TIERRA WEST

Central & Unser (Ed Garcia) Commercial Development

(Albuquerque, New Mexico)

Draft Traffic Impact Study

June 25, 2024

DRAFT

Presented to:
Curtis Cherne, P.E.
City of Albuquerque Transp. Dev.

Prepared for:
Ed Garcia
8301 Lomas Blvd NE
Albuquerque NM 87110

Terry O. Brown, P.E.
5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 883-8807

Ronald R. Bohannan, P.E.
5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 883-8807

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

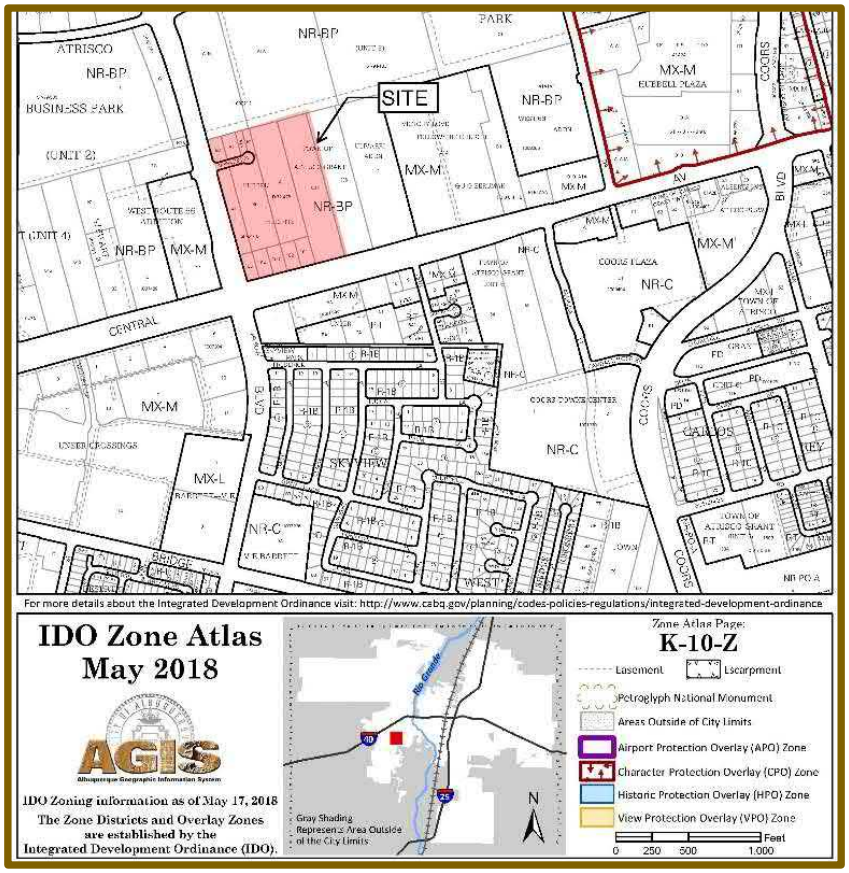
Executive Summary

Purpose

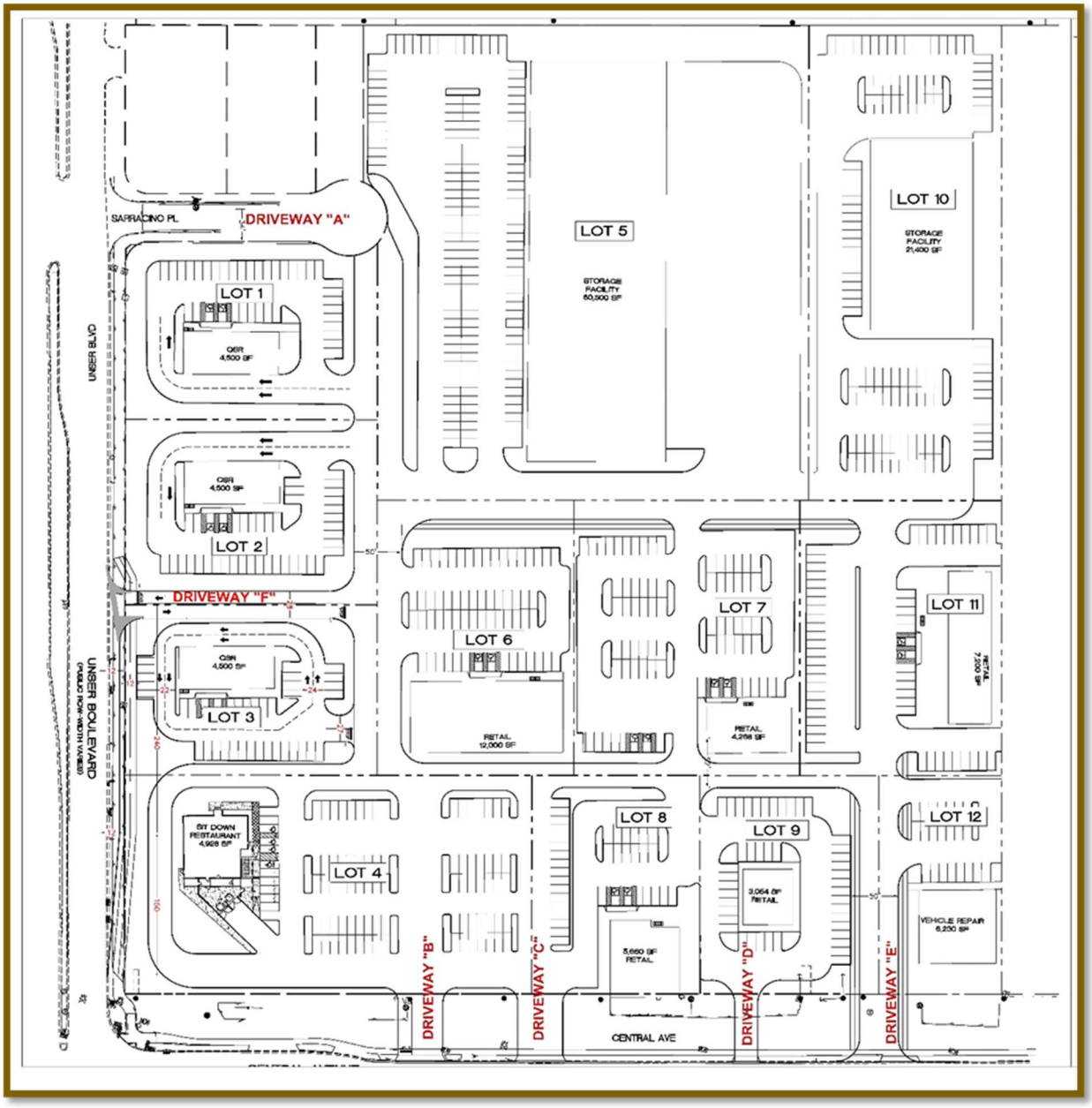
The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed commercial development (by Ed Garcia), to determine the impact of the project on the adjacent transportation system, and recommend mitigation measures where necessary. 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 northeast corner of Central Ave. and Unser Blvd. at 7707 West Central Ave. 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.

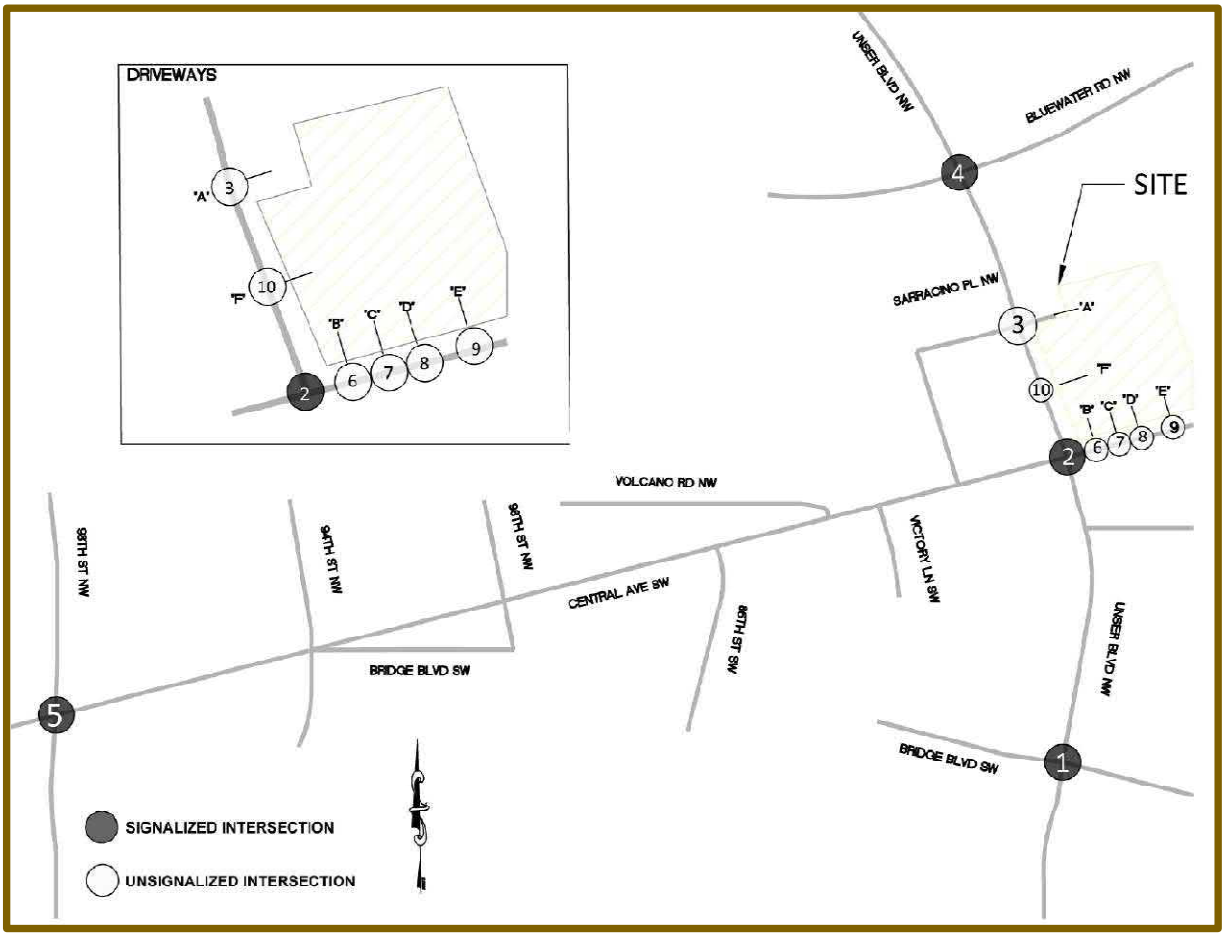


The site is mostly undeveloped except for three small light industrial businesses and one residential home which will be replaced by the proposed development. Impacts, to the study area intersections increased by the 11,000 daily weekday trips generated by the new development, can be minimized with implementation 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

5/22/2024					2025 IMPLEMENTATION YEAR Capacity Analysis				2035 HORIZON YEAR Capacity Analysis			
					LOS, Delay (s/veh)[1]				LOS, Delay (s/veh)[1]			
Intersect. No.	Intersection Name	ACCESS TYPE	Existing Signalization/Control	Case	AM Peak	Noon Peak	PM Peak	V/C>1	AM Peak	Noon Peak	PM Peak	V/C>1
1	Unser Blvd & Bridge Blvd.	N/A	Signalized/ Actuated Coordinated	NO BUILD	B - 19.8	A - 9.4	B - 19.1		C - 28.6	A - 9.7	C - 29.0	
				BUILD	C - 20.1		B - 19.3		C - 29.7		C - 29.2	
				MITIGATED	C - 20.5		B - 19.8		C - 30.3		C - 30.4	
2	Unser Blvd & Central Ave	N/A	Signalized/ Actuated Coordinated	NO BUILD	D - 48.0	0	E - 57.5		F - 97.9	0	F - 112.9	EBL, EBT, EBR
				BUILD	E - 56.7	0	E - 67.0		F - 107.9	0	F - 129.4	EBL, EBT, EBR, NBR
				MITIGATED	D - 35.3	0	D - 42.7		D-46.1		D - 48.7	
3	Unser Blvd & Sarracino/Driveway 'A'	FULL ACCESS	Unsignalized/ 2-Way Stop Control	NO BUILD	F-169	0	F-135		F-999	0	F-988	EBL, WBT, SB
				BUILD	F-999	0	F-999	EBL, WBT	F-999	0	F-988	EBL, WBT, SB
			Signalized	MITIGATED	B - 16.3	0	A - 8.8		B - 19.6	0	A - 9.6	
4	Unser Blvd & Bluewater	N/A	Signalized/ Actuated Coordinated	NO BUILD	C - 20.7	0	C - 25.9		D - 35.2	0	D - 49.8	EBL
				BUILD	C - 21.0	0	C - 27.8		D - 40.0	0	D - 52.9	EBL, NBT
				MITIGATED	C - 21.2		C - 26.6		C - 29.1		C - 34.1	
5	98th Street & Central Blvd	N/A	Signalized/ Actuated Coordinated	NO BUILD	C - 33.2	0	D - 42.2	WBL	D - 35.1	0	D - 54.6	WBL
				BUILD	C - 33.9	0	D - 45.0	WBL	D - 36.1	0	E - 59.0	WBL
				MITIGATED	N/A		D - 36.1		N/A		D - 37.6	
6	Central Ave. & Driveway 'B'	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	0	N/A		N/A	N/A	N/A	
				BUILD	A-9.5	0	C-16.4		A-9.9	0	C-22.5	
7	Central Ave & Driveway'C'	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	0	N/A		N/A	N/A	N/A	
				BUILD	A-9.5	0	C-16.8		A-9.9	0	C-23.5	
8	Central Ave. & Driveway 'D'	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	0	N/A		N/A	N/A	N/A	
				BUILD	A-9.6	0	C-16.6		B-10	0	C-22.9	
9	Central Ave. & Driveway 'E'	FULL ACCESS	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	0	N/A		N/A	N/A	N/A	
				BUILD	C-15.2	0	F-74.2		D-29.5	0	F-443	
10	Driveway 'F' & Unser Blvd.	RI/RO	Unsignalized/ 2-Way Stop Control	NO BUILD	N/A	0	N/A		N/A	N/A	N/A	
				BUILD	C-22.6	0	C-21.6		E-37.2	0	D-34.3	

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 by Development with mitigation
   - The Intersection Level of Service (LOS) remains the same from the NO BUILD to BUILD conditions. LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 2 seconds per vehicle.
   - LOS= D or better for all movements in the intersection except for the eastbound left turn movement (EBL) which is LOS=E, however, this is an existing condition, and the development does not contribute traffic to this movement.
   - Storage capacity is inadequate in 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 EBR and WBL queue capacities are only exceeded by less than 1-vehicle length during the **2035** AM and PM peak hours.

