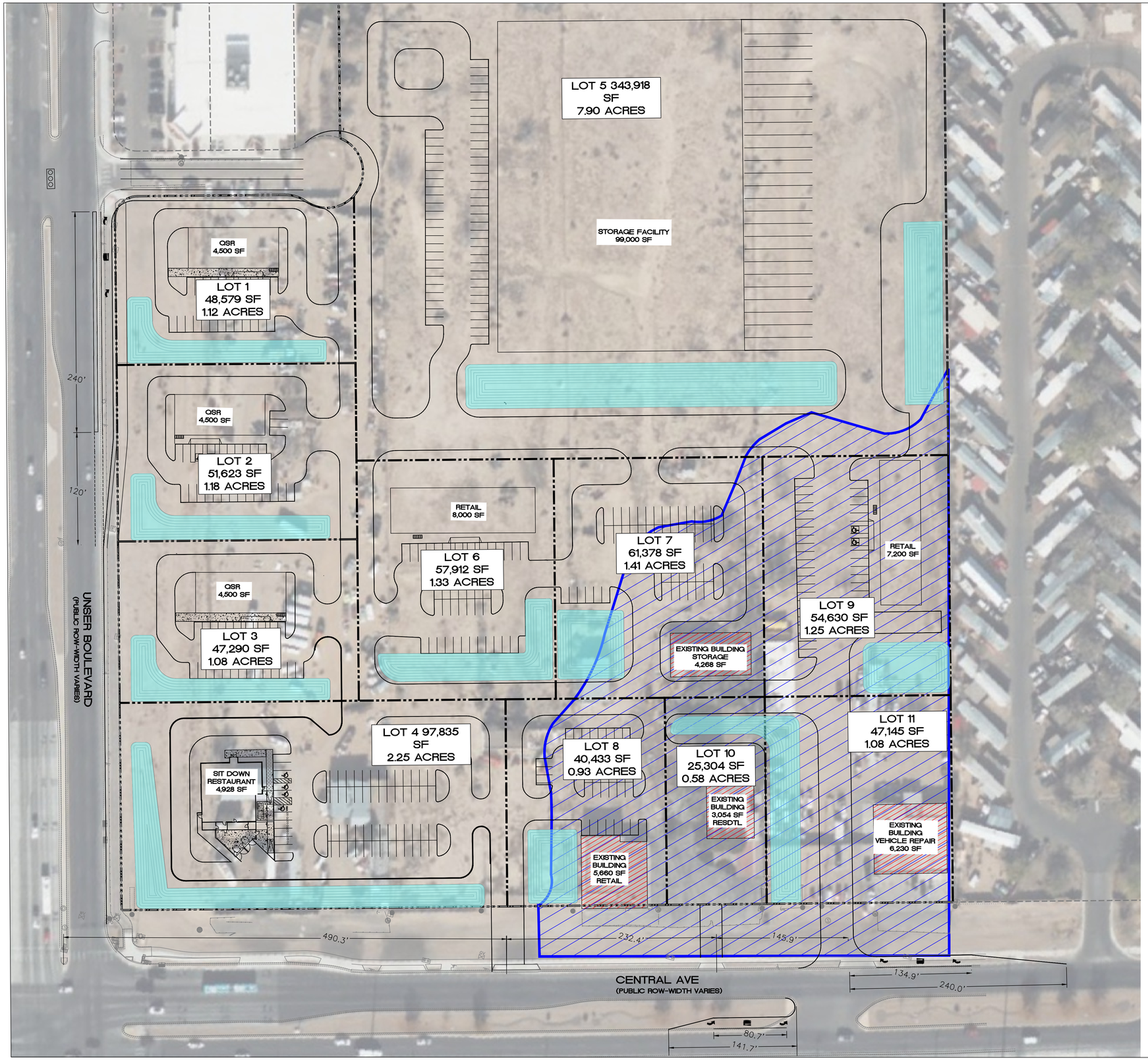


Zone Atlas Page:

K-10-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500 1,000



LEGEND

- CURB & GUTTER
- PROPOSED BOUNDARY LINE
- EASEMENT
- PROPOSED BUILDING
- EXISTING BUILDING
- EXISTING FLOOD PLAIN
- PROPOSED RETENTION POND

N

GRAPHIC SCALE

50 0 25 50

(IN FEET)
1 inch = 50 ft.

LOT #	USAGE	SQ.FT.
1	OSR	4,500.0
2	OSR	4,500.0
3	OSR	4,500.0
4	RESTAURANT	4,928.0
5	STORAGE FACILITY	99,000.0
6	RETAIL	8,000.0
7	RETAIL	4,268.0
8	RETAIL	5,660.0
9	RETAIL	7,200.0
10	RESIDENTIAL	3,054.0
11	VEHICLE REPAIR	6,230.0

NOTES:

ALL WORK SHOWN ON THIS EXHIBIT IS FOR PRELIMINARY REVIEW & APPROVAL

04/01/2025

7707 WEST CENTRAL

CONCEPTUAL SITE PLAN

TIERRA WEST

Historic Growth Data Table

West Central (Ed Garcia)

(Central and Unser)

Traffic Flows (AWDT) from Mid-Region Council of Governments

COG ID **Location**

Intersection #1: **CENTRAL / 98TH STREET**

	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
26293	CENTRAL	EAST OF 114TH ST.	WEST OF 98TH ST.	7,915	7,796	7,606	7,477	10,702	10,702	10,970	8,121	8,556	8,926
25728	CENTRAL	EAST OF 98TH ST.	WEST OF BRIDGE	14,725	14,504	14,200	13,959	15,439	15,439	15,825	17,328	18,255	19,044
26532	98TH STREET	NORTH OF TOWER	SOUTH OF CENTRAL	37,440	36,878	29,263	28,766	28,306	28,466	29,178	30,287	27,780	28,980
25764	98TH STREET	NORTH OF CENTRAL	SOUTH OF I-40 S. RAMPS	26,621	26,222	25,881	30,989	30,493	30,493	34,670	35,987	37,913	39,942
	Total Intersection Traffic Flows			**86,701**	**85,400**	**76,950**	**81,191**	**84,940**	**85,100**	**90,643**	**91,723**	**92,504**	**96,892**

COG ID **Location**

Intersection #2: **UNSER BLVD. / BLUEWATER**

	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
25048	UNSER BLVD.	NORTH OF BLUEWATER	SOUTH OF LOS VOLCANES	23,268	22,919	22,621	27,057	26,625	26,840	30,819	31,990	35,270	30,106
25050	UNSER BLVD.	NORTH OF CENTRAL	SOUTH OF BLUEWATER	31,785	21,255	20,979	26,048	25,781	25,781	26,426	29,184	25,676	26,785
24714	BLUEWATER	END OF ROAD	WEST OF UNSER	3,187	4,660	4,599	4,521	4,406	4,406	4,516	7,333	7,725	8,059
24712	BLUEWATER	EAST OF UNSER	WEST OF AIRPORT	4,786	4,714	4,653	5,496	5,408	5,408	4,581	4,755	5,009	6,057
	Total Intersection Traffic Flows			**63,026**	**53,548**	**52,852**	**63,122**	**62,220**	**62,435**	**66,342**	**73,262**	**73,680**	**71,007**

COG ID **Location**

Intersection #3: **UNSER BLVD. / BRIDGE BLVD.**

	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
25051	UNSER BLVD.	NE OF BRIDGE BLVD.	SOUTH OF CENTRAL	7,239	15,256	15,058	18,089	23,643	23,643	24,234	23,410	24,663	25,729
25052	UNSER BLVD.	NORTH OF TOWER	SW OF BRIDGE BLVD.	11,010	10,845	10,704	16,798	16,695	16,695	17,112	17,675	18,621	19,426
25870	BRIDGE BLVD.	EAST OF 86TH ST.	WEST OF UNSER BLVD.	4,642	4,572	4,513	5,293	5,208	5,208	5,605	5,818	6,129	7,725
25868	BRIDGE BLVD.	EAST OF UNSER BLVE	WEST OF COORS	4,247	10,129	9,997	6,955	6,844	6,844	9,553	9,916	10,447	18,874
	Total Intersection Traffic Flows			**27,138**	**40,802**	**40,272**	**47,135**	**52,390**	**52,390**	**56,504**	**56,819**	**59,860**	**71,754**

COG ID **Location**

Intersection #4: **UNSER BLVD. / CENTRAL**

	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
25050	UNSER BLVD.	NORTH OF CENTRAL	SOUTH OF BLUEWATER	31,785	21,255	20,979	26,048	25,781	25,781	26,426	29,184	25,676	26,785
25051	UNSER BLVD.	NE OF BRIDGE BLVD.	SOUTH OF CENTRAL	7,239	15,256	15,058	18,089	23,643	23,643	24,234	23,410	24,663	25,729
25729	CENTRAL	EAST OF BRIDGE	WEST OF UNSER	22,586	21,794	21,511	18,216	17,741	17,741	18,185	17,746	18,696	19,504
25556	CENTRAL	EAST OF UNSER	WEST OF 75TH	19,803	16,703	16,486	13,979	19,453	19,453	19,939	20,681	21,788	22,729
	Total Intersection Traffic Flows			**81,413**	**75,008**	**74,034**	**76,332**	**86,618**	**86,618**	**88,784**	**91,021**	**90,823**	**94,747**

COG ID **Location** ****No Data for Serracino**

Intersection #5: **UNSER BLVD. / Not Found**

	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
25050	UNSER BLVD.	NORTH OF CENTRAL	SOUTH OF BLUEWATER	31,785	21,255	20,979	26,048	25,781	25,781	26,426	29,184	25,676	26,785
25051	UNSER BLVD.	NE OF BRIDGE BLVD.	SOUTH OF CENTRAL	7,239	15,256	15,058	18,089	23,643	23,643	24,234	23,410	24,663	25,729
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**39,024**	**36,511**	**36,037**	**44,137**	**49,424**	**49,424**	**50,660**	**52,594**	**50,339**	**52,514**

COG ID **Location**

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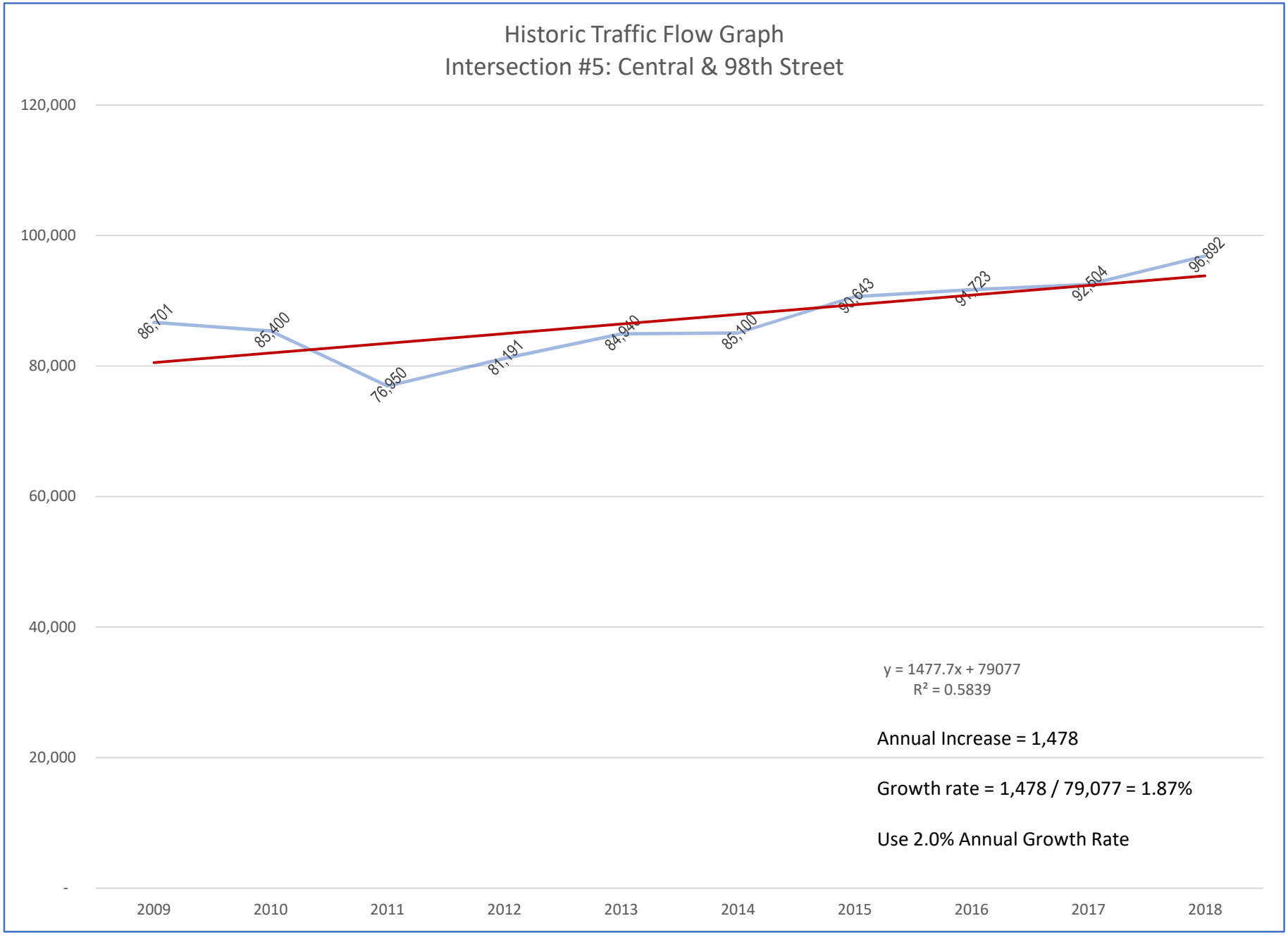
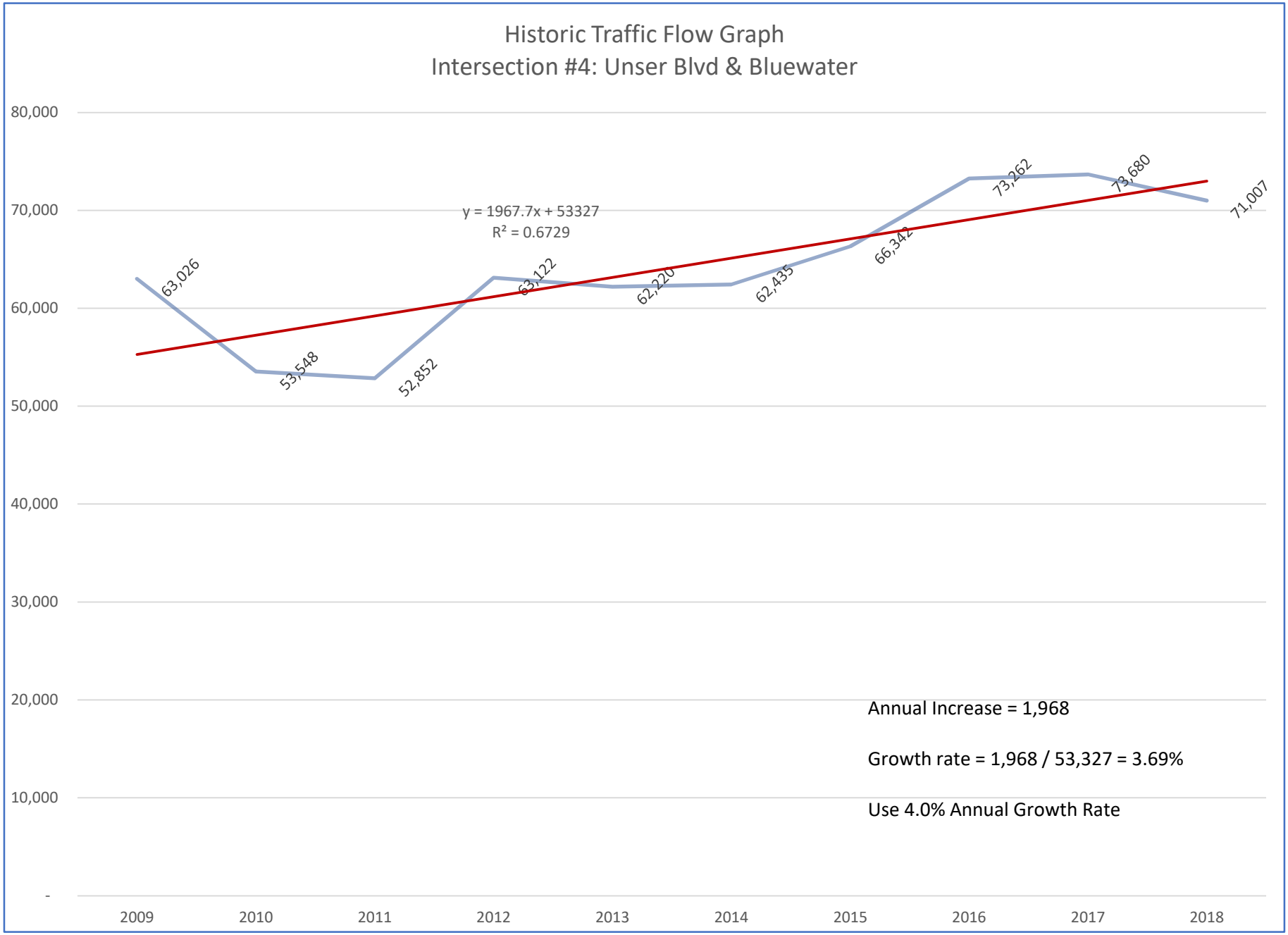
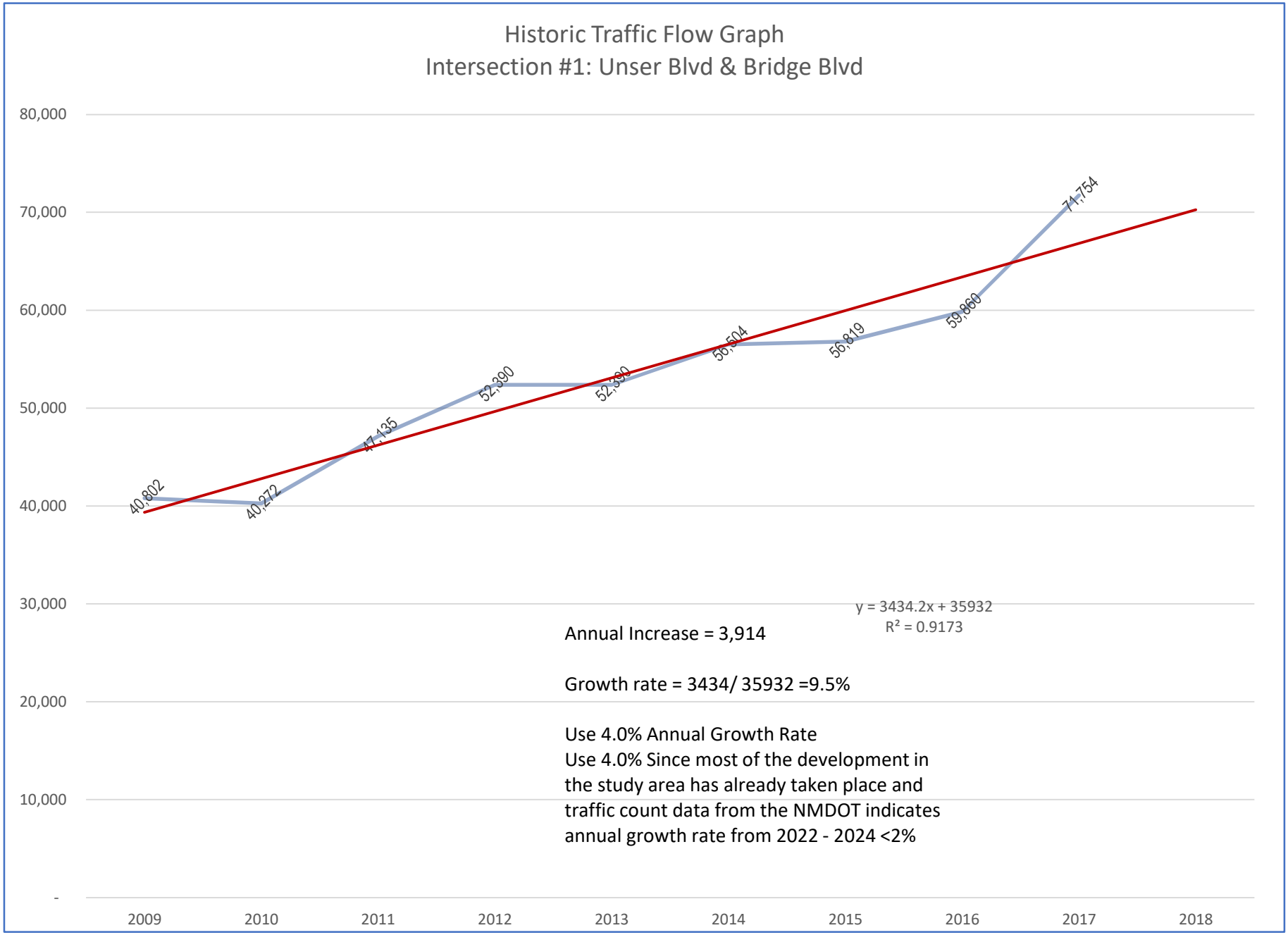
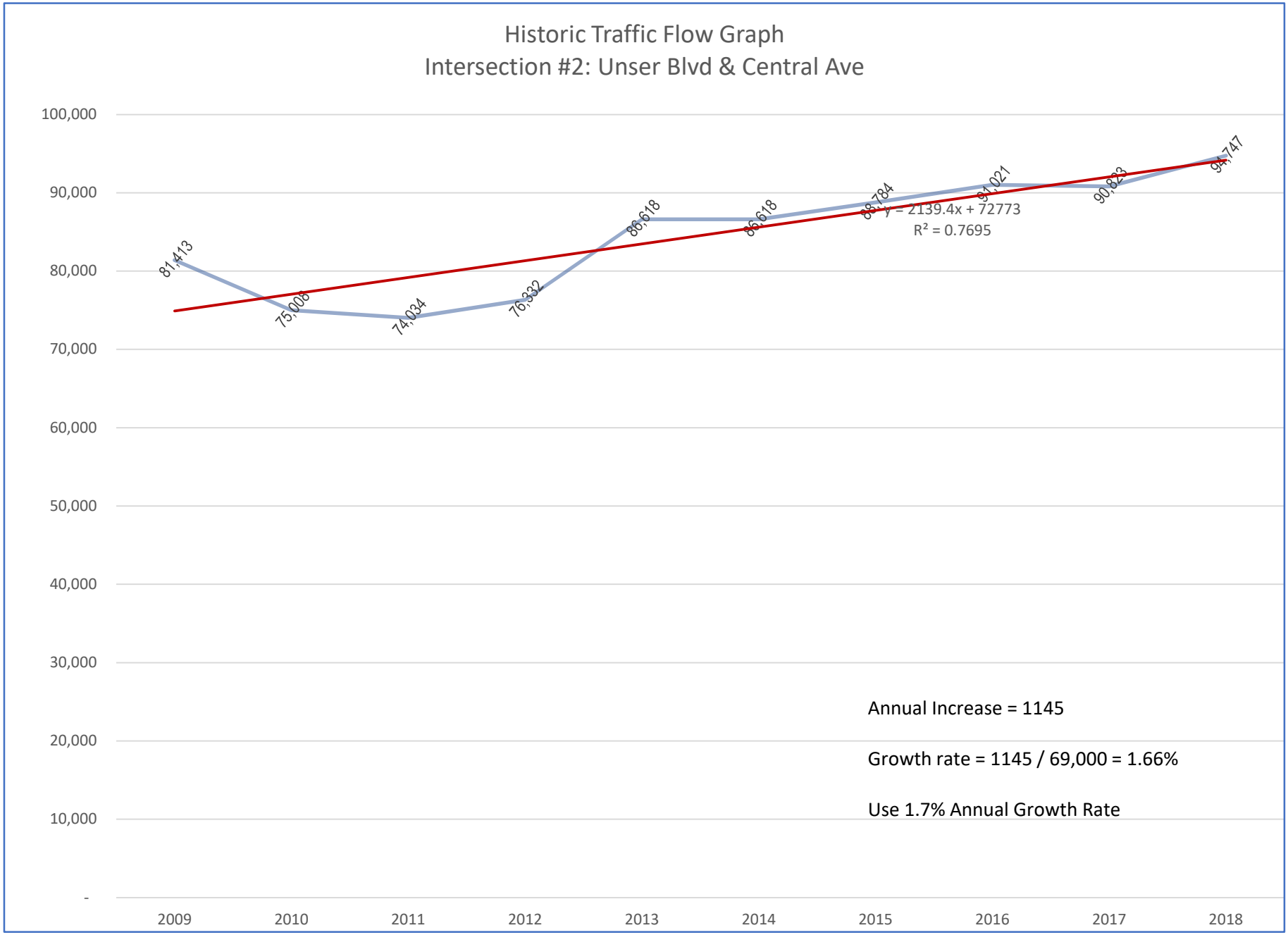
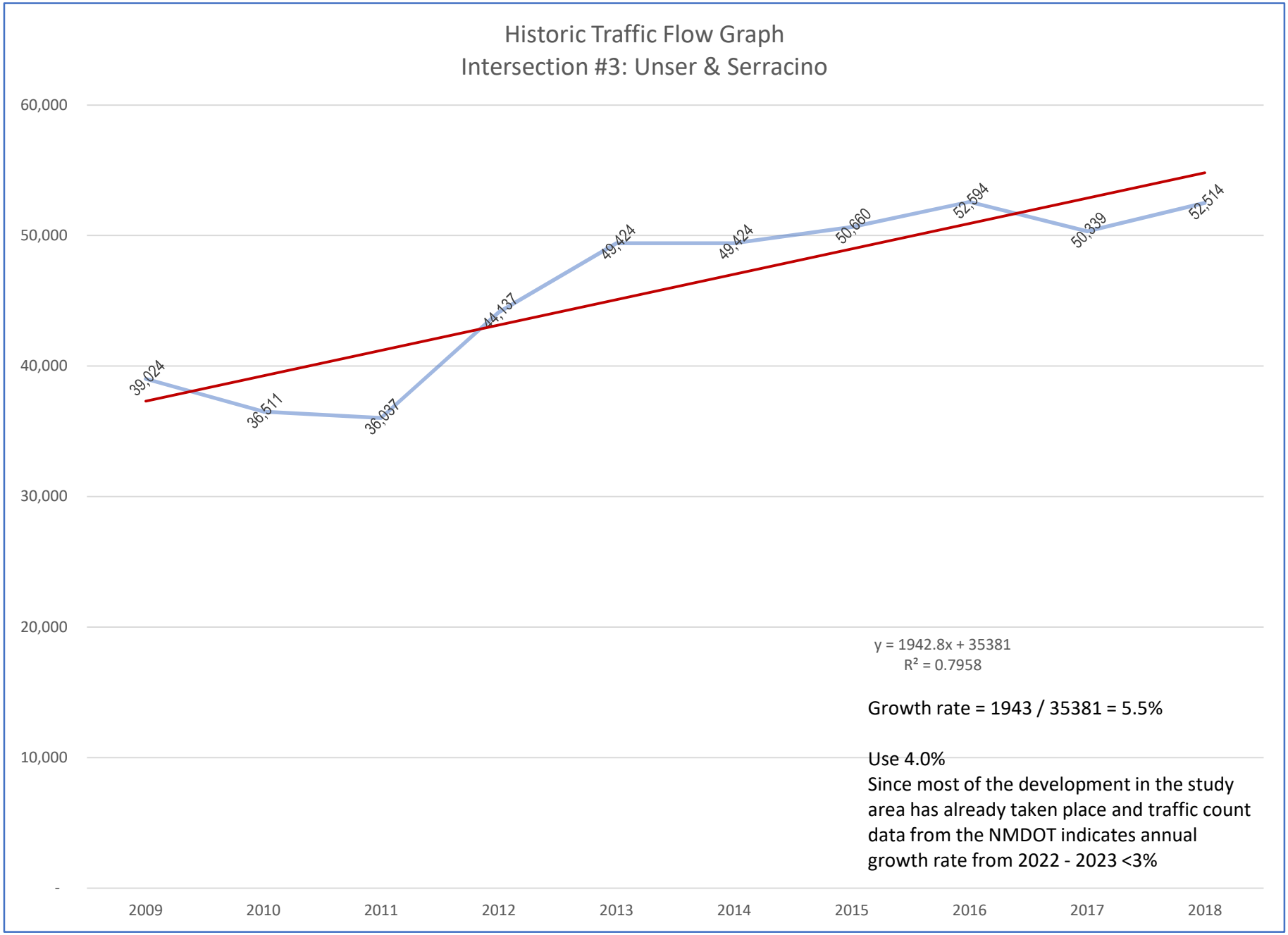

Historic Traffic Flow Graph
Intersection #5: Central & 98th Street
120,000
100,000
80,000
60,000
40,000
20,000
-
86,701
85,400
76,950
81,191
84,940
85,100
90,643
91,723
92,504
96,892
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1477.7x + 79077
R² = 0.5839
Annual Increase = 1,478
Growth rate = 1,478 / 79,077 = 1.87%
Use 2.0% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #4: Unser Blvd & Bluewater
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1967.7x + 53327
R² = 0.6729
63,026
53,548
52,852
63,122
62,220
62,435
66,342
73,262
73,680
71,007
Annual Increase = 1,968
Growth rate = 1,968 / 53,327 = 3.69%
Use 4.0% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #1: Unser Blvd & Bridge Blvd
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
40,802
40,272
47,135
52,390
52,390
56,504
56,819
59,860
71,754
y = 3434.2x + 35932
R² = 0.9173
Annual Increase = 3,914
Growth rate = 3434/ 35932 =9.5%
Use 4.0% Annual Growth Rate
Use 4.0% Since most of the development in the study area has already taken place and traffic count data from the NMDOT indicates annual growth rate from 2022 - 2024 <2%


Historic Traffic Flow Graph
Intersection #2: Unser Blvd & Central Ave
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
81,413
75,008
74,034
76,332
86,618
86,618
88,784
91,021
90,823
94,747
y = 2139.4x + 72773
R² = 0.7695
Annual Increase = 1145
Growth rate = 1145 / 69,000 = 1.66%
Use 1.7% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #3: Unser & Serracino
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
39,024
36,511
36,037
44,137
49,424
49,424
50,660
52,594
50,339
52,514
y = 1942.8x + 35381
R² = 0.7958
Growth rate = 1943 / 35381 = 5.5%
Use 4.0%
Since most of the development in the study area has already taken place and traffic count data from the NMDOT indicates annual growth rate from 2022 - 2023 <3%

7707 West Central (Central and Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial Trips**

2016 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(C98W) Central & 98th West			(98N) 98th North			(98S) 98th South			(UNS) Unser South			(BW) Bridge West		
DASZ #	% Sub Area in Study	2016 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2016	**2040**	**2023**																	
Boundary Specified on DASZ Map																					
5601	100%	2039	2125	2,064	2,064	**3.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5602	50%	2316	2490	2,367	1,184	**1.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5603	100%	825	1206	936	936	**1.55%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5611	20%	707	891	761	152	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5641	75%	1566	2109	1,724	1,293	**2.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**5%**	0.11%	65	0%	0.00%	0
5642	5%	1580	2113	1,735	87	**0.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5643	100%	121	164	134	134	**0.22%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	0.11%	67	0%	0.00%	0
5702	33%	46	45	46	15	**0.02%**	**100%**	0.02%	15	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5703	100%	2542	1969	2,375	2,375	**3.93%**	**50%**	1.96%	1,188	0%	0.00%	0	**50%**	1.96%	1,188	0%	0.00%	0	0%	0.00%	0
5711	50%	1804	1580	1,739	870	**1.44%**	0%	0.00%	0	0%	0.00%	0	**30%**	0.43%	261	0%	0.00%	0	0%	0.00%	0
5712	100%	2632	2255	2,522	2,522	**4.17%**	0%	0.00%	0	0%	0.00%	0	**50%**	2.09%	1,261	0%	0.00%	0	0%	0.00%	0
5713	100%	961	809	917	917	**1.52%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	0.76%	459	0%	0.00%	0
5714	40%	5247	4701	5,088	2,035	**3.36%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	1.68%	1,018	0%	0.00%	0
5715	100%	4173	3578	3,999	3,999	**6.61%**	0%	0.00%	0	0%	0.00%	0	**40%**	2.64%	1,600	0%	0.00%	0	**5%**	0.33%	200
5716	100%	2685	2496	2,630	2,630	**4.35%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**40%**	1.74%	1,052	**20%**	0.87%	526
5717	100%	6	589	176	176	**0.29%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5723	40%	4643	3787	4,393	1,757	**2.91%**	**25%**	0.73%	439	0%	0.00%	0	**25%**	0.73%	439	0%	0.00%	0	0%	0.00%	0
5731	100%	1272	1227	1,259	1,259	**2.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	1.04%	630	0%	0.00%	0
5732	100%	650	1178	804	804	**1.33%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**90%**	1.20%	724	0%	0.00%	0
5733	100%	91	97	93	93	**0.15%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5734	95%	843	957	876	832	**1.38%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	0.69%	416	0%	0.00%	0
5735	100%	1664	1499	1,616	1,616	**2.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	2.67%	1,616	0%	0.00%	0
5751	10%	5716	4361	5,321	532	**0.88%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	0.88%	532	0%	0.00%	0
5752	5%	1102	1238	1,142	57	**0.09%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	0.09%	57	0%	0.00%	0
5801	100%	1449	1976	1,603	1,603	**2.65%**	0%	0.00%	0	**10%**	0.27%	160	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5802	100%	590	543	576	576	**0.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5804	100%	2853	3047	2,910	2,910	**4.81%**	**33%**	1.59%	960	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5805	100%	115	267	159	159	**0.26%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5806	100%	707	741	717	717	**1.19%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5807	100%	1726	1709	1,721	1,721	**2.85%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5811	100%	4234	4170	4,215	4,215	**6.97%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5812	80%	2217	2102	2,183	1,746	**2.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5821	85%	1953	2055	1,983	1,686	**2.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5822	50%	1046	1412	1,153	577	**0.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5831	100%	669	930	745	745	**1.23%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5832	100%	1219	1397	1,271	1,271	**2.10%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5833	100%	3940	3653	3,856	3,856	**6.38%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5841	25%	171	210	182	46	**0.08%**	**80%**	0.06%	37	**20%**	0.02%	9	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	10%	1388	1446	1,405	141	**0.23%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6203	95%	861	1047	915	869	**1.44%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6204	100%	1827	1645	1,774	1,774	**2.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6205	100%	2227	1913	2,135	2,135	**3.53%**	0%	0.00%	0	**30%**	1.06%	641	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6206	100%	1713	1485	1,647	1,647	**2.72%**	0%	0.00%	0	**70%**	1.91%	1,153	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6208	20%	2499	3258	2,720	544	**0.90%**	0%	0.00%	0	**50%**	0.45%	272	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6209	100%	1641	1441	1,583	1,583	**2.62%**	0%	0.00%	0	**50%**	1.31%	792	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6214	45%	3560	3480	3,537	1,592	**2.63%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6307	60%	0	154	45	27	**0.04%**	0%	0.00%	0	**100%**	0.04%	27	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6308	5%	0	0	0	0	**0.00%**	0%	0.00%	0	**100%**	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				83,752	60,479	100.00%			**2,639**			**3,053**			**4,748**			**6,634**			**726**
									4.36%			5.05%			7.85%			10.97%			1.20%