2. **Unser Blvd / Central Ave. (Signalized)**
   Moderate Impact by Development with mitigation
   - Seven movements (EBL, EBT, EBR, WBL, WBR, NBL, and SBL) have NO BUILD LOS= E or F so additional traffic from new development has a significant impact on LOS and delays.
   - Intersection LOS degrades from LOS=D (NO BUILD) to LOS=E (BUILD) during the AM and PM peak hours with the additional traffic generated by the development.
   - Delays for individual movements become worse by 8 to 20 seconds per vehicle.
   - Adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, improves the intersection LOS and delays to better than pre-development conditions.
   - Storage capacity for the EBL, EBR, WBR, NBR, and SBR lanes (BUILD and NO BUILD) is inadequate and volume to capacity ratios (V/C's) exceed 1, indicating a high level of congestion at this intersection.
   - Mitigating the intersection by adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, significantly improves queuing capacity and V/C<1 for all lanes.

3. **Unser Blvd / Sarracino Pl. (Driveway A) (Existing Unsignalized, Proposed Signalized)**
   Minimal Impact by Development with mitigation.
   - Intersection LOS from the NO BUILD to BUILD condition remains at LOS=F for the side street traffic (EB & WB).

- The SBL turn movement LOS degrades from LOS=D to LOS=F with the additional traffic generated by the development.
- Poor LOS for these low volume movements indicates that the high volume of traffic on Unser Blvd. creates inadequate gaps for these vehicles to enter the stream of traffic on Unser Blvd.
- Adding a second WBL lane and signalizing the intersection improves the LOS of the intersection for the 2025 and 2035 AM and PM conditions to LOS=A or B.
- 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.
- 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.
- Mitigating the intersection by adding a WBL lane and signalizing the intersection improves queuing capacity and V/C<1 for all lanes.
- **Assuming this intersection becomes signalized, the City of Albuquerque Deceleration Warrant Analysis** indicates that a new northbound left (NBL) deceleration lane is warranted with a minimum storage capacity of 240-ft not including a 300/150 transition.
- A southbound left turn lane with 115-ft of queue capacity is also warranted but the existing SBL lane meets the warrant and has adequate capacity for anticipated queues.
- 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.
- Since the distance between the Serracino Pl. and Central Ave. intersections is only 935-ft., centerline to centerline, approval of the proposed signal would require a waiver of the COA DPM minimum standard spacing (1320 ft.) by the City of Albuquerque.

4. <u>Unser Blvd / Bluewater Rd. (Signalized)</u>

Minimal Impact by Development with mitigation

- Intersection LOS remains at LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 1 second per vehicle for 2025 and by less than 5 seconds per vehicle for 2035.
- LOS remains the same from the NO BUILD to BUILD condition for all movements in the intersection except the NBT during 2035 AM peak hour when the LOS degrades from LOS=D to LOS=F and PM peak hour when the LOS degrades from LOS=C to LOS=D
- Re-timing the signal improves the intersection LOS to better than NO BUILD conditions.
- Storage capacities are adequate except for the EBL, WBL, and WBR lanes for the NO BUILD and BUILD conditions.
- By 2035 V/C's exceed 1 for the EBL, WBT, and SBL lanes for the BUILD condition indicating a high level of congestion.

- Mitigating the intersection by extending the EBL lane from 90-ft to 250-ft and re-timing the signal improves overall queuing capacity.
- The WBR queue length becomes slightly worse with signal retiming which will cause the WBR lane queue to periodically spill over into the outside WBT lane. To resolve this issue, the existing WBR turn lane could be extended past the driveway east of the intersection (access to UPS) to create a continuous right turn lane or a second right-turn lane could be constructed. However, since the development does not contribute traffic to this movement, no recommendation is made on behalf of the development.

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

Minimal Impact by Development

- Intersection LOS remains acceptable (D or better) for all conditions except the 2035 PM BUILD condition when the LOS degrades to LOS=E for the BUILD condition.
- LOS for individual movements remain the same from the NO BUILD to BUILD conditions.
- WBL turn movement has an unacceptable LOS (E or F) for all conditions.
- EBL turn movement has LOS=E for the 2025 and 2035 AM peak hour.
- Retiming the signal improves the intersection LOS and delays to better than pre-development conditions.
- Storage capacity for the WBL and SBL lanes (BUILD condition) is inadequate and volume to capacity ratios (V/C's) exceed 1 for the WBL lane.
- Mitigating the intersection by retiming the signal for the PM BUILD condition significantly improves queuing capacity and restores the V/C<1 for the WBL lane.
- Re-timing the signal causes the queue length in the SBL lane to exceed the existing lane capacity by 73-ft (3 vehicles). But this does not occur for another 10 years and the benefit of re-timing the signal to the overall function of the intersection the intersection is significantly more beneficial than not re-timing the signal.
- No improvement was shown by retiming the signal for the AM BUILD condition.

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

- LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
- No deceleration lanes are warranted.

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

- LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
- No deceleration lanes are warranted.

8. Central Ave / Driveway D (Unsignalized – Right-in, right-out ONLY)

- LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.

- No deceleration lanes are warranted.

9. **Central Ave / Driveway E (Unsignalized – Full Access)**
   - LOS is not acceptable (LOS=F) for the SBL movement. Since the southbound approach of this intersection is an unsignalized commercial driveway and traffic volumes indicate that a traffic signal (the preferred mitigation) is not likely warranted, no mitigation is recommended.
   - Storage capacity for the SBL lane (BUILD condition) is inadequate and the volume to capacity ratio (V/C) exceed 1. Mitigating the intersection by extending the on-site queue capacity from 125-ft to 250-ft would provide adequate capacity.
   - Due to the long queue and delays for traffic turning left from the driveway (south to east) it is expected that more on-site traffic will use the signalized driveway on Unser Blvd. (Driveway A) than predicted for the model. For Driveway E, this would improve delays and the V/C ratio.
   - No deceleration lanes are warranted.

10. **Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY**)
    - LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
    - No deceleration lanes are warranted.

Recommendations (Refer to Site Plan on page iii)

1. **Unser Blvd / Bridge Blvd (Signalized)**
   (See Exhibit 1 in Recommendations section of main report)
   No mitigation is recommended on behalf of the development since the development does not contribute traffic to this movement., however, the COA should consider re-striping the West Leg of intersection to extend the EBL lane storage from 90' to 330'.
2. **Unser Blvd / Central Ave. (Signalized)**
   (See Exhibit 2 in Recommendations section of report)
   - Re-stripe the north & south legs of the Central Ave./Unser Blvd. intersection to add a 3rd SBT lane.
   - Extend the new SBT lane, south of Central Ave., to the right-turn lane at the Murphy Express driveway by constructing a third SBT lane 450-ft long and re-striping existing SBT lanes.
   - Change the markings on the right NBT lane from thru arrow to a thru/right arrow.
   - Consider re-timing the signal, as necessary.
3. **Unser Blvd / Sarracino Pl. (Driveway A) (Existing Unsignalized, Proposed Signalized)**
   (See *Exhibit 3 in Recommendations section of main report)*

- Construct a new northbound right-turn deceleration lane with 240-ft of queue storage and a 300/150 transition.
- Install a new traffic signal when volumes at the intersection approach BUILD volumes or traffic conditions become problematic due to delays and obtain a waiver of COA Development Process Manual (DPM) minimum access spacing requirements from the City of Albuquerque.
- Construct a second westbound left turn lane and a WBT/R lane.

4. **Unser Blvd / Bluewater Rd. (Signalized)**
   (See Exhibit 4 in Recommendations section of main report)
   - Re-stripe the west leg of the intersection to extend the EBL lane from 90-ft to 250-ft.
   - Consider re-timing the signal.
5. **Central Ave / 98th St. (Signalized)**
   Consider re-timing the signal for the PM BUILD condition.
6. **Central Ave / Driveway B (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
7. **Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
8. **Central Ave / Driveway D (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
9. **Central Ave / Driveway E (Unsignalized – Full Access)**
   On-site queue capacity should be 250-ft minimum.
10. **Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY)**
    No mitigation recommended.

Central & Unser (Ed Garcia) Commercial Development
7707 West Central Ave., Albuquerque, NM
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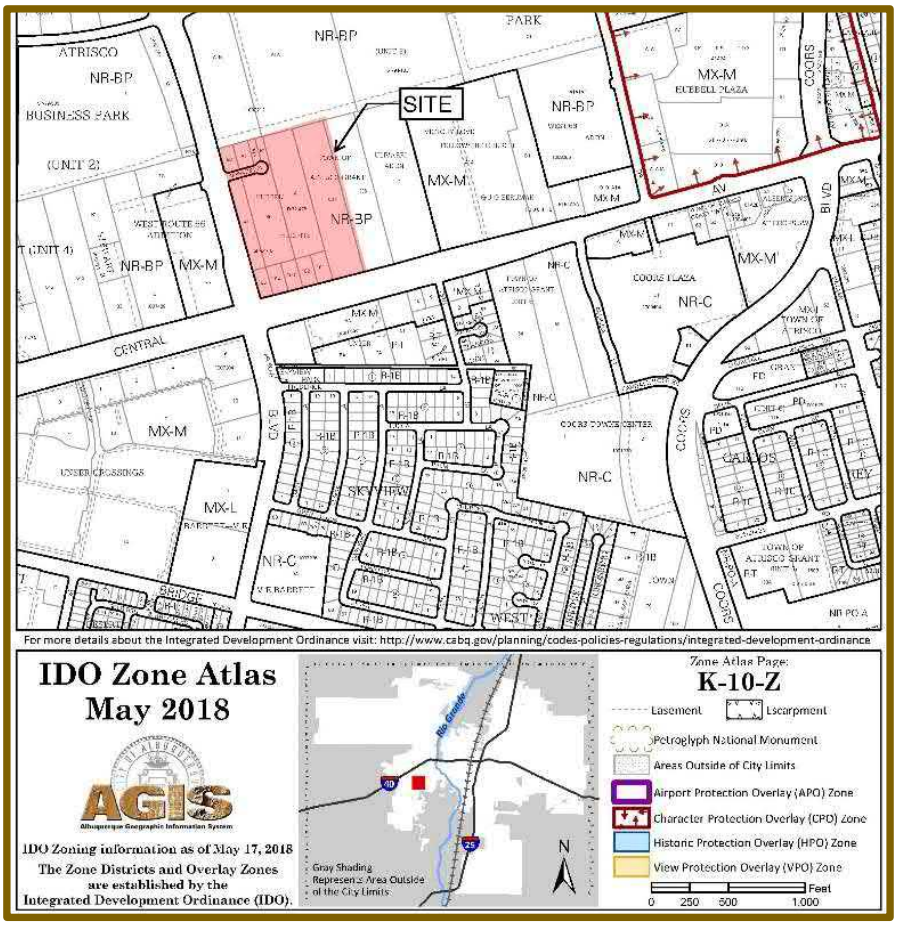
Purpose

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, Traffic Engineering Department.

Project Description

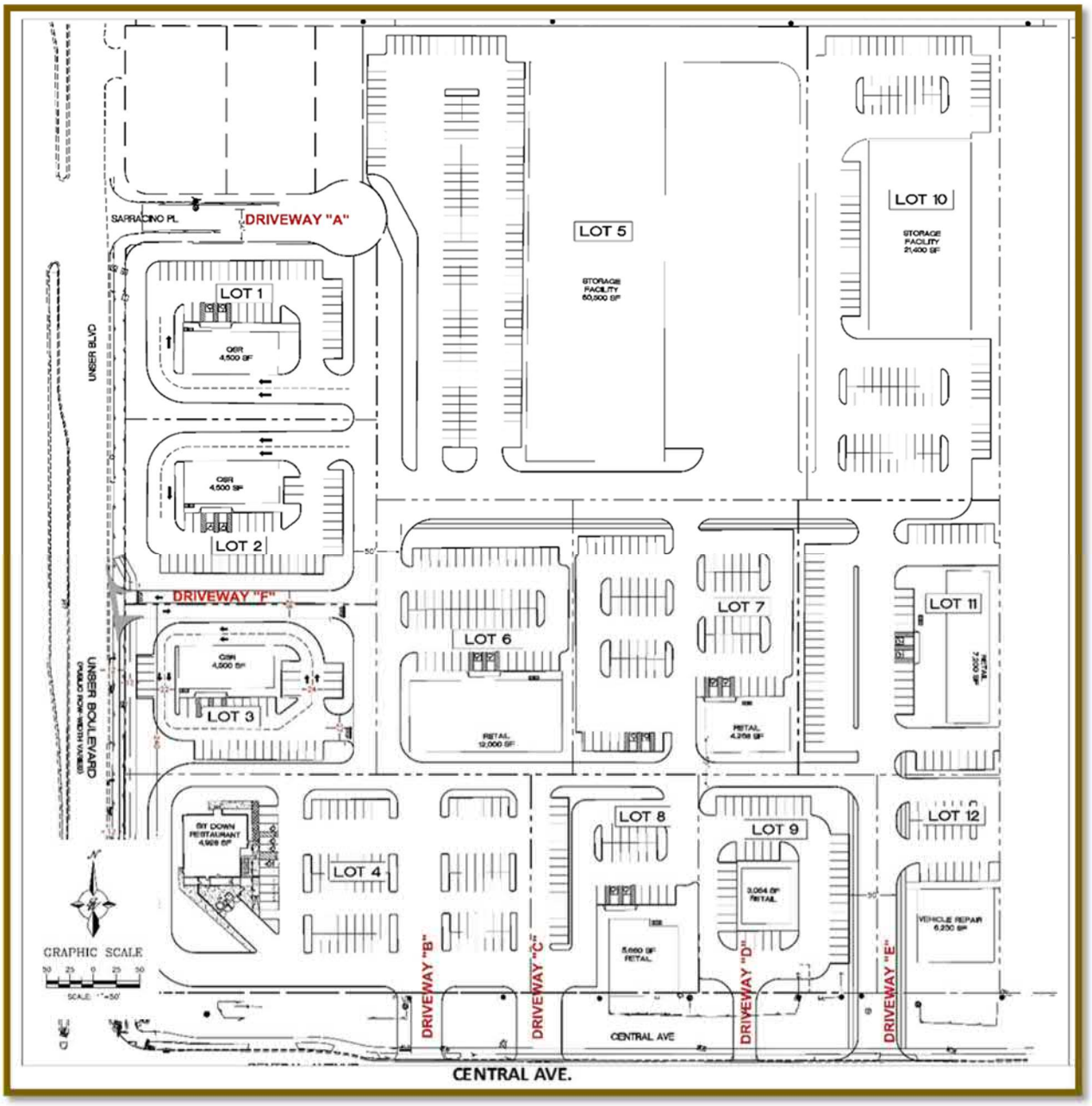
Location

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 accesses (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