7707 West Central (Central and Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercia**

2016 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(BE) Bridge East			(UCS) Unser Central South			(UCW) Unser Central West			(CE) Central East		
DASZ #	% Sub Area in Study	2016 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2016	**2040**	**2023**														
Boundary Specified on DASZ Map																		
5601	100%	2039	2125	2,064	2,064	**3.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	3.41%	2,064
5602	50%	2316	2490	2,367	1,184	**1.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	1.96%	1,184
5603	100%	825	1206	936	936	**1.55%**	**100%**	1.55%	936	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5611	20%	707	891	761	152	**0.25%**	**100%**	0.25%	152	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5641	75%	1566	2109	1,724	1,293	**2.14%**	**95%**	2.03%	1,228	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5642	5%	1580	2113	1,735	87	**0.14%**	**100%**	0.14%	87	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5643	100%	121	164	134	134	**0.22%**	**50%**	0.11%	67	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5702	33%	46	45	46	15	**0.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5703	100%	2542	1969	2,375	2,375	**3.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5711	50%	1804	1580	1,739	870	**1.44%**	0%	0.00%	0	0%	0.00%	0	**70%**	1.01%	609	0%	0.00%	0
5712	100%	2632	2255	2,522	2,522	**4.17%**	0%	0.00%	0	0%	0.00%	0	**50%**	2.09%	1,261	0%	0.00%	0
5713	100%	961	809	917	917	**1.52%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.76%	459	0%	0.00%	0
5714	40%	5247	4701	5,088	2,035	**3.36%**	0%	0.00%	0	0%	0.00%	0	**50%**	1.68%	1,018	0%	0.00%	0
5715	100%	4173	3578	3,999	3,999	**6.61%**	0%	0.00%	0	**15%**	0.99%	600	**40%**	2.64%	1,600	0%	0.00%	0
5716	100%	2685	2496	2,630	2,630	**4.35%**	0%	0.00%	0	0%	0.00%	0	**40%**	1.74%	1,052	0%	0.00%	0
5717	100%	6	589	176	176	**0.29%**	0%	0.00%	0	**33%**	0.10%	58	**34%**	0.10%	60	0%	0.00%	0
5723	40%	4643	3787	4,393	1,757	**2.91%**	0%	0.00%	0	**25%**	0.73%	439	**25%**	0.73%	439	0%	0.00%	0
5731	100%	1272	1227	1,259	1,259	**2.08%**	**50%**	1.04%	630	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5732	100%	650	1178	804	804	**1.33%**	**5%**	0.07%	40	0%	0.00%	0	0%	0.00%	0	**5%**	0.07%	40
5733	100%	91	97	93	93	**0.15%**	**100%**	0.15%	93	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5734	95%	843	957	876	832	**1.38%**	**50%**	0.69%	416	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5735	100%	1664	1499	1,616	1,616	**2.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5751	10%	5716	4361	5,321	532	**0.88%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5752	5%	1102	1238	1,142	57	**0.09%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5801	100%	1449	1976	1,603	1,603	**2.65%**	0%	0.00%	0	0%	0.00%	0	**90%**	2.39%	1,443	0%	0.00%	0
5802	100%	590	543	576	576	**0.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5804	100%	2853	3047	2,910	2,910	**4.81%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**34%**	1.64%	989
5805	100%	115	267	159	159	**0.26%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5806	100%	707	741	717	717	**1.19%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	0.59%	359
5807	100%	1726	1709	1,721	1,721	**2.85%**	0%	0.00%	0	0%	0.00%	0	**60%**	1.71%	1,033	0%	0.00%	0
5811	100%	4234	4170	4,215	4,215	**6.97%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**50%**	3.48%	2,108
5812	80%	2217	2102	2,183	1,746	**2.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	2.89%	1,746
5821	85%	1953	2055	1,983	1,686	**2.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	2.79%	1,686
5822	50%	1046	1412	1,153	577	**0.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	0.95%	577
5831	100%	669	930	745	745	**1.23%**	**10%**	0.12%	75	0%	0.00%	0	0%	0.00%	0	**90%**	1.11%	671
5832	100%	1219	1397	1,271	1,271	**2.10%**	0%	0.00%	0	**85%**	1.79%	1,080	0%	0.00%	0	**5%**	0.11%	64
5833	100%	3940	3653	3,856	3,856	**6.38%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	**100%**	6.38%	3,856
5841	25%	171	210	182	46	**0.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	10%	1388	1446	1,405	141	**0.23%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6203	95%	861	1047	915	869	**1.44%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6204	100%	1827	1645	1,774	1,774	**2.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6205	100%	2227	1913	2,135	2,135	**3.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6206	100%	1713	1485	1,647	1,647	**2.72%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6208	20%	2499	3258	2,720	544	**0.90%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6209	100%	1641	1441	1,583	1,583	**2.62%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6214	45%	3560	3480	3,537	1,592	**2.63%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6307	60%	0	154	45	27	**0.04%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6308	5%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				83,752	60,479	100.00%			**3,724**			**2,178**			**8,972**			**15,343**
									6.16%			3.60%			14.83%			25.37%

7707 West Central (Central and Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercia**

2016 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

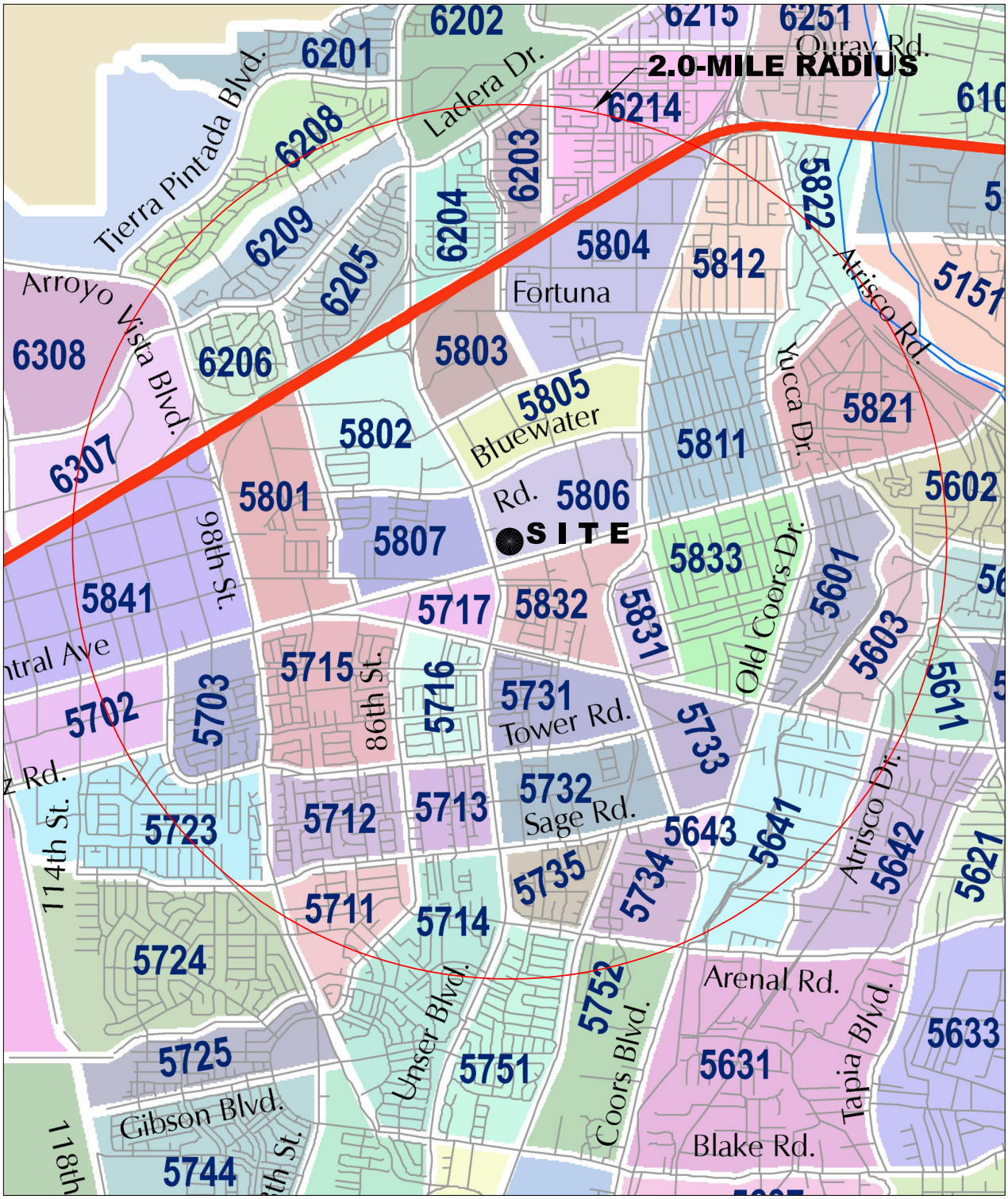
							(SW) Serracino West			(BWW) Bluewater West			(UN) Unser North		
DASZ #	% Sub Area in Study	2016 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2016	**2040**	**2023**											
Boundary Specified on DASZ Map															
5601	100%	2039	2125	2,064	2,064	**3.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5602	50%	2316	2490	2,367	1,184	**1.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5603	100%	825	1206	936	936	**1.55%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5611	20%	707	891	761	152	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5641	75%	1566	2109	1,724	1,293	**2.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5642	5%	1580	2113	1,735	87	**0.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5643	100%	121	164	134	134	**0.22%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5702	33%	46	45	46	15	**0.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5703	100%	2542	1969	2,375	2,375	**3.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5711	50%	1804	1580	1,739	870	**1.44%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5712	100%	2632	2255	2,522	2,522	**4.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5713	100%	961	809	917	917	**1.52%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5714	40%	5247	4701	5,088	2,035	**3.36%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5715	100%	4173	3578	3,999	3,999	**6.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5716	100%	2685	2496	2,630	2,630	**4.35%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5717	100%	6	589	176	176	**0.29%**	0%	0.00%	0	**33%**	0.10%	58	0%	0.00%	0
5723	40%	4643	3787	4,393	1,757	**2.91%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5731	100%	1272	1227	1,259	1,259	**2.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5732	100%	650	1178	804	804	**1.33%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5733	100%	91	97	93	93	**0.15%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5734	95%	843	957	876	832	**1.38%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5735	100%	1664	1499	1,616	1,616	**2.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5751	10%	5716	4361	5,321	532	**0.88%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5752	5%	1102	1238	1,142	57	**0.09%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5801	100%	1449	1976	1,603	1,603	**2.65%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5802	100%	590	543	576	576	**0.95%**	0%	0.00%	0	**95%**	0.90%	547	**5%**	0.05%	29
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	**100%**	0.00%	0
5804	100%	2853	3047	2,910	2,910	**4.81%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5805	100%	115	267	159	159	**0.26%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.13%	80
5806	100%	707	741	717	717	**1.19%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5807	100%	1726	1709	1,721	1,721	**2.85%**	0%	0.00%	0	**40%**	1.14%	688	0%	0.00%	0
5811	100%	4234	4170	4,215	4,215	**6.97%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5812	80%	2217	2102	2,183	1,746	**2.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5821	85%	1953	2055	1,983	1,686	**2.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5822	50%	1046	1412	1,153	577	**0.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5831	100%	669	930	745	745	**1.23%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5832	100%	1219	1397	1,271	1,271	**2.10%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5833	100%	3940	3653	3,856	3,856	**6.38%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5841	25%	171	210	182	46	**0.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	10%	1388	1446	1,405	141	**0.23%**	0%	0.00%	0	0%	0.00%	0	**100%**	0.23%	141
6203	95%	861	1047	915	869	**1.44%**	0%	0.00%	0	0%	0.00%	0	**100%**	1.44%	869
6204	100%	1827	1645	1,774	1,774	**2.93%**	0%	0.00%	0	0%	0.00%	0	**100%**	2.93%	1,774
6205	100%	2227	1913	2,135	2,135	**3.53%**	0%	0.00%	0	0%	0.00%	0	**70%**	2.47%	1,495
6206	100%	1713	1485	1,647	1,647	**2.72%**	0%	0.00%	0	0%	0.00%	0	**30%**	0.82%	494
6208	20%	2499	3258	2,720	544	**0.90%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.45%	272
6209	100%	1641	1441	1,583	1,583	**2.62%**	0%	0.00%	0	0%	0.00%	0	**50%**	1.31%	792
6214	45%	3560	3480	3,537	1,592	**2.63%**	0%	0.00%	0	0%	0.00%	0	**80%**	2.11%	1,274
6307	60%	0	154	45	27	**0.04%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6308	5%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				83,752	60,479	100.00%			**-**			**1,294**			**7,218**
									0.00%			2.14%			11.93%

7707 West Central (Central and Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercia**

2016 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(BWE) Bluewater East		
DASZ #	% Sub Area in Study	2016 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population
		2016	**2040**	**2023**					
Boundary Specified on DASZ Map									
5601	100%	2039	2125	2,064	2,064	**3.41%**	0%	0.00%	0
5602	50%	2316	2490	2,367	1,184	**1.96%**	0%	0.00%	0
5603	100%	825	1206	936	936	**1.55%**	0%	0.00%	0
5611	20%	707	891	761	152	**0.25%**	0%	0.00%	0
5641	75%	1566	2109	1,724	1,293	**2.14%**	0%	0.00%	0
5642	5%	1580	2113	1,735	87	**0.14%**	0%	0.00%	0
5643	100%	121	164	134	134	**0.22%**	0%	0.00%	0
5702	33%	46	45	46	15	**0.02%**	0%	0.00%	0
5703	100%	2542	1969	2,375	2,375	**3.93%**	0%	0.00%	0
5711	50%	1804	1580	1,739	870	**1.44%**	0%	0.00%	0
5712	100%	2632	2255	2,522	2,522	**4.17%**	0%	0.00%	0
5713	100%	961	809	917	917	**1.52%**	0%	0.00%	0
5714	40%	5247	4701	5,088	2,035	**3.36%**	0%	0.00%	0
5715	100%	4173	3578	3,999	3,999	**6.61%**	0%	0.00%	0
5716	100%	2685	2496	2,630	2,630	**4.35%**	0%	0.00%	0
5717	100%	6	589	176	176	**0.29%**	0%	0.00%	0
5723	40%	4643	3787	4,393	1,757	**2.91%**	0%	0.00%	0
5731	100%	1272	1227	1,259	1,259	**2.08%**	0%	0.00%	0
5732	100%	650	1178	804	804	**1.33%**	0%	0.00%	0
5733	100%	91	97	93	93	**0.15%**	0%	0.00%	0
5734	95%	843	957	876	832	**1.38%**	0%	0.00%	0
5735	100%	1664	1499	1,616	1,616	**2.67%**	0%	0.00%	0
5751	10%	5716	4361	5,321	532	**0.88%**	0%	0.00%	0
5752	5%	1102	1238	1,142	57	**0.09%**	0%	0.00%	0
5801	100%	1449	1976	1,603	1,603	**2.65%**	0%	0.00%	0
5802	100%	590	543	576	576	**0.95%**	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0
5804	100%	2853	3047	2,910	2,910	**4.81%**	**33%**	1.59%	960
5805	100%	115	267	159	159	**0.26%**	**50%**	0.13%	80
5806	100%	707	741	717	717	**1.19%**	**50%**	0.59%	359
5807	100%	1726	1709	1,721	1,721	**2.85%**	0%	0.00%	0
5811	100%	4234	4170	4,215	4,215	**6.97%**	**50%**	3.48%	2,108
5812	80%	2217	2102	2,183	1,746	**2.89%**	0%	0.00%	0
5821	85%	1953	2055	1,983	1,686	**2.79%**	0%	0.00%	0
5822	50%	1046	1412	1,153	577	**0.95%**	0%	0.00%	0
5831	100%	669	930	745	745	**1.23%**	0%	0.00%	0
5832	100%	1219	1397	1,271	1,271	**2.10%**	**10%**	0.21%	127
5833	100%	3940	3653	3,856	3,856	**6.38%**	0%	0.00%	0
5841	25%	171	210	182	46	**0.08%**	0%	0.00%	0
6202	10%	1388	1446	1,405	141	**0.23%**	0%	0.00%	0
6203	95%	861	1047	915	869	**1.44%**	0%	0.00%	0
6204	100%	1827	1645	1,774	1,774	**2.93%**	0%	0.00%	0
6205	100%	2227	1913	2,135	2,135	**3.53%**	0%	0.00%	0
6206	100%	1713	1485	1,647	1,647	**2.72%**	0%	0.00%	0
6208	20%	2499	3258	2,720	544	**0.90%**	0%	0.00%	0
6209	100%	1641	1441	1,583	1,583	**2.62%**	0%	0.00%	0
6214	45%	3560	3480	3,537	1,592	**2.63%**	**20%**	0.53%	318
6307	60%	0	154	45	27	**0.04%**	0%	0.00%	0
6308	5%	0	0	0	0	**0.00%**	0%	0.00%	0
				83,752	60,479	100.00%			**3,951**
									6.53%



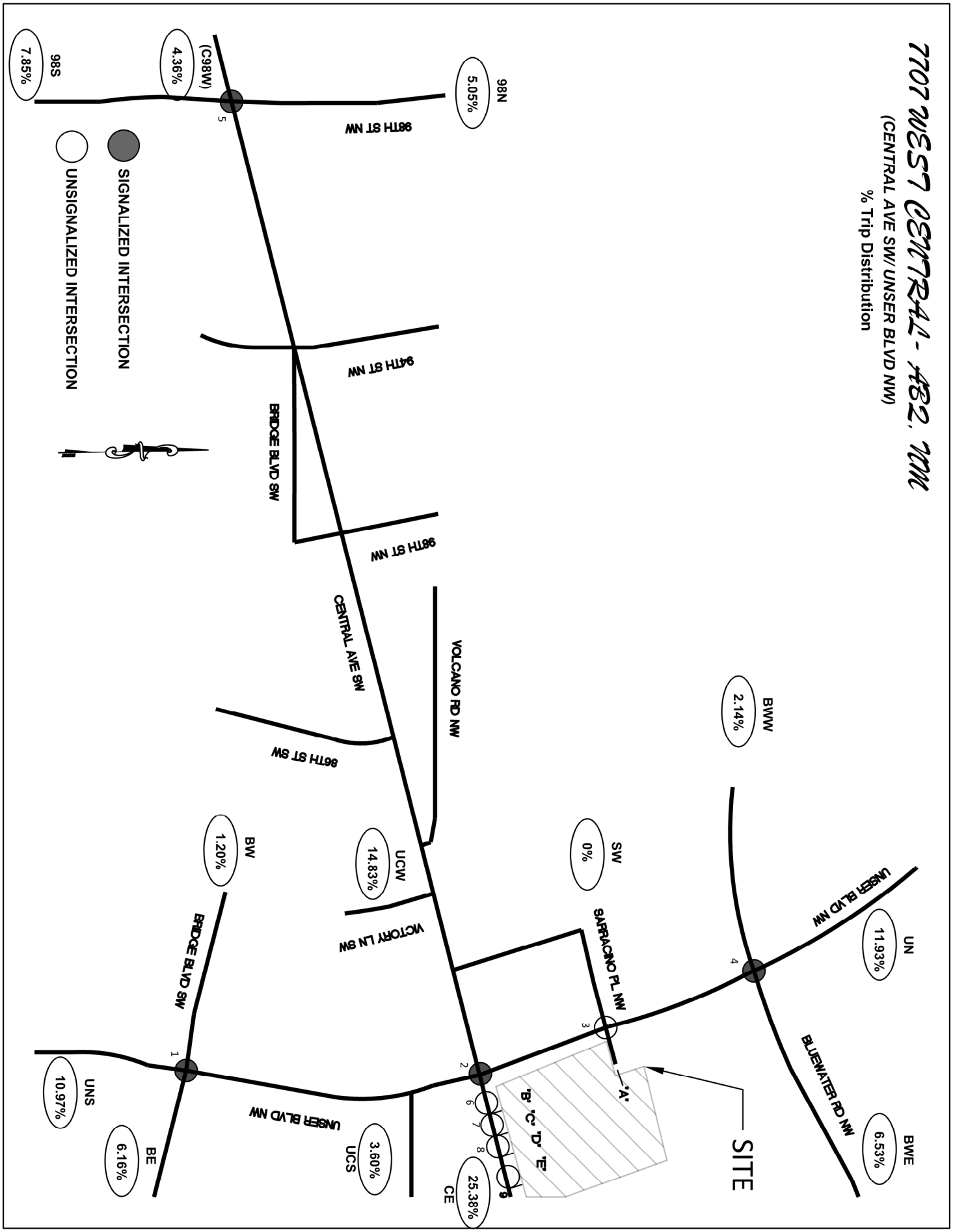
DATA ANALYSIS SUBZONE (DASZ) MAP

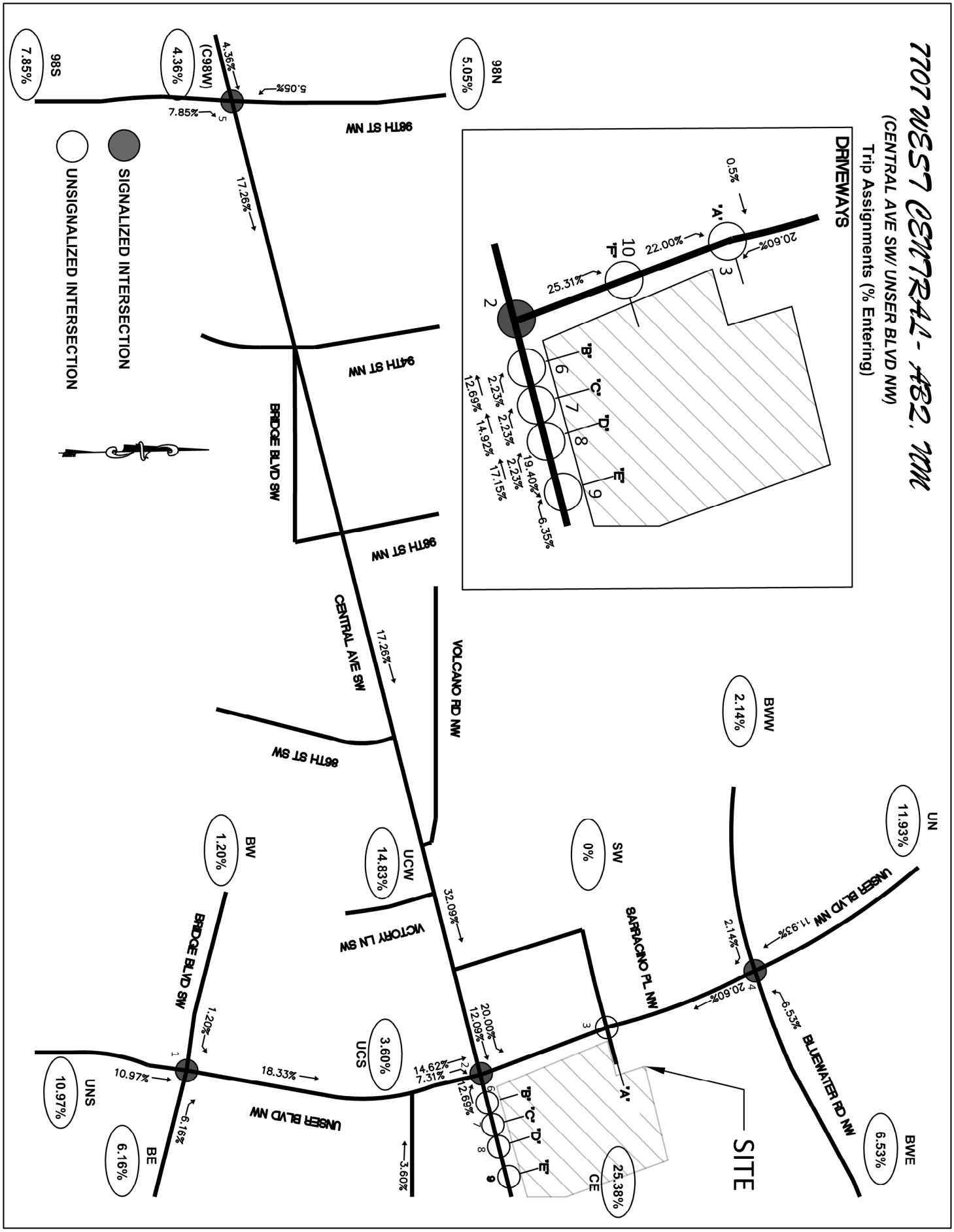
Sage Rd. / Unser Blvd. Development (NW Corner)

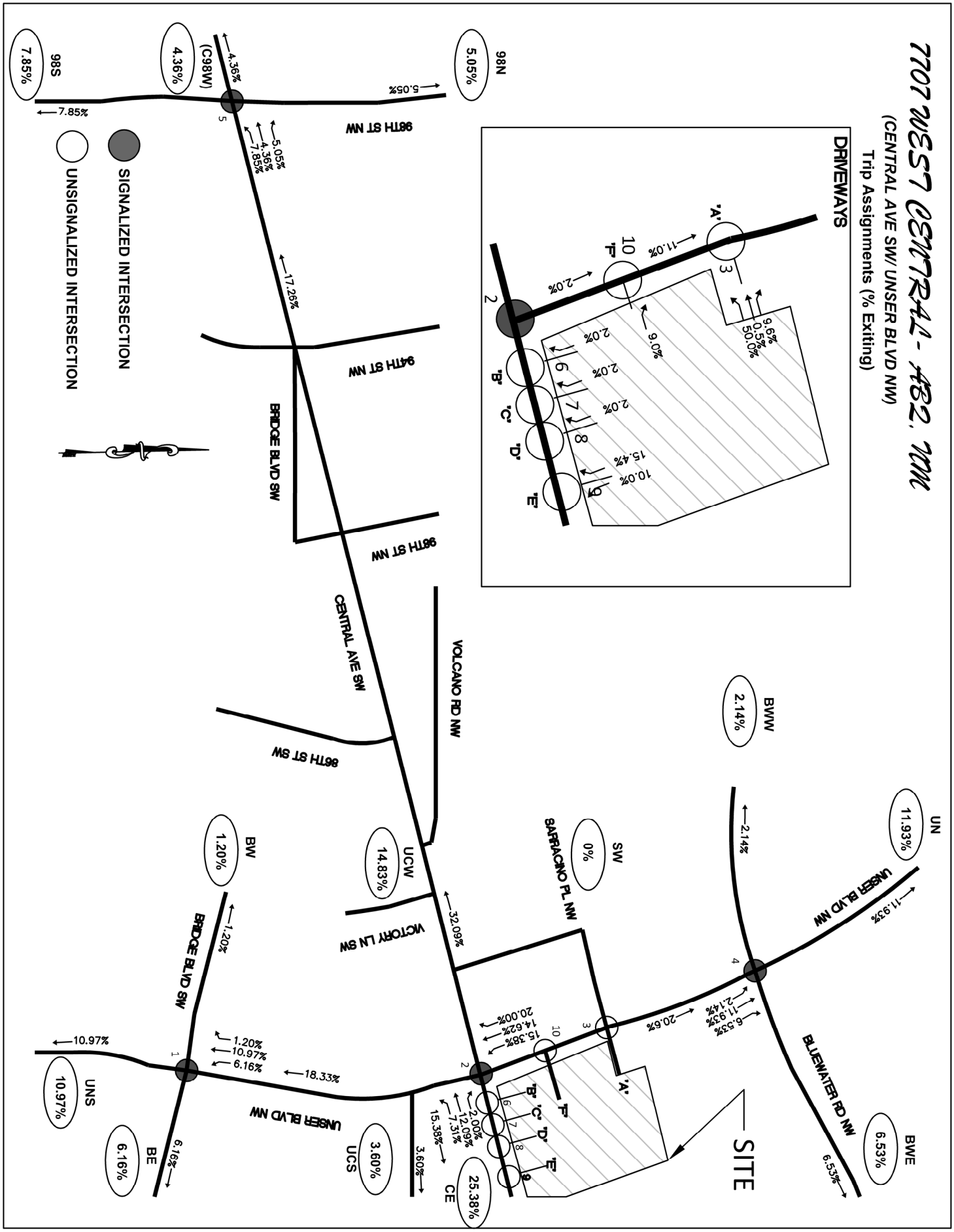
7707 WEST CENTRAL - AB2, NM

(CENTRAL AVE SW/ UNSER BLVD NW)

% Trip Distribution



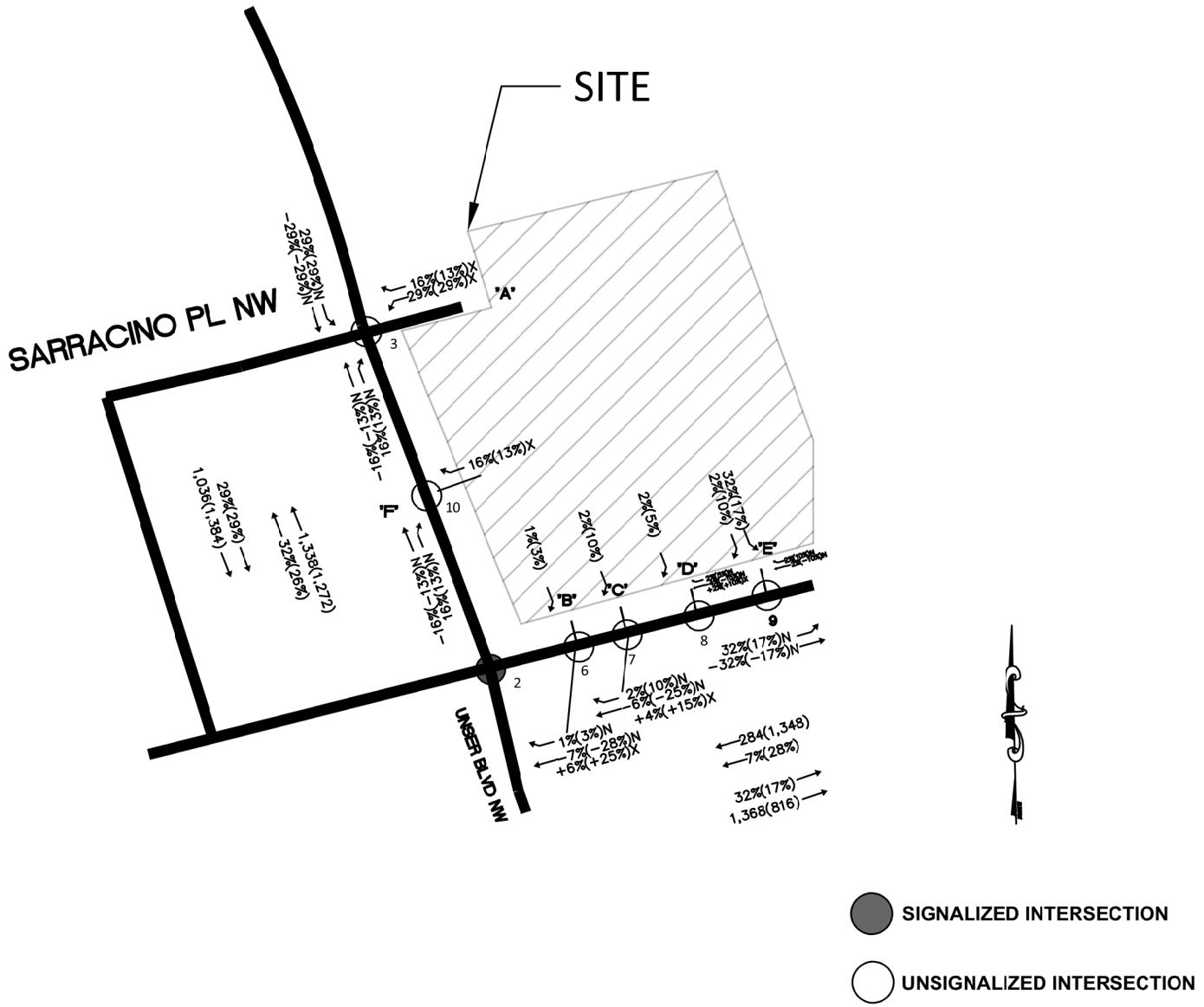

7707 WEST CENTRAL - AB2, NM
(CENTRAL AVE SW/ UNSER BLVD NW)
Trip Assignments (% Entering)
DRIVEWAYS
0.5%
'A'
22.00%
20.60%
3
10
'F'
25.31%
2
'B'
6
'C'
7
'D'
8
'E'
9
2.23%
2.23%
2.23%
12.69%
14.92%
17.15%
19.40%
6.35%
98N
5.05%
98TH ST NW
4.36%
(C98W)
4.36%
5.05%
7.85%
5
98S
7.85%
17.26%
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
94TH ST NW
BRIDGE BLVD SW
98TH ST NW
CENTRAL AVE SW
17.26%
VOLCANO RD NW
86TH ST SW
BWW
2.14%
UN
11.93%
SW
0%
UNSER BLVD NW
11.93%
2.14%
SARRACINO PL NW
20.60%
4
6.53%
BLUEWATER RD NW
BWE
6.53%
3
'A'
SITE
25.38%
CE
UCW
14.83%
32.09%
VICTORY LN SW
20.00%
12.09%
6
'B'
'C'
'D'
'E'
7
8
9
12.69%
BW
1.20%
BRIDGE BLVD SW
1.20%
1
10.97%
18.33%
14.62%
7.31%
2
3.60%
UCS
3.60%
UNSER BLVD NW
6.16%
BE
6.16%
UNS
10.97%


7707 WEST CENTRAL - AB2, NM
(CENTRAL AVE SW/ UNSER BLVD NW)
Trip Assignments (% Exiting)
DRIVEWAYS
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
98N
5.05%
98S
7.85%
(C98W)
4.36%
98TH ST NW
94TH ST NW
BRIDGE BLVD SW
CENTRAL AVE SW
VOLCANO RD NW
86TH ST SW
VICTORY LN SW
SARRACINO PL NW
UNSER BLVD NW
BLUEWATER RD NW
BRIDGE BLVD SW
BWW
2.14%
UN
11.93%
BWE
6.53%
SW
0%
UCW
14.83%
BW
1.20%
UNS
10.97%
BE
6.16%
UCS
3.60%
CE
25.38%
SITE
'A'
'B'
'C'
'D'
'E'
'F'
17.26%
18.33%
32.09%
20.6%
11.0%
9.0%
2.0%
10.0%
15.4%
9.6%
0.5%
50.0%
6.53%
2.14%
11.93%
20.00%
14.62%
15.38%
2.00%
12.09%
7.31%
15.38%
3.60%
1.20%
10.97%
6.16%
4.36%
7.85%
5.05%

7707 WEST CENTRAL - ABQ, NM

(CENTRAL AVE SW/ UNSER BLVD NW)

Trip Assignments (% Pass-by Trips)



7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

Based on Latest Site Plan with one 100,000 s.f. Warehouse on Lots 1 & 11

COMMENT	USE (ITE CODE) DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units (1k ft^2)					
Lots 5 &10	Warehousing (150)	100.00	171	13	4	5	13
Lots 1 - 3	Fast Food Restaurant w/ Drive-Thru Window (934)	13.50	6,311	307	295	232	214
Lot 4	High Turnover (Sit-Down) Restaurant (932)	4.93	528	26	21	27	17
Lots 6- 9 & 11	Shopping Plaza 40 - 150K - No Supermarket (821)	32.30	2,181	35	21	82	85
Lot 12	Automobile Care Center (942)	6.30	-	9	5	13	14
	Subtotal		**9,191**	**390**	**346**	**359**	**343**
	Pass-By Trips	35%		*-137*	*-121*	*-126*	*-120*
	Total Primary Trips			**253**	**225**	**233**	**223**

7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
Warehousing (150)	***100.00*** 1,000 S.F.	171	13	4	5	13

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***1.71*** **(X) +** ***0***

50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***0.17*** **(X) +** ***0***

77% Enter, ***23%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

T = ***0.18*** **(X) +** ***0***

28% Enter, ***72%*** Exit

Comments:

Lots 5 &10

7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
Fast Food Restaurant w/ Drive-Thru Window (934)	***13.50*** **1,000 S.F.**	6,311	307	295	232	214

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***467.48*** **(X) +** ***0***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***44.61*** **(X) +** ***0***
51% Enter, ***49%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

T = ***33.03*** **(X) +** ***0***
52% Enter, ***48%*** Exit

Comments:
Lots 1 - 3

7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
High Turnover (Sit-Down) Restaurant (932)	***4.93*** **1,000 S.F.**	528	26	21	27	17

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***107.2*** **(X) +** ***0***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***9.57*** **(X) +** ***0***
55% Enter, ***45%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

T = ***9.05*** **(X) +** ***0***
61% Enter, ***39%*** Exit

Comments:
Lot 4

7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
Shopping Plaza 40 - 150K - No Supermarket (821)	***32.30*** **1,000 S.F.**	2,181	35	21	82	85

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***67.52*** **(X) +** ***0***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***1.73*** **(X) +** ***0***
62% Enter, ***38%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

T = ***5.19*** **(X) +** ***0***
49% Enter, ***51%*** Exit

Comments:
Lots 6- 9 & 11

7707 W. Central Ave. Development (Central Ave. / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
Automobile Care Center (942)	***6.30*** **1,000 S.F.**	-	9	5	13	14

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***0*** **(X) +** ***0***
50% Enter, ***50%*** Exit

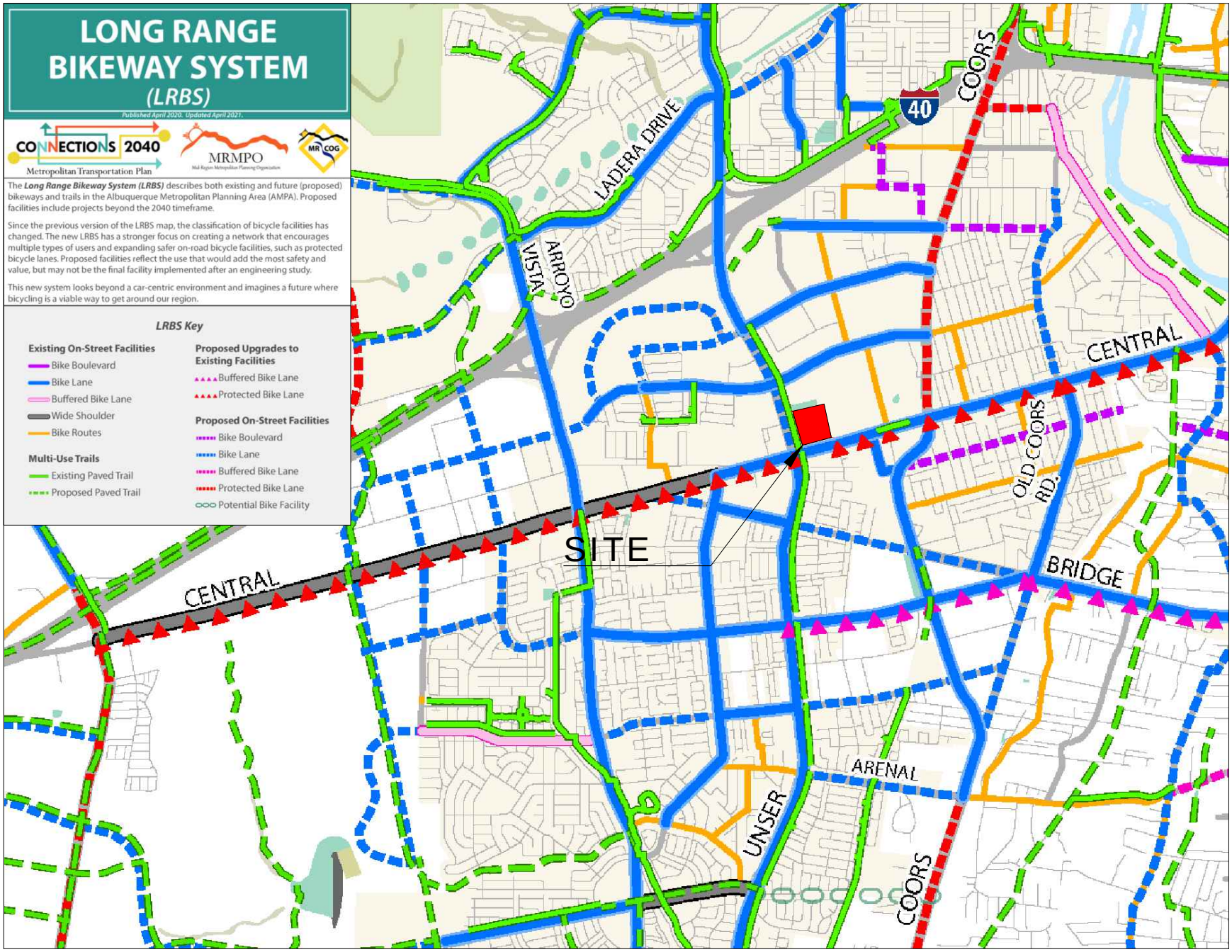
Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***2.25*** **(X) +** ***0***
66% Enter, ***34%*** Exit

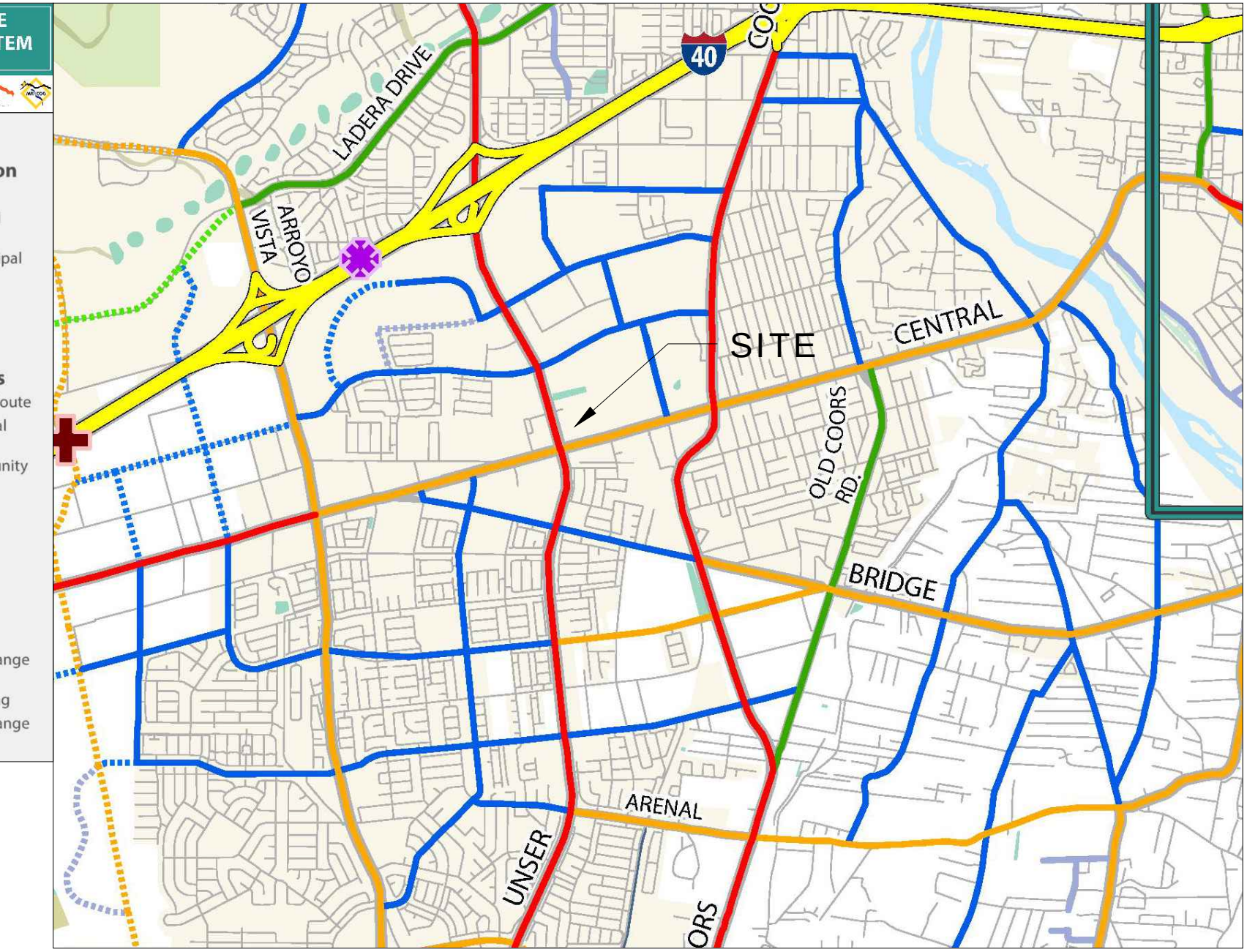
Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

T = ***2.41*** **(X) +** ***11.83***
48% Enter, ***52%*** Exit

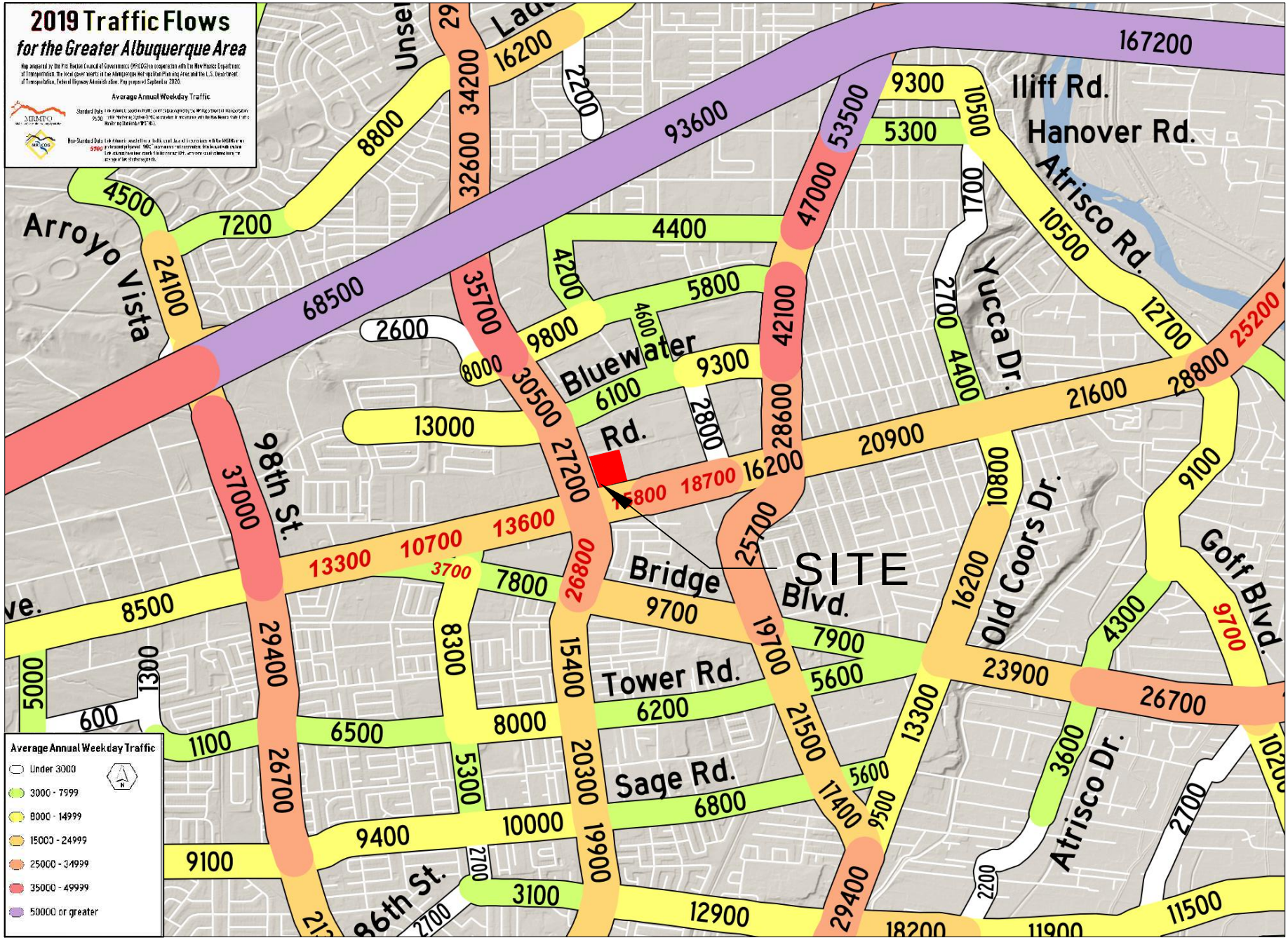
Comments:
Lot 12



Portion of Futures 2040 Long Range Bikeway System (from Mid-Region Council of Governments)



Portion of Futures 2040 Long Range Roadway System (from Mid-Region Council of Governments)



Portion of 2019 Traffic Flow Map
(from Mid-Region Council of Governments)

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025) - 100% Development

INTERSECTION: **Summary**

Bridge Blvd / Unser Blvd

(1)

3% Heavy Commercial

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	166	125	99	54	134	85	40	1,277	90	81	694	40
2025 (NO BUILD - A.M.)	*166*	*125*	*99*	*54*	*134*	*85*	*40*	*1,277*	*90*	*81*	*694*	*40*
2025 (BUILD - A.M.)	***166***	***125***	***116***	***57***	***134***	***85***	***40***	***1,308***	***90***	***95***	***720***	***43***

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	125	139	54	90	130	121	49	1,004	22	90	1,371	134
2025 (NO BUILD - P.M.)	*125*	*139*	*54*	*90*	*130*	*121*	*49*	*1,004*	*22*	*90*	*1,371*	*134*
2025 (BUILD - P.M.)	***125***	***139***	***70***	***93***	***130***	***121***	***49***	***1,033***	***22***	***107***	***1,401***	***137***

Central Blvd / Unser Blvd

(2)

3% Heavy Commercial

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	502	900	13	40	197	81	22	972	515	116	793	251
2025 (NO BUILD - A.M.)	*502*	*900*	*13*	*40*	*197*	*81*	*22*	*972*	*515*	*116*	*793*	*251*
2025 (BUILD - A.M.)	***564***	***928***	***13***	***49***	***250***	***86***	***22***	***1,034***	***515***	***152***	***835***	***267***

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	439	627	49	336	986	188	81	797	157	130	981	439
2025 (NO BUILD - P.M.)	*439*	*627*	*49*	*336*	*986*	*188*	*81*	*797*	*157*	*130*	*981*	*439*
2025 (BUILD - P.M.)	***498***	***654***	***49***	***347***	***1,035***	***207***	***81***	***855***	***157***	***171***	***1,030***	***458***

Serracino/Driveway 'A' & Unser Blvd

(3)

3% Heavy Commercial

	Eastbound (Serracino/Driveway 'A			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	40	0	31	22	0	4	31	1,693	4	9	1,116	36
2025 (NO BUILD - A.M.)	*40*	*0*	*31*	*22*	*0*	*4*	*31*	*1,693*	*4*	*9*	*1,116*	*36*
2025 (BUILD - A.M.)	***40***	***0***	***31***	***288***	***2***	***124***	***31***	***1,649***	***53***	***53***	***1,072***	***36***

	Eastbound (Serracino/Driveway 'A			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	18	0	27	0	0	1	4	1,649	0	0	1,568	31
2025 (NO BUILD - P.M.)	*18*	*0*	*27*	*0*	*0*	*1*	*4*	*1,649*	*0*	*0*	*1,568*	*31*
2025 (BUILD - P.M.)	***18***	***0***	***27***	***284***	***2***	***120***	***4***	***1,617***	***37***	***41***	***1,527***	***31***

Bluewater / Unser Blvd

(4)

3% Heavy Commercial

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	161	161	99	18	90	121	112	1,443	139	108	981	139
2025 (NO BUILD - A.M.)	*161*	*161*	*99*	*18*	*90*	*121*	*112*	*1,443*	*139*	*108*	*981*	*139*
2025 (BUILD - A.M.)	***161***	***161***	***105***	***36***	***90***	***121***	***117***	***1,471***	***154***	***108***	***1,015***	***139***

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2025)	233	67	36	85	143	152	27	1,362	72	108	1,564	121
2025 (NO BUILD - P.M.)	*233*	*67*	*36*	*85*	*143*	*152*	*27*	*1,362*	*72*	*108*	*1,564*	*121*
2025 (BUILD - P.M.)	***233***	***67***	***42***	***102***	***143***	***152***	***33***	***1,394***	***90***	***108***	***1,596***	***121***

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025) - 100% Development

INTERSECTION: **Summary**

Central Ave / 98th Street

(5)

3% Heavy Commercial

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	204	293	34	157	229	144	102	1,018	428	85	314	110	
2025 (NO BUILD - A.M.)	*204*	*293*	*34*	*157*	*229*	*144*	*102*	*1,018*	*428*	*85*	*314*	*110*	
2025 (BUILD - A.M.)	***204***	***305***	***34***	***175***	***239***	***156***	***102***	***1,018***	***450***	***99***	***314***	***110***	

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	187	263	85	437	462	153	47	555	360	144	725	119	
2025 (NO BUILD - P.M.)	*187*	*263*	*85*	*437*	*462*	*153*	*47*	*555*	*360*	*144*	*725*	*119*	
2025 (BUILD - P.M.)	***187***	***275***	***85***	***458***	***474***	***167***	***47***	***555***	***381***	***157***	***725***	***119***	

Central Ave. / Driveway "B"

(6)

3% Heavy Commercial

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	1,577	0	0	328	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,577*	*0*	*0*	*328*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***0***	***1,641***	***0***	***0***	***358***	***34***	***0***	***0***	***0***	***0***	***0***	***36***	

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	941	0	0	1,555	0	0	0	0	0	0	0	
2025 (NO BUILD - P.M.)	*0*	*941*	*0*	*0*	*1,555*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - P.M.)	***0***	***1,010***	***0***	***0***	***1,577***	***47***	***0***	***0***	***0***	***0***	***0***	***56***	

Central Ave. / Driveway "C"

(7)

3% Heavy Commercial

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	1,577	0	0	328	2	0	0	0	0	0	2	
2025 (NO BUILD - A.M.)	*0*	*1,577*	*0*	*0*	*328*	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
2025 (BUILD - A.M.)	***0***	***1,641***	***0***	***0***	***392***	***2***	***0***	***0***	***0***	***0***	***0***	***2***	

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	941	0	0	1,555	2	0	0	0	0	0	2	
2025 (NO BUILD - P.M.)	*0*	*941*	*0*	*0*	*1,555*	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
2025 (BUILD - P.M.)	***0***	***1,010***	***0***	***0***	***1,624***	***2***	***0***	***0***	***0***	***0***	***0***	***2***	

Central Ave. / Driveway "D"

(8)

3% Heavy Commercial

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	1,577	0	0	328	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,577*	*0*	*0*	*328*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***77***	***1,564***	***0***	***0***	***365***	***48***	***0***	***0***	***0***	***28***	***0***	***75***	

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")			PHF
	1.00			1.00			1.00			1.00			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2025)	0	941	0	0	1,555	0	0	0	0	0	0	0	
2025 (NO BUILD - P.M.)	*0*	*941*	*0*	*0*	*1,555*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - P.M.)	***51***	***959***	***0***	***0***	***1,575***	***61***	***0***	***0***	***0***	***49***	***0***	***66***	

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Bridge Blvd / Unser Blvd

INTERSECTION: E-W Street: **Bridge Blvd** (1)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2025**

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	148	112	88	48	120	76	36	1,140	80	72	620	36
Background Traffic Growth	18	13	11	6	14	9	4	137	10	9	74	4
Subtotal (NO BUILD - A.M.)	***166***	***125***	***99***	***54***	***134***	***85***	***40***	***1,277***	***90***	***81***	***694***	***40***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.16%***	***1.20%***	*0.00%*	*0.00%*	*0.00%*	***10.97%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.16%***	***10.97%***	***1.20%***
Total Trips Generated	0	0	17	3	0	0	0	31	0	14	26	3
Subtotal AM Pk Hr. BUILD Volumes	**166**	**125**	**116**	**57**	**134**	**85**	**40**	**1,308**	**90**	**95**	**720**	**43**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**166**	**125**	**116**	**57**	**134**	**85**	**40**	**1,308**	**90**	**95**	**720**	**43**

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	112	124	48	80	116	108	44	896	20	80	1,224	120
Background Traffic Growth	13	15	6	10	14	13	5	108	2	10	147	14
Subtotal (NO BUILD - P.M.)	***125***	***139***	***54***	***90***	***130***	***121***	***49***	***1,004***	***22***	***90***	***1,371***	***134***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.16%***	***1.20%***	*0.00%*	*0.00%*	*0.00%*	***10.97%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.16%***	***10.97%***	***1.20%***
Total Trips Generated	0	0	16	3	0	0	0	29	0	17	30	3
Subtotal PM Pk Hr. BUILD Volumes	**125**	**139**	**70**	**93**	**130**	**121**	**49**	**1,033**	**22**	**107**	**1,401**	**137**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**125**	**139**	**70**	**93**	**130**	**121**	**49**	**1,033**	**22**	**107**	**1,401**	**137**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Bridge Blvd)*			*Westbound (Bridge Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Bridge Blvd)*			*Westbound (Bridge Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Blvd / Unser Blvd

INTERSECTION: E-W Street: **Central Blvd** (2)

N-S Street: **Unser Blvd**

Year of Existing Counts 2022

Horizon Year **2025**

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	448	804	12	36	176	72	20	868	460	104	708	224
Background Traffic Growth	54	96	1	4	21	9	2	104	55	12	85	27
Subtotal (NO BUILD - A.M.)	***502***	***900***	***13***	***40***	***197***	***81***	***22***	***972***	***515***	***116***	***793***	***251***
Percent Commercial Trips Generated(Entering)	***22.09%***	***10.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***21.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***3.93%***	***25.09%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***18.00%***	***7.00%***
Total Trips Generated	62	28	0	9	58	0	0	62	0	36	42	16
Subtotal AM Pk Hr. BUILD Volumes	**564**	**928**	**13**	**49**	**255**	**81**	**22**	**1,034**	**515**	**152**	**835**	**267**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**564**	**928**	**13**	**49**	**250**	**86**	**22**	**1,034**	**515**	**152**	**835**	**267**

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	392	560	44	300	880	168	72	712	140	116	876	392
Background Traffic Growth	47	67	5	36	106	20	9	85	17	14	105	47
Subtotal (NO BUILD - P.M.)	***439***	***627***	***49***	***336***	***986***	***188***	***81***	***797***	***157***	***130***	***981***	***439***
Percent Commercial Trips Generated(Entering)	***22.09%***	***10.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***21.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***3.93%***	***25.09%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***18.00%***	***7.00%***
Total Trips Generated	59	27	0	11	68	0	0	58	0	41	49	19
Subtotal PM Pk Hr. BUILD Volumes	**498**	**654**	**49**	**347**	**1,054**	**188**	**81**	**855**	**157**	**171**	**1,030**	**458**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**498**	**654**	**49**	**347**	**1,035**	**207**	**81**	**855**	**157**	**171**	**1,030**	**458**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Blvd)*			*Westbound (Central Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-3.00%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***-5***	***5***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Blvd)*			*Westbound (Central Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-13.00%***	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***-19***	***19***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Serracino/Driveway 'A' & Unser Blvd

INTERSECTION: E-W Street: **Serracino/Driveway 'A'** (3)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2025**

Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	36	0	28	20	0	4	28	1,512	4	8	996	32
Background Traffic Growth	4	0	3	2	0	0	3	181	0	1	120	4
Subtotal (NO BUILD - A.M.)	***40***	***0***	***31***	***22***	***0***	***4***	***31***	***1,693***	***4***	***9***	***1,116***	***36***
Percent Residential Trips Generated(Exiting)	*0.00%*	***0.50%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***44.02%***	***20.60%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***40.38%***	***0.50%***	***20.60%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	230	2	80	0	5	0	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	**40**	**0**	**31**	**252**	**2**	**84**	**31**	**1,698**	**4**	**9**	**1,116**	**36**
Pass-by Trip Adjustments	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*-49*	*49*	*44*	*-44*	*0*
Total AM Peak Hour BUILD Volumes	**40**	**0**	**31**	**288**	**2**	**124**	**31**	**1,649**	**53**	**53**	**1,072**	**36**
	1.2%	**0.0%**	**0.9%**	**8.5%**	**0.1%**	**3.7%**	**0.9%**	**48.8%**	**1.6%**	**1.6%**	**31.7%**	**1.1%**

	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	16	0	24	0	0	1	4	1,472	0	0	1,400	28
Background Traffic Growth	2	0	3	0	0	0	0	177	0	0	168	3
Subtotal	18	0	27	0	0	1	4	1,649	0	0	1,568	31
Subtotal (NO BUILD - P.M.)	***18***	***0***	***27***	***0***	***0***	***1***	***4***	***1,649***	***0***	***0***	***1,568***	***31***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***40.38%***	***0.50%***	***20.60%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.00%***	***0.50%***	***9.60%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	242	2	81	0	5	0	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**18**	**0**	**27**	**242**	**2**	**82**	**4**	**1,654**	**0**	**0**	**1,568**	**31**
Pass-by Trip Adjustments	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*-37*	*37*	*41*	*-41*	*0*
Total PM Peak Hour BUILD Volumes	**18**	**0**	**27**	**284**	**2**	**120**	**4**	**1,617**	**37**	**41**	**1,527**	**31**
	0%	**0.0%**	**0.7%**	**7.7%**	**0.1%**	**3.2%**	**0.1%**	**43.6%**	**1.0%**	**1.1%**	**41.2%**	**0.8%**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-32.00%***	***32.00%***	***29.00%***	***-29.00%***	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*-49*	*49*	*44*	*-44*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***29.00%***	*0.00%*	***32.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***36***	***0***	***40***	***0***	***-49***	***49***	***44***	***-44***	***0***

PM Pass-by Trips	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-26.00%***	***26.00%***	***29.00%***	***-29.00%***	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*-37*	*37*	*41*	*-41*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***29.00%***	*0.00%*	***26.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***42***	***0***	***38***	***0***	***-37***	***37***	***41***	***-41***	***0***
	Entering	*Exiting*										

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Bluewater / Unser Blvd

INTERSECTION: E-W Street: **Bluewater** (4)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2025**

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	144	144	88	16	80	108	100	1,288	124	96	876	124
Background Traffic Growth	17	17	11	2	10	13	12	155	15	12	105	15
Subtotal (NO BUILD - A.M.)	***161***	***161***	***99***	***18***	***90***	***121***	***112***	***1,443***	***139***	***108***	***981***	***139***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***2.14%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.93%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.14%***	***11.93%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	6	18	0	0	5	28	15	0	34	0
Subtotal AM Pk Hr. BUILD Volumes	**161**	**161**	**105**	**36**	**90**	**121**	**117**	**1,471**	**154**	**108**	**1,015**	**139**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**161**	**161**	**105**	**36**	**90**	**121**	**117**	**1,471**	**154**	**108**	**1,015**	**139**

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	208	60	32	76	128	136	24	1,216	64	96	1,396	108
Background Traffic Growth	25	7	4	9	15	16	3	146	8	12	168	13
Subtotal (NO BUILD - P.M.)	***233***	***67***	***36***	***85***	***143***	***152***	***27***	***1,362***	***72***	***108***	***1,564***	***121***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***2.14%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.93%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.14%***	***11.93%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	6	17	0	0	6	32	18	0	32	0
Subtotal PM Pk Hr. BUILD Volumes	**233**	**67**	**42**	**102**	**143**	**152**	**33**	**1,394**	**90**	**108**	**1,596**	**121**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**233**	**67**	**42**	**102**	**143**	**152**	**33**	**1,394**	**90**	**108**	**1,596**	**121**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Bluewater)*			*Westbound (Bluewater)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Bluewater)*			*Westbound (Bluewater)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave / 98th Street

INTERSECTION: E-W Street: **Central Ave** (5)

N-S Street: **98th Street**

Year of Existing Counts 2022

Horizon Year **2025**

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	192	276	32	148	216	136	96	960	404	80	296	104
Background Traffic Growth	12	17	2	9	13	8	6	58	24	5	18	6
Subtotal (NO BUILD - A.M.)	***204***	***293***	***34***	***157***	***229***	***144***	***102***	***1,018***	***428***	***85***	***314***	***110***
Percent Commercial Trips Generated(Entering)	*0.00%*	***4.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***5.05%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***4.36%***	***5.05%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	12	0	18	10	12	0	0	22	14	0	0
Subtotal AM Pk Hr. BUILD Volumes	**204**	**305**	**34**	**175**	**239**	**156**	**102**	**1,018**	**450**	**99**	**314**	**110**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**204**	**305**	**34**	**175**	**239**	**156**	**102**	**1,018**	**450**	**99**	**314**	**110**

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	176	248	80	412	436	144	44	524	340	136	684	112
Background Traffic Growth	11	15	5	25	26	9	3	31	20	8	41	7
Subtotal (NO BUILD - P.M.)	***187***	***263***	***85***	***437***	***462***	***153***	***47***	***555***	***360***	***144***	***725***	***119***
Percent Commercial Trips Generated(Entering)	*0.00%*	***4.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***5.05%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***4.36%***	***5.05%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	12	0	21	12	14	0	0	21	13	0	0
Subtotal PM Pk Hr. BUILD Volumes	**187**	**275**	**85**	**458**	**474**	**167**	**47**	**555**	**381**	**157**	**725**	**119**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**187**	**275**	**85**	**458**	**474**	**167**	**47**	**555**	**381**	**157**	**725**	**119**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave)*			*Westbound (Central Ave)*			*Northbound (98th Street)*			*Southbound (98th Street)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Ave)*			*Westbound (Central Ave)*			*Northbound (98th Street)*			*Southbound (98th Street)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "B"

INTERSECTION: E-W Street: **Central Ave.** (6)
N-S Street: **Driveway "B"**

Year of Existing Counts 2022
Horizon Year **2025**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
Growth Rates	1.00%			1.00%			1.00%			1.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,531	0	0	318	0	0	0	0	0	0	0
Background Traffic Growth	0	46	0	0	10	0	0	0	0	0	0	0
Subtotal	0	1,577	0	0	328	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,577***	***0***	***0***	***328***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.52%***
Total Trips Generated	0	64	0	0	35	29	0	0	0	0	0	32
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,641**	**0**	**0**	**363**	**29**	**0**	**0**	**0**	**0**	**0**	**32**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*4*
Total AM Peak Hour BUILD Volumes	**0**	**1,641**	**0**	**0**	**358**	**34**	**0**	**0**	**0**	**0**	**0**	**36**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	***914***	***0***	***0***	***1,510***	0	0	0	0	0	0	0
Background Traffic Growth	0	27	0	0	45	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***941***	***0***	***0***	***1,555***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.52%***
Total Trips Generated	0	69	0	0	41	28	0	0	0	0	0	37
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,010**	**0**	**0**	**1,596**	**28**	**0**	**0**	**0**	**0**	**0**	**37**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*19*
Total PM Peak Hour BUILD Volumes	**0**	**1,010**	**0**	**0**	**1,577**	**47**	**0**	**0**	**0**	**0**	**0**	**56**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "B")*			*Southbound (Driveway "B")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-3.00%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***-5***	***5***	***0***	***0***	***0***	***0***	***0***	***4***

PM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "B")*			*Southbound (Driveway "B")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-13.00%***	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*19*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***-19***	***19***	***0***	***0***	***0***	***0***	***0***	***19***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "C"

INTERSECTION: E-W Street: **Central Ave.** (7)
N-S Street: **Driveway "C"**

Year of Existing Counts 2022
Horizon Year **2025**

		Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Growth Rates	**1.00%**			**1.00%**			**1.00%**			**1.00%**		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	1,531	0	0	318	2	0	0	0	0	0	2
Background Traffic Growth		0	46	0	0	10	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***0***	***1,577***	***0***	***0***	***328***	***2***	***0***	***0***	***0***	***0***	***0***	***2***
Percent Commercial Trips Generated(Entering)		*0.00%*	***10.00%***	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	64	0	0	64	0	0	0	0	0	0	0
Subtotal AM Pk Hr. BUILD Volumes		**0**	**1,641**	**0**	**0**	**392**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes		**0**	**1,641**	**0**	**0**	**392**	**2**	**0**	**0**	**0**	**0**	**0**	**2**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	914	0	0	1,510	2	0	0	0	0	0	2
Background Traffic Growth	0	27	0	0	45	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***941***	***0***	***0***	***1,555***	***2***	***0***	***0***	***0***	***0***	***0***	***2***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	69	0	0	69	0	0	0	0	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,010**	**0**	**0**	**1,624**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**0**	**1,010**	**0**	**0**	**1,624**	**2**	**0**	**0**	**0**	**0**	**0**	**2**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "C")*			*Southbound (Driveway "C")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "C")*			*Southbound (Driveway "C")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "D"

INTERSECTION: E-W Street: **Central Ave.** (8)

N-S Street: **Driveway "D"**

Year of Existing Counts 2022

Horizon Year **2025**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
Growth Rates	1.00%			1.00%			1.00%			1.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,531	0	0	318	0	0	0	0	0	0	0
Background Traffic Growth	0	46	0	0	10	0	0	0	0	0	0	0
Subtotal	0	1,577	0	0	328	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,577***	***0***	***0***	***328***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***15.38%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.00%***	*0.00%*	***15.00%***
Total Trips Generated	28	36	0	0	43	42	0	0	0	23	0	35
Subtotal AM Pk Hr. BUILD Volumes	**28**	**1,613**	**0**	**0**	**371**	**42**	**0**	**0**	**0**	**23**	**0**	**35**
Pass-by Trip Adjustments	*49*	*-49*	*0*	*0*	*-6*	*6*	*0*	*0*	*0*	*5*	*0*	*40*
Total AM Peak Hour BUILD Volumes	**77**	**1,564**	**0**	**0**	**365**	**48**	**0**	**0**	**0**	**28**	**0**	**75**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	***914***	***0***	***0***	***1,510***	0	0	0	0	0	0	0
Background Traffic Growth	0	27	0	0	45	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***941***	***0***	***0***	***1,555***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***15.38%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.00%***	*0.00%*	***15.00%***
Total Trips Generated	27	42	0	0	41	40	0	0	0	27	0	41
Subtotal PM Pk Hr. BUILD Volumes	**27**	**983**	**0**	**0**	**1,596**	**40**	**0**	**0**	**0**	**27**	**0**	**41**
Pass-by Trip Adjustments	*24*	*-24*	*0*	*0*	*-21*	*21*	*0*	*0*	*0*	*22*	*0*	*25*
Total PM Peak Hour BUILD Volumes	**51**	**959**	**0**	**0**	**1,575**	**61**	**0**	**0**	**0**	**49**	**0**	**66**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
Percent Entering	***32.00%***	***-32.00%***	*0.00%*	*0.00%*	***-4.00%***	***4.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*49*	*-49*	*0*	*0*	*-6*	*6*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.00%***	*0.00%*	***32.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*0*	*40*
Net AM Passby Trips	***49***	***-49***	***0***	***0***	***-6***	***6***	***0***	***0***	***0***	***5***	***0***	***40***

PM Pass-by Trips	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
Percent Entering	***17.00%***	***-17.00%***	*0.00%*	*0.00%*	***-15.00%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*24*	*-24*	*0*	*0*	*-21*	*21*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.00%***	*0.00%*	***17.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*22*	*0*	*25*
Net PM Passby Trips	***24***	***-24***	***0***	***0***	***-21***	***21***	***0***	***0***	***0***	***22***	***0***	***25***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2035) - 100% Development

INTERSECTION: **Summary**

Bridge Blvd / Unser Blvd

(1)

3% Heavy Commercial

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	166	125	99	54	134	85	40	1,277	90	81	694	40
2035 (NO BUILD - A.M.)	*225*	*170*	*134*	*73*	*182*	*116*	*55*	*1,733*	*122*	*109*	*942*	*55*
2035 (BUILD - A.M.)	***225***	***170***	***151***	***76***	***182***	***116***	***55***	***1,764***	***122***	***123***	***968***	***58***

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	125	139	54	90	130	121	49	1,004	22	90	1,371	134
2035 (NO BUILD - P.M.)	*170*	*188*	*73*	*122*	*176*	*164*	*67*	*1,362*	*30*	*122*	*1,860*	*182*
2035 (BUILD - P.M.)	***170***	***188***	***89***	***125***	***176***	***164***	***67***	***1,391***	***30***	***139***	***1,890***	***185***

Central Blvd / Unser Blvd

(2)

3% Heavy Commercial

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	502	900	13	40	197	81	22	972	515	116	793	251
2035 (NO BUILD - A.M.)	*681*	*1,222*	*18*	*55*	*268*	*109*	*30*	*1,319*	*699*	*158*	*1,076*	*340*
2035 (BUILD - A.M.)	***743***	***1,250***	***18***	***64***	***321***	***114***	***30***	***1,381***	***699***	***194***	***1,118***	***356***

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	439	627	49	336	986	188	81	797	157	130	981	439
2035 (NO BUILD - P.M.)	*596*	*851*	*67*	*456*	*1,338*	*255*	*109*	*1,082*	*213*	*176*	*1,332*	*596*
2035 (BUILD - P.M.)	***655***	***878***	***67***	***467***	***1,387***	***274***	***109***	***1,140***	***213***	***217***	***1,381***	***615***

Serracino/Driveway 'A' & Unser Blvd

(3)

3% Heavy Commercial

	Eastbound (Serracino/Driveway 'A			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	40	0	31	22	0	4	31	1,693	4	9	1,116	36
2035 (NO BUILD - A.M.)	*55*	*0*	*43*	*30*	*0*	*6*	*43*	*2,298*	*6*	*12*	*1,514*	*49*
2035 (BUILD - A.M.)	***55***	***0***	***43***	***296***	***2***	***126***	***43***	***2,254***	***55***	***56***	***1,470***	***49***

	Eastbound (Serracino/Driveway 'A			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	18	0	27	0	0	1	4	1,649	0	0	1,568	31
2035 (NO BUILD - P.M.)	*24*	*0*	*36*	*0*	*0*	*2*	*6*	*2,237*	*0*	*0*	*2,128*	*43*
2035 (BUILD - P.M.)	***24***	***0***	***36***	***284***	***2***	***121***	***6***	***2,205***	***37***	***41***	***2,087***	***43***

Bluewater / Unser Blvd

(4)

3% Heavy Commercial

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	161	161	99	18	90	121	112	1,443	139	108	981	139
2035 (NO BUILD - A.M.)	*219*	*219*	*134*	*24*	*122*	*164*	*152*	*1,958*	*188*	*146*	*1,332*	*188*
2035 (BUILD - A.M.)	***219***	***219***	***140***	***42***	***122***	***164***	***157***	***1,986***	***203***	***146***	***1,366***	***188***

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	1.00			1.00			1.00			1.00		PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	233	67	36	85	143	152	27	1,362	72	108	1,564	121
2035 (NO BUILD - P.M.)	*316*	*91*	*49*	*116*	*195*	*207*	*36*	*1,848*	*97*	*146*	*2,122*	*164*
2035 (BUILD - P.M.)	***316***	***91***	***55***	***133***	***195***	***207***	***42***	***1,880***	***115***	***146***	***2,154***	***164***

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2035) - 100% Development

INTERSECTION: **Summary**

Central Ave / 98th Street

(5)

3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	204	293	34	157	229	144	102	1,018	428	85	314	110
2035 (NO BUILD - A.M.)	*242*	*348*	*40*	*186*	*272*	*171*	*121*	*1,210*	*509*	*101*	*373*	*131*
2035 (BUILD - A.M.)	***242***	***360***	***40***	***204***	***282***	***183***	***121***	***1,210***	***531***	***115***	***373***	***131***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	187	263	85	437	462	153	47	555	360	144	725	119
2035 (NO BUILD - P.M.)	*222*	*312*	*101*	*519*	*549*	*181*	*55*	*660*	*428*	*171*	*862*	*141*
2035 (BUILD - P.M.)	***222***	***324***	***101***	***540***	***561***	***195***	***55***	***660***	***449***	***184***	***862***	***141***

Central Ave. / Driveway "B"

(6)

3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	1,577	0	0	328	0	0	0	0	0	0	0
2035 (NO BUILD - A.M.)	*0*	*1,730*	*0*	*0*	*359*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - A.M.)	***0***	***1,794***	***0***	***0***	***389***	***34***	***0***	***0***	***0***	***0***	***0***	***36***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	941	0	0	1,555	0	0	0	0	0	0	0
2035 (NO BUILD - P.M.)	*0*	*1,033*	*0*	*0*	*1,706*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - P.M.)	***0***	***1,102***	***0***	***0***	***1,728***	***47***	***0***	***0***	***0***	***0***	***0***	***56***

Central Ave. / Driveway "C"

(7)

3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	1,577	0	0	328	2	0	0	0	0	0	2
2035 (NO BUILD - A.M.)	*0*	*1,730*	*0*	*0*	*359*	*2*	*0*	*0*	*0*	*0*	*0*	*2*
2035 (BUILD - A.M.)	***0***	***1,794***	***0***	***0***	***423***	***2***	***0***	***0***	***0***	***0***	***0***	***2***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	941	0	0	1,555	2	0	0	0	0	0	2
2035 (NO BUILD - P.M.)	*0*	*1,033*	*0*	*0*	*1,706*	*2*	*0*	*0*	*0*	*0*	*0*	*2*
2035 (BUILD - P.M.)	***0***	***1,102***	***0***	***0***	***1,775***	***2***	***0***	***0***	***0***	***0***	***0***	***2***