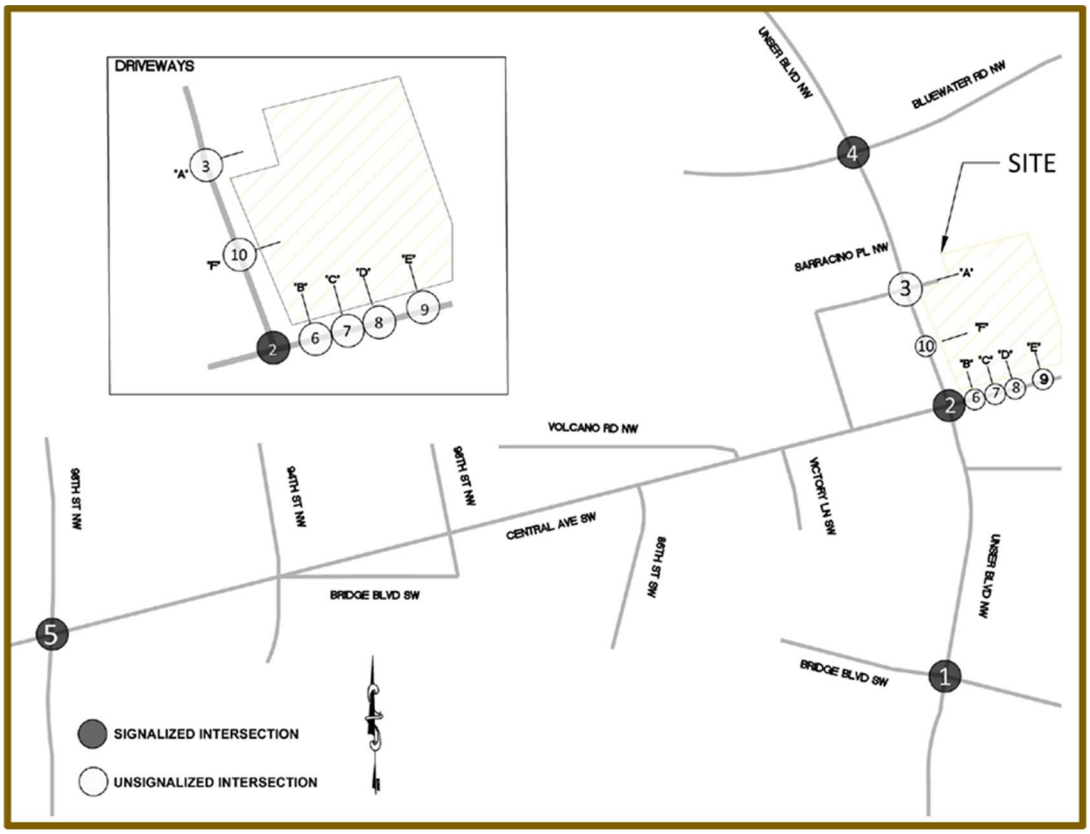
The anticipated implementation year for this project is 2025 and the horizon year is 2035.

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 – Right-in, right-out ONLY)
9. Central Ave / Driveway E (Unsignalized – Full Access)
10. Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY)



Existing Land Uses

The land for the project is 75% undeveloped with three small light industrial businesses and one residential home which will be replaced by the proposed development. To be conservative, no credit for existing trips is considered in the trips generated calculations. All land parcels adjacent to the development are fully developed. The influence area is 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.

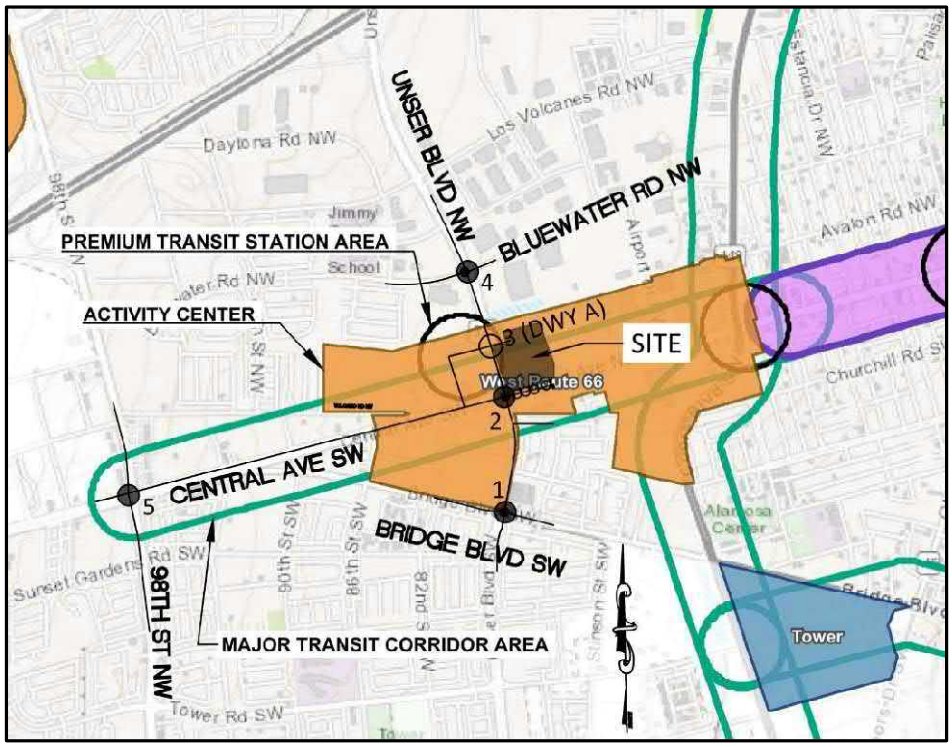
All existing intersections in the study area have adequate **lighting**.

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, pedestrian, or 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 follows:

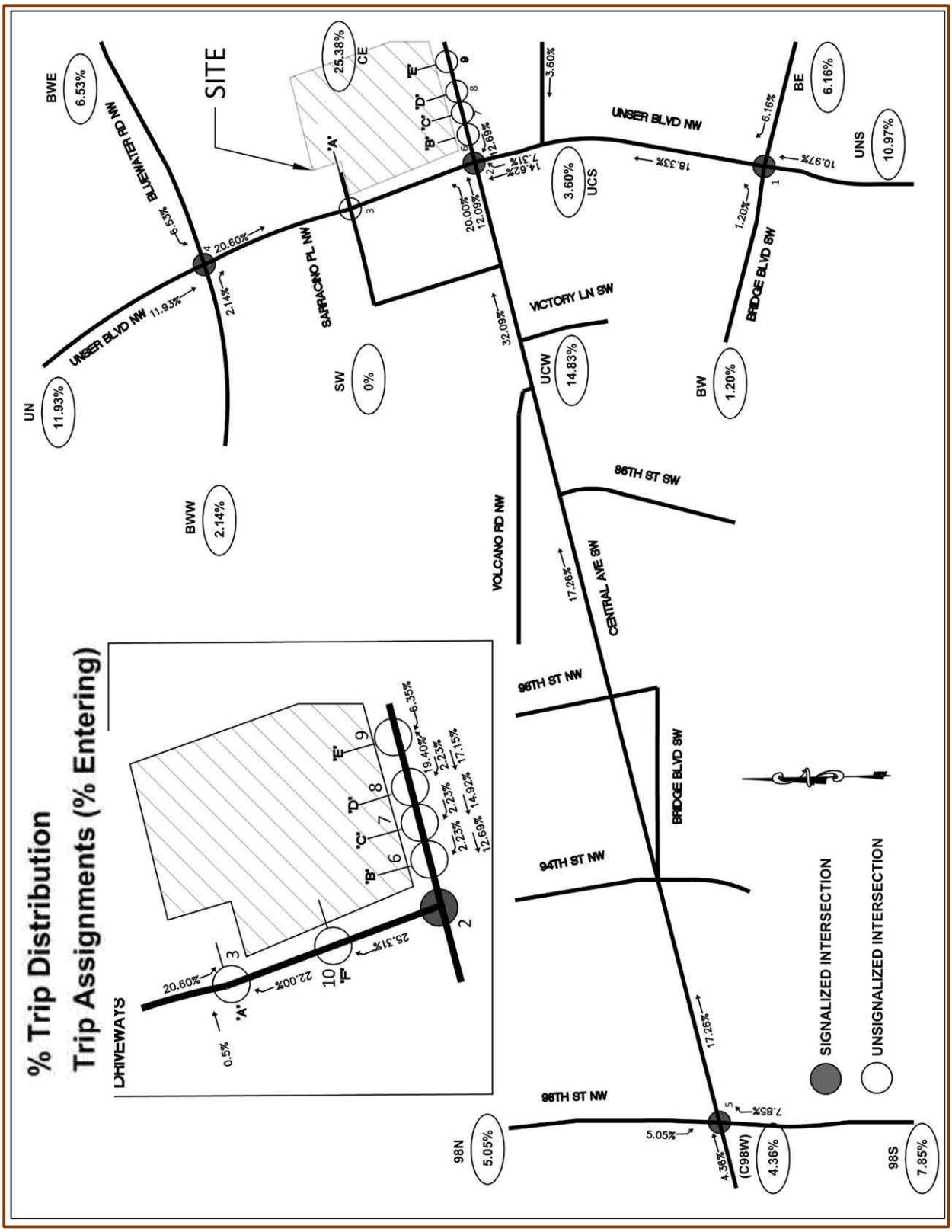
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

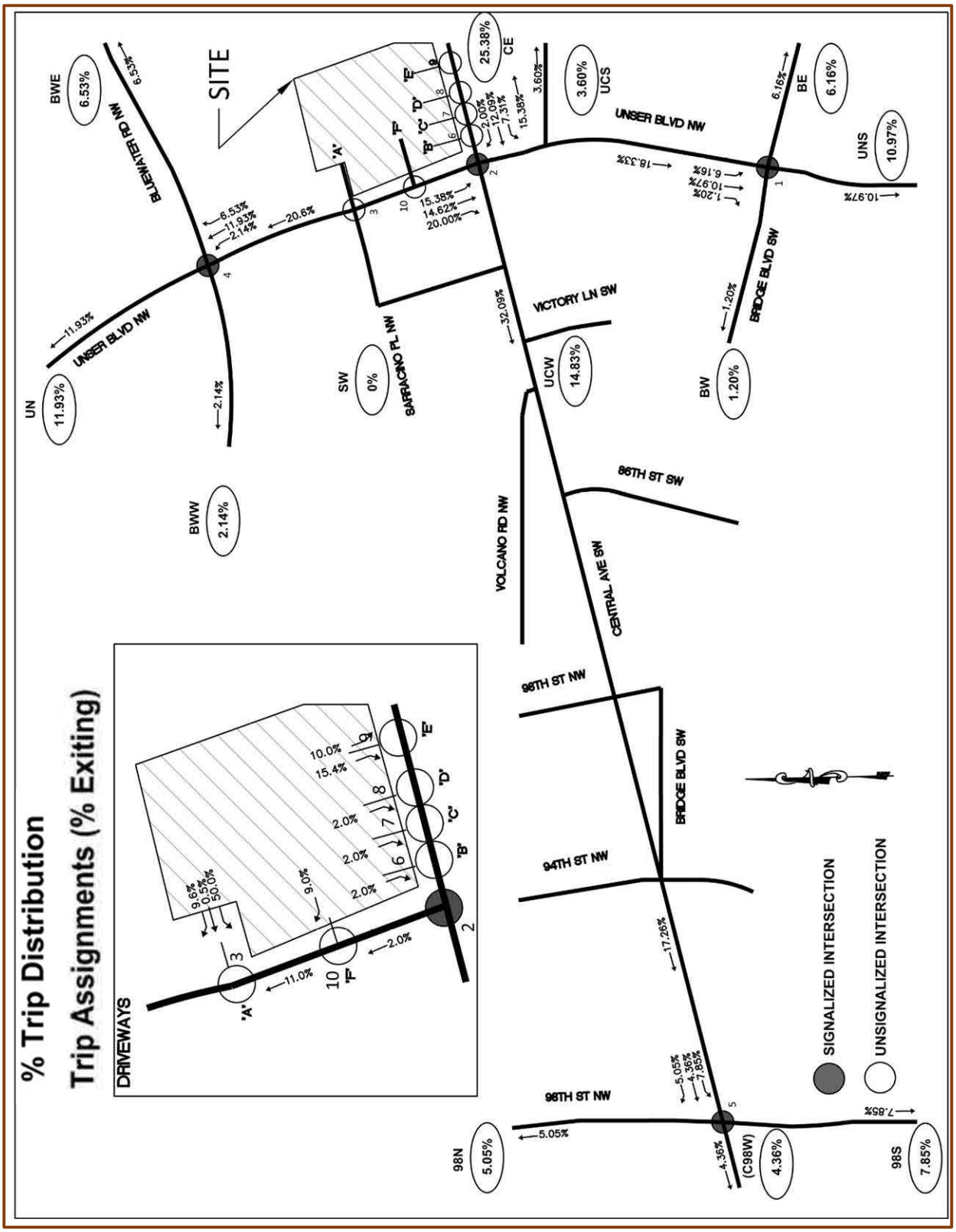
Based on Latest Site Plan with one 100,000 s.f. Warehouse on Lots 5 & 10

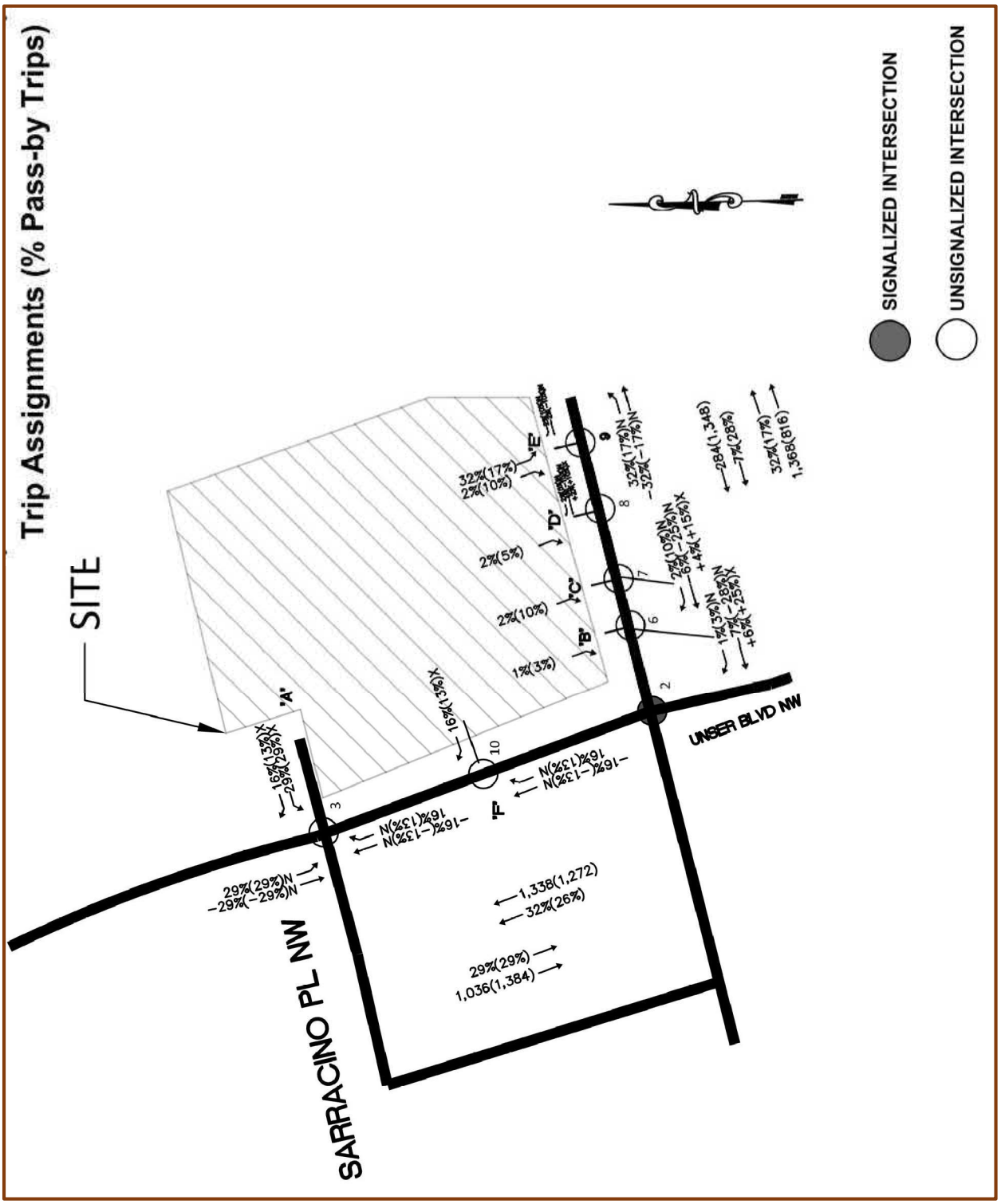
USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
DESCRIPTION		*GROSS*	*ENTER*	*EXIT*	*ENTER*	*EXIT*
Summary Sheet	Units (1k ft^2)					
Warehousing (150)	100.00	171	13	4	5	13
Fast Food Restaurant w/ Drive-Thru Window (934)	13.50	6,311	307	295	232	214
High Turnover (Sit-Down) Restaurant (932)	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.


% Trip Distribution
Trip Assignments (% Entering)
DRIVEWAYS
SITE
BLUEWATER RD NW
UNSER BLVD NW
BARRACINO PL NW
VICTORY LN SW
VOLCANO RD NW
CENTRAL AVE SW
BRIDGE BLVD SW
86TH ST SW
98TH ST NW
94TH ST NW
98TH ST NW
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
BWE 6.53%
UN 11.93%
BWW 2.14%
SW 0%
CE 25.38%
UCS 3.60%
UCW 14.83%
BW 1.20%
BE 6.16%
UNS 10.97%
98N 5.05%
(C98W) 4.36%
98S 7.85%
'A'
'B'
'C'
'D'
'E'
'F'
20.60%
22.00%
25.31%
0.5%
6.35%
19.40%
17.15%
14.92%
12.69%
2.23%
32.09%
17.26%
18.33%
10.97%
7.85%
5.05%
4.36%
3.60%
6.16%
1.20%
20.00%
12.09%
14.62%
7.51%
12.69%
2.14%
11.93%
6.53%


% Trip Distribution
Trip Assignments (% Exiting)
DRIVEWAYS
SITE
BLUEWATER RD NW
UNSER BLVD NW
VICTORY LN SW
BARRACINO PL NW
VOLCANO RD NW
CENTRAL AVE SW
BRIDGE BLVD SW
86TH ST SW
98TH ST NW
94TH ST NW
98TH ST NW
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
BWE 6.53%
UN 11.93%
BWW 2.14%
SW 0%
CE 25.38%
UCS 3.60%
UCW 14.83%
BE 6.16%
BW 1.20%
UNS 10.97%
98N 5.05%
(C98W) 4.36%
98S 7.85%


Trip Assignments (% Pass-by Trips)
SITE
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
SARRACINO PL NW
UNSER BLVD NW
'A'
'B'
'C'
'D'
'E'
'F'
1,338(1,272)
32%(26%)
29%(29%)
1,036(1,384)
284(1,348)
17%(28%)
32%(17%)
1,368(816)

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-40 and A-41 thru A-53, 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-134 thru A-139 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						
	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
Major Transit	E	E-F	E	E	D-E	D-E	D-E
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
Minor Arterial	E	E	D-E	D-E	D-E	D	D
Collector	E	D-E	D	D	C-D	C-D	C-D

INTERSECTIONS
3 &10
2 , 4, 5, 6, 7, 8, & 9

1

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-54 thru A-131 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)

Refer to Appendix A-54 thru A-65 for Synchro analysis reports.

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. LOS remains at D or better for all movements in the intersection except for the eastbound left turn movement (EBL) which is LOS=E. This is an existing condition, and the development does not contribute traffic to this movement, so no mitigation is proposed on behalf of the development. Intersection LOS remains at LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 2 seconds per vehicle. See results of the capacity analysis for 2025 and 2035 in the following tables.

1: Unser Blvd & Bridge Blvd.

2025 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	166	125	99	54	134	85	40	1,277	90	81	694	40
V/C Ratio	0.67	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)	51.5	39.0	38.8	43.9	39.2	38.5	8.6	15.0	9.6	11.6	10.6	8.5
Intersection LOS	**B - 19.8**											
BUILD VOLUMES	166	125	116	57	134	85	40	1,308	90	95	720	43
V/C Ratio	0.67	0.30	0.33	0.23	0.32	0.24	0.09	0.61	0.09	0.35	0.32	0.04
Level-of-Service	D	D	D	D	D	D	A	B	A	B	B	A
Control Delay (Seconds)	51.5	39.0	39.3	44.0	39.2	38.4	8.8	15.6	9.8	12.3	10.7	8.6
Intersection LOS	**C - 20.1**											
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	0.66	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	A	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**											

PM Peak Hour												
NO BUILD VOLUMES	125	139	54	90	130	121	49	1,004	22	90	1,371	134
V/C Ratio	0.62	0.39	0.18	0.44	0.37	0.40	0.20	0.43	0.02	0.23	0.58	0.13
Level-of-Service	E	D	D	D	D	D	B	B	A	A	B	A
Control Delay (Seconds)	56.5	46.2	44.1	54.3	46.0	46.4	10.1	11.2	7.7	8.1	12.7	8.0
Intersection LOS	**B - 19.1**											
BUILD VOLUMES	125	139	70	93	130	121	49	1,033	22	107	1,401	137
V/C Ratio	0.62	0.39	0.23	0.46	0.37	0.40	0.20	0.45	0.02	0.28	0.59	0.13
Level-of-Service	E	D	D	D	D	D	B	B	A	A	B	A
Control Delay (Seconds)	56.5	46.2	44.6	54.6	45.9	46.4	10.4	11.6	7.9	8.5	12.9	8.1
Intersection LOS	**B - 19.3**											
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	0.59	0.38	0.22	0.44	0.35	0.39	0.21	0.45	0.02	0.28	0.60	0.13
Level-of-Service	E	D	D	E	D	D	B	B	A	A	B	A
Control Delay (Seconds)	58.1	46.0	44.2	55.1	45.7	46.3	11.3	12.2	8.3	9.3	13.6	8.4
Intersection LOS	**B - 19.8**											

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	0.84	0.33	0.31	0.27	0.36	0.27	0.16	0.89	0.14	0.66	0.47	0.06
Level-of-Service	E	C	C	D	D	C	B	C	B	C	B	B
Control Delay (Seconds)	67.9	34.9	34.7	41.3	35.2	34.3	12.3	29.9	13.3	28.4	15.8	11.6
Intersection LOS	**C - 28.6**											
BUILD VOLUMES	225	170	151	76	182	116	55	1,764	122	123	968	58
V/C Ratio	0.84	0.33	0.35	0.28	0.36	0.27	0.17	0.91	0.14	0.74	0.48	0.06
Level-of-Service	E	C	D	D	D	C	B	C	B	C	B	B
Control Delay (Seconds)	67.9	34.9	35.1	41.5	35.2	34.3	12.6	32.1	13.5	29.9	16.0	11.6
Intersection LOS	**C - 29.7**											
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	0.84	0.33	0.35	0.28	0.36	0.27	0.17	0.91	0.14	0.73	0.48	0.06
Level-of-Service	E	D	D	D	D	C	B	C	B	D	B	B
Control Delay (Seconds)	69.6	35.3	35.7	42.1	35.7	34.6	12.9	32.7	13.7	35.7	16.1	11.6
Intersection LOS	**C - 30.3**											
PM Peak Hour												
NO BUILD VOLUMES	170	188	73	122	176	164	67	1,362	30	122	1,890	182
V/C Ratio	0.70	0.39	0.18	0.48	0.36	0.40	0.52	0.67	0.03	0.48	0.91	0.20
Level-of-Service	E	D	D	D	D	D	C	C	B	B	C	B
Control Delay (Seconds)	55.1	39.8	37.4	50.0	39.5	39.9	30.5	20.7	11.9	17.3	30.4	12.7
Intersection LOS	**C - 29.0**											
BUILD VOLUMES	170	188	89	125	176	164	67	1,391	30	139	1,890	185
V/C Ratio	0.70	0.39	0.22	0.50	0.36	0.40	0.52	0.69	0.03	0.56	0.91	0.20
Level-of-Service	E	D	D	D	D	D	C	C	B	B	C	B
Control Delay (Seconds)	55.1	39.7	37.8	50.3	39.4	39.9	30.5	21.6	12.2	18.9	30.5	12.8
Intersection LOS	**C - 29.2**											
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	137
V/C Ratio	0.68	0.38	0.21	0.49	0.36	0.39	0.52	0.70	0.03	0.56	0.92	0.13
Level-of-Service	E	D	D	D	D	D	C	C	B	C	C	A
Control Delay (Seconds)	56.7	39.6	37.4	50.9	39.3	39.9	34.4	22.5	12.7	21.6	32.0	8.4
Intersection LOS	**C - 30.4**											

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.

See the following queuing data table and Exhibit 1 in the Recommendations section. Only those movements where volume exceeds capacity or queue capacity is inadequate are presented in the table.

QUEUING ANALYSIS RESULTS

1: Unser Blvd & Bridge Blvd.

	2025	2035	
Bridge Blvd.	EB (Bridge Blvd.)	EB (Bridge Blvd.)	
Unser Blvd.	L	L	R
Existing Lane Geometry	1	1	1
AM Peak Hour			
NO BUILD VOLUMES	166	225	134
V/C Ratio	0.67	0.84	0.31
95th Percentile Queue (veh)	8.6	12.8	5.5
Queue Storage Ratio	2.39	3.56	0.92
Existing Queue Capacity (ft)	90	90	150
Additional Queue Length Required (ft)	125	230	0
BUILD VOLUMES	166	225	151
V/C Ratio	0.67	0.84	0.35
95th Percentile Queue (veh)	8.6	12.8	6.3
Queue Storage Ratio	2.39	3.56	1.05
Existing Queue Capacity (ft)	90	90	150
Additional Queue Length Required (ft)	125	230	8
MITIGATED Lane Geometry	1	1	1
BUILD VOLUMES	166	225	151
V/C Ratio	0.66	0.84	0.35
95th Percentile Queue (veh)	8.8	12.9	6.4
Queue Storage Ratio	0.96	0.98	1.07
Existing Queue Capacity (ft)	230	330	150
Additional Queue Length Required (ft)	0	0	10
PM Peak Hour			
NO BUILD VOLUMES	125	170	73
V/C Ratio	0.62	0.70	0.18
95th Percentile Queue (veh)	7.2	9.4	3.2
Queue Storage Ratio	2.00	2.61	0.53
Existing Queue Capacity (ft)	90	90	150
Additional Queue Length Required (ft)	90	145	0
BUILD VOLUMES	125	170	89
V/C Ratio	0.62	0.70	0.22
95th Percentile Queue (veh)	7.2	9.4	4.0
Queue Storage Ratio	2.00	2.61	0.67
Existing Queue Capacity (ft)	90	90	150
Additional Queue Length Required (ft)	90	145	0
Mitigated Lane Geometry	1	1	1
BUILD VOLUMES	125	170	89
V/C Ratio	0.59	0.68	0.21
95th Percentile Queue (veh)	7.4	9.6	4.0
Queue Storage Ratio	0.80	0.73	0.67
Mitigated Queue Capacity (ft)	230	330	150
Additional Queue Length Required (ft)	0	0	0

2 – Unser Blvd / Central Ave. (Signalized)

Refer to Appendix A-66 thru A-77 for Synchro analysis reports.

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. Intersection LOS degrades from LOS=D (NO BUILD) to LOS=E (BUILD) during the AM and PM peak hours and delays for individual movements become worse with the additional traffic generated by the development. However, this intersection has seven movements (EBL, EBT, EBR, WBL, WBR, NBL, and SBL) that have LOS= E or F for the NO BUILD condition so any additional traffic has a significant impact on delays. As shown for the mitigated case in data tables below and the summary table in the executive summary, adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, improves the intersection LOS and delays to better than pre-development conditions.