Central Ave. / Driveway "D"

(8)

3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	1,577	0	0	328	0	0	0	0	0	0	0
2035 (NO BUILD - A.M.)	*0*	*1,730*	*0*	*0*	*359*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - A.M.)	***77***	***1,717***	***0***	***0***	***396***	***48***	***0***	***0***	***0***	***28***	***0***	***75***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2035)	0	941	0	0	1,555	0	0	0	0	0	0	0
2035 (NO BUILD - P.M.)	*0*	*1,033*	*0*	*0*	*1,706*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - P.M.)	***51***	***1,051***	***0***	***0***	***1,726***	***61***	***0***	***0***	***0***	***49***	***0***	***66***

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Bridge Blvd / Unser Blvd

INTERSECTION: E-W Street: **Bridge Blvd** (1)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2035**

		Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Growth Rates	**4.00%**			**4.00%**			**4.00%**			**4.00%**		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		148	112	88	48	120	76	36	1,140	80	72	620	36
Background Traffic Growth		77	58	46	25	62	40	19	593	42	37	322	19
Subtotal (NO BUILD - A.M.)		***225***	***170***	***134***	***73***	***182***	***116***	***55***	***1,733***	***122***	***109***	***942***	***55***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	***6.16%***	***1.20%***	*0.00%*	*0.00%*	*0.00%*	***10.97%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.16%***	***10.97%***	***1.20%***
Total Trips Generated		0	0	17	3	0	0	0	31	0	14	26	3
Subtotal AM Pk Hr. BUILD Volumes		**225**	**170**	**151**	**76**	**182**	**116**	**55**	**1,764**	**122**	**123**	**968**	**58**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes		**225**	**170**	**151**	**76**	**182**	**116**	**55**	**1,764**	**122**	**123**	**968**	**58**

	Eastbound (Bridge Blvd)			Westbound (Bridge Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	112	124	48	80	116	108	44	896	20	80	1,224	120
Background Traffic Growth	58	64	25	42	60	56	23	466	10	42	636	62
Subtotal (NO BUILD - P.M.)	***170***	***188***	***73***	***122***	***176***	***164***	***67***	***1,362***	***30***	***122***	***1,860***	***182***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.16%***	***1.20%***	*0.00%*	*0.00%*	*0.00%*	***10.97%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.16%***	***10.97%***	***1.20%***
Total Trips Generated	0	0	16	3	0	0	0	29	0	17	30	3
Subtotal PM Pk Hr. BUILD Volumes	**170**	**188**	**89**	**125**	**176**	**164**	**67**	**1,391**	**30**	**139**	**1,890**	**185**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**170**	**188**	**89**	**125**	**176**	**164**	**67**	**1,391**	**30**	**139**	**1,890**	**185**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Bridge Blvd)*			*Westbound (Bridge Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Bridge Blvd)*			*Westbound (Bridge Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Blvd / Unser Blvd

INTERSECTION: E-W Street: **Central Blvd** (2)

N-S Street: **Unser Blvd**

Year of Existing Counts 2022

Horizon Year **2035**

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	448	804	12	36	176	72	20	868	460	104	708	224
Background Traffic Growth	233	418	6	19	92	37	10	451	239	54	368	116
Subtotal (NO BUILD - A.M.)	***681***	***1,222***	***18***	***55***	***268***	***109***	***30***	***1,319***	***699***	***158***	***1,076***	***340***
Percent Commercial Trips Generated(Entering)	***22.09%***	***10.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***21.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***3.93%***	***25.09%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***18.00%***	***7.00%***
Total Trips Generated	62	28	0	9	58	0	0	62	0	36	42	16
Subtotal AM Pk Hr. BUILD Volumes	**743**	**1,250**	**18**	**64**	**326**	**109**	**30**	**1,381**	**699**	**194**	**1,118**	**356**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**743**	**1,250**	**18**	**64**	**321**	**114**	**30**	**1,381**	**699**	**194**	**1,118**	**356**

	Eastbound (Central Blvd)			Westbound (Central Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	392	560	44	300	880	168	72	712	140	116	876	392
Background Traffic Growth	204	291	23	156	458	87	37	370	73	60	456	204
Subtotal (NO BUILD - P.M.)	***596***	***851***	***67***	***456***	***1,338***	***255***	***109***	***1,082***	***213***	***176***	***1,332***	***596***
Percent Commercial Trips Generated(Entering)	***22.09%***	***10.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***21.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***3.93%***	***25.09%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***18.00%***	***7.00%***
Total Trips Generated	59	27	0	11	68	0	0	58	0	41	49	19
Subtotal PM Pk Hr. BUILD Volumes	**655**	**878**	**67**	**467**	**1,406**	**255**	**109**	**1,140**	**213**	**217**	**1,381**	**615**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**655**	**878**	**67**	**467**	**1,387**	**274**	**109**	**1,140**	**213**	**217**	**1,381**	**615**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Blvd)*			*Westbound (Central Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-3.00%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***-5***	***5***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Blvd)*			*Westbound (Central Blvd)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-13.00%***	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***-19***	***19***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Serracino/Driveway 'A' & Unser Blvd

INTERSECTION: E-W Street: **Serracino/Driveway 'A'** (3)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2035**

	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	**4.00%**			**4.00%**			**4.00%**			**4.00%**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	36	0	28	20	0	4	28	1,512	4	8	996	32
Background Traffic Growth	19	0	15	10	0	2	15	786	2	4	518	17
Subtotal (NO BUILD - A.M.)	***55***	***0***	***43***	***30***	***0***	***6***	***43***	***2,298***	***6***	***12***	***1,514***	***49***
Percent Residential Trips Generated(Exiting)	*0.00%*	***0.50%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***44.02%***	***20.60%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***40.38%***	***0.50%***	***20.60%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	230	2	80	0	5	0	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	**55**	**0**	**43**	**260**	**2**	**86**	**43**	**2,303**	**6**	**12**	**1,514**	**49**
Pass-by Trip Adjustments	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*-49*	*49*	*44*	*-44*	*0*
Total AM Peak Hour BUILD Volumes	**55**	**0**	**43**	**296**	**2**	**126**	**43**	**2,254**	**55**	**56**	**1,470**	**49**

	Eastbound (Serracino/Driveway 'A')			Westbound (Serracino/Driveway 'A')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	16	0	24	0	0	1	4	1,472	0	0	1,400	28
Background Traffic Growth	8	0	12	0	0	1	2	765	0	0	728	15
Subtotal (NO BUILD - P.M.)	***24***	***0***	***36***	***0***	***0***	***2***	***6***	***2,237***	***0***	***0***	***2,128***	***43***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***40.38%***	***0.50%***	***20.60%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.00%***	***0.50%***	***9.60%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	242	2	81	0	5	0	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**24**	**0**	**36**	**242**	**2**	**83**	**6**	**2,242**	**0**	**0**	**2,128**	**43**
Pass-by Trip Adjustments	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*-37*	*37*	*41*	*-41*	*0*
Total PM Peak Hour BUILD Volumes	**24**	**0**	**36**	**284**	**2**	**121**	**6**	**2,205**	**37**	**41**	**2,087**	**43**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Serracino/Driveway 'A')*			*Westbound (Serracino/Driveway 'A')*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-32.00%***	***32.00%***	***29.00%***	***-29.00%***	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*-49*	*49*	*44*	*-44*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***29.00%***	*0.00%*	***32.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***36***	***0***	***40***	***0***	***-49***	***49***	***44***	***-44***	***0***

PM Pass-by Trips	*Eastbound (Serracino/Driveway 'A')*			*Westbound (Serracino/Driveway 'A')*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-26.00%***	***26.00%***	***29.00%***	***-29.00%***	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*-37*	*37*	*41*	*-41*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***29.00%***	*0.00%*	***26.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***42***	***0***	***38***	***0***	***-37***	***37***	***41***	***-41***	***0***
	Entering	*Exiting*										

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Bluewater / Unser Blvd

INTERSECTION: E-W Street: **Bluewater** (4)
N-S Street: **Unser Blvd**

Year of Existing Counts 2022
Horizon Year **2035**

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	144	144	88	16	80	108	100	1,288	124	96	876	124
Background Traffic Growth	75	75	46	8	42	56	52	670	64	50	456	64
Subtotal (NO BUILD - A.M.)	***219***	***219***	***134***	***24***	***122***	***164***	***152***	***1,958***	***188***	***146***	***1,332***	***188***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***2.14%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.93%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.14%***	***11.93%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	6	18	0	0	5	28	15	0	34	0
Subtotal AM Pk Hr. BUILD Volumes	**219**	**219**	**140**	**42**	**122**	**164**	**157**	**1,986**	**203**	**146**	**1,366**	**188**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**219**	**219**	**140**	**42**	**122**	**164**	**157**	**1,986**	**203**	**146**	**1,366**	**188**

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	208	60	32	76	128	136	24	1,216	64	96	1,396	108
Background Traffic Growth	108	31	17	40	67	71	12	632	33	50	726	56
Subtotal (NO BUILD - P.M.)	***316***	***91***	***49***	***116***	***195***	***207***	***36***	***1,848***	***97***	***146***	***2,122***	***164***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***2.14%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.93%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.14%***	***11.93%***	***6.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	6	17	0	0	6	32	18	0	32	0
Subtotal PM Pk Hr. BUILD Volumes	**316**	**91**	**55**	**133**	**195**	**207**	**42**	**1,880**	**115**	**146**	**2,154**	**164**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**316**	**91**	**55**	**133**	**195**	**207**	**42**	**1,880**	**115**	**146**	**2,154**	**164**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Bluewater)*			*Westbound (Bluewater)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Bluewater)*			*Westbound (Bluewater)*			*Northbound (Unser Blvd)*			*Southbound (Unser Blvd)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave / 98th Street

INTERSECTION: E-W Street: **Central Ave** (5)
N-S Street: **98th Street**

Year of Existing Counts 2022
Horizon Year **2035**

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	192	276	32	148	216	136	96	960	404	80	296	104
Background Traffic Growth	50	72	8	38	56	35	25	250	105	21	77	27
Subtotal (NO BUILD - A.M.)	***242***	***348***	***40***	***186***	***272***	***171***	***121***	***1,210***	***509***	***101***	***373***	***131***
Percent Commercial Trips Generated(Entering)	*0.00%*	***4.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***5.05%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***4.36%***	***5.05%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	12	0	18	10	12	0	0	22	14	0	0
Subtotal AM Pk Hr. BUILD Volumes	**242**	**360**	**40**	**204**	**282**	**183**	**121**	**1,210**	**531**	**115**	**373**	**131**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**242**	**360**	**40**	**204**	**282**	**183**	**121**	**1,210**	**531**	**115**	**373**	**131**

	Eastbound (Central Ave)			Westbound (Central Ave)			Northbound (98th Street)			Southbound (98th Street)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	176	248	80	412	436	144	44	524	340	136	684	112
Background Traffic Growth	46	64	21	107	113	37	11	136	88	35	178	29
Subtotal (NO BUILD - P.M.)	***222***	***312***	***101***	***519***	***549***	***181***	***55***	***660***	***428***	***171***	***862***	***141***
Percent Commercial Trips Generated(Entering)	*0.00%*	***4.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***5.05%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.85%***	***4.36%***	***5.05%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	12	0	21	12	14	0	0	21	13	0	0
Subtotal PM Pk Hr. BUILD Volumes	**222**	**324**	**101**	**540**	**561**	**195**	**55**	**660**	**449**	**184**	**862**	**141**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**222**	**324**	**101**	**540**	**561**	**195**	**55**	**660**	**449**	**184**	**862**	**141**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave)*			*Westbound (Central Ave)*			*Northbound (98th Street)*			*Southbound (98th Street)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Ave)*			*Westbound (Central Ave)*			*Northbound (98th Street)*			*Southbound (98th Street)*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "B"

INTERSECTION: E-W Street: **Central Ave.** (6)
N-S Street: **Driveway "B"**

Year of Existing Counts 2022
Horizon Year **2035**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
Growth Rates	1.00%			1.00%			1.00%			1.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,531	0	0	318	0	0	0	0	0	0	0
Background Traffic Growth	0	199	0	0	41	0	0	0	0	0	0	0
Subtotal	0	1,730	0	0	359	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,730***	***0***	***0***	***359***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.52%***
Total Trips Generated	0	64	0	0	35	29	0	0	0	0	0	32
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,794**	**0**	**0**	**394**	**29**	**0**	**0**	**0**	**0**	**0**	**32**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*4*
Total AM Peak Hour BUILD Volumes	**0**	**1,794**	**0**	**0**	**389**	**34**	**0**	**0**	**0**	**0**	**0**	**36**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	***914***	***0***	***0***	***1,510***	0	0	0	0	0	0	0
Background Traffic Growth	0	119	0	0	196	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***1,033***	***0***	***0***	***1,706***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.52%***
Total Trips Generated	0	69	0	0	41	28	0	0	0	0	0	37
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,102**	**0**	**0**	**1,747**	**28**	**0**	**0**	**0**	**0**	**0**	**37**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*19*
Total PM Peak Hour BUILD Volumes	**0**	**1,102**	**0**	**0**	**1,728**	**47**	**0**	**0**	**0**	**0**	**0**	**56**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "B")*			*Southbound (Driveway "B")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-3.00%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***-5***	***5***	***0***	***0***	***0***	***0***	***0***	***4***

PM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "B")*			*Southbound (Driveway "B")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-13.00%***	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-19*	*19*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*19*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***-19***	***19***	***0***	***0***	***0***	***0***	***0***	***19***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "C"

INTERSECTION: E-W Street: **Central Ave.** (7)
N-S Street: **Driveway "C"**

Year of Existing Counts 2022
Horizon Year **2035**

		Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Growth Rates	1.00%			1.00%			1.00%			1.00%		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	1,531	0	0	318	2	0	0	0	0	0	2
Background Traffic Growth		0	199	0	0	41	0	0	0	0	0	0	0
Subtotal		0	1,730	0	0	359	2	0	0	0	0	0	2
Subtotal (NO BUILD - A.M.)		***0***	***1,730***	***0***	***0***	***359***	***2***	***0***	***0***	***0***	***0***	***0***	***2***
Percent Commercial Trips Generated(Entering)		*0.00%*	***10.00%***	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	64	0	0	64	0	0	0	0	0	0	0
Subtotal AM Pk Hr. BUILD Volumes		**0**	**1,794**	**0**	**0**	**423**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes		**0**	**1,794**	**0**	**0**	**423**	**2**	**0**	**0**	**0**	**0**	**0**	**2**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	914	0	0	1,510	2	0	0	0	0	0	2
Background Traffic Growth	0	119	0	0	196	0	0	0	0	0	0	0
Subtotal	0	1,033	0	0	1,706	2	0	0	0	0	0	2
Previous Development #1	0	0	0	0	0	0	0	0	0	0	0	0
Previous Development #2	0	0	0	0	0	0	0	0	0	0	0	0
Previous Development #3	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***1,033***	***0***	***0***	***1,706***	***2***	***0***	***0***	***0***	***0***	***0***	***2***
Percent Commercial Trips Generated(Entering)	*0.00%*	***10.00%***	*0.00%*	*0.00%*	***10.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	69	0	0	69	0	0	0	0	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,102**	**0**	**0**	**1,775**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**0**	**1,102**	**0**	**0**	**1,775**	**2**	**0**	**0**	**0**	**0**	**0**	**2**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "C")*			*Southbound (Driveway "C")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

PM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "C")*			*Southbound (Driveway "C")*		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "D"

INTERSECTION: E-W Street: **Central Ave.** (8)
N-S Street: **Driveway "D"**

Year of Existing Counts 2022
Horizon Year **2035**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
Growth Rates	1.00%			1.00%			1.00%			1.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,531	0	0	318	0	0	0	0	0	0	0
Background Traffic Growth	0	199	0	0	41	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,730***	***0***	***0***	***359***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***15.38%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.00%***	*0.00%*	***15.00%***
Total Trips Generated	28	36	0	0	43	42	0	0	0	23	0	35
Subtotal AM Pk Hr. BUILD Volumes	**28**	**1,766**	**0**	**0**	**402**	**42**	**0**	**0**	**0**	**23**	**0**	**35**
Pass-by Trip Adjustments	*49*	*-49*	*0*	*0*	*-6*	*6*	*0*	*0*	*0*	*5*	*0*	*40*
Total AM Peak Hour BUILD Volumes	**77**	**1,717**	**0**	**0**	**396**	**48**	**0**	**0**	**0**	**28**	**0**	**75**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	***914***	***0***	***0***	***1,510***	0	0	0	0	0	0	0
Background Traffic Growth	0	119	0	0	196	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***1,033***	***0***	***0***	***1,706***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***10.00%***	*0.00%*	*0.00%*	*0.00%*	***15.38%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***15.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.00%***	*0.00%*	***15.00%***
Total Trips Generated	27	42	0	0	41	40	0	0	0	27	0	41
Subtotal PM Pk Hr. BUILD Volumes	**27**	**1,075**	**0**	**0**	**1,747**	**40**	**0**	**0**	**0**	**27**	**0**	**41**
Pass-by Trip Adjustments	*24*	*-24*	*0*	*0*	*-21*	*21*	*0*	*0*	*0*	*22*	*0*	*25*
Total PM Peak Hour BUILD Volumes	**51**	**1,051**	**0**	**0**	**1,726**	**61**	**0**	**0**	**0**	**49**	**0**	**66**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "D")*			*Southbound (Driveway "D")*		
Percent Entering	***32.00%***	***-32.00%***	*0.00%*	*0.00%*	***-4.00%***	***4.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*49*	*-49*	*0*	*0*	*-6*	*6*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.00%***	*0.00%*	***32.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*0*	*40*
Net AM Passby Trips	***49***	***-49***	***0***	***0***	***-6***	***6***	***0***	***0***	***0***	***5***	***0***	***40***

PM Pass-by Trips	*Eastbound (Central Ave.)*			*Westbound (Central Ave.)*			*Northbound (Driveway "D")*			*Southbound (Driveway "D")*		
Percent Entering	***17.00%***	***-17.00%***	*0.00%*	*0.00%*	***-15.00%***	***15.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*24*	*-24*	*0*	*0*	*-21*	*21*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.00%***	*0.00%*	***17.00%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*22*	*0*	*25*
Net PM Passby Trips	***24***	***-24***	***0***	***0***	***-21***	***21***	***0***	***0***	***0***	***22***	***0***	***25***

	Entering	*Exiting*	
Pass-by Trips	***152***	***125***	*AM*
	143	***145***	*PM*

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	125	99	54	134	85	40	1277	90	81	694	40
Future Volume (veh/h)	166	125	99	54	134	85	40	1277	90	81	694	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	166	125	99	54	134	85	40	1277	90	81	694	40
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	420	356	256	420	356	476	2159	963	272	2207	984
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.02	0.61	0.61	0.03	0.63	0.63
Sat Flow, veh/h	1153	1856	1572	1148	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	166	125	99	54	134	85	40	1277	90	81	694	40
Grp Sat Flow(s),veh/h/ln	1153	1856	1572	1148	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	16.8	6.7	6.2	4.9	7.2	5.3	1.0	26.4	2.8	2.0	11.0	1.2
Cycle Q Clear(g_c), s	24.1	6.7	6.2	11.6	7.2	5.3	1.0	26.4	2.8	2.0	11.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	420	356	256	420	356	476	2159	963	272	2207	984
V/C Ratio(X)	0.66	0.30	0.28	0.21	0.32	0.24	0.08	0.59	0.09	0.30	0.31	0.04
Avail Cap(c_a), veh/h	293	487	413	297	487	413	524	2159	963	340	2207	984
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	48.7	38.5	38.3	43.3	38.7	38.0	8.7	14.1	9.6	11.6	10.5	8.6
Incr Delay (d2), s/veh	5.4	0.6	0.6	0.6	0.6	0.5	0.1	1.2	0.2	0.9	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	5.5	4.4	2.6	6.0	3.7	0.7	15.2	1.7	1.4	7.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	39.1	38.9	43.9	39.3	38.5	8.9	15.3	9.8	12.5	10.8	8.7
LnGrp LOS	D	D	D	D	D	D	A	B	A	B	B	A
Approach Vol, veh/h		390			273			1407			815	
Approach Delay, s/veh		45.4			40.0			14.8			10.9	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	79.0		32.7	6.7	80.6		32.7
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	4.0	28.4		26.1	3.0	13.0		13.6
Green Ext Time (p_c), s	0.1	17.3		1.1	0.0	8.0		1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	125	116	57	134	85	40	1308	90	95	720	43
Future Volume (veh/h)	166	125	116	57	134	85	40	1308	90	95	720	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	166	125	116	57	134	85	40	1308	90	95	720	43
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	252	420	356	253	420	356	463	2144	956	268	2205	984
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.02	0.61	0.61	0.04	0.63	0.63
Sat Flow, veh/h	1153	1856	1572	1130	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	166	125	116	57	134	85	40	1308	90	95	720	43
Grp Sat Flow(s),veh/h/ln	1153	1856	1572	1130	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	16.8	6.7	7.4	5.3	7.2	5.3	1.0	27.7	2.9	2.4	11.5	1.3
Cycle Q Clear(g_c), s	24.0	6.7	7.4	12.0	7.2	5.3	1.0	27.7	2.9	2.4	11.5	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	420	356	253	420	356	463	2144	956	268	2205	984
V/C Ratio(X)	0.66	0.30	0.33	0.23	0.32	0.24	0.09	0.61	0.09	0.35	0.33	0.04
Avail Cap(c_a), veh/h	293	487	413	294	487	413	511	2144	956	329	2205	984
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	48.7	38.5	38.7	43.5	38.7	37.9	8.9	14.7	9.8	12.3	10.6	8.7
Incr Delay (d2), s/veh	5.3	0.6	0.7	0.6	0.6	0.5	0.1	1.3	0.2	1.1	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	5.5	5.2	2.7	6.0	3.7	0.7	15.8	1.8	1.7	7.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.0	39.0	39.5	44.1	39.3	38.4	9.1	16.0	10.0	13.4	11.0	8.7
LnGrp LOS	D	D	D	D	D	D	A	B	A	B	B	A
Approach Vol, veh/h		407			276			1438			858	
Approach Delay, s/veh		45.3			40.0			15.4			11.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	78.5		32.7	6.7	80.6		32.7
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	4.4	29.7		26.0	3.0	13.5		14.0
Green Ext Time (p_c), s	0.1	17.5		1.1	0.0	8.4		1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	20.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	125	116	57	134	85	40	1308	90	95	720	43
Future Volume (veh/h)	166	125	116	57	134	85	40	1308	90	95	720	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	166	125	116	57	134	85	40	1308	90	95	720	43
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	254	424	359	255	424	359	461	2139	954	266	2198	980
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.02	0.61	0.61	0.04	0.62	0.62
Sat Flow, veh/h	1153	1856	1572	1130	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	166	125	116	57	134	85	40	1308	90	95	720	43
Grp Sat Flow(s),veh/h/ln	1153	1856	1572	1130	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	16.8	6.7	7.4	5.3	7.2	5.3	1.0	27.8	2.9	2.4	11.6	1.3
Cycle Q Clear(g_c), s	24.0	6.7	7.4	12.0	7.2	5.3	1.0	27.8	2.9	2.4	11.6	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	424	359	255	424	359	461	2139	954	266	2198	980
V/C Ratio(X)	0.65	0.29	0.32	0.22	0.32	0.24	0.09	0.61	0.09	0.36	0.33	0.04
Avail Cap(c_a), veh/h	313	518	439	312	518	439	509	2139	954	284	2198	980
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	48.5	38.3	38.5	43.2	38.5	37.7	9.0	14.8	9.8	12.4	10.7	8.7
Incr Delay (d2), s/veh	4.5	0.5	0.7	0.6	0.6	0.5	0.1	1.3	0.2	1.1	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	5.5	5.2	2.7	5.9	3.7	0.7	15.9	1.8	1.7	7.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.0	38.8	39.3	43.9	39.1	38.2	9.1	16.1	10.0	13.6	11.1	8.8
LnGrp LOS	D	D	D	D	D	D	A	B	B	B	B	A
Approach Vol, veh/h		407			276			1438			858	
Approach Delay, s/veh		44.7			39.8			15.5			11.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	78.3		32.9	6.8	80.3		32.9
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	* 66		33.5	5.5	65.5		33.5
Max Q Clear Time (g_c+I1), s	4.4	29.8		26.0	3.0	13.6		14.0
Green Ext Time (p_c), s	0.0	17.7		1.4	0.0	8.4		1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	20.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	139	54	90	130	121	49	1004	22	90	1371	137
Future Volume (veh/h)	125	139	54	90	130	121	49	1004	22	90	1371	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	139	54	90	130	121	49	1004	22	90	1371	137
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	365	309	215	365	309	246	2260	1008	390	2302	1027
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.64	0.64	0.03	0.65	0.65
Sat Flow, veh/h	1120	1856	1572	1181	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	125	139	54	90	130	121	49	1004	22	90	1371	137
Grp Sat Flow(s),veh/h/ln	1120	1856	1572	1181	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	13.0	7.8	3.4	8.6	7.3	8.0	1.2	17.2	0.6	2.1	26.5	4.0
Cycle Q Clear(g_c), s	20.3	7.8	3.4	16.4	7.3	8.0	1.2	17.2	0.6	2.1	26.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	365	309	215	365	309	246	2260	1008	390	2302	1027
V/C Ratio(X)	0.59	0.38	0.17	0.42	0.36	0.39	0.20	0.44	0.02	0.23	0.60	0.13
Avail Cap(c_a), veh/h	286	487	413	293	487	413	290	2260	1008	457	2302	1027
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	50.4	41.9	40.1	49.0	41.6	42.0	10.1	10.8	7.8	8.2	11.8	7.9
Incr Delay (d2), s/veh	3.7	0.9	0.4	1.8	0.8	1.1	0.6	0.6	0.0	0.4	1.1	0.3
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(95%),veh/ln	6.8	6.5	2.4	4.7	6.0	5.7	0.8	10.4	0.4	1.4	14.7	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	42.8	40.5	50.8	42.5	43.1	10.6	11.4	7.9	8.6	13.0	8.2
LnGrp LOS	D	D	D	D	D	D	B	B	A	A	B	A
Approach Vol, veh/h		318			341			1075			1598	
Approach Delay, s/veh		46.8			44.9			11.3			12.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	82.4		29.1	7.1	83.9		29.1
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	4.1	19.2		22.3	3.2	28.5		18.4
Green Ext Time (p_c), s	0.1	12.8		1.3	0.0	20.0		1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.6
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	139	70	93	130	121	49	1033	22	107	1401	137
Future Volume (veh/h)	125	139	70	93	130	121	49	1033	22	107	1401	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	139	70	93	130	121	49	1033	22	107	1401	137
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	366	310	214	366	310	239	2243	1000	384	2300	1026
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.64	0.64	0.04	0.65	0.65
Sat Flow, veh/h	1120	1856	1572	1163	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	125	139	70	93	130	121	49	1033	22	107	1401	137
Grp Sat Flow(s),veh/h/ln	1120	1856	1572	1163	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	13.0	7.8	4.5	9.0	7.3	8.0	1.2	18.1	0.6	2.5	27.5	4.0
Cycle Q Clear(g_c), s	20.3	7.8	4.5	16.9	7.3	8.0	1.2	18.1	0.6	2.5	27.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	366	310	214	366	310	239	2243	1000	384	2300	1026
V/C Ratio(X)	0.59	0.38	0.23	0.44	0.36	0.39	0.20	0.46	0.02	0.28	0.61	0.13
Avail Cap(c_a), veh/h	286	487	413	290	487	413	283	2243	1000	443	2300	1026
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	50.4	41.8	40.5	49.1	41.6	41.9	10.4	11.2	8.1	8.5	12.0	7.9
Incr Delay (d2), s/veh	3.6	0.9	0.5	2.0	0.8	1.1	0.6	0.7	0.0	0.6	1.2	0.3
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(95%),veh/ln	6.8	6.5	3.2	4.9	6.0	5.7	0.8	10.8	0.4	1.6	15.2	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.0	42.7	41.0	51.1	42.4	43.1	11.0	11.9	8.1	9.1	13.2	8.2
LnGrp LOS	D	D	D	D	D	D	B	B	A	A	B	A
Approach Vol, veh/h		334			344			1104			1645	
Approach Delay, s/veh		46.6			45.0			11.8			12.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	81.8		29.1	7.1	83.8		29.1
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	4.5	20.1		22.3	3.2	29.5		18.9
Green Ext Time (p_c), s	0.1	13.3		1.4	0.0	20.3		1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	139	70	93	130	121	49	1033	22	107	1401	137
Future Volume (veh/h)	125	139	70	93	130	121	49	1033	22	107	1401	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	139	70	93	130	121	49	1033	22	107	1401	137
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	214	368	312	215	368	312	239	2241	1000	382	2296	1024
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.64	0.64	0.04	0.65	0.65
Sat Flow, veh/h	1120	1856	1572	1163	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	125	139	70	93	130	121	49	1033	22	107	1401	137
Grp Sat Flow(s),veh/h/ln	1120	1856	1572	1163	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	13.0	7.8	4.5	9.0	7.2	8.0	1.2	18.1	0.6	2.5	27.6	4.0
Cycle Q Clear(g_c), s	20.2	7.8	4.5	16.8	7.2	8.0	1.2	18.1	0.6	2.5	27.6	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	214	368	312	215	368	312	239	2241	1000	382	2296	1024
V/C Ratio(X)	0.58	0.38	0.22	0.43	0.35	0.39	0.21	0.46	0.02	0.28	0.61	0.13
Avail Cap(c_a), veh/h	305	518	439	309	518	439	282	2241	1000	398	2296	1024
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	50.2	41.7	40.4	49.0	41.5	41.8	10.5	11.3	8.1	8.6	12.1	8.0
Incr Delay (d2), s/veh	3.6	0.9	0.5	1.9	0.8	1.1	0.6	0.7	0.0	0.6	1.2	0.3
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(95%),veh/ln	6.8	6.5	3.2	4.9	6.0	5.7	0.8	10.9	0.4	1.7	15.2	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	42.6	40.9	50.9	42.3	42.9	11.1	12.0	8.1	9.1	13.3	8.3
LnGrp LOS	D	D	D	D	D	D	B	B	A	A	B	A
Approach Vol, veh/h		334			344			1104			1645	
Approach Delay, s/veh		46.4			44.8			11.8			12.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	81.8		29.3	7.1	83.6		29.3
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	* 66		33.5	5.5	65.5		33.5
Max Q Clear Time (g_c+I1), s	4.5	20.1		22.2	3.2	29.6		18.8
Green Ext Time (p_c), s	0.0	13.3		1.5	0.0	19.7		1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	170	134	73	182	116	55	1733	122	109	942	55
Future Volume (veh/h)	225	170	134	73	182	116	55	1733	122	109	942	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	225	170	134	73	182	116	55	1733	122	109	942	55
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	256	487	413	261	487	413	346	1996	890	171	2056	917
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.57	0.57	0.04	0.58	0.58
Sat Flow, veh/h	1073	1856	1572	1067	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	225	170	134	73	182	116	55	1733	122	109	942	55
Grp Sat Flow(s),veh/h/ln	1073	1856	1572	1067	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	21.9	8.9	8.2	7.2	9.6	7.0	1.6	50.3	4.4	3.1	18.2	1.8
Cycle Q Clear(g_c), s	31.5	8.9	8.2	16.1	9.6	7.0	1.6	50.3	4.4	3.1	18.2	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	487	413	261	487	413	346	1996	890	171	2056	917
V/C Ratio(X)	0.88	0.35	0.32	0.28	0.37	0.28	0.16	0.87	0.14	0.64	0.46	0.06
Avail Cap(c_a), veh/h	256	487	413	261	487	413	383	1996	890	221	2056	917
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	50.5	35.9	35.7	42.5	36.2	35.2	11.6	22.2	12.2	26.1	14.2	10.8
Incr Delay (d2), s/veh	28.4	0.6	0.6	0.8	0.7	0.5	0.3	5.4	0.3	5.6	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.6	7.3	5.7	3.5	7.8	0.1	1.1	27.9	2.8	3.5	11.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.8	36.5	36.3	43.3	36.9	35.8	11.9	27.6	12.6	31.7	15.0	10.9
LnGrp LOS	E	D	D	D	D	D	B	C	B	C	B	B
Approach Vol, veh/h		529			371			1910			1106	
Approach Delay, s/veh		54.5			37.8			26.2			16.4	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	73.4		37.0	7.5	75.5		37.0
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	5.1	52.3		33.5	3.6	20.2		18.1
Green Ext Time (p_c), s	0.1	10.7		0.0	0.0	12.0		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	28.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	170	151	76	182	116	55	1764	122	123	968	58
Future Volume (veh/h)	225	170	151	76	182	116	55	1764	122	123	968	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	225	170	151	76	182	116	55	1764	122	123	968	58
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	256	487	413	258	487	413	337	1982	884	171	2056	917
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.56	0.56	0.05	0.58	0.58
Sat Flow, veh/h	1073	1856	1572	1050	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	225	170	151	76	182	116	55	1764	122	123	968	58
Grp Sat Flow(s),veh/h/ln	1073	1856	1572	1050	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	21.9	8.9	9.4	7.6	9.6	7.0	1.6	52.6	4.4	3.5	18.9	1.9
Cycle Q Clear(g_c), s	31.5	8.9	9.4	16.5	9.6	7.0	1.6	52.6	4.4	3.5	18.9	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	487	413	258	487	413	337	1982	884	171	2056	917
V/C Ratio(X)	0.88	0.35	0.37	0.30	0.37	0.28	0.16	0.89	0.14	0.72	0.47	0.06
Avail Cap(c_a), veh/h	256	487	413	258	487	413	373	1982	884	215	2056	917
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	50.5	35.9	36.1	42.6	36.2	35.2	11.8	23.0	12.5	27.1	14.4	10.8
Incr Delay (d2), s/veh	28.4	0.6	0.8	0.9	0.7	0.5	0.3	6.5	0.3	10.2	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.6	7.3	6.5	3.6	7.8	0.1	1.1	29.3	2.8	4.3	11.7	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.8	36.5	36.9	43.5	36.9	35.8	12.1	29.5	12.8	37.3	15.2	11.0
LnGrp LOS	E	D	D	D	D	D	B	C	B	D	B	B
Approach Vol, veh/h		546			374			1941			1149	
Approach Delay, s/veh		54.1			37.9			28.0			17.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	73.0		37.0	7.5	75.5		37.0
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	5.5	54.6		33.5	3.6	20.9		18.5
Green Ext Time (p_c), s	0.1	9.1		0.0	0.0	12.5		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	170	151	76	182	116	55	1764	122	123	968	58
Future Volume (veh/h)	225	170	151	76	182	116	55	1764	122	123	968	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	225	170	151	76	182	116	55	1764	122	123	968	58
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	275	518	439	277	518	439	368	2153	960	187	2217	989
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.02	0.61	0.61	0.04	0.63	0.63
Sat Flow, veh/h	1073	1856	1572	1050	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	225	170	151	76	182	116	55	1764	122	123	968	58
Grp Sat Flow(s),veh/h/ln	1073	1856	1572	1050	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	24.1	8.7	9.2	7.4	9.4	6.9	1.4	46.8	3.9	3.1	16.9	1.7
Cycle Q Clear(g_c), s	33.5	8.7	9.2	16.2	9.4	6.9	1.4	46.8	3.9	3.1	16.9	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	518	439	277	518	439	368	2153	960	187	2217	989
V/C Ratio(X)	0.82	0.33	0.34	0.27	0.35	0.26	0.15	0.82	0.13	0.66	0.44	0.06
Avail Cap(c_a), veh/h	275	518	439	277	518	439	407	2153	960	193	2217	989
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	48.5	34.3	34.5	40.7	34.6	33.7	9.3	18.2	9.9	24.5	11.4	8.6
Incr Delay (d2), s/veh	17.9	0.5	0.7	0.8	0.6	0.5	0.3	3.6	0.3	8.7	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.6	7.1	6.4	3.5	7.6	4.8	1.0	25.1	2.4	4.6	10.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.4	34.8	35.1	41.5	35.1	34.1	9.5	21.8	10.1	33.3	12.0	8.7
LnGrp LOS	E	C	D	D	D	C	A	C	B	C	B	A
Approach Vol, veh/h		546			374			1941			1149	
Approach Delay, s/veh		47.9			36.1			20.7			14.1	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	78.8		39.0	7.4	81.0		39.0
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	* 66		33.5	5.5	65.5		33.5
Max Q Clear Time (g_c+I1), s	5.1	48.8		35.5	3.4	18.9		18.2
Green Ext Time (p_c), s	0.0	14.2		0.0	0.0	12.5		2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	188	73	122	176	164	67	1362	30	122	1860	182
Future Volume (veh/h)	170	188	73	122	176	164	67	1362	30	122	1860	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	170	188	73	122	176	164	67	1362	30	122	1860	182
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	479	406	253	479	406	136	2000	892	254	2058	918
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.57	0.57	0.05	0.58	0.58
Sat Flow, veh/h	1032	1856	1572	1110	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	170	188	73	122	176	164	67	1362	30	122	1860	182
Grp Sat Flow(s),veh/h/ln	1032	1856	1572	1110	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	19.4	10.0	4.3	12.2	9.3	10.4	1.9	32.7	1.0	3.4	55.8	6.5
Cycle Q Clear(g_c), s	28.7	10.0	4.3	22.3	9.3	10.4	1.9	32.7	1.0	3.4	55.8	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	479	406	253	479	406	136	2000	892	254	2058	918
V/C Ratio(X)	0.69	0.39	0.18	0.48	0.37	0.40	0.49	0.68	0.03	0.48	0.90	0.20
Avail Cap(c_a), veh/h	251	487	413	258	487	413	165	2000	892	299	2058	918
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	48.3	36.8	34.6	46.0	36.5	36.9	26.9	18.3	11.5	16.2	22.0	11.8
Incr Delay (d2), s/veh	8.5	0.7	0.3	2.0	0.7	0.9	3.9	1.9	0.1	2.0	7.1	0.5
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(95%),veh/ln	9.3	8.1	3.0	6.2	7.6	7.2	2.1	18.7	0.6	2.5	30.6	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.8	37.5	34.9	48.0	37.2	37.8	30.8	20.2	11.5	18.2	29.1	12.2
LnGrp LOS	E	D	C	D	D	D	C	C	B	B	C	B
Approach Vol, veh/h		431			462			1459			2164	
Approach Delay, s/veh		44.7			40.2			20.5			27.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	73.6		36.5	8.0	75.5		36.5
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	5.4	34.7		30.7	3.9	57.8		24.3
Green Ext Time (p_c), s	0.1	16.5		0.2	0.0	8.8		1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	188	89	125	176	164	67	1391	30	139	1890	185
Future Volume (veh/h)	170	188	89	125	176	164	67	1391	30	139	1890	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	170	188	89	125	176	164	67	1391	30	139	1890	185
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	479	406	251	479	406	132	1983	885	253	2057	917
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.56	0.56	0.05	0.58	0.58
Sat Flow, veh/h	1032	1856	1572	1093	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	170	188	89	125	176	164	67	1391	30	139	1890	185
Grp Sat Flow(s),veh/h/ln	1032	1856	1572	1093	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	19.4	10.0	5.3	12.8	9.3	10.4	1.9	34.2	1.0	4.0	57.8	6.7
Cycle Q Clear(g_c), s	28.7	10.0	5.3	22.8	9.3	10.4	1.9	34.2	1.0	4.0	57.8	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	479	406	251	479	406	132	1983	885	253	2057	917
V/C Ratio(X)	0.69	0.39	0.22	0.50	0.37	0.40	0.51	0.70	0.03	0.55	0.92	0.20
Avail Cap(c_a), veh/h	251	487	413	256	487	413	161	1983	885	289	2057	917
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	48.3	36.8	35.0	46.2	36.5	36.9	27.5	19.0	11.7	17.5	22.4	11.8
Incr Delay (d2), s/veh	8.5	0.7	0.4	2.2	0.7	0.9	4.2	2.1	0.1	2.6	8.1	0.5
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(95%),veh/ln	9.3	8.1	3.7	6.4	7.6	7.2	2.1	19.5	0.6	2.9	31.8	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.8	37.5	35.4	48.4	37.2	37.8	31.8	21.1	11.8	20.2	30.6	12.3
LnGrp LOS	E	D	D	D	D	D	C	C	B	C	C	B
Approach Vol, veh/h		447			465			1488			2214	
Approach Delay, s/veh		44.4			40.4			21.4			28.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	73.0		36.5	8.0	75.5		36.5
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	8.5	* 65		31.5	5.5	67.5		31.5
Max Q Clear Time (g_c+I1), s	6.0	36.2		30.7	3.9	59.8		24.8
Green Ext Time (p_c), s	0.1	16.4		0.2	0.0	7.1		1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	188	89	125	176	164	67	1391	30	139	1890	185
Future Volume (veh/h)	170	188	89	125	176	164	67	1391	30	139	1890	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	170	188	89	125	176	164	67	1391	30	139	1890	185
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	250	486	411	255	486	411	131	1986	886	245	2044	912
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.56	0.56	0.05	0.58	0.58
Sat Flow, veh/h	1032	1856	1572	1093	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	170	188	89	125	176	164	67	1391	30	139	1890	185
Grp Sat Flow(s),veh/h/ln	1032	1856	1572	1093	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	19.3	10.0	5.3	12.7	9.3	10.3	1.9	34.1	1.0	4.0	58.3	6.7
Cycle Q Clear(g_c), s	28.6	10.0	5.3	22.7	9.3	10.3	1.9	34.1	1.0	4.0	58.3	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	486	411	255	486	411	131	1986	886	245	2044	912
V/C Ratio(X)	0.68	0.39	0.22	0.49	0.36	0.40	0.51	0.70	0.03	0.57	0.92	0.20
Avail Cap(c_a), veh/h	268	518	439	274	518	439	160	1986	886	245	2044	912
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	47.8	36.4	34.7	45.7	36.1	36.5	27.8	18.9	11.7	17.7	22.8	12.0
Incr Delay (d2), s/veh	7.2	0.7	0.4	2.1	0.6	0.9	4.4	2.1	0.1	3.8	8.6	0.5
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(95%),veh/ln	9.1	8.0	3.7	6.4	7.6	7.2	2.1	19.5	0.6	3.1	32.3	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.9	37.1	35.0	47.8	36.8	37.4	32.2	21.0	11.7	21.4	31.5	12.5
LnGrp LOS	D	D	D	D	D	D	C	C	B	C	C	B
Approach Vol, veh/h		447			465			1488			2214	
Approach Delay, s/veh		43.5			40.0			21.3			29.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	73.1		36.9	8.0	75.1		36.9
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	* 66		33.5	5.5	65.5		33.5
Max Q Clear Time (g_c+I1), s	6.0	36.1		30.6	3.9	60.3		24.7
Green Ext Time (p_c), s	0.0	16.8		0.8	0.0	4.9		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	900	13	40	197	81	22	972	515	116	793	251
Future Volume (veh/h)	502	900	13	40	197	81	22	972	515	116	793	251
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	502	900	13	40	197	81	22	972	515	116	793	251
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	595	1013	15	126	522	311	89	2339	784	171	1704	1033
Arrive On Green	0.17	0.28	0.28	0.04	0.15	0.15	0.03	0.46	0.46	0.05	0.48	0.48
Sat Flow, veh/h	3428	3558	51	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	502	446	467	40	197	81	22	972	515	116	793	251
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	17.0	29.1	29.1	1.4	6.1	5.2	0.8	15.3	29.3	4.0	18.0	7.8
Cycle Q Clear(g_c), s	17.0	29.1	29.1	1.4	6.1	5.2	0.8	15.3	29.3	4.0	18.0	7.8
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	595	502	526	126	522	311	89	2339	784	171	1704	1033
V/C Ratio(X)	0.84	0.89	0.89	0.32	0.38	0.26	0.25	0.42	0.66	0.68	0.47	0.24
Avail Cap(c_a), veh/h	786	536	562	614	911	485	206	2339	784	271	1704	1033
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)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	41.1	41.1	56.3	46.1	40.7	57.3	21.5	22.4	56.0	20.7	8.4
Incr Delay (d2), s/veh	6.6	14.8	14.3	2.0	0.6	0.6	2.0	0.5	4.3	6.5	0.9	0.6
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(95%),veh/ln	11.9	20.1	20.8	1.1	4.8	3.7	0.6	10.0	16.7	3.3	11.8	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.6	55.9	55.4	58.3	46.8	41.3	59.3	22.1	26.7	62.5	21.6	9.0
LnGrp LOS	D	E	E	E	D	D	E	C	C	E	C	A
Approach Vol, veh/h		1415			318			1509			1160	
Approach Delay, s/veh		55.3			46.8			24.2			23.0	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	61.9	7.9	40.7	6.9	64.5	24.3	24.3
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	6.0	31.3	3.4	31.1	2.8	20.0	19.0	8.1
Green Ext Time (p_c), s	0.1	1.0	0.1	3.1	0.0	7.2	1.8	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	35.5
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	564	928	13	49	250	86	22	1034	515	152	835	267
Future Volume (veh/h)	564	928	13	49	250	86	22	1034	515	152	835	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	564	928	13	49	250	86	22	1034	515	152	835	267
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	653	1031	14	138	492	315	89	2242	759	209	1675	1046
Arrive On Green	0.19	0.29	0.29	0.04	0.14	0.14	0.03	0.44	0.44	0.06	0.48	0.48
Sat Flow, veh/h	3428	3559	50	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	564	460	481	49	250	86	22	1034	515	152	835	267
Grp Sat Flow(s),veh/h/ln	1714	1763	1847	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	19.1	30.1	30.1	1.7	7.9	5.6	0.8	17.2	30.2	5.2	19.6	8.2
Cycle Q Clear(g_c), s	19.1	30.1	30.1	1.7	7.9	5.6	0.8	17.2	30.2	5.2	19.6	8.2
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	653	510	535	138	492	315	89	2242	759	209	1675	1046
V/C Ratio(X)	0.86	0.90	0.90	0.36	0.51	0.27	0.25	0.46	0.68	0.73	0.50	0.26
Avail Cap(c_a), veh/h	786	536	562	614	911	502	206	2242	759	271	1675	1046
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)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	41.0	41.0	56.1	47.8	40.6	57.3	23.4	23.9	55.4	21.7	8.1
Incr Delay (d2), s/veh	8.2	16.3	15.7	2.2	1.2	0.7	2.0	0.7	4.8	8.4	1.1	0.6
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(95%),veh/ln	18.2	20.9	21.6	1.4	6.3	3.9	0.6	11.0	17.3	4.4	12.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.3	57.3	56.7	58.3	49.0	41.2	59.3	24.1	28.7	63.8	22.7	8.7
LnGrp LOS	E	E	E	E	D	D	E	C	C	E	C	A
Approach Vol, veh/h		1505			385			1571			1254	
Approach Delay, s/veh		56.3			48.4			26.1			24.7	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	59.6	8.3	41.3	6.9	63.5	26.3	23.2
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	7.2	32.2	3.7	32.1	2.8	21.6	21.1	9.9
Green Ext Time (p_c), s	0.1	0.2	0.1	2.7	0.0	7.0	1.7	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	37.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	564	928	13	49	250	86	22	1034	515	152	835	267
Future Volume (veh/h)	564	928	13	49	250	86	22	1034	515	152	835	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	564	928	13	49	250	86	22	1034	515	152	835	267
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	653	1044	15	138	504	320	89	2226	754	207	1662	1041
Arrive On Green	0.19	0.29	0.29	0.04	0.14	0.14	0.03	0.44	0.44	0.02	0.16	0.16
Sat Flow, veh/h	3428	3559	50	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	564	460	481	49	250	86	22	1034	515	152	835	267
Grp Sat Flow(s),veh/h/ln	1714	1763	1847	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	19.1	29.9	29.9	1.7	7.8	5.5	0.8	17.3	30.4	5.3	26.0	11.7
Cycle Q Clear(g_c), s	19.1	29.9	29.9	1.7	7.8	5.5	0.8	17.3	30.4	5.3	26.0	11.7
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	653	517	541	138	504	320	89	2226	754	207	1662	1041
V/C Ratio(X)	0.86	0.89	0.89	0.36	0.50	0.27	0.25	0.46	0.68	0.73	0.50	0.26
Avail Cap(c_a), veh/h	786	551	577	529	852	475	206	2226	754	214	1662	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	47.1	40.5	40.5	56.1	47.4	40.3	57.3	23.7	24.2	57.8	37.8	14.1
Incr Delay (d2), s/veh	8.2	14.5	14.0	2.2	1.1	0.6	2.0	0.7	5.0	11.4	1.0	0.5
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(95%),veh/ln	18.2	20.5	21.3	1.4	6.2	3.9	0.6	11.0	17.4	4.8	17.9	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.3	55.1	54.5	58.3	48.5	40.9	59.3	24.4	29.1	69.3	38.7	14.6
LnGrp LOS	E	E	D	E	D	D	E	C	C	E	D	B
Approach Vol, veh/h		1505			385			1571			1254	
Approach Delay, s/veh		55.0			48.0			26.4			37.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	59.2	8.3	41.7	6.9	63.1	26.3	23.7
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	7.5	36.5	18.5	37.5	7.2	* 37	27.5	* 29
Max Q Clear Time (g_c+I1), s	7.3	32.4	3.7	31.9	2.8	28.0	21.1	9.8
Green Ext Time (p_c), s	0.0	3.3	0.1	3.3	0.0	5.3	1.7	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	40.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	439	627	49	336	986	188	81	797	157	130	981	439
Future Volume (veh/h)	439	627	49	336	986	188	81	797	157	130	981	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	439	627	49	336	986	188	81	797	157	130	981	439
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	533	969	76	416	911	492	160	1850	765	186	1306	827
Arrive On Green	0.16	0.29	0.29	0.12	0.26	0.26	0.05	0.37	0.37	0.05	0.37	0.37
Sat Flow, veh/h	3428	3313	259	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	439	333	343	336	986	188	81	797	157	130	981	439
Grp Sat Flow(s),veh/h/ln	1714	1763	1809	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	14.9	19.8	19.8	11.5	31.0	11.2	2.8	14.2	6.8	4.5	29.1	22.0
Cycle Q Clear(g_c), s	14.9	19.8	19.8	11.5	31.0	11.2	2.8	14.2	6.8	4.5	29.1	22.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	533	516	529	416	911	492	160	1850	765	186	1306	827
V/C Ratio(X)	0.82	0.65	0.65	0.81	1.08	0.38	0.51	0.43	0.21	0.70	0.75	0.53
Avail Cap(c_a), veh/h	786	536	550	614	911	492	206	1850	765	271	1306	827
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)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	37.0	37.0	51.4	44.5	32.2	55.9	28.7	17.6	55.8	33.0	18.7
Incr Delay (d2), s/veh	5.3	2.8	2.7	6.3	54.8	0.7	3.5	0.7	0.6	6.5	4.0	2.4
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(95%),veh/ln	10.7	13.4	13.7	8.9	28.7	7.7	2.3	9.7	4.6	3.7	18.6	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.4	39.8	39.8	57.7	99.3	32.9	59.4	29.4	18.2	62.3	37.0	21.1
LnGrp LOS	D	D	D	E	F	C	E	C	B	E	D	C
Approach Vol, veh/h		1115			1510			1035			1550	
Approach Delay, s/veh		45.5			81.8			30.1			34.6	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	50.3	18.0	41.6	9.4	50.9	22.2	37.5
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	6.5	16.2	13.5	21.8	4.8	31.1	16.9	33.0
Green Ext Time (p_c), s	0.1	7.0	1.1	4.7	0.1	3.0	1.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	498	654	49	347	1035	207	81	855	157	171	1030	458
Future Volume (veh/h)	498	654	49	347	1035	207	81	855	157	171	1030	458
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	498	654	49	347	1035	207	81	855	157	171	1030	458
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	591	1019	76	427	911	511	160	1703	724	228	1246	827
Arrive On Green	0.17	0.31	0.31	0.12	0.26	0.26	0.05	0.34	0.34	0.07	0.35	0.35
Sat Flow, veh/h	3428	3325	249	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	498	346	357	347	1035	207	81	855	157	171	1030	458
Grp Sat Flow(s),veh/h/ln	1714	1763	1811	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	16.9	20.4	20.4	11.8	31.0	12.3	2.8	16.2	7.2	5.9	32.0	23.4
Cycle Q Clear(g_c), s	16.9	20.4	20.4	11.8	31.0	12.3	2.8	16.2	7.2	5.9	32.0	23.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	591	540	555	427	911	511	160	1703	724	228	1246	827
V/C Ratio(X)	0.84	0.64	0.64	0.81	1.14	0.41	0.51	0.50	0.22	0.75	0.83	0.55
Avail Cap(c_a), veh/h	786	540	555	614	911	511	206	1703	724	271	1246	827
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)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	35.9	35.9	51.2	44.5	31.5	55.9	31.8	19.4	55.0	35.4	19.0
Incr Delay (d2), s/veh	6.7	2.7	2.7	6.8	74.9	0.7	3.5	1.1	0.7	10.6	6.4	2.7
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(95%),veh/ln	12.0	13.6	14.0	9.2	32.7	8.2	2.3	10.8	4.8	5.1	20.5	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	38.6	38.6	57.9	119.4	32.2	59.4	32.9	20.1	65.7	41.8	21.7
LnGrp LOS	D	D	D	E	F	C	E	C	C	E	D	C
Approach Vol, veh/h		1201			1589			1093			1659	
Approach Delay, s/veh		45.3			94.6			33.0			38.7	
Approach LOS		D			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	46.8	18.4	43.3	9.4	48.9	24.2	37.5
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	17.9	18.2	13.8	22.4	4.8	34.0	18.9	33.0
Green Ext Time (p_c), s	0.1	6.9	1.1	4.8	0.1	0.8	1.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	55.1
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	498	654	49	347	1035	207	81	855	157	171	1030	458
Future Volume (veh/h)	498	654	49	347	1035	207	81	855	157	171	1030	458
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	498	654	49	347	1035	207	81	855	157	171	1030	458
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	529	1130	85	418	1084	590	160	1981	807	231	1443	886
Arrive On Green	0.15	0.34	0.34	0.12	0.31	0.31	0.05	0.39	0.39	0.02	0.14	0.14
Sat Flow, veh/h	3428	3325	249	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	498	346	357	347	1035	207	81	855	157	171	1030	458
Grp Sat Flow(s),veh/h/ln	1714	1763	1811	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	17.2	19.4	19.4	11.9	34.5	11.4	2.8	14.8	6.5	6.0	33.6	24.7
Cycle Q Clear(g_c), s	17.2	19.4	19.4	11.9	34.5	11.4	2.8	14.8	6.5	6.0	33.6	24.7
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	529	599	615	418	1084	590	160	1981	807	231	1443	886
V/C Ratio(X)	0.94	0.58	0.58	0.83	0.95	0.35	0.51	0.43	0.19	0.74	0.71	0.52
Avail Cap(c_a), veh/h	529	599	615	529	1087	591	177	1981	807	300	1443	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	50.2	32.5	32.6	51.5	40.7	27.0	55.9	26.8	15.8	57.6	45.2	24.6
Incr Delay (d2), s/veh	23.4	1.5	1.5	9.8	17.5	0.5	3.5	0.7	0.5	7.1	2.6	1.8
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(95%),veh/ln	13.5	12.7	13.0	9.4	23.9	7.6	2.3	9.9	4.3	5.1	22.4	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.6	34.0	34.0	61.3	58.2	27.5	59.4	27.5	16.4	64.7	47.7	26.4
LnGrp LOS	E	C	C	E	E	C	E	C	B	E	D	C
Approach Vol, veh/h		1201			1589			1093			1659	
Approach Delay, s/veh		50.4			54.9			28.2			43.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	53.7	18.1	47.3	9.4	55.9	22.0	43.4
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	10.5	34.5	18.5	36.5	6.2	* 39	18.5	* 37
Max Q Clear Time (g_c+I1), s	8.0	16.8	13.9	21.4	4.8	35.6	19.2	36.5
Green Ext Time (p_c), s	0.2	7.8	0.8	4.9	0.0	2.8	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	45.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	681	1222	18	55	268	109	30	1319	699	158	1076	340
Future Volume (veh/h)	681	1222	18	55	268	109	30	1319	699	158	1076	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	681	1222	18	55	268	109	30	1319	699	158	1076	340
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	747	1082	16	144	452	300	108	2150	733	215	1597	1055
Arrive On Green	0.22	0.30	0.30	0.04	0.13	0.13	0.03	0.42	0.42	0.06	0.45	0.45
Sat Flow, veh/h	3428	3556	52	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	681	606	634	55	268	109	30	1319	699	158	1076	340
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	23.3	36.5	36.5	1.9	8.6	7.2	1.0	24.3	50.9	5.4	28.8	10.9
Cycle Q Clear(g_c), s	23.3	36.5	36.5	1.9	8.6	7.2	1.0	24.3	50.9	5.4	28.8	10.9
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	536	562	144	452	300	108	2150	733	215	1597	1055
V/C Ratio(X)	0.91	1.13	1.13	0.38	0.59	0.36	0.28	0.61	0.95	0.73	0.67	0.32
Avail Cap(c_a), veh/h	786	536	562	614	911	505	206	2150	733	271	1597	1055
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)	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	41.7	41.8	56.0	49.4	42.2	56.8	26.9	30.7	55.3	25.8	8.3
Incr Delay (d2), s/veh	12.4	76.3	75.8	2.4	1.8	1.0	1.9	1.3	23.5	9.1	2.3	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.8	37.0	38.5	1.5	6.9	5.1	0.8	14.8	30.8	4.6	17.7	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	118.1	117.6	58.3	51.1	43.3	58.7	28.2	54.3	64.4	28.1	9.1
LnGrp LOS	E	F	F	E	D	D	E	C	D	E	C	A
Approach Vol, veh/h		1921			432			2048			1574	
Approach Delay, s/veh		96.7			50.1			37.5			27.6	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	57.4	8.5	43.0	7.6	60.9	29.7	21.9
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	7.4	52.9	3.9	38.5	3.0	30.8	25.3	10.6
Green Ext Time (p_c), s	0.1	0.0	0.2	0.0	0.0	3.3	0.9	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	743	1250	18	64	321	114	30	1381	699	194	1118	356
Future Volume (veh/h)	743	1250	18	64	321	114	30	1381	699	194	1118	356
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	743	1250	18	64	321	114	30	1381	699	194	1118	356
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	786	1119	16	151	456	318	108	2037	702	250	1554	1053
Arrive On Green	0.23	0.31	0.31	0.04	0.13	0.13	0.03	0.40	0.40	0.07	0.44	0.44
Sat Flow, veh/h	3428	3558	51	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	743	619	649	64	321	114	30	1381	699	194	1118	356
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	25.6	37.7	37.7	2.2	10.5	7.5	1.0	26.9	48.2	6.7	31.2	11.6
Cycle Q Clear(g_c), s	25.6	37.7	37.7	2.2	10.5	7.5	1.0	26.9	48.2	6.7	31.2	11.6
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	786	554	580	151	456	318	108	2037	702	250	1554	1053
V/C Ratio(X)	0.95	1.12	1.12	0.42	0.70	0.36	0.28	0.68	1.00	0.78	0.72	0.34
Avail Cap(c_a), veh/h	786	554	580	614	911	521	206	2037	702	271	1554	1053
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)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	41.1	41.1	55.9	50.0	41.2	56.8	29.5	33.1	54.7	27.5	8.5
Incr Delay (d2), s/veh	17.1	70.9	70.5	2.7	2.8	1.0	1.9	1.8	33.1	13.4	2.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.6	36.8	38.3	1.8	8.3	5.3	0.8	16.2	33.7	5.9	19.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.7	112.1	111.6	58.5	52.9	42.2	58.7	31.3	66.2	68.1	30.4	9.3
LnGrp LOS	E	F	F	E	D	D	E	C	E	E	C	A
Approach Vol, veh/h		2011			499			2110			1668	
Approach Delay, s/veh		93.7			51.2			43.3			30.3	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	54.7	8.8	44.2	7.6	59.4	31.0	22.0
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	8.7	50.2	4.2	39.7	3.0	33.2	27.6	12.5
Green Ext Time (p_c), s	0.1	0.0	0.2	0.0	0.0	1.5	0.0	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	56.6
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	743	1250	18	64	321	114	30	1381	699	194	1118	356
Future Volume (veh/h)	743	1250	18	64	321	114	30	1381	699	194	1118	356
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	743	1250	18	64	321	114	30	1650	520	194	1118	356
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	833	1289	19	151	576	372	112	1967	625	252	1385	1000
Arrive On Green	0.24	0.36	0.36	0.04	0.16	0.16	0.03	0.35	0.35	0.02	0.13	0.13
Sat Flow, veh/h	3428	3558	51	3428	3526	1572	3534	5567	1572	3428	3526	1572
Grp Volume(v), veh/h	743	619	649	64	321	114	30	1650	520	194	1118	356
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1767	1856	1572	1714	1763	1572
Q Serve(g_s), s	25.1	41.4	41.5	2.2	10.1	7.2	1.0	32.7	35.7	6.8	37.0	15.3
Cycle Q Clear(g_c), s	25.1	41.4	41.5	2.2	10.1	7.2	1.0	32.7	35.7	6.8	37.0	15.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	833	639	669	151	576	372	112	1967	625	252	1385	1000
V/C Ratio(X)	0.89	0.97	0.97	0.42	0.56	0.31	0.27	0.84	0.83	0.77	0.81	0.36
Avail Cap(c_a), veh/h	929	639	669	214	576	372	212	1967	625	271	1385	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	43.9	37.6	37.6	55.9	46.2	37.7	56.7	35.6	32.5	57.5	47.8	15.4
Incr Delay (d2), s/veh	8.6	24.3	23.7	2.7	1.5	0.7	1.8	4.5	12.3	10.5	4.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.3	28.2	29.2	1.8	7.9	5.0	0.8	21.4	21.5	6.0	24.4	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	61.9	61.3	58.5	47.7	38.3	58.6	40.1	44.8	68.0	51.9	16.2
LnGrp LOS	D	E	E	E	D	D	E	D	D	E	D	B
Approach Vol, veh/h		2011			499			2200			1668	
Approach Delay, s/veh		58.3			47.0			41.5			46.2	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	48.9	8.8	50.0	7.6	53.6	32.7	26.1
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	39.5	7.5	43.5	7.2	* 42	32.5	* 19
Max Q Clear Time (g_c+I1), s	18.8	37.7	4.2	43.5	3.0	39.0	27.1	12.1
Green Ext Time (p_c), s	0.1	1.7	0.1	0.0	0.0	2.5	2.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	48.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	596	851	67	456	1338	255	109	1082	213	176	1332	596
Future Volume (veh/h)	596	851	67	456	1338	255	109	1082	213	176	1332	596
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	596	851	67	456	1338	255	109	1082	213	176	1332	596
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	681	1002	79	529	911	513	167	1563	728	233	1147	824
Arrive On Green	0.20	0.30	0.30	0.15	0.26	0.26	0.05	0.31	0.31	0.07	0.33	0.33
Sat Flow, veh/h	3428	3311	261	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	596	453	465	456	1338	255	109	1082	213	176	1332	596
Grp Sat Flow(s),veh/h/ln	1714	1763	1809	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	20.2	28.9	29.0	15.6	31.0	15.7	3.7	22.5	10.1	6.1	39.0	34.9
Cycle Q Clear(g_c), s	20.2	28.9	29.0	15.6	31.0	15.7	3.7	22.5	10.1	6.1	39.0	34.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	681	534	547	529	911	513	167	1563	728	233	1147	824
V/C Ratio(X)	0.88	0.85	0.85	0.86	1.47	0.50	0.65	0.69	0.29	0.76	1.16	0.72
Avail Cap(c_a), veh/h	786	536	550	614	911	513	206	1563	728	271	1147	824
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)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	39.3	39.3	49.5	44.5	32.5	56.1	36.5	20.0	55.0	40.5	21.9
Incr Delay (d2), s/veh	9.4	11.4	11.1	11.6	217.1	1.1	6.8	2.5	1.0	11.2	82.6	5.5
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(95%),veh/ln	14.1	19.6	20.0	11.8	61.7	10.0	3.2	14.4	6.8	5.3	42.1	19.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.1	50.6	50.4	61.1	261.6	33.6	62.9	39.0	21.0	66.2	123.1	27.4
LnGrp LOS	E	D	D	E	F	C	E	D	C	E	F	C
Approach Vol, veh/h		1514			2049			1404			2104	
Approach Delay, s/veh		52.7			188.6			38.1			91.2	
Approach LOS		D			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	43.5	22.0	42.8	9.6	45.5	27.3	37.5
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	8.1	24.5	17.6	31.0	5.7	41.0	22.2	33.0
Green Ext Time (p_c), s	0.1	5.5	0.9	3.2	0.1	0.0	1.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	100.7
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	655	878	67	467	1387	274	109	1140	213	217	1381	615
Future Volume (veh/h)	655	878	67	467	1387	274	109	1140	213	217	1381	615
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	655	878	67	467	1387	274	109	1140	213	217	1381	615
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	728	1042	79	538	911	530	167	1437	693	270	1098	824
Arrive On Green	0.21	0.31	0.31	0.16	0.26	0.26	0.05	0.28	0.28	0.08	0.31	0.31
Sat Flow, veh/h	3428	3319	253	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	655	466	479	467	1387	274	109	1140	213	217	1381	615
Grp Sat Flow(s),veh/h/ln	1714	1763	1810	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	22.3	29.6	29.6	16.0	31.0	16.8	3.7	25.0	10.5	7.5	37.4	36.7
Cycle Q Clear(g_c), s	22.3	29.6	29.6	16.0	31.0	16.8	3.7	25.0	10.5	7.5	37.4	36.7
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	728	553	568	538	911	530	167	1437	693	270	1098	824
V/C Ratio(X)	0.90	0.84	0.84	0.87	1.52	0.52	0.65	0.79	0.31	0.80	1.26	0.75
Avail Cap(c_a), veh/h	786	553	568	614	911	530	206	1437	693	271	1098	824
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)	0.87	0.87	0.87	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	38.4	38.4	49.4	44.5	31.9	56.1	39.7	21.7	54.3	41.3	22.3
Incr Delay (d2), s/veh	11.7	10.4	10.1	12.2	240.9	1.2	6.8	4.6	1.1	16.5	123.6	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.4	19.7	20.1	12.1	66.7	10.5	3.2	16.0	7.2	6.8	50.5	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.8	48.8	48.5	61.6	285.4	33.1	62.9	44.3	22.9	70.8	164.9	28.5
LnGrp LOS	E	D	D	E	F	C	E	D	C	E	F	C
Approach Vol, veh/h		1600			2128			1462			2213	
Approach Delay, s/veh		52.4			203.8			42.6			117.8	
Approach LOS		D			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	40.5	22.3	44.2	9.6	43.9	29.0	37.5
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	32.5	21.5	36.5	7.2	* 35	27.5	* 31
Max Q Clear Time (g_c+I1), s	19.5	27.0	18.0	31.6	5.7	39.4	24.3	33.0
Green Ext Time (p_c), s	0.0	4.1	0.9	2.9	0.1	0.0	1.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	113.5
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	655	878	67	467	1387	274	109	1140	213	217	1381	615
Future Volume (veh/h)	655	878	67	467	1387	274	109	1140	213	217	1381	615
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	655	878	67	467	1387	274	109	1140	213	217	1381	615
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	529	1065	81	543	1146	636	172	2542	967	271	1709	1005
Arrive On Green	0.15	0.32	0.32	0.16	0.32	0.32	0.05	0.46	0.46	0.03	0.16	0.16
Sat Flow, veh/h	3428	3319	253	3428	3526	1572	3534	5567	1572	3428	3526	1572
Grp Volume(v), veh/h	655	466	479	467	1387	274	109	1140	213	217	1381	615
Grp Sat Flow(s),veh/h/ln	1714	1763	1810	1714	1763	1572	1767	1856	1572	1714	1763	1572
Q Serve(g_s), s	18.5	29.3	29.3	15.9	39.0	15.1	3.6	16.8	7.2	7.6	45.3	31.7
Cycle Q Clear(g_c), s	18.5	29.3	29.3	15.9	39.0	15.1	3.6	16.8	7.2	7.6	45.3	31.7
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	529	565	581	543	1146	636	172	2542	967	271	1709	1005
V/C Ratio(X)	1.24	0.82	0.82	0.86	1.21	0.43	0.63	0.45	0.22	0.80	0.81	0.61
Avail Cap(c_a), veh/h	529	565	581	643	1146	636	183	2542	967	271	1709	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	50.7	37.6	37.6	49.2	40.5	25.8	56.0	22.3	10.3	57.5	45.0	22.1
Incr Delay (d2), s/veh	120.2	8.1	7.9	10.8	103.0	0.7	7.6	0.6	0.5	11.8	3.0	2.0
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(95%),veh/ln	24.8	18.9	19.3	12.0	47.2	9.5	3.2	11.6	4.4	6.5	28.5	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	170.9	45.7	45.6	60.0	143.5	26.5	63.7	22.8	10.8	69.3	48.0	24.1
LnGrp LOS	F	D	D	E	F	C	E	C	B	E	D	C
Approach Vol, veh/h		1600			2128			1462			2213	
Approach Delay, s/veh		96.9			110.1			24.1			43.4	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	62.0	22.5	45.0	9.6	65.3	22.0	45.5
Change Period (Y+Rc), s	3.5	6.5	3.5	6.5	3.8	* 6.5	3.5	* 6.5
Max Green Setting (Gmax), s	9.5	33.5	22.5	34.5	6.2	* 37	18.5	* 39
Max Q Clear Time (g_c+I1), s	19.6	18.8	17.9	31.3	5.6	47.3	20.5	41.0
Green Ext Time (p_c), s	0.0	9.2	1.1	2.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	70.4
HCM 7th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	0	31	22	0	4	31	1693	4	9	1116	36
Future Vol, veh/h	40	0	31	22	0	4	31	1693	4	9	1116	36
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	40	0	31	22	0	4	31	1693	4	9	1116	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1891	2911	576	2219	2925	847	1152	0	0	1697	0	0
Stage 1	1152	1152	-	1755	1755	-	-	-	-	-	-	-
Stage 2	739	1759	-	464	1170	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	73	15	392	46	15	261	328	-	-	176	-	-
Stage 1	155	268	-	57	136	-	-	-	-	-	-	-
Stage 2	339	135	-	498	263	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	13	392	36	13	261	328	-	-	176	-	-
Mov Cap-2 Maneuver	62	13	-	36	13	-	-	-	-	-	-	-
Stage 1	147	255	-	52	123	-	-	-	-	-	-	-
Stage 2	302	122	-	435	250	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	82.91	175.39	0.31	0.21
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	328	-	-	62	392	36	261	176	-	-
HCM Lane V/C Ratio	0.095	-	-	0.645	0.079	0.609	0.015	0.051	-	-
HCM Ctrl Dly (s/v)	17.1	-	-	135.6	15	203.8	19	26.6	-	-
HCM Lane LOS	C	-	-	F	B	F	C	D	-	-
HCM 95th %tile Q(veh)	0.3	-	-	2.7	0.3	2.1	0	0.2	-	-

Intersection	
Int Delay, s/veh	465.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	1	31	288	2	124	31	1649	53	53	1072	36
Future Vol, veh/h	40	1	31	288	2	124	31	1649	53	53	1072	36
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	40	1	31	288	2	124	31	1649	53	53	1072	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1919	2960	554	2246	2925	825	1108	0	0	1702	0	0
Stage 1	1196	1196	-	1711	1711	-	-	-	-	-	-	-
Stage 2	723	1764	-	535	1214	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	71	14	406	~ 44	15	270	344	-	-	175	-	-
Stage 1	144	256	-	~ 62	143	-	-	-	-	-	-	-
Stage 2	347	134	-	451	251	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 21	9	406	~ 24	9	270	344	-	-	175	-	-
Mov Cap-2 Maneuver	~ 21	9	-	~ 24	9	-	-	-	-	-	-	-
Stage 1	100	178	-	~ 56	130	-	-	-	-	-	-	-
Stage 2	168	122	-	289	175	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 478.98	$ 3712.62	0.29	1.57
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	344	-	-	21	169	24	187	175	-	-
HCM Lane V/C Ratio	0.09	-	-	1.943	0.189	12.102	0.674	0.303	-	-
HCM Ctrl Dly (s/v)	16.5	-	-	-$ 837.2	31.2	$ 5312	56.9	34.3	-	-
HCM Lane LOS	C	-	-	F	D	F	F	D	-	-
HCM 95th %tile Q(veh)	0.3	-	-	5.3	0.7	36	4.1	1.2	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1	31	288	2	124	31	1649	53	53	1072	36
Future Volume (veh/h)	40	1	31	288	2	124	31	1649	53	53	1072	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	1	31	288	2	124	31	1649	53	53	1072	36
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	198	3	102	412	5	308	324	2894	898	182	2918	98
Arrive On Green	0.03	0.07	0.07	0.16	0.20	0.20	0.01	0.19	0.19	0.02	0.58	0.58
Sat Flow, veh/h	1767	49	1531	1767	25	1551	1767	5066	1572	1767	5033	169
Grp Volume(v), veh/h	40	0	32	288	0	126	31	1649	53	53	719	389
Grp Sat Flow(s),veh/h/ln	1767	0	1580	1767	0	1576	1767	1689	1572	1767	1689	1825
Q Serve(g_s), s	2.5	0.0	2.3	17.6	0.0	8.4	0.9	35.5	3.3	1.5	13.6	13.7
Cycle Q Clear(g_c), s	2.5	0.0	2.3	17.6	0.0	8.4	0.9	35.5	3.3	1.5	13.6	13.7
Prop In Lane	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	198	0	105	412	0	313	324	2894	898	182	1958	1058
V/C Ratio(X)	0.20	0.00	0.30	0.70	0.00	0.40	0.10	0.57	0.06	0.29	0.37	0.37
Avail Cap(c_a), veh/h	261	0	250	412	0	401	442	2894	898	286	1958	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.73	0.73	0.73	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	0.0	53.4	40.9	0.0	41.9	11.2	35.3	22.2	16.6	13.5	13.5
Incr Delay (d2), s/veh	0.5	0.0	2.3	5.7	0.0	1.2	0.1	0.6	0.1	1.2	0.5	1.0
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(95%),veh/ln	2.1	0.0	1.8	13.1	0.0	6.1	0.6	21.8	2.3	1.1	8.7	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.5	0.0	55.6	46.6	0.0	43.1	11.4	35.9	22.3	17.8	14.0	14.4
LnGrp LOS	D		E	D		D	B	D	C	B	B	B
Approach Vol, veh/h		72			414			1733			1161	
Approach Delay, s/veh		52.8			45.5			35.0			14.3	
Approach LOS		D			D			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	74.1	24.5	13.5	6.9	75.1	8.7	29.3
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	10.0	50.5	19.5	19.0	10.0	50.5	8.0	30.5
Max Q Clear Time (g_c+I1), s	3.5	37.5	19.6	4.3	2.9	15.7	4.5	10.4
Green Ext Time (p_c), s	0.1	10.3	0.0	0.1	0.0	12.2	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