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

2: Unser Blvd & Central Ave

2025 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	502	900	13	40	197	81	22	972	515	116	793	251
V/C Ratio	0.97	1.07	1.07	0.32	0.46	0.42	0.25	0.38	0.64	0.68	0.42	0.30
Level-of-Service	F	F	F	E	D	D	E	B	C	E	B	B
Control Delay (Seconds)	80.3	108.0	107.0	56.8	49.6	49.9	57.8	18.2	25.2	57.9	17.6	16.5
Intersection LOS	**D - 48.0**											
BUILD VOLUMES	558	934	13	93	225	162	22	964	585	196	783	298
V/C Ratio	1.08	1.11	1.11	0.57	0.48	0.78	0.25	0.40	0.78	0.77	0.43	0.36
Level-of-Service	F	F	F	E	D	E	E	C	C	E	B	B
Control Delay (Seconds)	111.0	121.0	120.0	57.1	48.8	58.1	57.8	20.8	34.2	56.5	18.4	18.2
Intersection LOS	**E - 56.7**											
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3>	1	2	3	1
Restripe the north & south legs to add a 3rd SBT lane, extend the new lane south to the Murphy Express driveway, and retime the signal.												
BUILD VOLUMES	558	934	13	93	225	162	22	964	585	196	783	298
V/C Ratio	0.83	0.80	0.80	0.57	0.36	0.41	0.24	0.59	0.57	0.76	0.36	0.30
Level-of-Service	D	D	D	E	D	D	E	C	C	E	C	B
Control Delay (Seconds)	50.1	41.4	41.2	60.3	43.8	38.3	59.2	30.7	29.2	62.2	23.5	11.1
Intersection LOS	**D - 35.3**											
PM Peak Hour												
NO BUILD VOLUMES	439	627	49	336	986	188	81	797	157	130	981	439
V/C Ratio	1.24	0.69	0.69	0.86	0.99	0.42	0.54	0.39	0.25	0.72	0.67	0.68
Level-of-Service	F	D	D	E	E	D	E	C	C	E	C	D
Control Delay (Seconds)	187.0	46.0	45.9	61.9	71.1	38.3	62.0	27.7	26.4	62.6	33.5	36.6
Intersection LOS	**E - 57.5**											
BUILD VOLUMES	492	659	49	398	1,019	265	81	799	213	212	979	493
V/C Ratio	1.39	0.78	0.78	0.88	1.02	0.59	0.54	0.41	0.35	0.80	0.67	0.76
Level-of-Service	F	D	D	E	F	D	E	C	C	E	C	D
Control Delay (Seconds)	250.0	52.1	52.0	65.3	79.7	41.9	62.0	30.1	30.4	61.1	33.5	40.7
Intersection LOS	**E - 67.0**											
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3>	1	2	3	1
Restripe the north & south legs to add a 3rd SBT lane, extend the new lane south to the Murphy Express driveway, and retime the signal.												
BUILD VOLUMES	492	659	49	398	1,019	265	81	799	213	212	979	493
V/C Ratio	0.87	0.54	0.54	0.80	0.83	0.40	0.52	0.56	0.34	0.80	0.67	0.69
Level-of-Service	E	C	C	E	D	C	E	D	C	E	D	C
Control Delay (Seconds)	62.7	33.5	33.5	57.9	43.3	26.5	64.7	43.5	28.3	71.3	37.5	30.2
Intersection LOS	**D - 42.7**											

Synchro Results Summary Sheet

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	1.32	1.46	1.46	0.38	0.60	0.55	0.28	0.53	0.90	0.74	0.59	0.41
Level-of-Service	F	F	F	E	D	D	E	C	D	E	C	B
Control Delay (Seconds)	204.0	262.0	262.0	56.6	50.4	50.9	57.3	21.7	43.5	57.1	21.2	19.1
Intersection LOS	**F - 97.9**											
BUILD VOLUMES	737	1,256	18	108	296	190	30	1,311	769	238	1,066	387
V/C Ratio	1.43	1.44	1.44	0.65	0.59	0.85	0.28	0.57	1.08	0.81	0.60	0.49
Level-of-Service	F	F	F	E	D	E	E	C	F	E	C	C
Control Delay (Seconds)	251.0	254.0	254.0	57.6	49.0	66.3	57.3	25.2	89.3	57.2	22.5	21.6
Intersection LOS	**F - 107.9**											
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	3	1
Restripe the north & south legs to add a 3rd SBT lane, extend the new lane south to the Murphy Express driveway, convert the outside NBT lane to a NBT/R lane, and retime the signal.												
BUILD VOLUMES	737	1,256	18	108	296	190	30	1,311	769	238	1,066	387
V/C Ratio	0.88	0.94	0.94	0.65	0.47	0.46	0.27	0.93	0.89	0.81	0.56	0.40
Level-of-Service	D	D	D	E	D	D	E	D	D	E	C	B
Control Delay (Seconds)	50.5	54.7	54.2	62.0	45.0	38.1	58.6	49.8	53.2	67.4	30.8	12.6
Intersection LOS	**D - 46.1**											
PM Peak Hour												
NO BUILD VOLUMES	596	851	67	456	1,338	255	109	1,082	213	176	1,332	596
V/C Ratio	1.69	1.08	1.08	0.90	1.34	0.57	0.69	0.54	0.35	0.77	0.92	0.92
Level-of-Service	F	F	F	E	F	D	E	C	C	E	D	E
Control Delay (Seconds)	378.0	112.0	111.0	68.2	205.0	41.3	63.1	31.6	29.3	61.7	47.2	57.2
Intersection LOS	**F - 112.9**											
BUILD VOLUMES	649	883	67	518	1,371	332	109	1,084	269	258	1,330	650
V/C Ratio	1.84	1.20	1.20	0.92	1.37	0.74	0.69	0.58	0.46	0.83	0.92	1.01
Level-of-Service	F	F	F	E	F	D	E	C	C	E	D	F
Control Delay (Seconds)	444.0	159.0	159.0	71.4	220.0	48.6	63.1	34.3	33.9	61.5	47.0	75.3
Intersection LOS	**F - 129.4**											
Mitigated Lane Geometry	2	2>	0	2	2	1	2	3	1	2	3	1
Restripe the north & south legs to add a 3rd SBT lane, extend the new lane south to the Murphy Express driveway, convert the outside NBT lane to a NBT/R lane, and retime the signal.												
BUILD VOLUMES	649	883	67	518	1,371	332	109	1,084	269	258	1,330	650
V/C Ratio	0.97	0.66	0.66	0.82	0.99	0.44	0.68	0.65	0.35	0.85	0.77	0.77
Level-of-Service	E	C	C	D	E	C	E	D	C	F	D	C
Control Delay (Seconds)	74.4	33.4	33.3	54.8	61.3	22.8	69.9	41.5	22.2	80.8	48.8	33.9
Intersection LOS	**D - 48.7**											

Intersection 2 – Queuing Analysis

2025 and 2035 Queueing analysis indicates that storage capacity for the EBL, EBR, WBR, NBR, and SBR lanes (BUILD and NO BUILD) is inadequate and volume to capacity ratios (V/C's) exceed 1 indicating a high level of congestion at this intersection. Mitigating the intersection by

adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, significantly improves queuing capacity and V/C<1 for all lanes.

See the following queuing data table and Exhibit 2 in the Recommendations section. Only those movements where volume exceeds capacity or queue capacity is inadequate are presented in the table.

QUEUING ANALYSIS RESULTS

2: Unser Blvd & Central Ave

	2025				2035			
Central Ave.	EB (Central Ave.)			NB (Unser Blvd)	EB (Central Ave.)			NB (Unser Blvd)
Unser Blvd	L	T	R	R	L	T	R	R
Existing Lane Geometry	2	2>	0	1	2	2>	0	1
AM Peak Hour								
NO BUILD VOLUMES	502	900	13	515	681	1,222	18	699
V/C Ratio	0.97	1.07	1.07	0.64	1.32	1.46	1.46	0.90
95th Percentile Queue (veh)	14.2	27.1	28.0	16.2	28.1	55.2	57.5	27.9
Queue Storage Ratio	1.06		0.70	2.53	2.10		1.44	4.36
Existing Queue Capacity (ft)	335		1,000	160	335		1,000	160
Additional Queue Length Required (ft)	20		0	245	368		438	538
BUILD VOLUMES	558	934	13	585	737	1,256	18	769
V/C Ratio	1.08	1.11	1.11	0.78	1.43	1.44	1.44	1.08
95th Percentile Queue (veh)	17.8	29.4	30.5	21.1	33.3	55.7	58.1	42.0
Queue Storage Ratio	1.33		0.76	3.30	2.49		1.45	6.56
Existing Queue Capacity (ft)	335	0	1,000	160	335	0	1,000	160
Additional Queue Length Required (ft)	110		0	368	498		453	890
Mitigated Lane Geometry	2	2>	0	1	2	2>	0	1
BUILD VOLUMES	558	934	13	585	737	1,256	18	769
V/C Ratio	0.83	0.80	0.80	0.57	0.88	0.94	0.94	0.89
95th Percentile Queue (veh)	12.5	18.2	18.9	13.5	15.9	26.8	27.8	23.2
Queue Storage Ratio	0.93		0.47	2.11	1.19		0.70	3.63
Existing Queue Capacity (ft)	335	0	1,000	160	335	0	1,000	160
Additional Queue Length Required (ft)	0		0	178	63		0	420
PM Peak Hour								
NO BUILD VOLUMES	439	627	49	157	596	851	67	213
V/C Ratio	1.24	0.69	0.69	0.25	1.69	1.08	1.08	0.35
95th Percentile Queue (veh)	19.0	14.8	15.2	6.0	33.5	28.8	29.3	8.4
Queue Storage Ratio	1.42		0.38	0.94	2.50		0.73	1.31
Existing Queue Capacity (ft)	335	0	1,000	160	335	0	1,000	160
Additional Queue Length Required (ft)	140		0	0	503		0	50
BUILD VOLUMES	492	659	49	213	649	883	67	269
V/C Ratio	1.39	0.78	0.78	0.35	1.84	1.20	1.20	0.46
95th Percentile Queue (veh)	23.8	16.3	16.7	8.6	38.5	34.9	35.6	11.0
Queue Storage Ratio	1.78		0.42	1.34	2.87		0.89	1.72
Existing Queue Capacity (ft)	335	0	1,000	160	335	0	1,000	160
Additional Queue Length Required (ft)	260		0	55	628		0	115
Mitigated Lane Geometry	2	2>	0	1	2	2>	0	1
BUILD VOLUMES	492	659	49	213	649	883	67	269
V/C Ratio	0.87	0.54	0.54	0.34	0.88	0.94	0.94	0.89
95th Percentile Queue (veh)	12.9	13.1	13.5	8.3	21.0	12.2	12.5	13.6
Queue Storage Ratio	0.96		0.34	1.30	1.57		0.31	2.13
Mitigated Queue Capacity (ft)	335	0	1,000	160	335	0	1,000	160
Additional Queue Length Required (ft)	0		0	48	190		0	180

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

Refer to Appendix A-78 thru A-89 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. Intersection LOS from the NO BUILD to BUILD condition remains at LOS=F for the side street traffic (EB & WB). The SBL turn movement LOS degrades from LOS=D to LOS=F with the additional traffic generated by the development. Poor LOS for these low volume movements indicates that the high volume of traffic on Unser Blvd. creates inadequate gaps for these vehicles to enter the stream of traffic on Unser Blvd. Adding a second WBL lane and signalizing the intersection improves the LOS of the intersection for the 2025 and 2035 AM and PM conditions to LOS=A or B.

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

3: Unser Blvd & Sarracino/Driveway 'A'

2025 LVAM

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>	0	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	0.63	0.08			0.59		0.10			0.05		
Level-of-Service	F	C			F		C			D		
Control Delay (Seconds)	128.0	15.0			169.0		17.1			26.6		
Intersection LOS	**F-169**											
BUILD VOLUMES	40	1	31	175	1	66	31	1,649	115	111	1,072	36
V/C Ratio	2.86	0.41			18.62		0.09			0.68		
Level-of-Service	F	F			F		C			F		
Control Delay (Seconds)	999.0	80.1			999.0		16.5			64.5		
Intersection LOS	**F-999**											
Mitigated Lane Geometry	1	1>	0	2	1>	0	1	3>	0	1	3>	0
Add 2nd WBL lane, convert WBL/R/T lane to WBT/R Lane & Signalize Intersection												
BUILD VOLUMES	40	1	31	175	1	87	31	1,649	186	111	1,072	36
V/C Ratio	0.35	0.00	0.44	0.69	0.00	0.27	0.07	0.52	0.52	0.36	0.31	0.31
Level-of-Service	E	A	E	E	A	D	A	B	B	A	A	A
Control Delay (Seconds)	65.9	0.0	68.6	65.7	0.0	50.9	6.2	12.8	13.5	9.7	9.1	9.4
Intersection LOS	**B - 16.3**											

PM Peak Hour												
NO BUILD VOLUMES	18	0	27	0	0	1	0	1,649	0	0	1,568	31
V/C Ratio	0.41	0.10			0.00							
Level-of-Service	F	C			C		A			A		
Control Delay (Seconds)	135.0	19.2			18.4		0.0			0.0		
Intersection LOS	**F-135**											
BUILD VOLUMES	18	1	27	177	1	65	4	1,617	96	96	1,527	31
V/C Ratio	1.64	0.42			15.19		0.02			0.56		
Level-of-Service	F	F			F		C			E		
Control Delay (Seconds)	987.0	94.9			999.0		22.8			49.1		
Intersection LOS	**F-999**											
Mitigated Lane Geometry	1	1>	0	2	1>	0	1	3>	0	1	3>	0
Add 2nd WBL lane, WBR Lane & Signalize Intersection												
BUILD VOLUMES	18	1	27	177	1	65	4	1,617	96	96	1,527	31
V/C Ratio	0.17	0.00	0.47	0.67	0.00	0.27	0.01	0.50	0.50	0.26	0.42	0.42
Level-of-Service	E	A	E	E	A	D	A	A	A	A	A	A
Control Delay (Seconds)	62.1	0.0	69.2	62.6	0.0	49.0	7.3	0.8	1.5	4.8	7.9	8.4
Intersection LOS	**A - 8.8**											

3: Unser Blvd & Sarracino/Driveway 'A'

2035 LVAM

Unsignalized

Sarrcino/Driveway 'A' Unser Blvd.	EB (Sarrcino/Driveway 'A')			WB (Sarrcino/Driveway 'A')			NB (Unser Blvd.)			SB (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	2.75	0.15			3.27		0.21			0.14		
Level-of-Service	F	C			F		D			F		
Control Delay (Seconds)	999.0	19.7			999.0		27.2			53.5		
Intersection LOS	**F-999**											
BUILD VOLUMES	55	1	43	183	1	68	43	2,254	117	114	1,470	49
V/C Ratio	2.75	0.15			3.27		0.20			1.43		
Level-of-Service	F	C			F		D			F		
Control Delay (Seconds)	999.0	19.2			999.0		25.8			341.0		
Intersection LOS	**F-999**											
Mitigated Lane Geometry	1	1>	0	2	1	1	1	3>	0	1	3>	0
Add 2nd WBL lane, WBT/R Lane & Signalize Intersection												
BUILD VOLUMES	F-999	0	0	0	0	0	0	0	0	0	0	0
V/C Ratio	7.20	0.50					0.70			9.00		
Level-of-Service	1.44	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	1.67	0.00	0.00
Control Delay (Seconds)	125.0	0.0	0.0	0.0	0.0	0.0	150.0	0.0	0.0	135.0	0.0	0.0
Intersection LOS	**B - 19.6**											
PM Peak Hour												
NO BUILD VOLUMES	24	0	36	0	0	2	0	2,237	0	0	2,128	43
V/C Ratio	1.85	0.20			0.01							
Level-of-Service	F	D			D		A			A		
Control Delay (Seconds)	988.0	29.9			26.3		0.0			0.0		
Intersection LOS	**F-988**											
BUILD VOLUMES	24	1	36	177	1	66	6	2,205	96	96	2,087	43
V/C Ratio	1.85	0.20					0.06			1.10		
Level-of-Service	F	D					E			F		
Control Delay (Seconds)	988.0	29.1					41.0			215.0		
Intersection LOS	**F-988**											
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	2	1>	0	1	3>	0	1	3>	0
Add 2nd WBL lane, WBT/R Lane & Signalize Intersection												
BUILD VOLUMES	24	1	36	177	1	66	6	2,205	96	96	2,087	43
V/C Ratio	0.22	0.00	0.59	0.67	0.00	0.27	0.03	0.67	0.68	0.33	0.57	0.58
Level-of-Service	E	A	E	E	A	D	A	A	A	A	B	B
Control Delay (Seconds)	62.5	0.0	73.4	62.6	0.0	48.8	8.4	1.6	3.1	5.3	10.2	11.0
Intersection LOS	**A - 9.6**											

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 WBL lane and signalizing the intersection improves queuing capacity and V/C<1 for all lanes.