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	18	1	27	0	0	1	4	1649	0	0	1568	0
Future Vol, veh/h	18	1	27	0	0	1	4	1649	0	0	1568	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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	1	27	0	0	1	4	1649	0	0	1568	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2236	3225	784	2285	3225	825	1568	0	0	1649	0	0
Stage 1	1568	1568	-	1657	1657	-	-	-	-	-	-	-
Stage 2	668	1657	-	628	1568	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	45	9	287	42	9	270	204	-	-	186	-	-
Stage 1	78	168	-	68	152	-	-	-	-	-	-	-
Stage 2	375	152	-	396	168	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	44	9	287	33	9	270	204	-	-	186	-	-
Mov Cap-2 Maneuver	44	9	-	33	9	-	-	-	-	-	-	-
Stage 1	78	168	-	66	149	-	-	-	-	-	-	-
Stage 2	366	149	-	357	168	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	76.5	18.41	0.06	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	204	-	-	44	137	-	270	186	-	-
HCM Lane V/C Ratio	0.02	-	-	0.413	0.204	-	0.004	-	-	-
HCM Ctrl Dly (s/v)	23	-	-	136.7	37.8	0	18.4	0	-	-
HCM Lane LOS	C	-	-	F	E	A	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.5	0.7	-	0	0	-	-

Intersection	
Int Delay, s/veh	404.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	1	27	284	2	120	4	1617	37	41	1527	31
Future Vol, veh/h	18	1	27	284	2	120	4	1617	37	41	1527	31
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	1	27	284	2	120	4	1617	37	41	1527	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2280	3287	779	2318	3265	809	1558	0	0	1654	0	0
Stage 1	1625	1625	-	1625	1625	-	-	-	-	-	-	-
Stage 2	656	1662	-	693	1640	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	42	8	289	~ 40	9	276	206	-	-	185	-	-
Stage 1	71	158	-	~ 71	158	-	-	-	-	-	-	-
Stage 2	381	151	-	361	155	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 14	6	289	~ 24	7	276	206	-	-	185	-	-
Mov Cap-2 Maneuver	~ 14	6	-	~ 24	7	-	-	-	-	-	-	-
Stage 1	56	123	-	~ 70	155	-	-	-	-	-	-	-
Stage 2	209	148	-	~ 253	121	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 320.97	$ 3652.27	0.05	0.77
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	206	-	-	14	113	24	166	185	-	-
HCM Lane V/C Ratio	0.019	-	-	1.324	0.249	11.838	0.734	0.222	-	-
HCM Ctrl Dly (s/v)	22.8	-	-	$ 746.8	47.2	$ 5190.9	70.5	29.9	-	-
HCM Lane LOS	C	-	-	F	E	F	F	D	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.9	0.9	35.5	4.5	0.8	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1	27	284	2	120	4	1617	37	41	1527	31
Future Volume (veh/h)	18	1	27	284	2	120	4	1617	37	41	1527	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	18	1	25	284	2	120	4	1617	37	41	1527	31
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	177	4	101	415	5	324	204	2924	908	181	3035	62
Arrive On Green	0.02	0.07	0.07	0.16	0.21	0.21	0.00	0.19	0.19	0.02	0.59	0.59
Sat Flow, veh/h	1767	61	1521	1767	26	1551	1767	5066	1572	1767	5110	104
Grp Volume(v), veh/h	18	0	26	284	0	122	4	1617	37	41	1009	549
Grp Sat Flow(s),veh/h/ln	1767	0	1582	1767	0	1576	1767	1689	1572	1767	1689	1837
Q Serve(g_s), s	1.1	0.0	1.9	17.4	0.0	8.0	0.1	34.7	2.3	1.1	20.8	20.8
Cycle Q Clear(g_c), s	1.1	0.0	1.9	17.4	0.0	8.0	0.1	34.7	2.3	1.1	20.8	20.8
Prop In Lane	1.00		0.96	1.00		0.98	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	177	0	105	415	0	330	204	2924	908	181	2006	1091
V/C Ratio(X)	0.10	0.00	0.25	0.68	0.00	0.37	0.02	0.55	0.04	0.23	0.50	0.50
Avail Cap(c_a), veh/h	328	0	250	417	0	342	345	2924	908	294	2006	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	0.0	53.2	40.9	0.0	40.7	12.1	34.6	21.5	15.8	14.1	14.1
Incr Delay (d2), s/veh	0.2	0.0	1.7	5.1	0.0	1.0	0.0	0.5	0.1	0.9	0.9	1.7
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(95%),veh/ln	0.9	0.0	1.4	12.9	0.0	5.8	0.1	21.2	1.6	0.8	12.1	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.0	0.0	54.9	45.9	0.0	41.7	12.1	35.1	21.5	16.7	15.0	15.8
LnGrp LOS	D		D	D		D	B	D	C	B	B	B
Approach Vol, veh/h		44			406			1658			1599	
Approach Delay, s/veh		53.3			44.7			34.7			15.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	74.8	24.4	13.5	5.4	76.8	7.3	30.6
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	10.0	50.5	19.5	19.0	10.0	50.5	12.5	26.0
Max Q Clear Time (g_c+I1), s	3.1	36.7	19.4	3.9	2.1	22.8	3.1	10.0
Green Ext Time (p_c), s	0.0	10.6	0.0	0.1	0.0	16.6	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	34.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	0	43	30	0	6	43	2298	6	12	1514	49
Future Vol, veh/h	55	0	43	30	0	6	43	2298	6	12	1514	49
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	55	0	43	30	0	6	43	2298	6	12	1514	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2568	3953	782	3014	3971	1149	1563	0	0	2304	0	0
Stage 1	1563	1563	-	2384	2384	-	-	-	-	-	-	-
Stage 2	1005	2390	-	630	1587	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	~ 27	3	288	~ 14	3	164	205	-	-	86	-	-
Stage 1	79	169	-	~ 20	64	-	-	-	-	-	-	-
Stage 2	232	64	-	395	165	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 18	2	288	~ 8	2	164	205	-	-	86	-	-
Mov Cap-2 Maneuver	~ 18	2	-	~ 8	2	-	-	-	-	-	-	-
Stage 1	68	146	-	~ 16	51	-	-	-	-	-	-	-
Stage 2	176	51	-	289	142	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 777.84	$ 1752.48	0.5	0.41
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	205	-	-	18	288	8	164	86	-	-
HCM Lane V/C Ratio	0.21	-	-	3.062	0.149	3.682	0.037	0.139	-	-
HCM Ctrl Dly (s/v)	27.1	-	-	$ 1370.6	19.3	$ 2097.4	27.8	53.4	-	-
HCM Lane LOS	D	-	-	F	C	F	D	F	-	-
HCM 95th %tile Q(veh)	0.8	-	-	7.4	0.5	5	0.1	0.5	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	2913.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	0	43	296	2	126	43	2254	55	56	1470	49
Future Vol, veh/h	55	0	43	296	2	126	43	2254	55	56	1470	49
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	55	0	43	296	2	126	43	2254	55	56	1470	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2595	4002	760	3040	3971	1127	1519	0	0	2309	0	0
Stage 1	1607	1607	-	2340	2340	-	-	-	-	-	-	-
Stage 2	989	2395	-	700	1631	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	~ 26	3	298	~ 14	3	169	216	-	-	86	-	-
Stage 1	73	161	-	~ 21	68	-	-	-	-	-	-	-
Stage 2	237	64	-	358	157	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	1	298	~ 3	~ 1	169	216	-	-	86	-	-
Mov Cap-2 Maneuver	-	1	-	~ 3	~ 1	-	-	-	-	-	-	-
Stage 1	~ 25	56	-	~ 17	54	-	-	-	-	-	-	-
Stage 2	~ 47	51	-	~ 106	54	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v		$ 30557.94	0.47	3.73
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	216	-	-	-	298	3	40	86	-	-
HCM Lane V/C Ratio	0.199	-	-	-	0.145	92.146	3.234	0.653	-	-
HCM Ctrl Dly (s/v)	25.8	-	-	-	19	$ 43244.9	$ 1219.3	104.8	-	-
HCM Lane LOS	D	-	-	-	C	F	F	F	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	0.5	39.4	14.4	3.1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	0	43	296	2	126	43	2254	55	56	1470	49
Future Volume (veh/h)	55	0	43	296	2	126	43	2254	55	56	1470	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	55	0	43	296	2	126	43	2254	55	56	1470	49
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	211	0	105	402	5	296	233	2888	897	129	2896	97
Arrive On Green	0.04	0.00	0.07	0.16	0.19	0.19	0.01	0.19	0.19	0.03	0.58	0.58
Sat Flow, veh/h	1767	0	1572	1767	25	1552	1767	5066	1572	1767	5035	168
Grp Volume(v), veh/h	55	0	43	296	0	128	43	2254	55	56	986	533
Grp Sat Flow(s),veh/h/ln	1767	0	1572	1767	0	1576	1767	1689	1572	1767	1689	1825
Q Serve(g_s), s	3.5	0.0	3.1	18.2	0.0	8.6	1.2	50.8	3.4	1.6	21.0	21.0
Cycle Q Clear(g_c), s	3.5	0.0	3.1	18.2	0.0	8.6	1.2	50.8	3.4	1.6	21.0	21.0
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	211	0	105	402	0	301	233	2888	897	129	1942	1050
V/C Ratio(X)	0.26	0.00	0.41	0.74	0.00	0.43	0.18	0.78	0.06	0.44	0.51	0.51
Avail Cap(c_a), veh/h	261	0	249	402	0	401	344	2888	897	230	1942	1050
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.22	0.22	0.22	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	0.0	53.7	41.1	0.0	42.8	12.5	41.6	22.3	26.0	15.3	15.3
Incr Delay (d2), s/veh	0.6	0.0	3.6	7.5	0.0	1.4	0.1	0.5	0.0	3.3	1.0	1.8
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(95%),veh/ln	2.8	0.0	2.5	13.7	0.0	6.3	0.8	26.7	2.2	1.8	12.3	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.3	0.0	57.4	48.6	0.0	44.1	12.6	42.0	22.4	29.3	16.2	17.1
LnGrp LOS	D		E	D		D	B	D	C	C	B	B
Approach Vol, veh/h		98			424			2352			1575	
Approach Delay, s/veh		53.4			47.3			41.1			17.0	
Approach LOS		D			D			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	73.9	24.5	13.5	7.5	74.5	9.6	28.4
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	10.0	50.5	19.5	19.0	10.0	50.5	8.0	30.5
Max Q Clear Time (g_c+I1), s	3.6	52.8	20.2	5.1	3.2	23.0	5.5	10.6
Green Ext Time (p_c), s	0.1	0.0	0.0	0.2	0.0	16.1	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	36	0	0	2	6	2237	0	0	2128	43
Future Vol, veh/h	24	0	36	0	0	2	6	2237	0	0	2128	43
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	0	36	0	0	2	6	2237	0	0	2128	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3056	4399	1086	3100	4420	1119	2171	0	0	2237	0	0
Stage 1	2150	2150	-	2249	2249	-	-	-	-	-	-	-
Stage 2	907	2249	-	851	2171	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	~ 13	1	181	12	1	172	101	-	-	93	-	-
Stage 1	30	85	-	25	76	-	-	-	-	-	-	-
Stage 2	267	76	-	289	83	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 12	1	181	9	1	172	101	-	-	93	-	-
Mov Cap-2 Maneuver	~ 12	1	-	9	1	-	-	-	-	-	-	-
Stage 1	30	85	-	23	71	-	-	-	-	-	-	-
Stage 2	248	71	-	231	83	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 444.08	26.24	0.11	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	101	-	-	12	181	-	172	93	-	-
HCM Lane V/C Ratio	0.059	-	-	1.956	0.199	-	0.012	-	-	-
HCM Ctrl Dly (s/v)	42.9	-	-	$ 1065.4	29.8	0	26.2	0	-	-
HCM Lane LOS	E	-	-	F	D	A	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	3.8	0.7	-	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	1580.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	36	284	2	121	6	2205	37	41	2087	43
Future Vol, veh/h	24	0	36	284	2	121	6	2205	37	41	2087	43
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	-	-	None	-	-	None	-	-	None
Storage Length	999	-	-	0	-	-	150	-	140	135	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	0	36	284	2	121	6	2205	37	41	2087	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3086	4445	1065	3134	4429	1103	2130	0	0	2242	0	0
Stage 1	2191	2191	-	2217	2217	-	-	-	-	-	-	-
Stage 2	895	2254	-	917	2212	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	~ 13	1	186	~ 12	~ 1	176	106	-	-	93	-	-
Stage 1	28	81	-	~ 26	79	-	-	-	-	-	-	-
Stage 2	271	75	-	~ 263	79	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	1	186	~ 5	~ 1	176	106	-	-	93	-	-
Mov Cap-2 Maneuver	-	1	-	~ 5	~ 1	-	-	-	-	-	-	-
Stage 1	~ 15	45	-	~ 25	74	-	-	-	-	-	-	-
Stage 2	78	71	-	~ 119	44	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v		$ 18968.87	0.11	1.35
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	106	-	-	-	186	5	36	93	-	-
HCM Lane V/C Ratio	0.057	-	-	-	0.193	56.94	3.412	0.442	-	-
HCM Ctrl Dly (s/v)	41	-	-	-	28.$	$ 2661	$ 1316.7	71.4	-	-
HCM Lane LOS	E	-	-	-	D	F	F	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7	37.7	14.1	1.8	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	36	284	2	121	6	2205	37	41	2087	43
Future Volume (veh/h)	24	0	36	284	2	121	6	2205	37	41	2087	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	24	0	34	284	2	121	6	2205	37	41	2087	43
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	184	0	105	408	5	318	126	2924	908	123	3027	62
Arrive On Green	0.02	0.00	0.07	0.16	0.21	0.21	0.00	0.19	0.19	0.02	0.59	0.59
Sat Flow, veh/h	1767	0	1572	1767	26	1551	1767	5066	1572	1767	5109	105
Grp Volume(v), veh/h	24	0	34	284	0	123	6	2205	37	41	1379	751
Grp Sat Flow(s),veh/h/ln	1767	0	1572	1767	0	1576	1767	1689	1572	1767	1689	1837
Q Serve(g_s), s	1.5	0.0	2.5	17.4	0.0	8.1	0.2	49.4	2.3	1.1	33.7	33.9
Cycle Q Clear(g_c), s	1.5	0.0	2.5	17.4	0.0	8.1	0.2	49.4	2.3	1.1	33.7	33.9
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	184	0	105	408	0	323	126	2924	908	123	2001	1088
V/C Ratio(X)	0.13	0.00	0.33	0.70	0.00	0.38	0.05	0.75	0.04	0.33	0.69	0.69
Avail Cap(c_a), veh/h	328	0	249	410	0	342	266	2924	908	235	2001	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.26	0.26	0.26	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	53.4	40.9	0.0	41.1	15.0	40.5	21.5	23.4	16.8	16.9
Incr Delay (d2), s/veh	0.3	0.0	2.5	5.6	0.0	1.0	0.1	0.5	0.0	2.2	2.0	3.6
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(95%),veh/ln	1.2	0.0	1.9	13.0	0.0	5.9	0.1	26.3	1.5	1.2	18.3	20.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.7	0.0	56.0	46.5	0.0	42.2	15.0	41.0	21.5	25.6	18.8	20.5
LnGrp LOS	D		E	D		D	B	D	C	C	B	C
Approach Vol, veh/h		58			407			2248			2171	
Approach Delay, s/veh		53.8			45.2			40.6			19.5	
Approach LOS		D			D			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	74.8	24.4	13.5	5.5	76.6	7.8	30.1
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	10.0	50.5	19.5	19.0	10.0	50.5	12.5	26.0
Max Q Clear Time (g_c+I1), s	3.5	51.4	19.4	4.5	2.2	35.9	3.5	10.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	12.8	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	161	99	18	90	121	112	1443	139	108	981	139
Future Volume (veh/h)	161	161	99	18	90	121	112	1443	139	108	981	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	161	161	99	18	90	121	112	1443	0	108	981	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	199	122	106	189	218	422	2303		276	2296	
Arrive On Green	0.05	0.19	0.19	0.10	0.10	0.10	0.04	0.65	0.00	0.04	0.65	0.00
Sat Flow, veh/h	1767	1075	661	1111	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	161	0	260	18	90	121	112	1443	0	108	981	0
Grp Sat Flow(s),veh/h/ln	1767	0	1737	1111	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	17.2	1.9	5.5	8.6	2.5	28.8	0.0	2.4	16.1	0.0
Cycle Q Clear(g_c), s	6.5	0.0	17.2	9.1	5.5	8.6	2.5	28.8	0.0	2.4	16.1	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	0	322	106	189	218	422	2303		276	2296	
V/C Ratio(X)	0.73	0.00	0.81	0.17	0.48	0.56	0.27	0.63		0.39	0.43	
Avail Cap(c_a), veh/h	221	0	535	248	425	418	523	2303		307	2296	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	46.8	56.0	50.9	48.3	7.5	12.2	0.0	11.1	10.1	0.0
Incr Delay (d2), s/veh	12.4	0.0	6.7	1.1	2.6	3.1	0.5	1.3	0.0	1.3	0.6	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(95%),veh/ln	4.1	0.0	12.4	1.0	4.7	6.3	1.6	15.8	0.0	1.6	9.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.7	0.0	53.6	57.1	53.5	51.4	8.0	13.5	0.0	12.3	10.7	0.0
LnGrp LOS	E		D	E	D	D	A	B		B	B	
Approach Vol, veh/h		421			229			1555			1089	
Approach Delay, s/veh		56.3			52.7			13.1			10.9	
Approach LOS		E			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	83.9		28.2	8.1	83.7	10.0	18.2
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	4.4	30.8		19.2	4.5	18.1	8.5	11.1
Green Ext Time (p_c), s	0.1	17.8		1.8	0.2	11.7	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	161	105	36	90	121	117	1471	154	108	1015	139
Future Volume (veh/h)	161	161	105	36	90	121	117	1471	154	108	1015	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	161	161	105	36	90	121	117	1471	0	108	1015	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	242	212	139	124	221	247	398	2238		260	2227	
Arrive On Green	0.05	0.20	0.20	0.12	0.12	0.12	0.04	0.63	0.00	0.04	0.63	0.00
Sat Flow, veh/h	1767	1049	684	1105	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	161	0	266	36	90	121	117	1471	0	108	1015	0
Grp Sat Flow(s),veh/h/ln	1767	0	1732	1105	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	17.4	3.8	5.4	8.4	2.8	31.4	0.0	2.6	17.9	0.0
Cycle Q Clear(g_c), s	6.5	0.0	17.4	11.2	5.4	8.4	2.8	31.4	0.0	2.6	17.9	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	351	124	221	247	398	2238		260	2227	
V/C Ratio(X)	0.66	0.00	0.76	0.29	0.41	0.49	0.29	0.66		0.42	0.46	
Avail Cap(c_a), veh/h	242	0	534	245	425	420	495	2238		289	2227	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.1	0.0	45.1	55.0	48.9	46.2	8.6	13.7	0.0	12.7	11.4	0.0
Incr Delay (d2), s/veh	7.5	0.0	4.7	1.8	1.7	2.1	0.6	1.5	0.0	1.5	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.0	12.2	2.0	4.6	6.1	1.8	17.2	0.0	1.8	10.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.7	0.0	49.8	56.9	50.6	48.3	9.2	15.3	0.0	14.2	12.1	0.0
LnGrp LOS	D		D	E	D	D	A	B		B	B	
Approach Vol, veh/h		427			247			1588			1123	
Approach Delay, s/veh		51.3			50.4			14.8			12.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	81.7		30.3	8.4	81.3	10.0	20.3
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	4.6	33.4		19.4	4.8	19.9	8.5	13.2
Green Ext Time (p_c), s	0.1	17.3		1.8	0.2	12.1	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	161	105	36	90	121	117	1471	154	108	1015	139
Future Volume (veh/h)	161	161	105	36	90	121	117	1471	154	108	1015	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	161	161	105	36	90	121	117	1471	0	108	1015	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	238	209	136	119	215	241	401	2250		262	2240	
Arrive On Green	0.05	0.20	0.20	0.12	0.12	0.12	0.04	0.64	0.00	0.04	0.64	0.00
Sat Flow, veh/h	1767	1049	684	1105	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	161	0	266	36	90	121	117	1471	0	108	1015	0
Grp Sat Flow(s),veh/h/ln	1767	0	1732	1105	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	17.4	3.8	5.4	8.5	2.8	31.1	0.0	2.6	17.7	0.0
Cycle Q Clear(g_c), s	6.5	0.0	17.4	11.3	5.4	8.5	2.8	31.1	0.0	2.6	17.7	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	345	119	215	241	401	2250		262	2240	
V/C Ratio(X)	0.68	0.00	0.77	0.30	0.42	0.50	0.29	0.65		0.41	0.45	
Avail Cap(c_a), veh/h	238	0	411	166	294	308	498	2250		306	2240	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.6	0.0	45.5	55.5	49.3	46.6	8.4	13.5	0.0	12.5	11.2	0.0
Incr Delay (d2), s/veh	8.3	0.0	8.3	2.0	1.8	2.3	0.6	1.5	0.0	1.5	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	12.7	2.0	4.6	6.1	1.8	17.0	0.0	1.7	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.9	0.0	53.8	57.5	51.2	48.9	9.0	15.0	0.0	14.0	11.9	0.0
LnGrp LOS	D		D	E	D	D	A	B		B	B	
Approach Vol, veh/h		427			247			1588			1123	
Approach Delay, s/veh		54.2			51.0			14.5			12.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	82.1		29.9	8.4	81.7	10.0	19.9
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	7.5	* 70		28.5	11.5	65.0	6.5	* 19
Max Q Clear Time (g_c+I1), s	4.6	33.1		19.4	4.8	19.7	8.5	13.3
Green Ext Time (p_c), s	0.1	19.9		1.2	0.2	12.8	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	67	36	85	143	152	27	1362	72	108	1564	121
Future Volume (veh/h)	233	67	36	85	143	152	27	1362	72	108	1564	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	233	67	36	85	143	152	27	1362	0	108	1564	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	234	125	217	227	251	210	2229		284	2307	
Arrive On Green	0.05	0.21	0.21	0.12	0.12	0.12	0.01	0.63	0.00	0.04	0.65	0.00
Sat Flow, veh/h	1767	1136	610	1281	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	233	0	103	85	143	152	27	1362	0	108	1564	0
Grp Sat Flow(s),veh/h/ln	1767	0	1746	1281	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	6.0	7.5	8.8	10.8	0.7	27.8	0.0	2.5	33.1	0.0
Cycle Q Clear(g_c), s	6.5	0.0	6.0	7.5	8.8	10.8	0.7	27.8	0.0	2.5	33.1	0.0
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	0	359	217	227	251	210	2229		284	2307	
V/C Ratio(X)	1.12	0.00	0.29	0.39	0.63	0.61	0.13	0.61		0.38	0.68	
Avail Cap(c_a), veh/h	208	0	538	354	425	419	353	2229		315	2307	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	0.0	40.2	49.5	50.1	46.9	11.8	13.2	0.0	11.4	12.9	0.0
Incr Delay (d2), s/veh	97.4	0.0	0.6	1.6	4.1	3.3	0.4	1.3	0.0	1.2	1.6	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(95%),veh/ln	14.0	0.0	4.6	4.4	7.6	7.8	0.5	15.6	0.0	1.7	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	147.5	0.0	40.8	51.1	54.1	50.3	12.2	14.5	0.0	12.6	14.5	0.0
LnGrp LOS	F		D	D	D	D	B	B		B	B	
Approach Vol, veh/h		336			380			1389			1672	
Approach Delay, s/veh		114.8			51.9			14.4			14.4	
Approach LOS		F			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	81.4		30.7	5.3	84.0	10.0	20.7
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	4.5	29.8		8.0	2.7	35.1	8.5	12.8
Green Ext Time (p_c), s	0.1	16.9		0.7	0.0	15.0	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	67	42	102	143	152	33	1394	90	108	1596	121
Future Volume (veh/h)	233	67	42	102	143	152	33	1394	90	108	1596	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	233	67	42	102	143	152	33	1394	0	108	1596	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	220	138	217	228	252	205	2226		276	2299	
Arrive On Green	0.05	0.21	0.21	0.12	0.12	0.12	0.02	0.63	0.00	0.04	0.65	0.00
Sat Flow, veh/h	1767	1067	669	1274	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	233	0	109	102	143	152	33	1394	0	108	1596	0
Grp Sat Flow(s),veh/h/ln	1767	0	1735	1274	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	6.4	9.2	8.8	10.8	0.8	28.9	0.0	2.5	34.5	0.0
Cycle Q Clear(g_c), s	6.5	0.0	6.4	9.2	8.8	10.8	0.8	28.9	0.0	2.5	34.5	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	0	358	217	228	252	205	2226		276	2299	
V/C Ratio(X)	1.11	0.00	0.30	0.47	0.63	0.60	0.16	0.63		0.39	0.69	
Avail Cap(c_a), veh/h	209	0	535	352	425	419	345	2226		306	2299	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	0.0	40.3	50.2	50.0	46.8	12.4	13.5	0.0	11.9	13.3	0.0
Incr Delay (d2), s/veh	96.0	0.0	0.7	2.3	4.0	3.3	0.5	1.3	0.0	1.3	1.8	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(95%),veh/ln	13.9	0.0	4.9	5.4	7.6	7.8	0.6	16.1	0.0	1.7	18.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	146.1	0.0	41.0	52.4	54.0	50.1	12.9	14.8	0.0	13.1	15.0	0.0
LnGrp LOS	F		D	D	D	D	B	B		B	B	
Approach Vol, veh/h		342			397			1427			1704	
Approach Delay, s/veh		112.6			52.1			14.8			14.9	
Approach LOS		F			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	81.3		30.8	5.5	83.7	10.0	20.8
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	4.5	30.9		8.4	2.8	36.5	8.5	12.8
Green Ext Time (p_c), s	0.1	17.0		0.7	0.0	14.5	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	67	42	102	143	152	33	1394	90	108	1596	121
Future Volume (veh/h)	233	67	42	102	143	152	33	1394	90	108	1596	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	233	67	42	102	143	152	33	1394	0	108	1596	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	204	215	135	211	220	244	207	2243		278	2315	
Arrive On Green	0.05	0.20	0.20	0.12	0.12	0.12	0.02	0.64	0.00	0.04	0.66	0.00
Sat Flow, veh/h	1767	1067	669	1274	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	233	0	109	102	143	152	33	1394	0	108	1596	0
Grp Sat Flow(s),veh/h/ln	1767	0	1735	1274	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	6.4	9.2	8.8	10.8	0.8	28.5	0.0	2.5	34.1	0.0
Cycle Q Clear(g_c), s	6.5	0.0	6.4	9.2	8.8	10.8	0.8	28.5	0.0	2.5	34.1	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	0	350	211	220	244	207	2243		278	2315	
V/C Ratio(X)	1.14	0.00	0.31	0.48	0.65	0.62	0.16	0.62		0.39	0.69	
Avail Cap(c_a), veh/h	204	0	434	278	317	327	274	2243		309	2315	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.2	0.0	40.8	50.7	50.5	47.4	12.0	13.1	0.0	11.5	12.9	0.0
Incr Delay (d2), s/veh	106.7	0.0	0.7	2.4	4.6	3.7	0.5	1.3	0.0	1.3	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.4	0.0	4.9	5.4	7.7	7.8	0.5	15.9	0.0	1.7	18.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	156.9	0.0	41.5	53.1	55.1	51.0	12.5	14.4	0.0	12.8	14.6	0.0
LnGrp LOS	F		D	D	E	D	B	B		B	B	
Approach Vol, veh/h		342			397			1427			1704	
Approach Delay, s/veh		120.1			53.0			14.4			14.5	
Approach LOS		F			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	81.9		30.2	5.5	84.3	10.0	20.2
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 69		30.0	6.5	68.5	6.5	* 21
Max Q Clear Time (g_c+I1), s	4.5	30.5		8.4	2.8	36.1	8.5	12.8
Green Ext Time (p_c), s	0.1	19.1		0.7	0.0	20.5	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	27.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	219	134	24	122	164	152	1958	188	146	1332	188
Future Volume (veh/h)	219	219	134	24	122	164	152	1958	188	146	1332	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	219	219	134	24	122	164	152	1958	0	146	1332	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	265	262	160	111	296	336	286	2038		167	2041	
Arrive On Green	0.05	0.24	0.24	0.16	0.16	0.16	0.05	0.58	0.00	0.05	0.58	0.00
Sat Flow, veh/h	1767	1078	659	1020	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	219	0	353	24	122	164	152	1958	0	146	1332	0
Grp Sat Flow(s),veh/h/ln	1767	0	1737	1020	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	23.2	2.7	7.1	11.0	4.2	63.3	0.0	4.9	30.7	0.0
Cycle Q Clear(g_c), s	6.5	0.0	23.2	15.9	7.1	11.0	4.2	63.3	0.0	4.9	30.7	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	0	422	111	296	336	286	2038		167	2041	
V/C Ratio(X)	0.83	0.00	0.84	0.22	0.41	0.49	0.53	0.96		0.87	0.65	
Avail Cap(c_a), veh/h	265	0	536	182	425	446	361	2038		167	2041	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.3	0.0	43.2	55.5	45.4	41.4	15.1	24.0	0.0	33.0	17.1	0.0
Incr Delay (d2), s/veh	19.8	0.0	10.2	1.4	1.3	1.6	2.2	12.6	0.0	37.3	1.6	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(95%),veh/ln	8.3	0.0	16.2	1.3	5.9	7.7	3.0	35.8	0.0	7.3	17.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.2	0.0	53.3	56.9	46.7	43.0	17.3	36.7	0.0	70.3	18.7	0.0
LnGrp LOS	E		D	E	D	D	B	D		E	B	
Approach Vol, veh/h		572			310			2110			1478	
Approach Delay, s/veh		58.2			45.5			35.3			23.8	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	74.9		35.1	9.9	75.0	10.0	25.1
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	6.9	65.3		25.2	6.2	32.7	8.5	17.9
Green Ext Time (p_c), s	0.0	0.0		2.1	0.3	13.8	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	35.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	219	140	42	122	164	157	1986	203	146	1366	188
Future Volume (veh/h)	219	219	140	42	122	164	157	1986	203	146	1366	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	219	219	140	42	122	164	157	1986	0	146	1366	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	284	275	176	127	327	362	270	1979		156	1972	
Arrive On Green	0.05	0.26	0.26	0.18	0.18	0.18	0.06	0.56	0.00	0.05	0.56	0.00
Sat Flow, veh/h	1767	1058	676	1014	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	219	0	359	42	122	164	157	1986	0	146	1366	0
Grp Sat Flow(s),veh/h/ln	1767	0	1734	1014	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	23.2	4.8	7.0	10.8	4.5	67.4	0.0	5.8	33.4	0.0
Cycle Q Clear(g_c), s	6.5	0.0	23.2	18.0	7.0	10.8	4.5	67.4	0.0	5.8	33.4	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	0	450	127	327	362	270	1979		156	1972	
V/C Ratio(X)	0.77	0.00	0.80	0.33	0.37	0.45	0.58	1.00		0.94	0.69	
Avail Cap(c_a), veh/h	284	0	535	181	425	446	340	1979		156	1972	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.3	0.0	41.5	54.6	43.6	39.7	17.5	26.3	0.0	36.2	19.0	0.0
Incr Delay (d2), s/veh	13.0	0.0	7.9	2.1	1.0	1.3	2.8	21.1	0.0	54.2	2.0	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(95%),veh/ln	7.4	0.0	15.9	2.3	5.8	7.5	3.3	40.6	0.0	10.9	19.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.3	0.0	49.4	56.7	44.6	40.9	20.3	47.4	0.0	90.3	21.0	0.0
LnGrp LOS	E		D	E	D	D	C	F		F	C	
Approach Vol, veh/h		578			328			2143			1512	
Approach Delay, s/veh		52.4			44.3			45.5			27.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	72.9		37.1	10.2	72.6	10.0	27.1
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	7.8	69.4		25.2	6.5	35.4	8.5	20.0
Green Ext Time (p_c), s	0.0	0.0		2.1	0.3	13.0	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	40.4
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	219	140	42	122	164	157	1986	203	146	1366	188
Future Volume (veh/h)	219	219	140	42	122	164	157	1986	203	146	1366	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	219	219	140	42	122	164	157	1986	0	146	1366	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	263	256	163	104	294	334	290	2109		173	2115	
Arrive On Green	0.05	0.24	0.24	0.16	0.16	0.16	0.05	0.60	0.00	0.05	0.60	0.00
Sat Flow, veh/h	1767	1058	676	1014	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	219	0	359	42	122	164	157	1986	0	146	1366	0
Grp Sat Flow(s),veh/h/ln	1767	0	1734	1014	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	23.8	5.0	7.1	11.0	4.1	62.2	0.0	4.5	30.4	0.0
Cycle Q Clear(g_c), s	6.5	0.0	23.8	18.7	7.1	11.0	4.1	62.2	0.0	4.5	30.4	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	0	419	104	294	334	290	2109		173	2115	
V/C Ratio(X)	0.83	0.00	0.86	0.40	0.42	0.49	0.54	0.94		0.84	0.65	
Avail Cap(c_a), veh/h	263	0	419	104	294	334	366	2109		188	2115	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.5	0.0	43.5	57.2	45.5	41.5	14.3	22.2	0.0	31.9	15.7	0.0
Incr Delay (d2), s/veh	20.5	0.0	16.4	3.5	1.3	1.6	2.2	10.0	0.0	27.8	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	17.4	2.4	5.9	7.7	2.9	34.2	0.0	6.8	17.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.9	0.0	59.9	60.8	46.8	43.1	16.6	32.1	0.0	59.8	17.2	0.0
LnGrp LOS	E		E	E	D	D	B	C		E	B	
Approach Vol, veh/h		578			328			2143			1512	
Approach Delay, s/veh		62.6			46.8			31.0			21.3	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	77.3		35.0	9.8	77.5	10.0	25.0
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	7.5	* 70		28.5	11.5	65.0	6.5	* 19
Max Q Clear Time (g_c+I1), s	8.5	64.2		25.8	6.1	32.4	8.5	20.7
Green Ext Time (p_c), s	0.1	5.0		0.7	0.3	17.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	91	49	116	195	207	36	1848	97	146	2122	164
Future Volume (veh/h)	316	91	49	116	195	207	36	1848	97	146	2122	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	316	91	49	116	195	207	36	1848	0	146	2122	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	272	147	254	291	322	98	2069		177	2176	
Arrive On Green	0.05	0.24	0.24	0.16	0.16	0.16	0.02	0.59	0.00	0.05	0.62	0.00
Sat Flow, veh/h	1767	1135	611	1239	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	316	0	140	116	195	207	36	1848	0	146	2122	0
Grp Sat Flow(s),veh/h/ln	1767	0	1746	1239	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	8.0	10.5	11.9	14.5	1.0	54.6	0.0	3.8	69.4	0.0
Cycle Q Clear(g_c), s	6.5	0.0	8.0	10.5	11.9	14.5	1.0	54.6	0.0	3.8	69.4	0.0
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	419	254	291	322	98	2069		177	2176	
V/C Ratio(X)	1.49	0.00	0.33	0.46	0.67	0.64	0.37	0.89		0.82	0.98	
Avail Cap(c_a), veh/h	212	0	538	344	425	436	237	2069		188	2176	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	37.7	47.1	47.7	43.7	29.8	21.5	0.0	28.0	22.1	0.0
Incr Delay (d2), s/veh	244.0	0.0	0.7	1.8	3.8	3.0	3.2	6.4	0.0	24.7	14.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	27.2	0.0	6.1	5.9	9.6	9.7	1.2	29.8	0.0	6.6	38.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	292.2	0.0	38.3	48.9	51.4	46.7	33.0	27.9	0.0	52.8	36.3	0.0
LnGrp LOS	F		D	D	D	D	C	C		D	D	
Approach Vol, veh/h		456			518			1884			2268	
Approach Delay, s/veh		214.2			49.0			28.0			37.4	
Approach LOS		F			D			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	75.9		34.8	5.6	79.6	10.0	24.8
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	5.8	56.6		10.0	3.0	71.4	8.5	16.5
Green Ext Time (p_c), s	0.0	4.9		1.0	0.0	0.0	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	50.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	91	55	133	195	207	42	1880	115	146	2154	164
Future Volume (veh/h)	316	91	55	133	195	207	42	1880	115	146	2154	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	316	91	55	133	195	207	42	1880	0	146	2154	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	261	158	254	292	324	97	2065		173	2166	
Arrive On Green	0.05	0.24	0.24	0.16	0.16	0.16	0.02	0.59	0.00	0.05	0.61	0.00
Sat Flow, veh/h	1767	1083	655	1232	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	316	0	146	133	195	207	42	1880	0	146	2154	0
Grp Sat Flow(s),veh/h/ln	1767	0	1738	1232	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	8.4	12.2	11.9	14.4	1.2	56.8	0.0	3.8	72.7	0.0
Cycle Q Clear(g_c), s	6.5	0.0	8.4	12.2	11.9	14.4	1.2	56.8	0.0	3.8	72.7	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	0	418	254	292	324	97	2065		173	2166	
V/C Ratio(X)	1.49	0.00	0.35	0.52	0.67	0.64	0.43	0.91		0.84	0.99	
Avail Cap(c_a), veh/h	213	0	536	342	425	437	231	2065		183	2166	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	37.8	47.8	47.6	43.6	30.1	22.1	0.0	28.7	22.9	0.0
Incr Delay (d2), s/veh	242.2	0.0	0.7	2.4	3.7	3.0	4.3	7.5	0.0	28.9	18.1	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(95%),veh/ln	27.1	0.0	6.4	6.9	9.5	9.7	1.4	31.2	0.0	6.9	41.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	290.4	0.0	38.5	50.1	51.3	46.6	34.4	29.5	0.0	57.6	41.1	0.0
LnGrp LOS	F		D	D	D	D	C	C		E	D	
Approach Vol, veh/h		462			535			1922			2300	
Approach Delay, s/veh		210.8			49.2			29.6			42.1	
Approach LOS		F			D			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	75.8		34.9	5.9	79.2	10.0	24.9
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 62		37.0	11.5	56.5	6.5	* 28
Max Q Clear Time (g_c+I1), s	5.8	58.8		10.4	3.2	74.7	8.5	16.4
Green Ext Time (p_c), s	0.0	3.0		1.0	0.1	0.0	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	53.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	91	55	133	195	207	42	1880	115	146	2154	164
Future Volume (veh/h)	316	91	55	133	195	207	42	1880	115	146	2154	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	316	91	55	133	195	207	42	1880	0	146	2154	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	203	251	152	243	275	308	101	2101		176	2199	
Arrive On Green	0.05	0.23	0.23	0.15	0.15	0.15	0.02	0.60	0.00	0.05	0.62	0.00
Sat Flow, veh/h	1767	1083	655	1232	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	316	0	146	133	195	207	42	1880	0	146	2154	0
Grp Sat Flow(s),veh/h/ln	1767	0	1738	1232	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.5	0.0	8.5	12.4	12.0	14.6	1.1	55.4	0.0	3.7	70.9	0.0
Cycle Q Clear(g_c), s	6.5	0.0	8.5	12.4	12.0	14.6	1.1	55.4	0.0	3.7	70.9	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	402	243	275	308	101	2101		176	2199	
V/C Ratio(X)	1.56	0.00	0.36	0.55	0.71	0.67	0.42	0.89		0.83	0.98	
Avail Cap(c_a), veh/h	203	0	434	270	317	343	162	2101		188	2199	
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.5	0.0	38.7	48.8	48.6	44.7	30.1	21.0	0.0	28.3	21.8	0.0
Incr Delay (d2), s/veh	274.0	0.0	0.8	2.7	7.1	5.2	3.9	6.4	0.0	25.7	15.0	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(95%),veh/ln	28.5	0.0	6.5	7.0	10.0	10.0	1.4	30.0	0.0	6.7	39.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	322.4	0.0	39.5	51.5	55.7	49.9	34.0	27.4	0.0	54.0	36.8	0.0
LnGrp LOS	F		D	D	E	D	C	C		D	D	
Approach Vol, veh/h		462			535			1922			2300	
Approach Delay, s/veh		233.0			52.4			27.5			37.9	
Approach LOS		F			D			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	77.0		33.8	5.9	80.3	10.0	23.8
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	6.5	* 69		30.0	6.5	68.5	6.5	* 21
Max Q Clear Time (g_c+I1), s	15.7	57.4		10.5	3.1	72.9	8.5	16.6
Green Ext Time (p_c), s	0.0	10.2		0.9	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	52.8
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	293	34	157	229	144	102	1018	428	85	314	110
Future Volume (veh/h)	204	293	34	157	229	144	102	1018	428	85	314	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	293	0	157	229	0	102	1018	0	85	314	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	492		212	434		720	2024		209	1502	
Arrive On Green	0.08	0.14	0.00	0.06	0.12	0.00	0.18	0.57	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	204	293	0	157	229	0	102	1018	0	85	314	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.6	10.1	0.0	5.9	7.9	0.0	0.0	22.5	0.0	4.0	7.3	0.0
Cycle Q Clear(g_c), s	7.6	10.1	0.0	5.9	7.9	0.0	0.0	22.5	0.0	4.0	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	492		212	434		720	2024		209	1502	
V/C Ratio(X)	0.76	0.60		0.74	0.53		0.14	0.50		0.41	0.21	
Avail Cap(c_a), veh/h	464	930		293	754		720	2024		209	1502	
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	0.98	0.98	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	52.5	0.0	60.0	53.5	0.0	17.6	16.6	0.0	28.3	23.5	0.0
Incr Delay (d2), s/veh	6.3	1.6	0.0	8.0	1.4	0.0	0.1	0.9	0.0	1.8	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	8.0	0.0	4.9	6.4	0.0	3.0	13.5	0.0	3.2	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.0	54.1	0.0	68.0	54.8	0.0	17.8	17.5	0.0	30.1	23.8	0.0
LnGrp LOS	E	D		E	D		B	B		C	C	
Approach Vol, veh/h		497			386			1120			399	
Approach Delay, s/veh		58.6			60.2			17.5			25.2	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	81.6	12.5	24.1	30.9	62.4	14.7	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.0	24.5	7.9	12.1	2.0	9.3	9.6	9.9
Green Ext Time (p_c), s	0.0	11.0	0.2	2.4	0.1	2.9	0.6	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	34.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	305	34	175	239	156	102	1018	450	99	314	110
Future Volume (veh/h)	204	305	34	175	239	156	102	1018	450	99	314	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	305	0	175	239	0	102	1018	0	99	314	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	473		229	434		720	2024		209	1502	
Arrive On Green	0.08	0.13	0.00	0.07	0.12	0.00	0.18	0.57	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	204	305	0	175	239	0	102	1018	0	99	314	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.6	10.7	0.0	6.5	8.3	0.0	0.0	22.5	0.0	4.7	7.3	0.0
Cycle Q Clear(g_c), s	7.6	10.7	0.0	6.5	8.3	0.0	0.0	22.5	0.0	4.7	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	473		229	434		720	2024		209	1502	
V/C Ratio(X)	0.76	0.64		0.76	0.55		0.14	0.50		0.47	0.21	
Avail Cap(c_a), veh/h	464	930		293	754		720	2024		209	1502	
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	0.97	0.97	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	53.3	0.0	59.6	53.6	0.0	17.6	16.6	0.0	28.7	23.5	0.0
Incr Delay (d2), s/veh	6.3	2.1	0.0	10.0	1.5	0.0	0.1	0.9	0.0	2.4	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	8.4	0.0	5.6	6.7	0.0	3.0	13.5	0.0	3.7	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.0	55.4	0.0	69.6	55.1	0.0	17.8	17.5	0.0	31.1	23.8	0.0
LnGrp LOS	E	E		E	E		B	B		C	C	
Approach Vol, veh/h		509			414			1120			413	
Approach Delay, s/veh		59.3			61.2			17.5			25.6	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	81.6	13.2	23.5	30.9	62.4	14.7	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.3	24.5	8.5	12.7	2.0	9.3	9.6	10.3
Green Ext Time (p_c), s	0.0	11.0	0.2	2.5	0.1	2.9	0.6	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	305	34	175	239	156	102	1018	450	99	314	110
Future Volume (veh/h)	204	305	34	175	239	156	102	1018	450	99	314	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	305	0	175	239	0	102	1018	0	99	314	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	473		229	434		720	2024		209	1502	
Arrive On Green	0.08	0.13	0.00	0.07	0.12	0.00	0.18	0.57	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	204	305	0	175	239	0	102	1018	0	99	314	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.6	10.7	0.0	6.5	8.3	0.0	0.0	22.5	0.0	4.7	7.3	0.0
Cycle Q Clear(g_c), s	7.6	10.7	0.0	6.5	8.3	0.0	0.0	22.5	0.0	4.7	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	473		229	434		720	2024		209	1502	
V/C Ratio(X)	0.76	0.64		0.76	0.55		0.14	0.50		0.47	0.21	
Avail Cap(c_a), veh/h	464	930		293	754		720	2024		209	1502	
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	0.97	0.97	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	53.3	0.0	59.6	53.6	0.0	17.6	16.6	0.0	28.7	23.5	0.0
Incr Delay (d2), s/veh	6.3	2.1	0.0	10.0	1.5	0.0	0.1	0.9	0.0	2.4	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	8.4	0.0	5.6	6.7	0.0	3.0	13.5	0.0	3.7	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.0	55.4	0.0	69.6	55.1	0.0	17.8	17.5	0.0	31.1	23.8	0.0
LnGrp LOS	E	E		E	E		B	B		C	C	
Approach Vol, veh/h		509			414			1120			413	
Approach Delay, s/veh		59.3			61.2			17.5			25.6	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	81.6	13.2	23.5	30.9	62.4	14.7	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.3	24.5	8.5	12.7	2.0	9.3	9.6	10.3
Green Ext Time (p_c), s	0.0	11.0	0.2	2.5	0.1	2.9	0.6	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	263	85	437	462	153	47	555	360	144	725	119
Future Volume (veh/h)	187	263	85	437	462	153	47	555	360	144	725	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	187	263	0	437	462	0	47	555	0	144	725	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	250	525		293	569		512	1908		331	1502	
Arrive On Green	0.07	0.15	0.00	0.09	0.16	0.00	0.15	0.54	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	187	263	0	437	462	0	47	555	0	144	725	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.0	8.9	0.0	11.1	16.4	0.0	0.0	11.1	0.0	4.7	19.3	0.0
Cycle Q Clear(g_c), s	7.0	8.9	0.0	11.1	16.4	0.0	0.0	11.1	0.0	4.7	19.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	525		293	569		512	1908		331	1502	
V/C Ratio(X)	0.75	0.50		1.49	0.81		0.09	0.29		0.43	0.48	
Avail Cap(c_a), veh/h	464	930		293	754		512	1908		331	1502	
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	0.52	0.52	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.1	50.9	0.0	59.4	52.6	0.0	23.9	16.2	0.0	30.9	26.9	0.0
Incr Delay (d2), s/veh	6.2	1.1	0.0	231.1	3.2	0.0	0.1	0.4	0.0	1.3	1.1	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(95%),veh/ln	5.8	7.1	0.0	21.3	10.6	0.0	1.6	7.8	0.0	2.6	12.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	51.9	0.0	290.5	55.8	0.0	24.0	16.6	0.0	32.2	28.1	0.0
LnGrp LOS	E	D		F	E		C	B		C	C	
Approach Vol, veh/h		450			899			602			869	
Approach Delay, s/veh		57.5			169.9			17.2			28.7	
Approach LOS		E			F			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	77.4	15.6	25.3	26.7	62.4	14.0	27.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	13.1	13.1	10.9	2.0	21.3	9.0	18.4
Green Ext Time (p_c), s	0.0	5.5	0.0	2.1	0.0	7.4	0.5	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	75.9
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	275	85	458	474	167	47	555	381	157	725	119
Future Volume (veh/h)	187	275	85	458	474	167	47	555	381	157	725	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	187	275	0	458	474	0	47	555	0	157	725	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	250	536		293	580		506	1896		331	1502	
Arrive On Green	0.07	0.15	0.00	0.09	0.16	0.00	0.15	0.54	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	187	275	0	458	474	0	47	555	0	157	725	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.0	9.3	0.0	11.1	16.9	0.0	0.0	11.2	0.0	4.7	19.3	0.0
Cycle Q Clear(g_c), s	7.0	9.3	0.0	11.1	16.9	0.0	0.0	11.2	0.0	4.7	19.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	536		293	580		506	1896		331	1502	
V/C Ratio(X)	0.75	0.51		1.56	0.82		0.09	0.29		0.47	0.48	
Avail Cap(c_a), veh/h	464	930		293	754		506	1896		331	1502	
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	0.41	0.41	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.1	50.7	0.0	59.4	52.4	0.0	24.2	16.5	0.0	32.0	26.9	0.0
Incr Delay (d2), s/veh	6.2	1.1	0.0	260.9	2.7	0.0	0.1	0.4	0.0	1.5	1.1	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(95%),veh/ln	5.8	7.5	0.0	22.6	10.5	0.0	1.6	7.9	0.0	3.3	12.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	51.8	0.0	320.3	55.1	0.0	24.3	16.9	0.0	33.5	28.1	0.0
LnGrp LOS	E	D		F	E		C	B		C	C	
Approach Vol, veh/h		462			932			602			882	
Approach Delay, s/veh		57.3			185.4			17.4			29.0	
Approach LOS		E			F			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	76.9	15.6	25.8	26.2	62.4	14.0	27.4
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	13.2	13.1	11.3	2.0	21.3	9.0	18.9
Green Ext Time (p_c), s	0.0	5.5	0.0	2.2	0.0	7.4	0.5	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	81.8
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	275	85	458	474	167	47	555	381	157	725	119
Future Volume (veh/h)	187	275	85	458	474	167	47	555	381	157	725	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	187	275	0	458	474	0	47	555	0	157	725	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	245	434		546	744		436	1589		347	1464	
Arrive On Green	0.07	0.12	0.00	0.16	0.21	0.00	0.11	0.45	0.00	0.08	0.42	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	187	275	0	458	474	0	47	555	0	157	725	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.0	9.6	0.0	16.8	15.9	0.0	0.0	13.3	0.0	7.9	19.7	0.0
Cycle Q Clear(g_c), s	7.0	9.6	0.0	16.8	15.9	0.0	0.0	13.3	0.0	7.9	19.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	434		546	744		436	1589		347	1464	
V/C Ratio(X)	0.76	0.63		0.84	0.64		0.11	0.35		0.45	0.50	
Avail Cap(c_a), veh/h	356	515		778	949		436	1589		439	1464	
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	0.49	0.49	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.3	54.2	0.0	53.0	46.7	0.0	28.3	23.3	0.0	28.8	28.0	0.0
Incr Delay (d2), s/veh	7.6	2.5	0.0	3.4	0.6	0.0	0.2	0.6	0.0	1.3	1.2	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(95%),veh/ln	5.8	7.8	0.0	10.5	10.0	0.0	1.8	9.3	0.0	6.1	13.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.9	56.7	0.0	56.5	47.4	0.0	28.4	23.9	0.0	30.1	29.2	0.0
LnGrp LOS	E	E		E	D		C	C		C	C	
Approach Vol, veh/h		462			932			602			882	
Approach Delay, s/veh		60.8			51.8			24.2			29.3	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	65.6	25.2	22.0	21.8	61.0	13.8	33.4
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	17.0	40.0	29.5	19.0	5.5	* 54	13.5	35.0
Max Q Clear Time (g_c+I1), s	19.9	15.3	18.8	11.6	2.0	21.7	9.0	17.9
Green Ext Time (p_c), s	0.3	4.9	1.9	1.2	0.0	7.3	0.3	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	40.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	348	40	186	272	171	121	1210	509	101	373	131
Future Volume (veh/h)	242	348	40	186	272	171	121	1210	509	101	373	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	242	348	0	186	272	0	121	1210	0	101	373	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	306	502		240	434		682	1985		169	1502	
Arrive On Green	0.09	0.14	0.00	0.07	0.12	0.00	0.17	0.56	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	242	348	0	186	272	0	121	1210	0	101	373	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	9.0	12.2	0.0	6.9	9.5	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Cycle Q Clear(g_c), s	9.0	12.2	0.0	6.9	9.5	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	502		240	434		682	1985		169	1502	
V/C Ratio(X)	0.79	0.69		0.78	0.63		0.18	0.61		0.60	0.25	
Avail Cap(c_a), veh/h	464	930		293	754		682	1985		169	1502	
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	0.96	0.96	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.0	53.0	0.0	59.4	54.2	0.0	19.0	18.9	0.0	31.5	23.9	0.0
Incr Delay (d2), s/veh	6.9	2.4	0.0	11.1	2.0	0.0	0.2	1.4	0.0	6.8	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	9.3	0.0	6.0	7.6	0.0	3.7	17.3	0.0	4.1	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.9	55.5	0.0	70.5	56.2	0.0	19.1	20.3	0.0	38.3	24.3	0.0
LnGrp LOS	E	E		E	E		B	C		D	C	
Approach Vol, veh/h		590			458			1331			474	
Approach Delay, s/veh		59.4			62.0			20.2			27.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	80.2	13.6	24.5	29.5	62.4	16.1	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	31.7	8.9	14.2	2.0	10.8	11.0	11.5
Green Ext Time (p_c), s	0.0	12.0	0.2	2.8	0.2	3.5	0.6	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	36.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	360	40	204	282	183	121	1210	531	115	373	131
Future Volume (veh/h)	242	360	40	204	282	183	121	1210	531	115	373	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	242	360	0	204	282	0	121	1210	0	115	373	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	306	485		257	434		682	1985		169	1502	
Arrive On Green	0.09	0.14	0.00	0.07	0.12	0.00	0.17	0.56	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	242	360	0	204	282	0	121	1210	0	115	373	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	9.0	12.8	0.0	7.6	9.9	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Cycle Q Clear(g_c), s	9.0	12.8	0.0	7.6	9.9	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	485		257	434		682	1985		169	1502	
V/C Ratio(X)	0.79	0.74		0.79	0.65		0.18	0.61		0.68	0.25	
Avail Cap(c_a), veh/h	464	930		293	754		682	1985		169	1502	
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	0.95	0.95	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.0	53.9	0.0	59.1	54.3	0.0	19.0	18.9	0.0	35.3	23.9	0.0
Incr Delay (d2), s/veh	6.9	3.2	0.0	13.1	2.2	0.0	0.2	1.4	0.0	11.8	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	9.7	0.0	6.7	7.9	0.0	3.7	17.3	0.0	5.1	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.9	57.1	0.0	72.2	56.6	0.0	19.1	20.3	0.0	47.1	24.3	0.0
LnGrp LOS	E	E		E	E		B	C		D	C	
Approach Vol, veh/h		602			486			1331			488	
Approach Delay, s/veh		60.2			63.1			20.2			29.7	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	80.2	14.2	23.9	29.5	62.4	16.1	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	31.7	9.6	14.8	2.0	10.8	11.0	11.9
Green Ext Time (p_c), s	0.0	12.0	0.1	2.8	0.2	3.5	0.6	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	37.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	360	40	204	282	183	121	1210	531	115	373	131
Future Volume (veh/h)	242	360	40	204	282	183	121	1210	531	115	373	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	242	360	0	204	282	0	121	1210	0	115	373	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	306	485		257	434		682	1985		169	1502	
Arrive On Green	0.09	0.14	0.00	0.07	0.12	0.00	0.17	0.56	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	242	360	0	204	282	0	121	1210	0	115	373	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	9.0	12.8	0.0	7.6	9.9	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Cycle Q Clear(g_c), s	9.0	12.8	0.0	7.6	9.9	0.0	0.0	29.7	0.0	4.7	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	485		257	434		682	1985		169	1502	
V/C Ratio(X)	0.79	0.74		0.79	0.65		0.18	0.61		0.68	0.25	
Avail Cap(c_a), veh/h	464	930		293	754		682	1985		169	1502	
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	0.92	0.92	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.0	53.9	0.0	59.1	54.3	0.0	19.0	18.9	0.0	35.3	23.9	0.0
Incr Delay (d2), s/veh	6.9	3.2	0.0	12.7	2.2	0.0	0.2	1.4	0.0	11.8	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	9.7	0.0	6.7	7.8	0.0	3.7	17.3	0.0	5.1	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.9	57.1	0.0	71.8	56.5	0.0	19.1	20.3	0.0	47.1	24.3	0.0
LnGrp LOS	E	E		E	E		B	C		D	C	
Approach Vol, veh/h		602			486			1331			488	
Approach Delay, s/veh		60.2			62.9			20.2			29.7	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	80.2	14.2	23.9	29.5	62.4	16.1	22.0
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	31.7	9.6	14.8	2.0	10.8	11.0	11.9
Green Ext Time (p_c), s	0.0	12.0	0.1	2.8	0.2	3.5	0.6	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	37.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	312	101	519	549	181	55	660	428	171	862	141
Future Volume (veh/h)	222	312	101	519	549	181	55	660	428	171	862	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	222	312	0	519	549	0	55	660	0	171	862	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	640		293	646		408	1793		291	1502	
Arrive On Green	0.08	0.18	0.00	0.09	0.18	0.00	0.12	0.51	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	222	312	0	519	549	0	55	660	0	171	862	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.2	10.3	0.0	11.1	19.6	0.0	0.0	14.7	0.0	4.7	24.1	0.0
Cycle Q Clear(g_c), s	8.2	10.3	0.0	11.1	19.6	0.0	0.0	14.7	0.0	4.7	24.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	640		293	646		408	1793		291	1502	
V/C Ratio(X)	0.78	0.49		1.77	0.85		0.13	0.37		0.59	0.57	
Avail Cap(c_a), veh/h	464	930		293	754		408	1793		291	1502	
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	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.4	47.8	0.0	59.4	51.3	0.0	30.7	19.3	0.0	35.2	28.3	0.0
Incr Delay (d2), s/veh	6.3	0.8	0.0	349.1	0.9	0.0	0.2	0.6	0.0	3.7	1.6	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(95%),veh/ln	6.8	8.1	0.0	25.6	10.0	0.0	2.2	9.9	0.0	4.9	15.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.7	48.6	0.0	408.6	52.2	0.0	30.9	19.9	0.0	38.9	29.9	0.0
LnGrp LOS	E	D		F	D		C	B		D	C	
Approach Vol, veh/h		534			1068			715			1033	
Approach Delay, s/veh		55.3			225.4			20.7			31.4	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	73.1	15.6	29.6	22.4	62.4	15.4	29.8
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	16.7	13.1	12.3	2.0	26.1	10.2	21.6
Green Ext Time (p_c), s	0.0	6.7	0.0	2.5	0.1	8.8	0.6	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	94.8
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	324	101	540	561	195	55	660	449	184	862	141
Future Volume (veh/h)	222	324	101	540	561	195	55	660	449	184	862	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	222	324	0	540	561	0	55	660	0	184	862	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	650		293	656		403	1783		290	1502	
Arrive On Green	0.08	0.18	0.00	0.09	0.19	0.00	0.12	0.51	0.00	0.04	0.43	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	222	324	0	540	561	0	55	660	0	184	862	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.2	10.7	0.0	11.1	20.0	0.0	0.0	14.8	0.0	4.7	24.1	0.0
Cycle Q Clear(g_c), s	8.2	10.7	0.0	11.1	20.0	0.0	0.0	14.8	0.0	4.7	24.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	650		293	656		403	1783		290	1502	
V/C Ratio(X)	0.78	0.50		1.84	0.85		0.14	0.37		0.63	0.57	
Avail Cap(c_a), veh/h	464	930		293	754		403	1783		290	1502	
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	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.4	47.6	0.0	59.4	51.2	0.0	30.9	19.5	0.0	36.5	28.3	0.0
Incr Delay (d2), s/veh	6.3	0.8	0.0	381.3	0.9	0.0	0.2	0.6	0.0	5.2	1.6	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(95%),veh/ln	6.8	8.3	0.0	27.4	10.2	0.0	2.2	9.9	0.0	6.0	15.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.7	48.5	0.0	440.8	52.1	0.0	31.1	20.1	0.0	41.6	29.9	0.0
LnGrp LOS	E	D		F	D		C	C		D	C	
Approach Vol, veh/h		546			1101			715			1046	
Approach Delay, s/veh		55.1			242.7			21.0			32.0	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	72.7	15.6	30.0	22.0	62.4	15.4	30.2
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	4.7	55.4	11.1	34.3	7.2	* 55	17.6	27.8
Max Q Clear Time (g_c+I1), s	6.7	16.8	13.1	12.7	2.0	26.1	10.2	22.0
Green Ext Time (p_c), s	0.0	6.7	0.0	2.6	0.1	8.8	0.6	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	101.5
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	324	101	540	561	195	55	660	449	184	862	141
Future Volume (veh/h)	222	324	101	540	561	195	55	660	449	184	862	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	222	324	0	540	561	0	55	660	0	184	862	0
Peak Hour 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
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	434		625	790		350	1466		320	1464	
Arrive On Green	0.08	0.12	0.00	0.18	0.22	0.00	0.09	0.42	0.00	0.09	0.42	0.00
Sat Flow, veh/h	3428	3526	1572	3428	3526	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	222	324	0	540	561	0	55	660	0	184	862	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1763	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.3	11.5	0.0	19.9	19.1	0.0	0.0	17.5	0.0	9.4	24.6	0.0
Cycle Q Clear(g_c), s	8.3	11.5	0.0	19.9	19.1	0.0	0.0	17.5	0.0	9.4	24.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	434		625	790		350	1466		320	1464	
V/C Ratio(X)	0.80	0.75		0.86	0.71		0.16	0.45		0.58	0.59	
Avail Cap(c_a), veh/h	356	515		778	949		350	1466		391	1464	
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	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.6	55.0	0.0	51.6	46.5	0.0	34.7	27.3	0.0	30.1	29.4	0.0
Incr Delay (d2), s/veh	10.8	5.7	0.0	0.9	0.2	0.0	0.3	1.0	0.0	2.3	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.1	9.2	0.0	9.9	9.7	0.0	2.4	11.8	0.0	7.4	15.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.4	60.7	0.0	52.5	46.7	0.0	35.0	28.3	0.0	32.4	31.1	0.0
LnGrp LOS	E	E		D	D		D	C		C	C	
Approach Vol, veh/h		546			1101			715			1046	
Approach Delay, s/veh		64.2			49.6			28.8			31.4	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	61.0	28.2	22.0	18.8	61.0	15.1	35.1
Change Period (Y+Rc), s	7.0	7.0	4.5	6.0	7.0	* 7	4.5	6.0
Max Green Setting (Gmax), s	17.0	40.0	29.5	19.0	5.5	* 54	13.5	35.0
Max Q Clear Time (g_c+I1), s	11.4	19.5	21.9	13.5	2.0	26.6	10.3	21.1
Green Ext Time (p_c), s	0.3	5.6	1.8	1.1	0.0	8.6	0.3	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1641	358	34	0	36
Future Vol, veh/h	0	1641	358	34	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1641	358	34	0	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	196
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	809
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	809
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.66
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	809
HCM Lane V/C Ratio	-	-	-	0.044
HCM Ctrl Dly (s/v)	-	-	-	9.7
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1010	1577	47	0	56
Future Vol, veh/h	0	1010	1577	47	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1010	1577	47	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	812
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	320
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	320
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	18.63
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	320
HCM Lane V/C Ratio	-	-	-	0.175
HCM Ctrl Dly (s/v)	-	-	-	18.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1794	389	34	0	36
Future Vol, veh/h	0	1794	389	34	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1794	389	34	0	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	212
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	791
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	791
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.77
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	791
HCM Lane V/C Ratio	-	-	-	0.046
HCM Ctrl Dly (s/v)	-	-	-	9.8
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1102	1728	47	0	56
Future Vol, veh/h	0	1102	1728	47	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1102	1728	47	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	888
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	285
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	285
HCM Lane V/C Ratio	-	-	-	0.197
HCM Ctrl Dly (s/v)	-	-	-	20.7
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1641	392	2	0	2
Future Vol, veh/h	0	1641	392	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1641	392	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	197
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	808
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	808
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.47
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	808
HCM Lane V/C Ratio	-	-	-	0.002
HCM Ctrl Dly (s/v)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1010	1624	2	0	2
Future Vol, veh/h	0	1010	1624	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1010	1624	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	813
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	319
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	319
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	16.34
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	319
HCM Lane V/C Ratio	-	-	-	0.006
HCM Ctrl Dly (s/v)	-	-	-	16.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1794	423	2	0	2
Future Vol, veh/h	0	1794	423	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1794	423	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	213
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	790
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	790
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.57
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	790
HCM Lane V/C Ratio	-	-	-	0.003
HCM Ctrl Dly (s/v)	-	-	-	9.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1102	1775	2	0	2
Future Vol, veh/h	0	1102	1775	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1102	1775	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	889
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	285
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	17.74
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	285
HCM Lane V/C Ratio	-	-	-	0.007
HCM Ctrl Dly (s/v)	-	-	-	17.7
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	1564	365	48	28	75
Future Vol, veh/h	77	1564	365	48	28	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	77	1564	365	48	28	75