See the following queuing data table and Exhibit 3 in the Recommendations section. Only those movements where volume exceeds capacity or queue capacity is inadequate are presented in the table.

QUEUING ANALYSIS RESULTS

3: Unser Blvd & Sarracino/Driveway 'A'

2025 LVAM	2025	2035				
Sarrcino/Driveway 'A'	EB (Sarrcino/Driveway 'A')	EB (Sarrcino/Driveway 'A')	WB (Sarrcino/Driveway 'A')			SB (Unser Blvd.)
Unser Blvd.	L	L	L	T	R	L
Existing Lane Geometry	0	1	0	<1>	0	1
AM Peak Hour						
NO BUILD VOLUMES	40	55	30	0	6	12
V/C Ratio	0.63	2.75		3.27		0.14
95th Percentile Queue (veh)	2.7	7.2		5.6		0.5
Queue Storage Ratio	0.54	1.44		0.71		0.09
Existing Queue Capacity (ft)	125	125		198		135
Additional Queue Length Required (ft)	0	55		0		0
BUILD VOLUMES	40	55	183	1	68	114
V/C Ratio	2.86	2.75		3.27		1.43
95th Percentile Queue (veh)	5.8	7.2				9.0
Queue Storage Ratio	1.16	1.44				1.67
Existing Queue Capacity (ft)	125	125				135
Additional Queue Length Required (ft)	20	55				90
Mitigated - Signalized	1	1	2	1>		1
BUILD VOLUMES	40	0	0	0	0	0
V/C Ratio	0.35		0.72	0.00	0.26	
95th Percentile Queue (veh)	2.6	3.6	5.9	0.0	3.8	4.6
Queue Storage Ratio	0.52	0.72	0.74		0.48	0.85
Existing Queue Capacity (ft)	125	125	200		200	135
Additional Queue Length Required (ft)	0	0	0		0	0
PM Peak Hour						
NO BUILD VOLUMES	18	24	0	0	2	0
V/C Ratio	0.41	1.85		0.01		
95th Percentile Queue (veh)	1.4	3.8		0.0		0.0
Queue Storage Ratio	0.28	0.76				0.00
Existing Queue Capacity (ft)	125	125				135
Additional Queue Length Required (ft)	0	0				0
BUILD VOLUMES	18	24	177	1	66	96
V/C Ratio	1.64	1.85				1.10
95th Percentile Queue (veh)	3.1	3.8				6.6
Queue Storage Ratio	0.62	0.76				1.22
Existing Queue Capacity (ft)	125	125				135
Additional Queue Length Required (ft)	0	0				30
Mitigated - Signalized	1	1	2	1>	0	1
BUILD VOLUMES	18	24	177	1	66	96
V/C Ratio	0.17	0.22	0.67	0.00	0.27	0.33
95th Percentile Queue (veh)	1.1	1.5	5.4	0.0	3.6	1.2
Queue Storage Ratio	0.28	0.30	0.68		0.45	0.22
Mitigated Queue Capacity (ft)	125	125	200		200	135
Additional Queue Length Required (ft)	0	0	0		0	0

4 - Unser Blvd / Bluewater Rd. (Signalized)

Refer to Appendix A-90 thru A-101 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. Intersection LOS remains at LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 1 second per vehicle for 2025 and by less than 5 seconds per vehicle for 2035. LOS remains the same from the NO BUILD to BUILD condition for all movements in the intersection except the NBT during 2035 AM peak hour when the LOS degrades from LOS=D to LOS=F and PM peak hour when the LOS degrades from LOS=C to LOS=D due to the additional traffic generated by the development. Re-timing the signal improves the intersection LOS to better than NO BUILD conditions as shown in the summary table for the mitigated case.

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

2025 LVAM

Signalized

Bluewater / Unser Blvd.	EB (Bluewater)			WB (Bluewater)			NB (Unser Blvd.)			SB (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	0.62	0.00	0.73	0.14	0.51	0.80	0.28	0.65		0.41	0.44	
Level-of-Service	D	A	D	D	D	E	A	B		B	B	
Control Delay (Seconds)	46.5	0.0	45.6	53.4	52.4	56.9	8.7	15.3	0.0	12.9	12.0	0.0
Intersection LOS	**C - 20.7**											
BUILD VOLUMES	161	161	105	36	90	121	117	1,471	154	108	1,015	139
V/C Ratio	0.62	0.00	0.74	0.28	0.50	0.80	0.30	0.66		0.42	0.46	
Level-of-Service	D	A	D	D	D	E	A	B		B	B	
Control Delay (Seconds)	46.4	0.0	45.8	55.0	52.3	56.8	8.9	15.6	0.0	13.4	12.3	0.0
Intersection LOS	**C - 21.0**											
Mitigated Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
Re-time Signal												
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	A	D	E	D	D	A	B		B	B	
Control Delay (Seconds)	53.7	0.0	49.8	56.9	50.6	48.3	9.2	15.3	0.0	14.2	12.1	0.0
Intersection LOS	**C - 21.2**											
PM Peak Hour												
NO BUILD VOLUMES	233	67	36	85	143	152	27	1,362	72	108	1,564	121
V/C Ratio	0.96	0.00	0.26	0.42	0.67	0.84	0.14	0.62		0.39	0.69	
Level-of-Service	F	A	D	D	E	E	B	B		B	B	
Control Delay (Seconds)	96.5	0.0	41.8	54.9	56.4	60.1	13.5	16.2	0.0	13.2	16.3	0.0
Intersection LOS	**C - 25.9**											
BUILD VOLUMES	233	67	42	102	143	152	33	1,394	90	108	1,596	121
V/C Ratio	0.72	0.00	0.23	0.51	0.68	0.86	0.20	0.68		0.45	0.75	
Level-of-Service	D	A	D	E	E	E	B	C		B	B	
Control Delay (Seconds)	48.3	0.0	37.2	56.3	58.7	76.9	18.0	21.1	0.0	17.6	21.5	0.0
Intersection LOS	**C - 27.8**											
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 150'. Construction would be requied to extend WBR lane by 60'												
BUILD VOLUMES	233	67	42	102	143	152	33	1,394	90	108	1,596	121
V/C Ratio	,71	0.00	0.23	0.50	0.66	0.83	0.20	0.69		0.45	0.76	
Level-of-Service	D	A	D	E	E	E	B	C		B	C	
Control Delay (Seconds)	49.3	0.0	37.2	57.9	61.2	78.4	18.9	21.4	0.0	19.2	21.9	0.0
Intersection LOS	**C - 28.3**											

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	0.79	0.00	0.85	0.23	0.51	0.81	0.53	0.98		0.84	0.65	
Level-of-Service	E	A	D	E	D	D	B	D		D	B	
Control Delay (Seconds)	57.6	0.0	47.6	56.5	49.4	53.7	15.4	40.3	0.0	40.6	18.3	0.0
Intersection LOS	**D - 35.2**											
BUILD VOLUMES	219	219	140	42	122	164	157	1,986	203	146	1,366	188
V/C Ratio	0.74	0.00	0.81	0.34	0.45	0.71	0.58	1.02		0.84	0.69	
Level-of-Service	D	A	D	E	D	D	B	F		D	C	
Control Delay (Seconds)	50.2	0.0	44.9	55.6	47.2	50.3	17.9	51.2	0.0	42.5	20.6	0.0
Intersection LOS	**D - 40.0**											
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 250'												
BUILD VOLUMES	219	219	140	42	122	164	157	1,986	203	146	1,366	188
V/C Ratio	0.86	0.00	0.89	0.45	0.44	0.53	0.51	0.89		0.83	0.61	
Level-of-Service	E	A	E	E	D	D	B	C		D	B	
Control Delay (Seconds)	73.2	0.0	65.4	63.1	47.9	45.6	14.0	23.9	0.0	53.0	14.6	0.0
Intersection LOS	**C - 29.1**											
PM Peak Hour												
NO BUILD VOLUMES	316	91	49	116	195	207	36	1,848	97	146	2,122	164
V/C Ratio	1.27	0.00	0.31	0.48	0.69	0.87	0.40	0.91		0.85	0.99	
Level-of-Service	F	A	D	D	D	E	C	C		D	D	
Control Delay (Seconds)	198.0	0.0	38.9	52.1	53.4	59.7	33.5	32.4	0.0	49.5	42.4	0.0
Intersection LOS	**D - 49.8**											
BUILD VOLUMES	316	91	55	133	195	207	42	1,880	115	146	2,154	164
V/C Ratio	1.27	0.00	0.32	0.55	0.69	0.87	0.46	0.93		0.85	1.01	
Level-of-Service	F	A	D	D	D	E	C	D		D	F	
Control Delay (Seconds)	197.0	0.0	39.1	53.1	53.4	59.6	33.7	35.4	0.0	53.6	47.5	0.0
Intersection LOS	**D - 52.9**											
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 250'												
BUILD VOLUMES	316	91	55	133	195	207	42	1,880	115	146	2,154	164
V/C Ratio	0.98	0.00	0.28	0.59	0.76	0.95	0.37	0.83		0.78	0.91	
Level-of-Service	F	A	D	E	E	F	C	C		D	C	
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	**C - 34.1**											

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. By 2035 V/C's exceed 1 for the EBL, WBT, and SBL lanes for the BUILD condition indicating a high level of congestion. Mitigating the intersection by extending the EBL lane from 90-ft to 250-ft and re-timing the signal improves overall queuing capacity. Even though the WBR queue length becomes slightly worse with signal re-timing than the BUILD condition and will cause the WBR lane queue to periodically

spill over into the outside WBT lane, V/C<1 for all lanes. To resolve this issue, the existing WBR turn lane could be extended past the driveway east of the intersection (access to UPS) to create a continuous right turn lane or a second right-turn lane could be constructed. However, since the development does not contribute traffic to this movement, no recommendation is made on behalf of the development.

QUEUING ANALYSIS RESULTS

4: Unser Blvd & Bluewater

2025 LVAM	2025		2035		
Bluewater	EB (Bluewater)	WB (Bluewater)	EB (Bluewater)	WB (Bluewater)	SB (Unser Blvd.)
Unser Blvd.	L	R	L	R	L
Existing Lane Geometry	1	1	1	1	1
AM Peak Hour					
NO BUILD VOLUMES	161	121	219	164	146
V/C Ratio	0.62	0.80	0.79	0.81	0.84
95th Percentile Queue (veh)	7.8	6.6	4.7	8.4	8.0
Queue Storage Ratio	2.17	1.00	1.31	1.27	1.18
Existing Queue Capacity (ft)	90	165	90	165	170
Additional Queue Length Required (ft)	105	0	28	45	30
BUILD VOLUMES	161	121	219	164	146
V/C Ratio	0.62	0.80	0.74	0.71	0.84
95th Percentile Queue (veh)	7.8	6.5	3.8	8.2	8.1
Queue Storage Ratio	2.17	0.98	1.06	1.24	1.19
Existing Queue Capacity (ft)	90	165	90	165	170
Additional Queue Length Required (ft)	105	0	5	40	33
Mitigated Lane Geometry	1	1	1	1	1
BUILD VOLUMES	161	121	219	164	146
V/C Ratio	0.66	0.49	0.86	0.53	0.83
95th Percentile Queue (veh)	3.4	6.1	8.9	7.9	6.8
Queue Storage Ratio	0.34	0.92	0.89	1.20	1.00
Existing Queue Capacity (ft)	250	165	250	165	170
Additional Queue Length Required (ft)	0	0	0	33	0
PM Peak Hour					
NO BUILD VOLUMES	233	152	316	207	146
V/C Ratio	0.96	0.84	1.27	0.87	0.85
95th Percentile Queue (veh)	9.4	8.6	20.9	11.1	6.2
Queue Storage Ratio	2.61	1.30	5.81	1.68	0.91
Existing Queue Capacity (ft)	90	165	90	165	170
Additional Queue Length Required (ft)	145	50	433	113	0
BUILD VOLUMES	233	152	316	207	146
V/C Ratio	0.96	0.83	1.27	0.87	0.85
95th Percentile Queue (veh)	9.3	8.6	20.8	11.1	6.3
Queue Storage Ratio	2.58	1.30	5.78	1.68	0.93
Existing Queue Capacity (ft)	90	165	90	165	170
Additional Queue Length Required (ft)	143	50	430	113	0
Mitigated Lane Geometry	1	1	1	1	1
BUILD VOLUMES	233	152	316	207	146
V/C Ratio	0.83	0.78	0.98	0.95	0.78
95th Percentile Queue (veh)	5.0	9.0	9.9	14.5	7.0
Queue Storage Ratio	0.50	1.36	0.99	2.20	1.03
Mitigated Queue Capacity (ft)	250	165	250	165	170
Additional Queue Length Required (ft)	0	60	0	198	5

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

Refer to Appendix A-102 thru A-111 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 LOS remains acceptable (D or better) for all conditions except the 2035 PM BUILD condition when the LOS degrades to LOS=E for the BUILD condition. LOS for individual movements remain the same from the NO BUILD to BUILD conditions, however, the WBL turn movement has an unacceptable LOS (E or F) for all conditions. And the EBL turn movement has LOS=E for the 2025 and 2035 AM peak hour. As shown in the summary table for the mitigated case, retiming the signal for the PM BUILD condition improves the intersection LOS and delays to better than pre-development conditions. Re-timing does not improve the LOS for the AM BUILD condition.

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

Synchro Results Summary Sheet

5: 98th Street & Central Blvd

2025 LVAM

Central Ave.

98th St.

Signalized

Central Ave. / 98th St.	EB (Central Ave.)			WB (Central Ave.)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2	1	2	2	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	204	293	34	157	229	144	102	1,018	428	85	314	110
V/C Ratio	0.79	0.60		0.75	0.53		0.14	0.50		0.41	0.21	
Level-of-Service	E	D		E	D		B	B		C	C	
Control Delay (Seconds)	61.2	53.2	0.0	63.8	53.8	0.0	17.4	17.2	0.0	28.8	23.8	0.0
Intersection LOS	**C - 33.2**											
V/C Ratio	204	305	34	175	239	156	102	1,018	450	99	314	110
V/C Ratio	0.79	0.65		0.77	0.55		0.14	0.50		0.47	0.21	
Level-of-Service	E	D		E	D		B	B		C	C	
Control Delay (Seconds)	61.2	54.2	0.0	66.1	54.0	0.0	17.4	17.2	0.0	29.3	23.8	0.0
Intersection LOS	**C - 33.9**											
PM Peak Hour												
NO BUILD VOLUMES	187	263	85	437	462	153	47	555	360	144	725	119
V/C Ratio	0.75	0.51		1.04	0.67		0.10	0.35		0.54	0.60	
Level-of-Service	D	D		F	D		C	C		C	C	
Control Delay (Seconds)	51.8	43.7	0.0	88.2	41.2	0.0	27.1	20.0	0.0	32.9	31.8	0.0
Intersection LOS	**D - 42.2**											
BUILD VOLUMES	187	275	85	458	474	167	47	555	381	157	725	119
V/C Ratio	0.75	0.54		1.09	0.69		0.10	0.35		0.59	0.60	
Level-of-Service	D	D		F	D		C	C		D	C	
Control Delay (Seconds)	51.8	43.9	0.0	103.0	41.4	0.0	27.1	20.0	0.0	35.2	31.8	0.0
Intersection LOS	**D - 45.0**											
Mitigated Lane Geometry	2	2	1	2	2	1	1	2	1	1	2	1
Re-time signal												
BUILD VOLUMES	187	275	85	458	474	167	47	555	381	157	725	119
V/C Ratio	0.73	0.54		0.83	0.58		0.12	0.41		0.51	0.55	
Level-of-Service	E	D		D	D		C	C		C	C	
Control Delay (Seconds)	55.5	44.8	0.0	48.2	37.8	0.0	29.8	25.5	0.0	30.4	28.9	0.0
Intersection LOS	**D - 36.1**											

Synchro Results Summary Sheet

5: 98th Street & Central Blvd

2035 LVAM

Central Ave. / 98th St.	EB (Central Ave.)			WB (Central Ave.)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2	1	2	2	1	1	2	1	1	2	1
AM Peak Hour												
NO BUILD VOLUMES	242	348	40	186	272	171	121	1,210	509	101	373	131
V/C Ratio	0.82	0.70		0.79	0.63		0.18	0.61		0.60	0.25	
Level-of-Service	E	D		E	D		B	B		D	C	
Control Delay (Seconds)	61.6	54.0	0.0	67.4	54.7	0.0	18.7	20.0	0.0	35.3	24.3	0.0
Intersection LOS	**D - 35.1**											
BUILD VOLUMES	242	360	40	204	282	183	121	1,210	531	115	373	131
V/C Ratio	0.82	0.76		0.80	0.65		0.18	0.61		0.68	0.25	
Level-of-Service	E	E		E	D		B	B		D	C	
Control Delay (Seconds)	61.6	55.1	0.0	69.6	54.9	0.0	18.7	20.0	0.0	43.9	24.3	0.0
Intersection LOS	**D - 36.1**											
PM Peak Hour												
NO BUILD VOLUMES	222	312	101	519	549	181	55	660	428	171	862	141
V/C Ratio	0.78	0.61		1.23	0.84		0.13	0.41		0.71	0.71	
Level-of-Service	D	D		F	D		C	C		D	C	
Control Delay (Seconds)	52.4	44.5	0.0	155.0	43.6	0.0	31.3	20.9	0.0	43.8	34.7	0.0
Intersection LOS	**D - 54.6**											
BUILD VOLUMES	222	324	101	540	561	195	55	660	449	184	862	141
V/C Ratio	0.78	0.63		1.28	0.85		0.13	0.41		0.77	0.71	
Level-of-Service	D	D		F	D		C	C		D	C	
Control Delay (Seconds)	52.4	44.5	0.0	178.0	43.7	0.0	31.5	21.0	0.0	49.6	34.7	0.0
Intersection LOS	**E - 59.0**											
Mitigated Lane Geometry	2	2	1	2	2	1	1	2	1	1	2	1
Re-time signal												
Untitled Volumes	222	324	101	540	561	195	55	660	449	184	862	141
V/C Ratio	0.77	0.63		0.86	0.65		0.19	0.53		0.64	0.66	
Level-of-Service	E	D		D	D		D	C		C	C	
Control Delay (Seconds)	56.9	46.6	0.0	45.2	37.6	0.0	36.3	30.1	0.0	34.3	31.2	0.0
Intersection LOS	**D - 37.5**											

Intersection 5 – Queuing Analysis

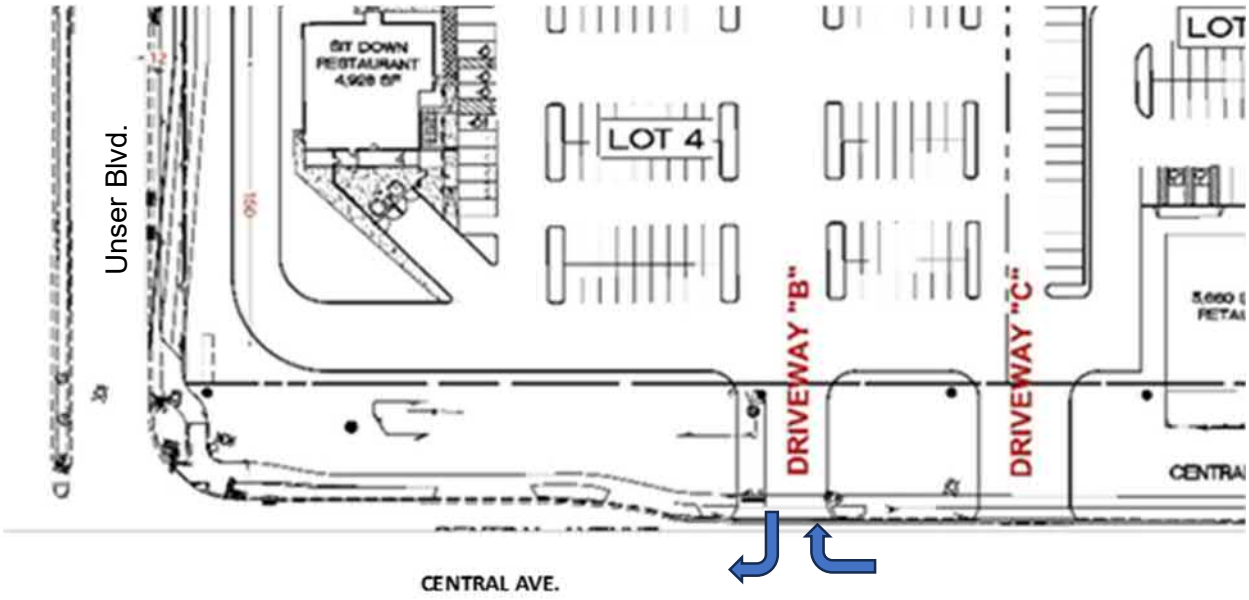
2025 and 2035 Queueing analysis indicates that storage capacity for the WBL and SBL lanes (BUILD condition) is inadequate and volume to capacity ratios (V/C's) exceed 1 for the WBL lane. Mitigating the intersection by re-timing the signal significantly improves queuing capacity and restores the V/C<1 for the WBL lane. Re-timing the signal causes the SBL queue length for the 2035 BUILD Mitigated condition to exceed the existing lane capacity by 73-ft (3 vehicles). But this does not occur for another 10 years and the benefit of re-timing the signal to the overall function of the intersection the intersection is significantly more beneficial than not re-timing the signal.

QUEUING ANALYSIS RESULTS

5: 98th Street & Central Blvd

2025 LVAM	2025	2035	
Central Ave.	WB (Central Ave.)	WB (Central Ave.)	SB (98th St.)
98th St.	L	L	L
Existing Lane Geometry	2	2	1
AM Peak Hour			
NO BUILD VOLUMES	157	186	101
V/C Ratio	0.75	0.79	0.60
95th Percentile Queue (veh)	4.7	5.8	3.9
Queue Storage Ratio	0.59	0.73	0.98
Existing Queue Capacity (ft)	200	200	100
Additional Queue Length Required (ft)	0	0	0
V/C Ratio	175	204	115
V/C Ratio	0.77	0.80	0.68
95th Percentile Queue (veh)	5.4	6.5	4.8
Queue Storage Ratio	0.68	0.81	1.20
Existing Queue Capacity (ft)	200	200	100
Additional Queue Length Required (ft)	0	0	20
Mitigated- Retime Signal	2	2	1
Untitled Volumes	175	204	115
V/C Ratio	0.76	0.79	0.68
95th Percentile Queue (veh)	5.6	6.7	5.1
Queue Storage Ratio	0.70	0.84	0.64
Existing Queue Capacity (ft)	200	200	200
Additional Queue Length Required (ft)	0	0	0
PM Peak Hour			
NO BUILD VOLUMES	437	519	171
V/C Ratio	1.04	1.23	0.71
95th Percentile Queue (veh)	11.3	15.1	3.6
Queue Storage Ratio	1.41	1.89	0.90
Existing Queue Capacity (ft)	200	200	100
Additional Queue Length Required (ft)	83	178	0
BUILD VOLUMES	458	540	184
V/C Ratio	1.09	1.28	0.77
95th Percentile Queue (veh)	12.3	16.9	5.0
Queue Storage Ratio	1.54	2.11	1.25
Existing Queue Capacity (ft)	200	200	100
Additional Queue Length Required (ft)	108	223	25
Mitigated - Re-time Signal	2	2	1
BUILD VOLUMES	458	540	184
V/C Ratio	0.83	0.86	0.64
95th Percentile Queue (veh)	9.0	8.7	6.9
Queue Storage Ratio	1.13	1.09	1.73
Existing Queue Capacity (ft)	200	200	100
Additional Queue Length Required (ft)	25	18	73

6 - Central Ave / Driveway B (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.

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

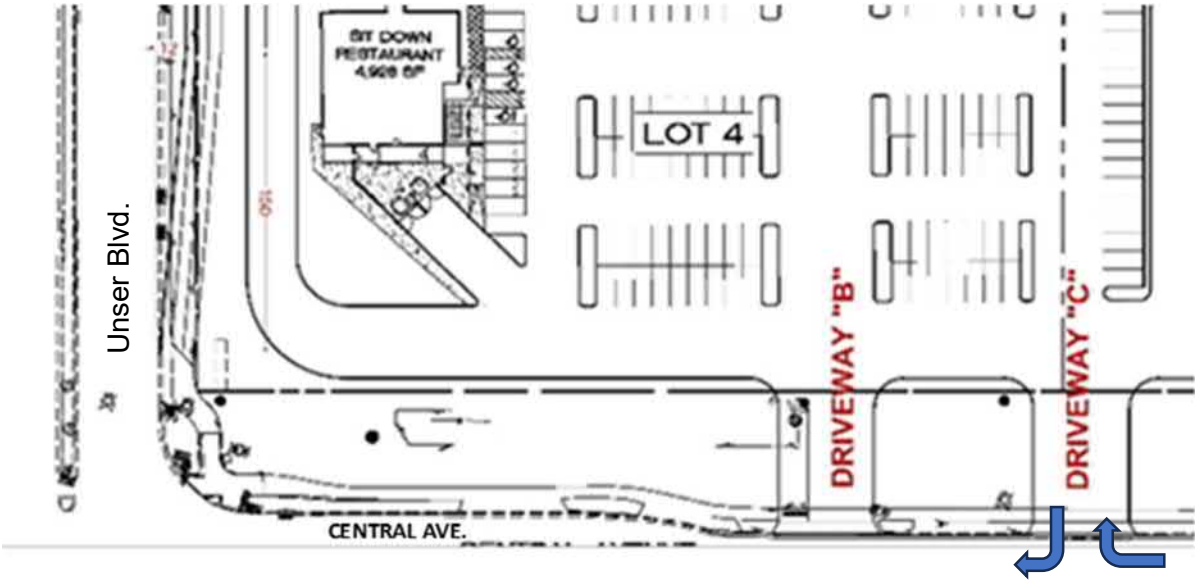
Central Ave. / Driveway 'B'	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'B')			SB (Driveway 'B')		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,622			396	8				0		6
V/C Ratio												0.01
Level-of-Service												A
Control Delay (Seconds)												9.5
Intersection LOS	**A-9.5**											
95th Percentile Queue (veh)												0.0
PM Peak Hour												
BUILD VOLUMES	0	1,334			1,592	10				0		9
V/C Ratio												0.03
Level-of-Service												C
Control Delay (Seconds)												16.4
Intersection LOS	**C-16.4**											
95th Percentile Queue (veh)												0.1

6: Central Ave. & Driveway 'B'

2035 LVAM

Central Ave. / Driveway 'B'	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'B')			SB (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	2,170			510	8				0		6
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	1,334			2,131	10				0		9
V/C Ratio												0.04
Level-of-Service												C
Control Delay (Seconds)												22.5
Intersection LOS	**C-22.5**											

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



Refer to Appendix A-116 thru A-119 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 results of the capacity analysis for 2025 and 2035 in the following tables.

7: Central Ave & Driveway'C'

2025 LVAM

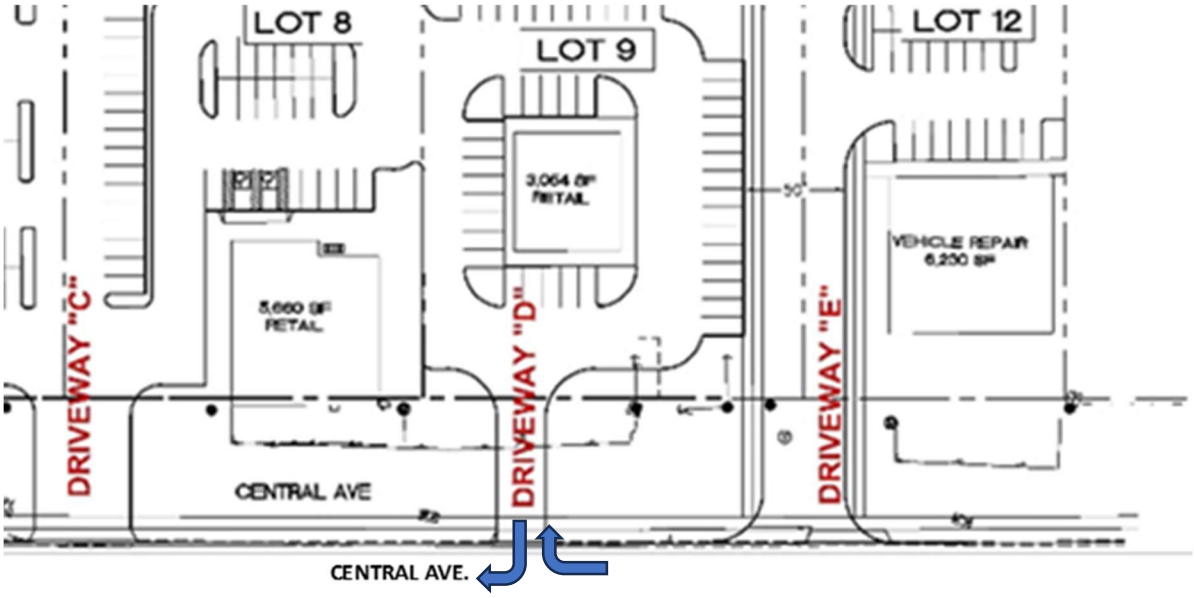
Central Ave. / Driveway 'C'	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'C')			SB (Driveway 'C')		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	2			2>	0				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,622			397	9				0		8
V/C Ratio												0.01
Level-of-Service												A
Control 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. / Driveway 'C'	EB (Central Ave.)			WB (Central Ave.)			NB (Driveway 'C')			SB (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	1,334			2,122	20				0		20
V/C Ratio												0.09
Level-of-Service												C
Control Delay (Seconds)												23.5
Intersection LOS	**C-23.5**											

8 - Central Ave / Driveway D (Unsignalized – Right-in, right-out ONLY)



Refer to Appendix A-120 thru A-123 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.