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	413	0	-	0	1301	183
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	936	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	1135	-	-	-	*494	826
Stage 1	-	-	-	-	*670	-
Stage 2	-	-	-	-	*607	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	1135	-	-	-	*460	826
Mov Cap-2 Maneuver	-	-	-	-	*491	-
Stage 1	-	-	-	-	*624	-
Stage 2	-	-	-	-	*607	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.39	0	10.61
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1135	-	-	-	491	826
HCM Lane V/C Ratio	0.068	-	-	-	0.057	0.091
HCM Ctrl Dly (s/v)	8.4	-	-	-	12.8	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2	0.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	959	1575	61	49	66
Future Vol, veh/h	51	959	1575	61	49	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	51	959	1575	61	49	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1636	0	-	0	2157	788
Stage 1	-	-	-	-	1575	-
Stage 2	-	-	-	-	582	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	388	-	-	-	*~ 47	332
Stage 1	-	-	-	-	*154	-
Stage 2	-	-	-	-	*771	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	388	-	-	-	*~ 41	332
Mov Cap-2 Maneuver	-	-	-	-	*113	-
Stage 1	-	-	-	-	*134	-
Stage 2	-	-	-	-	*771	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.79	0	36.02
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	388	-	-	-	113	332
HCM Lane V/C Ratio	0.132	-	-	-	0.435	0.199
HCM Ctrl Dly (s/v)	15.7	-	-	-	59.6	18.5
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.9	0.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	1717	396	48	28	75
Future Vol, veh/h	77	1717	396	48	28	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	77	1717	396	48	28	75

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	444	0	-	0	1409	198
Stage 1	-	-	-	-	396	-
Stage 2	-	-	-	-	1013	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	1105	-	-	-	*491	807
Stage 1	-	-	-	-	*646	-
Stage 2	-	-	-	-	*558	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	1105	-	-	-	*456	807
Mov Cap-2 Maneuver	-	-	-	-	*471	-
Stage 1	-	-	-	-	*601	-
Stage 2	-	-	-	-	*558	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.36	0	10.79
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1105	-	-	-	471	807
HCM Lane V/C Ratio	0.07	-	-	-	0.059	0.093
HCM Ctrl Dly (s/v)	8.5	-	-	-	13.1	9.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2	0.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	1051	1726	61	49	66
Future Vol, veh/h	51	1051	1726	61	49	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	51	1051	1726	61	49	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1787	0	-	0	2354	863
Stage 1	-	-	-	-	1726	-
Stage 2	-	-	-	-	628	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	339	-	-	-	*~ 32	296
Stage 1	-	-	-	-	*127	-
Stage 2	-	-	-	-	*738	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	339	-	-	-	*~ 27	296
Mov Cap-2 Maneuver	-	-	-	-	*91	-
Stage 1	-	-	-	-	*108	-
Stage 2	-	-	-	-	*738	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.81	0	47.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	339	-	-	-	91	296
HCM Lane V/C Ratio	0.151	-	-	-	0.538	0.223
HCM Ctrl Dly (s/v)	17.5	-	-	-	83.2	20.6
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	0.5	-	-	-	2.4	0.8

Notes

~: Volume exceeds capacity $: Delay exceeds 300s
+: Computation Not Defined *: All major volume in platoon

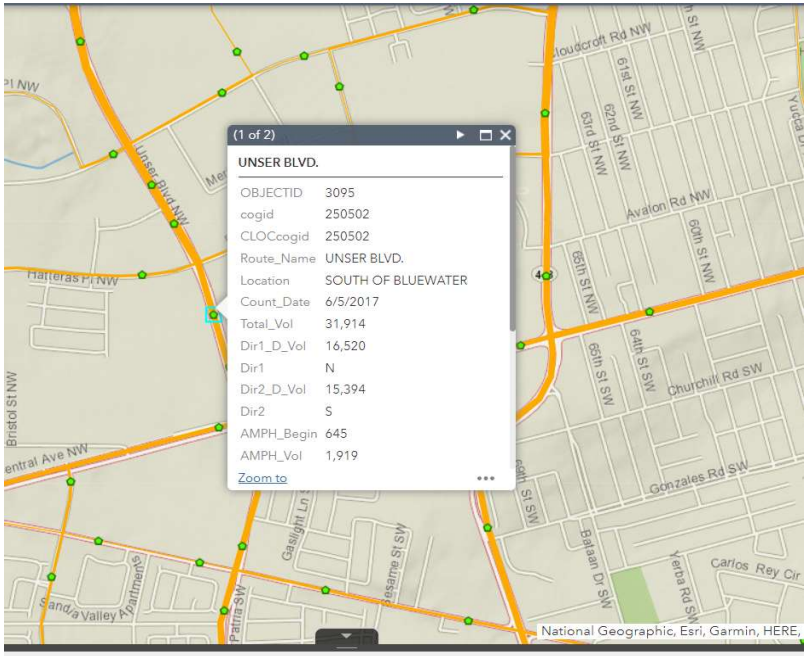
2021007 - 7707 W. Central (Ed Garcia) -Signal Warrant Traffic Volume Data

Intersection: Unser Blvd./Serracino Pl. SW

		Eastbound (13)			Westbound (13)			Northbound (13)			Southbound (13)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	6:00 - 7:00 AM	36	4	25	101	1	19	25	1370	45	47	901	29	2603
	7:00 - 8:00 AM	39	1	30	166	1	32	30	1658	71	72	1089	35	3226
AM Peak[1]	8:00 - 9:00 AM	40	2	31	175	0	87	31	1,649	186	111	1,072	36	3420
	9:00 - 10:00 AM	24	1	19	213	2	41	19	1042	92	90	682	22	2248
	10:00 - 11:00 AM	24	1	19	261	2	50	19	1041	116	112	679	22	2347
	11:00 - 12:00 PM	24	2	18	414	4	79	18	1024	200	190	664	21	2660
	12:00 - 1:00 PM	11	4	16	548	5	106	2	1002	240	224	932	18	3107
	1:00 - 2:00 PM	11	3	17	427	4	83	2	1052	176	165	984	19	2944
	2:00 - 3:00 PM	10	2	15	352	4	68	2	949	146	137	889	18	2592
	3:00 - 4:00 PM	11	2	16	332	3	64	2	1010	146	136	948	19	2690
	4:00 - 5:00 PM	12	2	18	343	3	67	2	1123	155	146	1055	21	2946
PM Peak[1]	5:00 - 6:00 PM	18	2	27	177	0	89	4	1,617	163	96	1,527	31	3751

1. Peak Hour data was taken from TURNS spreadsheet which is based on 2022 traffic counts. All other data based on 2021 MRCOG tube count data (MRCOG ID 250502, Unser Blvd. north of Serracino) and distributed to turning movements based on existing traffic count distribution.

2. Traffic generated by the development was distributed according to published ITE hourly distribution rates of traffic generated by the Shopping Center (ITE 821) and Fast Food Resturant (ITE 934) and added to the existing hourly traffic volumes.



Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Serracino/Driveway 'A' & Unser Blvd

INTERSECTION: E-W Street: Serracino/Driveway 'A' (3)

N-S Street: Unser Blvd

Year of Existing Counts 2022

Horizon Year **2025**

	Eastbound (Serracino/Driveway 'A'			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Growth Rates	4.00%			4.00%			4.00%			4.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	36	0	28	20	0	4	28	1,512	4	8	996	32
Background Traffic Growth	4	0	3	2	0	0	3	181	0	1	120	4
Subtotal (NO BUILD - A.M.)	***40***	***0***	***31***	***22***	***0***	***4***	***31***	***1,693***	***4***	***9***	***1,116***	***36***
	1.3%	***0.0%***	***1.0%***	***0.7%***	***0.0%***	***0.1%***	***1.0%***	***56.7%***	***0.1%***	***0.3%***	***37.4%***	***1.2%***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Entering)	*0.00%*	***0.50%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***47.31%***	***20.60%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***0.50%***	*0.00%*	***50.00%***	*0.00%*	***18.60%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	117	0	43	0	5	133	58	0	0
Subtotal AM Pk Hr. BUILD Volumes	**40**	**2**	**31**	**139**	**0**	**47**	**31**	**1,698**	**137**	**67**	**1,116**	**36**
Pass-by Trip Adjustments	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*-49*	*49*	*44*	*-44*	*0*
Total AM Peak Hour BUILD Volumes	**40**	**2**	**31**	**175**	**0**	**87**	**31**	**1,649**	**186**	**111**	**1,072**	**36**
	1.2%	**0.1%**	**0.9%**	**5.1%**	**0.0%**	**2.5%**	**0.9%**	**48.2%**	**5.4%**	**3.2%**	**31.3%**	**1.1%**

	Eastbound (Serracino/Driveway 'A'			Westbound (Serracino/Driveway 'A'			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	16	0	24	0	0	1	4	1,472	0	0	1,400	28
Background Traffic Growth	2	0	3	0	0	0	0	177	0	0	168	3
Subtotal (NO BUILD - P.M.)	***18***	***0***	***27***	***0***	***0***	***1***	***4***	***1,649***	***0***	***0***	***1,568***	***31***
	0.5%	**0.0%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**50.0%**	**0.0%**	**0.0%**	**47.5%**	**0.9%**
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Entering)	*0.00%*	***0.50%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***47.31%***	***20.60%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***0.50%***	*0.00%*	***50.00%***	*0.00%*	***18.60%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	135	0	50	0	5	126	55	0	0
Subtotal PM Pk Hr. BUILD Volumes	**18**	**2**	**27**	**135**	**0**	**51**	**4**	**1,654**	**126**	**55**	**1,568**	**31**
Pass-by Trip Adjustments	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*-37*	*37*	*41*	*-41*	*0*
Total PM Peak Hour BUILD Volumes	**18**	**2**	**27**	**177**	**0**	**89**	**4**	**1,617**	**163**	**96**	**1,527**	**31**
	0%	**0.1%**	**0.7%**	**4.7%**	**0.0%**	**2.4%**	**0.1%**	**43.1%**	**4.3%**	**2.6%**	**40.7%**	**0.8%**

	Entering	Exiting		
Number of Commercial Trips Generated	**281**	**233**	A.M.	100% Commercial Development
	266	**270**	P.M.	

Signal Warrant Analysis for Driveway "A" (Sarracino Pl.) / Unser Blvd.

HCS Warrants Report

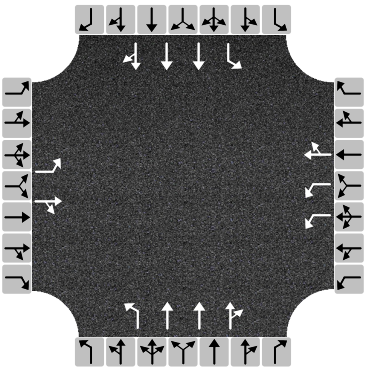
Project Information

Analyst	J. Becker	Date	10/3/2023
Agency	Tierra West LLC	Analysis Year	2023
Jurisdiction	NMDOT District 3 & City of Albuquerque	Time Period Analyzed	6 am to 6pm
Project Description	7707 W. Central Ave. - Ed Garcia		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	6	Coordinated Signal System	Yes
Median Type	Undivided	Crashes (crashes/year)	0
Major Street Speed (mi/h)	40	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	930		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	1	1	0	2	1	0	1	3	0	1	3	0
Lane Usage	L	TR		L	TR		L	TR		L	TR	
Vehicle Volumes Averages (veh/h)	21	2	20	292	2	65	13	1211	144	127	951	24
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	0.0			0.0			0.0			0.0		
Delay (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	4

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	3

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A (70%)	4B (56%)
06 - 07	2417	121	2603	0	0	No	No	Yes	Yes	Yes	No	No	No	No
07 - 08	2955	199	3224	0	0	No	Yes	Yes	Yes	Yes	No	Yes	No	No
08 - 09	3085	262	3420	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
09 - 10	1947	256	2247	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
10 - 11	1989	313	2346	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
11 - 12	2117	497	2658	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
12 - 13	2418	659	3108	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
13 - 14	2398	514	2943	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
14 - 15	2141	424	2592	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
15 - 16	2261	399	2689	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
16 - 17	2502	413	2947	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
17 - 18	3438	266	3751	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
Total	29668	4323	34528	0	0	10	11	12	12	12	0	11	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	✔
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	✔
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	✔
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	✔
Warrant 2: Four-Hour Vehicular Volume	✔
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	✔
Warrant 3: Peak Hour	✔
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	✔
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✔
Warrant 6: Coordinated Signal System	✔
Degree of Platooning (Predominant direction or both directions)	✔
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	✔
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

HCS™ Warrants Version 2023
Warrants1.xsw
Generated: 10/17/2023 10:27:14 AM

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Bridge Blvd.**
N-S Street: **Unser Bd.**

Speed Limit (Bridge Blvd.)= **40** MPH
Speed Limit (Unser Bd.)= **40** MPH

Signalized

5/4/22

Begin Time	End Time	Eastbound (Bridge Blvd.)				Westbound (Bridge Blvd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	54	30	18	0	4	16	21	1	24	284	9	0	20	150	8	0
7:15 AM	7:30 AM	33	25	13	0	7	16	21	0	21	289	14	0	17	176	5	0
7:30 AM	7:45 AM	**37**	**28**	**22**	**0**	**12**	**30**	**19**	**1**	**9**	**285**	**20**	**1**	**18**	**155**	**9**	**0**
7:45 AM	8:00 AM	24	24	15	0	6	19	27	0	15	268	11	0	15	193	15	0
8:00 AM	8:15 AM	31	19	16	0	4	17	31	0	12	259	5	1	16	128	10	0
8:15 AM	8:30 AM	35	20	17	0	0	15	23	0	13	273	10	0	18	135	6	0
8:30 AM	8:45 AM	28	15	9	0	7	8	19	0	12	224	11	0	16	149	10	0
8:45 AM	9:00 AM	16	21	16	0	1	9	14	0	14	222	9	0	20	153	8	0
4X Peak 15-Min. Vol. (AM)		**148**	**112**	**88**	**0**	**48**	**120**	**76**	**1**	**36**	**1140**	**80**	**2**	**72**	**620**	**36**	**0**
% of Total Traffic		5.7%	4.3%	3.4%		1.9%	4.6%	2.9%		1.4%	44.1%	3.1%		2.8%	24.0%	1.4%	
% Directional			13.5%				9.4%	**Intersection**			48.6%				28.2%		

Begin Time	End Time	Eastbound (Bridge Blvd.)				Westbound (Bridge Blvd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	17	15	17	0	7	27	17	0	14	203	11	0	29	290	20	0
4:15 PM	4:30 PM	22	21	19	0	7	25	19	2	12	206	10	0	23	294	23	0
4:30 PM	4:45 PM	19	17	21	0	9	20	17	0	16	202	4	0	27	286	17	0
4:45 PM	5:00 PM	25	20	17	0	18	17	30	0	15	200	8	0	22	309	34	0
5:00 PM	5:15 PM	19	21	15	0	8	24	17	0	15	222	12	0	21	290	32	0
5:15 PM	5:30 PM	29	22	22	0	12	26	29	0	12	213	6	0	28	289	16	0
5:30 PM	5:45 PM	**28**	**31**	**12**	**0**	**20**	**29**	**27**	**0**	**11**	**224**	**5**	**0**	**20**	**306**	**30**	**0**
5:45 PM	6:00 PM	17	24	20	0	8	28	23	0	16	196	9	0	21	282	30	0
4X Peak 15-Min. Vol. (PM)		**112**	**124**	**48**	**0**	**80**	**116**	**108**	**0**	**44**	**896**	**20**	**0**	**80**	**1224**	**120**	**0**
% of Total Traffic		3.8%	4.2%	1.6%		2.7%	3.9%	3.6%		1.5%	30.1%	0.7%		2.7%	41.2%	4.0%	
% Directional			9.6%				10.2%	**Intersection**			32.3%				47.9%		

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Central Ave.**
N-S Street: **Unser Bd.**

Speed Limit (Central Ave.)= **25** MPH
Speed Limit (Unser Bd.)= **35** MPH

Signalized

5/4/22

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	128	190	3	0	20	54	19	0	4	216	91	0	33	143	52	0
7:15 AM	7:30 AM	112	201	3	0	9	44	18	0	5	217	115	0	26	177	56	0
7:30 AM	7:45 AM	93	179	4	0	12	50	13	0	13	218	135	0	34	154	78	0
7:45 AM	8:00 AM	97	158	8	0	26	76	13	0	15	182	102	0	43	195	56	0
8:00 AM	8:15 AM	111	120	1	0	19	63	31	0	5	208	71	0	52	132	54	0
8:15 AM	8:30 AM	104	130	1	0	19	68	41	0	6	225	67	0	43	130	62	4
8:30 AM	8:45 AM	136	122	1	2	31	50	20	0	3	228	59	0	29	148	63	0
8:45 AM	9:00 AM	104	115	5	0	25	77	20	0	6	204	45	0	42	152	72	0
4X Peak 15-Min. Vol. (AM)		**448**	**804**	**12**	**0**	**36**	**176**	**72**	**0**	**20**	**868**	**460**	**0**	**104**	**708**	**224**	**0**
% of Total Traffic		11.4%	20.4%	0.3%		0.9%	4.5%	1.8%		0.5%	22.1%	11.7%		2.6%	18.0%	5.7%	
% Directional			32.1%				7.2%	**Intersection**			34.3%				26.3%		

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	102	122	3	0	74	159	34	0	6	168	34	0	34	236	83	0
4:15 PM	4:30 PM	91	120	10	0	83	169	35	0	13	181	33	0	27	231	92	0
4:30 PM	4:45 PM	120	113	10	0	77	182	37	1	6	185	33	0	23	237	69	2
4:45 PM	5:00 PM	102	116	7	0	95	182	21	0	10	200	31	0	21	225	88	0
5:00 PM	5:15 PM	120	127	9	0	101	194	43	0	12	185	36	0	23	216	74	0
5:15 PM	5:30 PM	124	112	15	0	81	181	47	0	11	196	29	0	30	218	97	0
5:30 PM	5:45 PM	99	117	10	0	76	211	35	0	14	199	37	0	22	221	110	1
5:45 PM	6:00 PM	98	140	11	0	75	220	42	0	18	178	35	0	29	219	98	0
4X Peak 15-Min. Vol. (PM)		**392**	**560**	**44**	**0**	**300**	**880**	**168**	**0**	**72**	**712**	**140**	**0**	**116**	**876**	**392**	**1**
% of Total Traffic		8.4%	12.0%	0.9%		6.4%	18.9%	3.6%		1.5%	15.3%	3.0%		2.5%	18.8%	8.4%	
% Directional			21.4%				29.0%	**Intersection**			19.9%				29.8%		

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Serracino**
N-S Street: **Unser Bd.**

Signalized

Speed Limit (Serracino)= **25** MPH
Speed Limit (Unser Bd.)= **40** MPH
5/4/22

Begin Time	End Time	Eastbound (Serracino)				Westbound (Serracino)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	0	0	6	0	0	0	0	0	3	382	0	0	0	253	3	0
7:15 AM	7:30 AM	0	0	7	0	0	0	0	0	5	343	0	0	1	264	5	0
7:30 AM	7:45 AM	6	0	4	0	0	0	0	0	2	331	2	0	0	266	8	0
7:45 AM	8:00 AM	1	0	6	0	1	0	0	0	4	307	2	0	0	295	13	0
8:00 AM	8:15 AM	7	0	4	0	0	0	0	0	6	372	0	0	0	240	15	0
8:15 AM	8:30 AM	5	0	10	0	0	0	1	0	4	372	1	0	0	216	7	0
8:30 AM	8:45 AM	**9**	**0**	**7**	**0**	**5**	**0**	**1**	**0**	**7**	**378**	**1**	**0**	**2**	**249**	**8**	**0**
8:45 AM	9:00 AM	4	0	3	0	1	0	0	0	6	331	1	0	1	247	6	0
4X Peak 15-Min. Vol. (AM)		**36**	**0**	**28**	**0**	**20**	**0**	**4**	**0**	**28**	**1512**	**4**	**0**	**8**	**996**	**32**	**0**
% of Total Traffic		1.3%	0.0%	1.0%		0.7%	0.0%	0.1%		1.0%	56.7%	0.1%		0.3%	37.3%	1.2%	
% Directional			2.4%				0.9%	**Intersection**			57.9%				38.8%		

Begin Time	End Time	Eastbound (Serracino)				Westbound (Serracino)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	5	0	5	0	1	0	3	0	2	298	1	0	0	354	10	0
4:15 PM	4:30 PM	6	0	4	0	0	0	2	0	3	291	0	0	0	341	21	0
4:30 PM	4:45 PM	1	0	7	1	0	0	0	1	0	336	2	0	0	329	15	0
4:45 PM	5:00 PM	6	0	6	0	0	0	4	0	0	295	0	0	0	343	9	0
5:00 PM	5:15 PM	5	0	4	0	0	0	1	0	0	342	3	0	0	335	10	0
5:15 PM	5:30 PM	**4**	**0**	**6**	**0**	**0**	**0**	**1**	**0**	**0**	**368**	**0**	**0**	**0**	**350**	**7**	**0**
5:30 PM	5:45 PM	2	0	5	0	1	0	1	1	2	325	2	0	0	373	12	0
5:45 PM	6:00 PM	1	0	5	0	0	0	0	0	2	298	0	1	0	358	14	0
4X Peak 15-Min. Vol. (PM)		**16**	**0**	**24**	**0**	**0**	**0**	**4**	**1**	**0**	**1472**	**0**	**1**	**0**	**1400**	**28**	**0**
% of Total Traffic		0.5%	0.0%	0.8%		0.0%	0.0%	0.1%		0.0%	50.0%	0.0%		0.0%	47.6%	1.0%	
% Directional			1.4%				0.1%	**Intersection**			50.0%				48.5%		

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Bluewater**
N-S Street: **Unser Bd.**

Speed Limit (Bluewater)= **40** MPH
Speed Limit (Unser Bd.)= **40** MPH

Signalized

5/4/22

Begin Time	End Time	Eastbound (Bluewater)				Westbound (Bluewater)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	61	38	17	0	12	9	20	0	4	303	28	0	16	229	23	0
7:15 AM	7:30 AM	45	32	14	0	9	11	21	1	5	311	33	1	17	258	29	0
7:30 AM	7:45 AM	62	31	19	0	12	15	22	0	7	274	25	0	26	235	33	0
7:45 AM	8:00 AM	41	30	24	0	17	21	21	0	10	252	26	0	33	273	26	0
8:00 AM	8:15 AM	**36**	**36**	**22**	**0**	**4**	**20**	**27**	**0**	**25**	**322**	**31**	**0**	**24**	**219**	**31**	**0**
8:15 AM	8:30 AM	52	31	13	0	5	7	12	0	10	355	23	0	30	214	16	0
8:30 AM	8:45 AM	47	21	9	0	8	14	15	0	6	317	36	0	19	230	15	0
8:45 AM	9:00 AM	29	23	11	0	9	18	2	1	5	342	26	0	25	232	17	0
4X Peak 15-Min. Vol. (AM)		**144**	**144**	**88**	**0**	**16**	**80**	**108**	**1**	**100**	**1288**	**124**	**0**	**96**	**876**	**124**	**0**
% of Total Traffic		4.5%	4.5%	2.8%		0.5%	2.5%	3.4%		3.1%	40.4%	3.9%		3.0%	27.5%	3.9%	
% Directional			11.8%				6.4%	**Intersection**			47.4%				34.4%		

Begin Time	End Time	Eastbound (Bluewater)				Westbound (Bluewater)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	49	35	14	0	21	32	33	0	6	274	24	0	17	325	41	0
4:15 PM	4:30 PM	38	20	10	0	10	24	28	0	13	291	12	0	17	330	44	0
4:30 PM	4:45 PM	41	27	11	1	17	26	45	0	7	294	23	0	11	314	23	0
4:45 PM	5:00 PM	29	27	4	0	13	42	25	0	11	308	15	0	12	308	27	0
5:00 PM	5:15 PM	44	26	10	0	10	31	39	0	7	319	11	0	24	311	33	0
5:15 PM	5:30 PM	37	11	7	0	14	32	32	0	14	342	18	0	16	325	28	0
5:30 PM	5:45 PM	**52**	**15**	**8**	**0**	**19**	**32**	**34**	**2**	**6**	**304**	**16**	**0**	**24**	**349**	**27**	**0**
5:45 PM	6:00 PM	25	12	9	0	11	23	25	0	11	301	18	0	22	337	50	0
4X Peak 15-Min. Vol. (PM)		**208**	**60**	**32**	**0**	**76**	**128**	**136**	**2**	**24**	**1216**	**64**	**0**	**96**	**1396**	**108**	**0**
% of Total Traffic		5.9%	1.7%	0.9%		2.1%	3.6%	3.8%		0.7%	34.2%	1.8%		2.7%	39.3%	3.0%	
% Directional			8.4%				9.6%	**Intersection**			36.7%				45.0%		

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Central Ave.**
N-S Street: **98th Street**

Speed Limit (Central Ave.)= **35** MPH
Speed Limit (98th Street)= **45** MPH

Signalized

5/5/22

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (98th Street)				Southbound (98th Street)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	35	63	8	3	24	47	31	0	17	253	75	1	13	42	13	0
7:15 AM	7:30 AM	**48**	**69**	**8**	**0**	**37**	**54**	**34**	**2**	**24**	**240**	**101**	**0**	**20**	**74**	**26**	**0**
7:30 AM	7:45 AM	52	65	9	2	51	39	48	1	13	260	84	0	19	65	20	1
7:45 AM	8:00 AM	39	58	8	1	51	48	33	0	5	229	103	0	29	91	29	2
8:00 AM	8:15 AM	40	67	5	0	57	48	30	1	12	202	69	0	18	74	13	0
8:15 AM	8:30 AM	29	39	4	0	37	37	40	1	10	183	87	0	23	67	29	0
8:30 AM	8:45 AM	34	41	10	0	26	35	32	0	8	182	86	0	30	64	17	1
8:45 AM	9:00 AM	27	38	7	0	52	32	35	0	7	127	79	0	33	68	15	0
4X Peak 15-Min. Vol. (AM)		**192**	**276**	**32**	**3**	**148**	**216**	**136**	**4**	**96**	**960**	**404**	**0**	**80**	**296**	**104**	**3**
% of Total Traffic		6.5%	9.4%	1.1%		5.0%	7.3%	4.6%		3.3%	32.6%	13.7%		2.7%	10.0%	3.5%	
% Directional			17.0%				17.0%	**Intersection**			49.5%				16.3%		

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (98th Street)				Southbound (98th Street)			
		L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	35	60	26	1	99	89	39	0	10	117	85	0	38	183	41	0
4:15 PM	4:30 PM	38	69	30	1	107	79	39	0	8	140	72	0	34	155	40	0
4:30 PM	4:45 PM	50	56	28	4	104	93	33	1	12	108	87	0	41	146	36	0
4:45 PM	5:00 PM	39	63	26	0	101	97	39	0	10	127	65	0	38	177	27	1
5:00 PM	5:15 PM	40	70	22	0	100	108	44	3	10	110	74	1	28	168	33	2
5:15 PM	5:30 PM	32	71	32	0	100	86	28	0	10	132	79	0	28	176	27	0
5:30 PM	5:45 PM	**44**	**62**	**20**	**0**	**103**	**109**	**36**	**0**	**11**	**131**	**85**	**0**	**34**	**171**	**28**	**0**
5:45 PM	6:00 PM	49	53	26	1	95	85	36	0	15	130	60	0	36	183	20	1
4X Peak 15-Min. Vol. (PM)		**176**	**248**	**80**	**1**	**412**	**436**	**144**	**3**	**44**	**524**	**340**	**1**	**136**	**684**	**112**	**3**
% of Total Traffic		5.3%	7.4%	2.4%		12.4%	13.1%	4.3%		1.3%	15.7%	10.2%		4.1%	20.5%	3.4%	
% Directional			15.1%				29.7%	**Intersection**			27.2%				27.9%		

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Ronald R. Bohannan, P.E.
Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM, 87109

MEETING DATE: March 23, 2022

ATTENDEES: Ronald R. Bohannan P.E., Amanda Herrera, P.E., and Luis Noriega (Tierra West, LLC), Terry Brown, P.E., Ed Garcia (Developer), Matthew Grush, P.E. and Jeanne Wolfenbarger, P.E. (City of Albuquerque Transportation Development Section, Planning Dept.)

PROJECT: Central / Unser Development (NE Corner), Zone Atlas Page K-10-Z

REQUESTED CITY ACTION: ___ Zone Change _X_ Site Development Plan

___ Subdivision _X___ Building Permit ___ Sector Plan ___ Sector Plan Amendment

___ Curb Cut Permit ___ Conditional Use ___ Annexation ___ Site Plan Amendment

ASSOCIATED APPLICATION: Non-residential business park comprised of industrial, automotive service, quick serve restaurants, sit-down restaurants, and retail.

SCOPE OF REPORT:
The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 11th Edition.
   Local data may be used for certain land use types as determined by staff.
   Consultant to provide.

2. Appropriate study area:
   Signalized Intersections;
   a. Central Ave. / Unser Blvd.
   b. Bluewater Rd. / Unser Blvd.
   c. Central Ave. / 98th St.
   d. Bridge Blvd. / Unser Blvd.

   Unsignalized Intersections;
   a. Sarracino Pl. / Unser Blvd.

   Driveway Intersections: all site drives (3).

3. Intersection turning movement counts
   Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour
   Consultant to provide for all intersections listed above.

4. Type of intersection progression and factors to be used.
   Type III arrival type (see "Highway Capacity Manual, current edition" or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial

should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

5. Boundaries of area to be used for trip distribution.
   City Wide - residential, office or industrial;
   2 mile radius – commercial;
   Interstate or to be determined by consultant - motel/hotel
   APS district boundary mapping for each school and bus routes

6. Basis for trip distribution.

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Residential - $Ts = (Tt) (Se / D) / (Se / D)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Se = Subarea Employment
D = Distance from Development to Subarea

Office/Industrial - $Ts = (Tt) (Sp / D) / (Sp / D)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population
D = Distance from Development to Subarea

Commercial -
$Ts = (Tt) (Sp) / (Sp)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population

7. Traffic Assignment. Logical routing on the major street system.

8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
   a. None

9. Method of intersection capacity analysis - planning or operational (see “2016 Highway Capacity Manual” or equivalent [i.e. HCS, Synchro, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.

10. Traffic conditions for analysis:
    a. Existing analysis _X_ yes __ no - year (2022);
    b. Phase implementation year(s) without proposed development – 2025
    c. Phase implementation year(s) with proposed development – 2025
    d. Project completion year without proposed development – 2035
    e. Project completion year with proposed development – 2035
    f. Other –

11. Background traffic growth.
    Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

12. Planned (programmed) traffic improvements.
    List planned CIP improvements in study area and projected project implementation year:
    a. Discuss Central Ave. Pedestrian Facility project

13. Items to be included in the study:
    a. Intersection analysis. Yes
    b. Signal progression - An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method: Not Required
    c. Arterial LOS analysis; Not Required
    d. Recommended street, intersection and signal improvements. Yes
    e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility. Yes
    f. Transportation system impacts. Yes
    g. Other mitigating measures. Roundabout evaluation at Sarracino Pl. / Unser Blvd.; Signal warrant study at Sarracino Pl. / Unser Blvd.
    h. Accident analyses _X_ yes __ no; Location(s): Study area – 5 year crash history
    i. Weaving analyses __ yes _X_ no; Location(s):

14. Other:

SUBMITTAL REQUIREMENTS:

1. Number of copies of report required
    a. 1 digital copy – Yes (no paper copy)
2. Submittal Fee – $1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3362.

M Grush P.E.

4/12/2022

Matt Grush, P.E., PTOE
Senior Engineer
City of Albuquerque, Planning
Transportation Development Section

Date

via: email

CITY OF ALBUQUERQUE

Planning Department
Alan Varela – Director

Mayor Timothy M. Keller

DATE: October 21, 2024
RESPONSE TO COMMENTS BY: Judith Becker, P.E, Tierra West LLC

August 19, 2024

Response to comment responses by Curtis Cherne P.E., COA, 11-8-24

Terry Brown, PE
Ronald Bohannan, PE
Tierra West, LLC
5571 Midway Park Pl NE
Albuquerque, NM 87109

Re: Central and Unser Development
Traffic Impact Study (K10D063)
DRAFT dated June 25,2024
Via email jroberts@tierrawestllc.com

Dear Mr. Brown/Bohannan,

The subject Traffic Impact Study (Study) draft received on July 12, 2024 , has been reviewed by the City of Albuquerque Planning Development Transportation Section. The City has the following comments to be addressed.

1. This project was discussed with COA Traffic Operations. Route most traffic internally to the access off of Central Ave at the Driveway "E" location. A traffic signal at this location was discussed.
   Response: A Traffic Signal should be located at Sarracino Pl/Unser Blvd. instead of Central Ave./Driveway E for the following reasons:

Discussed with Traffic Ops. Traffic Signal at Unser Blvd and Sarracino Pl is acceptable. Note for overlap phase for Transit as busses can't turn right on red.

- ***A signal at Sarracino would service a public street that feeds two potential major developments**, the existing mixed-use development at the northwest quadrant of Central/Unser (75% complete) and the proposed development at the northeast quadrant of Central/Unser. Placing the signal on Central would only service the proposed development. The signal will assist City Transit with moving the buses northbound to the West Transit service center and also allow better movement for the general public accessing the transit facility. Saracino is a public roadway.*
- ***All northbound traffic (approximately 20% of all trips) from the existing northwest development must make a left-turn movements at the development's two unsignalized access intersections**. As mentioned above, a proposed signal assists City buses leaving the Central & Unser Major Transit Center and returning to Daytona Transit Facility. A signal at Sarracino would eliminate this problem.*
- ***A signal at Sarracino would benefit more pedestrians.** Pedestrian traffic crossing Unser Blvd. at Saracino Place and Central Ave. is expected to increase as a result of the proposed development. The development in the northwest quadrant of Central/Unser contains a major transit center, public library, and a large apartment complex and the proposed development will contain restaurants and retail spaces. At Driveway "E" on Central, there are only two single family homes on the south side of central across from the proposed development. As stated in the City's DPM, "The greatest level of safety and comfort for pedestrians are provided by traffic control signals, including pedestrian hybrid beacons that completely stop the flow of traffic through a pedestrian-activated sensor". And since the project is in an Activity Center, designated pedestrian crossings should be less than 600-ft apart and signalized pedestrian crossings should be less than 1320-ft apart. (DPM, Table 7.4.41)*
- ***Given the traffic volume on Unser Blvd. and Central Ave. ((>12000 vehicles per direction) and the number of lanes to cross (>4 lanes), a signalized intersection control is the only acceptable control for a crosswalk. See Figure 7.4.51 of the DPM.***
- ***Traffic Volumes on Unser (28975 AADT) are greater than Traffic Volumes on Central (19876 AADT).** Therefore, unsignalized intersection delays on Unser for an are greater than on Central for the same volume of traffic exiting the development.*
- ***All northbound traffic (approximately 20% of all trips) from the existing northwest development must make a left-turn movements at the development's two unsignalized access intersections**. A signal at Sarracino would eliminate this problem.*

- ***No median modifications are required for the Sarracino location to install a signal**. The median at Central/Driveway E would need to be modified to install a signal.*
- ***A signal at Sarracino would be 35-feet further away from the Central/Unser intersection than a signal at Central/Driveway E** (920-ft north vs. 885-ft East). Unser Blvd. and Central Ave. are Major Transit Corridors in the vicinity of the project, therefore, minimum distance between signalized spacing is 1320-ft according to the DPM, Table 7.4.42. However, since the project is in an Activity Center, signalized pedestrian crossings should be less than 1320-ft apart. (DPM, Table 7.4.41).*

2. Include a crash section in the Study. MRCOG HFIN shows all 4 legs of Unser Blvd and Central Ave as "Red". Recommend mitigation to reduce crashes as necessary. Elaborate on pedestrian fatalities, if any, including mitigation. Recommendations in the Study should focus more on crash reduction than improving LOS at Central Ave and Unser Blvd.
   Response: A crash study for the intersection of Central Ave./Unser Blvd. will be included in the final report. OK

3. User Blvd is a limited access Roadway, therefore access on Unser Blvd will be per Sarracino Pl.

   Response: All accesses other than Sarracino Place have been eliminated from the design as requested.

4. There are too many driveways/conflict points proposed on Central Ave. It is preferable to have just one access on Central Ave as discussed in #1 above.
   Response: The number accesses to the development have been reduce to 4 instead of 6:
   1. *Driveway "A" - Sarracino Pl/Unser (Full Access, Existing, Signalized)*
   2. *Driveway ~~"B"~~ (Formerly "E") - Central Ave./Driveway "B"(Full Access, Proposed, Unsignalized),* Driveway D
   3. *Driveway "C" - Central Ave./Driveway "C" (Right-in/Right-out, Proposed, Unsignalized)*
   4. *Driveway ~~"D"~~ - Central Ave./Driveway "D" (Right-in~~/Right-out, Proposed, Unsignalized~~)* Driveway B, Right-in Only

   Driveways per revised site plan edited 11-8-24. See attched.

- *In Table 7.4.46 of the DPM, the maximum allowable number of commercial access points per site off a Principal Arterial is 1-2 access points per 300-ft of road frontage. This site has 1775-ft of frontage which would allow up to 11 access points. Just along Central Ave., which has 900-ft of frontage, the standard would allow up to 6 access points.*
- *There are currently 6 commercial access points to the proposed site on Central Ave. The new development would reduce the number of access points to only 3. The remaining 3 would be decommissioned.*
- *The proposed access points would meet the minimum spacing requirements listed in Table 7.4.45 of the DPM ((300-ft Approach Distance & 200-ft Departure Distance)*

5. Since this commercial subdivision will be master-planned, the Access Spacing as shown/discussed on page 43 is less appropriate. Every driveway is a conflict point for vehicles and pedestrians. *See response for Comment #4* OK

6. The 3rd SBT lane on Unser Blvd south of Central Ave creates a merge and may increase crashes. Please remove recommendation from the Study.

   Response: Agreed. Optimizing the timing of the signal at Central/Unser and redistributing most of the traffic away from Central to the signalized intersection at Sarracino eliminated the need for a 3rd Southbound lane.

7. Changing the Unser Blvd NBT to a thru/right may increase crashes and may be less safe for pedestrians. Please remove recommendation from the Study.

   Response: Agreed. The NBTR was changed back to NBT

8. For the intersection of Unser Blvd and Sarracino Pl, a WBR would allow drivers to make this turn without waiting for the WBT movement. Exhibit 3 shows 1 car driving thru. Drivers wishing to go west can use the driveway on Central Ave.
   Response: The WBT/R does not affect the performance of the intersection. The second WBL lane has been eliminated. OK

9. Show the Central driveway design in more detail.

   See response for Comment #1. OK

If you have any questions, please contact me at ccherne@cabq.gov or (505) 924-3986.

Sincerely,

Curtis A Cherne

Curtis Cherne, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Meeting summary for 2021007 Central & Unser - Meeting to Resolve Comments on TIS (11/08/2024)

The meeting covered various topics including:

- Curtis agreed to placing the signal at Saracino Pl. instead of on Central and to the three driveways on Central as proposed in the attached drawing.
- Driveway layouts, pedestrian safety measures, traffic signal adjustments, and the placement of a gas station in relation to traffic flow.
- Need for more detailed crash reports and potential solutions to overcome challenges in data collection and privacy concerns.

Next steps

• Curtis to send response to Judith's revised site plan, including comments on driveway locations and internal circulation.

• Judith to adjust site plan by centering driveway C between driveways B and D, and recalculate deceleration lane warrants.

• Judith to submit final TIS for approval based on Curtis's feedback.

• Curtis to explore options for improving crash data reporting with police department, focusing on including diagrams and narratives in reports.

Driveway Layout and Pedestrian Safety

- Curtis expressed concerns about the proximity of driveways B and C, suggesting they should be further apart for safety reasons.
- Terry suggested that the distance between the driveways could be increased to accommodate a right turn lane from Decal Lane into Driveway B.
- Discussed Ed Garcia's desire to preserve existing buildings.

Saraceno Intersection and Driveway Updates

- Terry suggested adding a right turn overlap phase to the signal timing to help buses turn right at the Saraceno intersection.
- Judith confirms they changed one driveway to right-in only due to safety concerns, Gas Station Placement and Traffic
- Curtis does not like driveways entering directly into parking area
- Final placement of Driveway C will depend on the site plan.
- Discussed the need for decal lanes and the potential for high-speed cut-throughs.

Site Plan Design

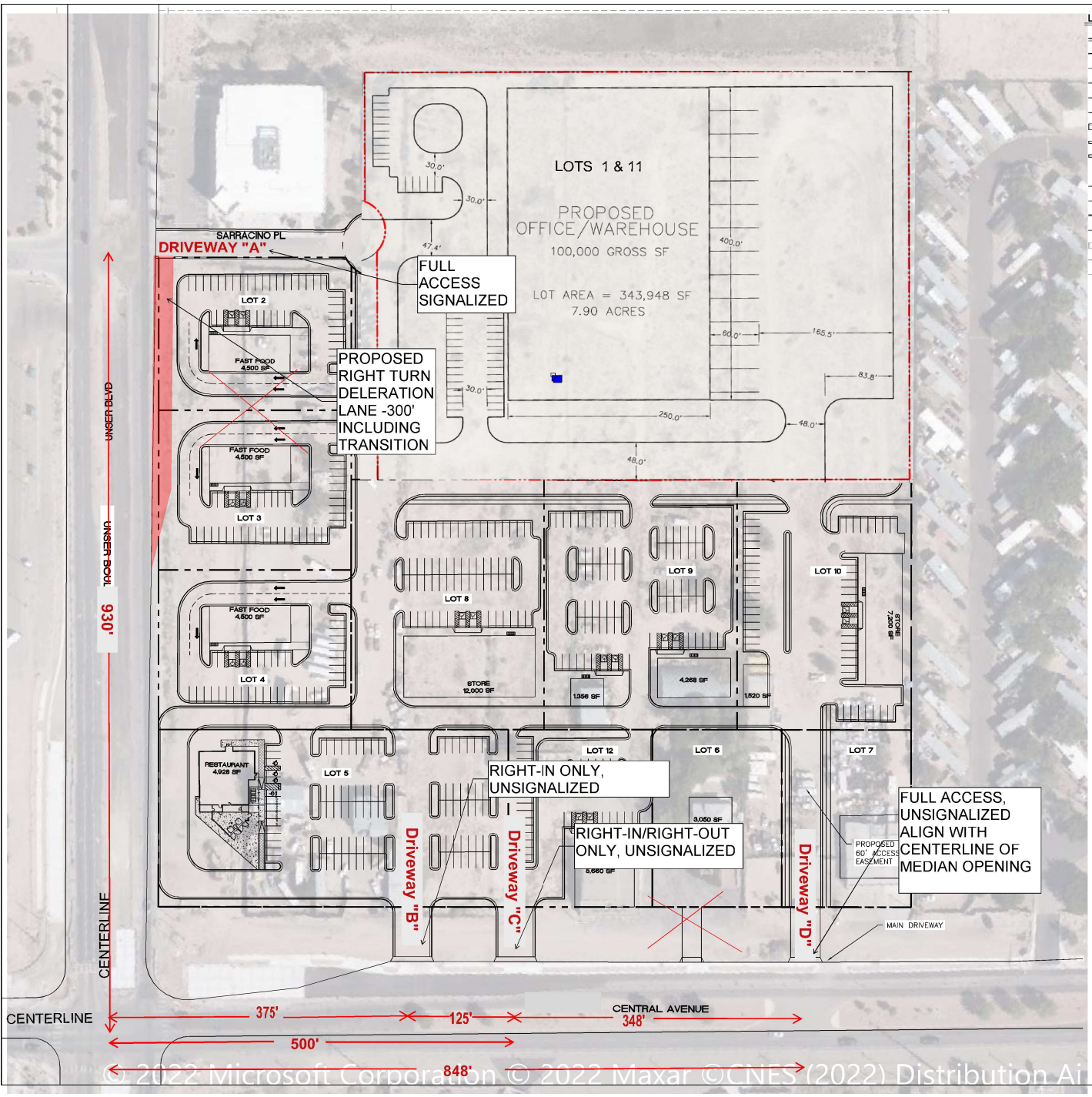
- Curtis expressed uncertainty about the process for obtaining a TCL for the project
- Judith suggested that a replat might be necessary due to the combination of lots.
- The team agreed to revisit these issues once the site plan was finalized.

Improving Pedestrian Safety with Traffic Light

- The team agreed that the new traffic light at Saracino Pl would help reduce the number of accidents and improve safety for pedestrians.
- Curtis mentioned that signals are beneficial for pedestrians, even if they don't meet the warrant criteria.
- They also discussed the use of cameras for traffic count data, with Derek's company being responsible for setting up and monitoring the cameras.
- Curtis expressed interest in observing the traffic firsthand, while Terry shared his past experiences of manually counting traffic.

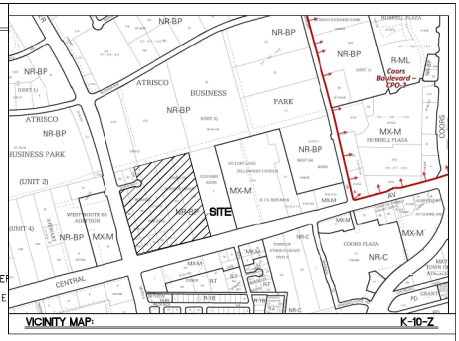
Improving Police Reports and Crash Data

- Terry acknowledged the difficulty in pulling this data due to resistance from police staff.
- Judith suggested that the police reports could be improved by including a diagram instead of a Google Earth image.
- Curtis proposed discussing this issue with Tim Brown, who could facilitate a meeting with the police to explain the benefits of the changes.
- The team also discussed the possibility of scanning police reports, but Curtis raised concerns about the logistics of this process.
- Curtis agreed to work on this and possibly visit the crash sites before scoping.
- They also discussed the challenges of privacy laws, which require personal information to be redacted from reports.



LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- BUILDING
- SIDEWALK
- SCREEN WALL
- RETAINING WALL
- STREET LIGHTS
- LANE
- STRIPING
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING SIDEWALK
- EXISTING LANE
- EXISTING STRIPING



SITE SUMMARY DATA

LOT 1 INDUSTRIAL
235,400 SF (5.40 AC)

LOT 2 QUICK SERVICE RESTAURANT
43,580 SF (1.00 AC)

LOT 3 QUICK SERVICE RESTAURANT
45,921 SF (1.054 AC)

LOT 4 QUICK SERVICE RESTAURANT
45,921 SF (1.054 AC)

LOT 5 RESTAURANT
130,674.65 SF (3.00 AC)

LOT 6 EXISTING HOUSE
34,222.07 SF (.785 AC

LOT 7 RETAIL
34,222.07 SF (.785 AC)

LOT 8 RETAIL
71,983 SF (1.65 AC)

LOT 9 RETAIL
71,957.56 SF (1.65 AC)

LOT 10 RETAIL
64,989 SF (1.50 AC)

LOT 11 RETAIL
104,435.10 SF (2.40 AC)

GRAPHIC SCALE
(IN FEET)
1 inch = 60 ft.

ENGINEER'S SEAL	7707 W CENTRAL ALBUQUERQUE, NM	DRAWN BY LN
	CONCEPTUAL SITE PLAN	DATE 01-26-22
		DRAWING 2021007_CSP_020122
	TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C1
RONALD R. BOHANNAN P.E. #7868		JOB # 2021007