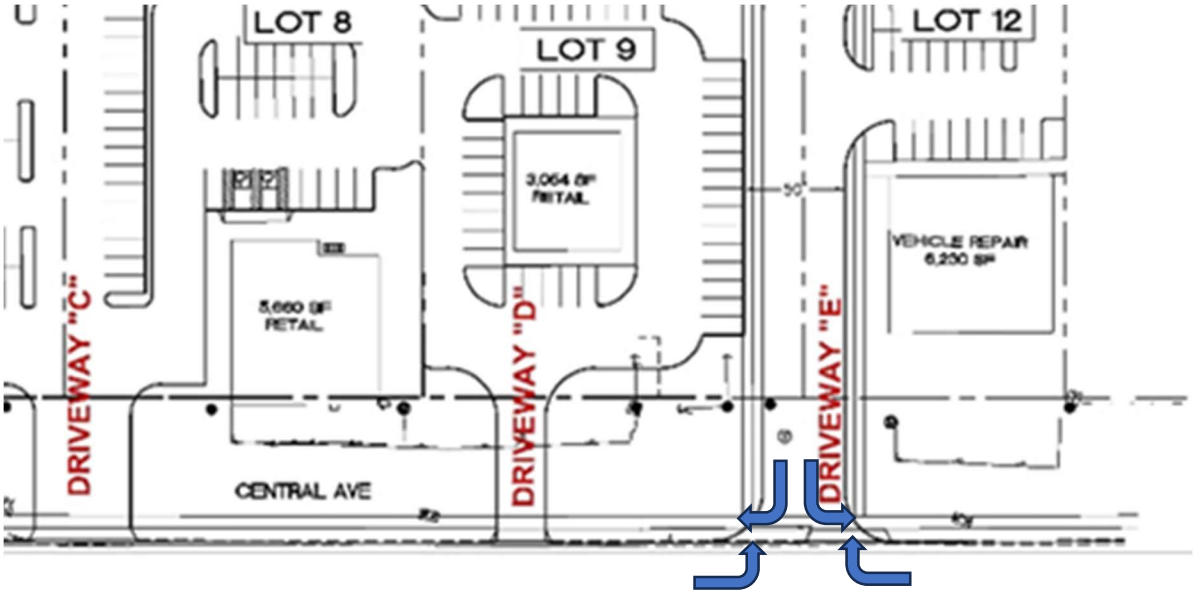
No deceleration lanes are warranted.

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

8: Central Ave. & Driveway 'D'												
2025 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				0		1
AM Peak Hour												
BUILD VOLUMES	0	1,622			404	12				0		8
V/C Ratio												0.01
Level-of-Service												A
Control Delay (Seconds)												9.6
Intersection LOS	**A-9.6**											
PM Peak Hour												
BUILD VOLUMES	0	1,008			1,597	15				0		12
V/C Ratio												0.04
Level-of-Service												C
Control Delay (Seconds)												16.6
Intersection LOS	**C-16.6**											

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				0		1
AM Peak Hour												
BUILD VOLUMES	0	2,170			518	12				0		8
V/C Ratio												0.01
Level-of-Service												B
Control Delay (Seconds)												10.0
Intersection LOS	**B-10**											
PM Peak Hour												
BUILD VOLUMES	0	1,334			2,136	15				0		12
V/C Ratio												0.06
Level-of-Service												C
Control Delay (Seconds)												22.9
Intersection LOS	**C-22.9**											

9 - Central Ave / Driveway E (Unsignalized – Full Access)



Refer to Appendix A-124 thru A-127 for Synchro analysis reports.

2025 and 2035 LOS Analysis indicates that LOS is not acceptable (LOS=F) for the SBL movement. Since the southbound approach of this intersection is an unsignalized commercial driveway and traffic volumes indicate that a signal is not likely warranted, no mitigation is recommended.

2025 and 2035 Queueing analysis indicates that storage capacity for the SBL lane (BUILD condition) is inadequate and the volume to capacity ratio (V/C) exceed 1. Mitigating the intersection by extending the on-site queue capacity from 125-ft to 250-ft would provide adequate capacity.

Due to the long queue and delays for traffic turning left from Driveway E (south to east) it is expected that more on-site traffic will use the signalized driveway on Unser Blvd. (Driveway A) than predicted for the model. For Driveway E, this would improve delays and the V/C ratio.

No deceleration lanes are warranted.

9: Central Ave. & Driveway 'E'

2025 LVAM

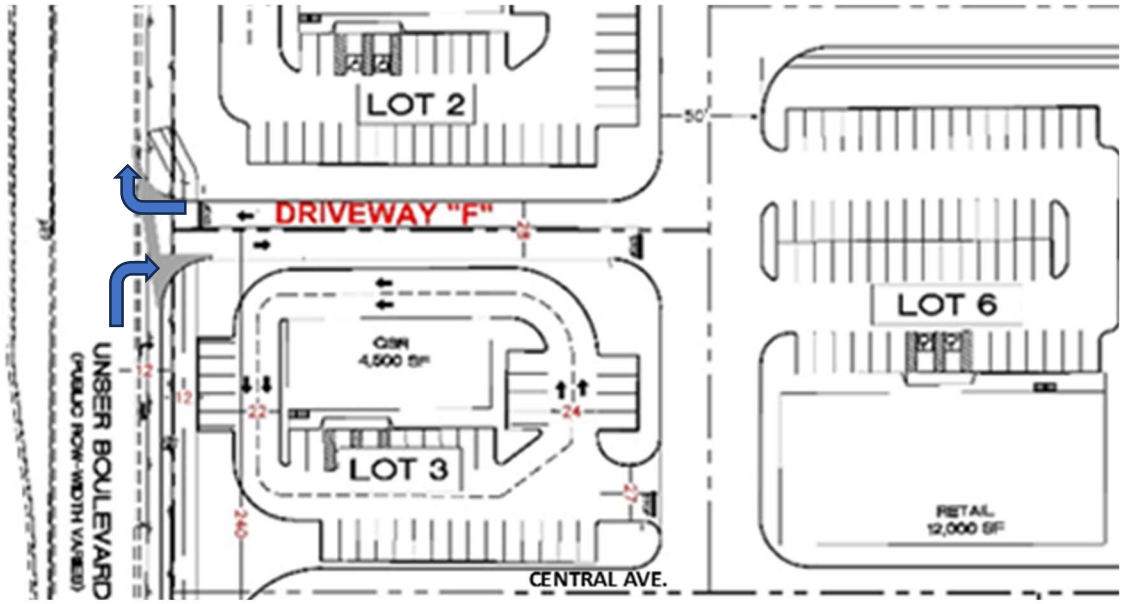
Cental Ave.	EB (Cental Ave.)			WB (Cental Ave.)			NB (Driveway 'E')			SB (Driveway 'E')		
Driveway 'E'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2			2>	0				1>		0
AM Peak Hour												
BUILD VOLUMES	104	1,518			369	21				76		26
V/C Ratio	0.09									0.23		
Level-of-Service	A									C		
Control Delay (Seconds)	8.4									15.2		
Intersection LOS	**C-15.2**											
PM Peak Hour												
BUILD VOLUMES	76	932			1,584	31				67		42
V/C Ratio	0.19									0.72		
Level-of-Service	C									F		
Control Delay (Seconds)	16.3									74.2		
Intersection LOS	**F-74.2**											

9: Central Ave. & Driveway 'E'

2035 LVAM

Cental Ave.	EB (Cental Ave.)			WB (Cental Ave.)			NB (Driveway 'E')			SB (Driveway 'E')		
Driveway 'E'	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2			2>	0				1>		0
AM Peak Hour												
BUILD VOLUMES	104	2,066			483	21				76		26
V/C Ratio	0.10									0.41		
Level-of-Service	A									D		
Control Delay (Seconds)	8.8									29.5		
Intersection LOS	**D-29.5**											
PM Peak Hour												
BUILD VOLUMES	76	1,258			2,087	31				67		42
V/C Ratio	0.30									1.63		
Level-of-Service	D									F		
Control Delay (Seconds)	25.5									443.0		
Intersection LOS	**F-443**											

10 - Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY)



Refer to Appendix A-128 thru A-131 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 results of the capacity analysis for 2025 and 2035 in the following tables.

10:Driveway 'F' & Unser Blvd.												
2025 LVAM												
Driveway 'F'	EB (Driveway 'F')			WB (Driveway 'F')			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		3	1	0	2	
AM Peak Hour												
BUILD VOLUMES				0		41		1,772	95	0	1,116	
V/C Ratio						0.17						
Level-of-Service						C						
Control Delay (Seconds)						22.6						
Intersection LOS	**C-22.6**											
PM Peak Hour												
BUILD VOLUMES				0		43		1,698	86	0	1,568	
V/C Ratio						0.17						
Level-of-Service						C						
Control Delay (Seconds)						21.6						
Intersection LOS	**C-21.6**											

10:Driveway 'F' & Unser Blvd.												
2035 LVAM												
Driveway 'F'	EB (Driveway 'F')			WB (Driveway 'F')			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		3	1	0	2	
AM Peak Hour												
BUILD VOLUMES				0		41		2,390	95	0	1,514	
V/C Ratio						0.27						
Level-of-Service						E						
Control Delay (Seconds)						37.2						
Intersection LOS	**E-37.2**											
PM Peak Hour												
BUILD VOLUMES				0		43		2,289	86	0	2,128	
V/C Ratio						0.26						
Level-of-Service						D						
Control Delay (Seconds)						34.3						
Intersection LOS	**D-34.3**											

Deceleration 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.). At this intersection, the development is responsible for constructing a new northbound left (NBL) 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. 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	114	Yes	300/150	50	117	Yes	240	300/150
Driveway 'B'	Central Ave	40	40	0	No	-	50	10	No		-
Driveway 'C'	Central Ave.	40	40	0	No	-	50	20	No	-	-
Driveway 'D'	Central Ave.	40	40	0	No	-	50	15	No	-	-
Driveway 'E'	Central Ave.	40	40	0	No	-	50	31	No		-
Driveway 'F'	Unser Blvd.	40	40	0	No	-	50	43	No	-	-

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

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 Serracino 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-132 thru A-134.

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 Serracino Pl. and Central Ave. intersections is only 935-ft., centerline to centerline. Therefore, approval of the proposed signal would require a waiver of the COA DPM minimum standard spacing by the City of Albuquerque.

Because justification of a new signal is dependent on traffic volumes generated by the development, it is recommended that installation of the signal be delayed until volumes at the intersection approach volumes used in the analysis or traffic conditions become problematic due to delays.

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 accesses are proposed for the site which is within the allowable criteria. See Table 7.4.46 from the COA DPM below.

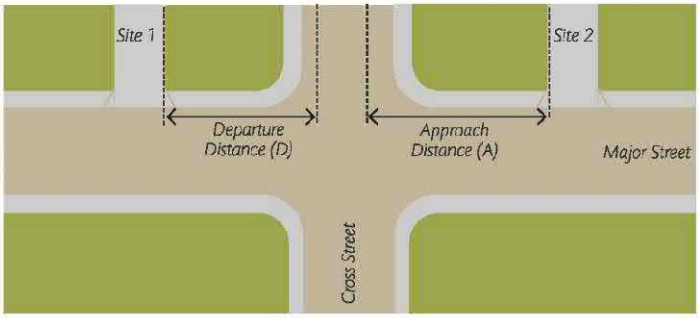


TABLE 7.4.45 **Minimum Distance Between Commercial Site Access and Intersection**

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

Impacts and Recommendations

In summary, the proposed Central & Unser Commercial Development will have a moderate adverse impact to the adjacent transportation system with implementation of the recommended mitigation measures presented in this report. A summary of the impacts and recommendations based on the results of the analysis, are stated below.

Impacts

1. **Unser Blvd / Bridge Blvd (Signalized)**
   Minimal Impact by Development with mitigation
   - The Intersection Level of Service (LOS) remains the same from the NO BUILD to BUILD conditions. LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 2 seconds per vehicle.
   - LOS= D or better for all movements in the intersection except for the eastbound left turn movement (EBL) which is LOS=E, however, this is an existing condition, and the development does not contribute traffic to this movement.
   - Storage capacity is inadequate in 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 EBR and WBL queue capacities are only exceeded by less than 1-vehicle length during the **2035** AM and PM peak hours.

2. **Unser Blvd / Central Ave. (Signalized)**
   Moderate Impact by Development with mitigation
   - Seven movements (EBL, EBT, EBR, WBL, WBR, NBL, and SBL) have NO BUILD LOS= E or F so any additional traffic from new development has a significant impact on LOS and delays.
   - Intersection LOS degrades from LOS=D (NO BUILD) to LOS=E (BUILD) during the AM and PM peak hours with the additional traffic generated by the development.
   - Delays for individual movements become worse by 8 to 20 seconds per vehicle.
   - Adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, improves the intersection LOS and delays to better than pre-development conditions.
   - Storage capacity for the EBL, EBR, WBR, NBR, and SBR lanes (BUILD and NO BUILD) is inadequate and volume to capacity ratios (V/C's) exceed 1, indicating a high level of congestion at this intersection.

- Mitigating the intersection by adding a third SBT lane, converting the outside NBT lane to a northbound thru-right (NBT/R) lane, and retiming the signal, significantly improves queuing capacity and V/C<1 for all lanes.

3. **Unser Blvd / Sarracino Pl. (Driveway A) (Existing Unsignalized, Proposed Signalized)**
   Minimal Impact by Development with mitigation.
   - Intersection LOS from the NO BUILD to BUILD condition remains at LOS=F for the side street traffic (EB & WB).
   - The SBL turn movement LOS degrades from LOS=D to LOS=F with the additional traffic generated by the development.
   - Poor LOS for these low volume movements indicates that the high volume of traffic on Unser Blvd. creates inadequate gaps for these vehicles to enter the stream of traffic on Unser Blvd.
   - Adding a second WBL lane and signalizing the intersection improves the LOS of the intersection for the 2025 and 2035 AM and PM conditions to LOS=A or B.
   - 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.
   - 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.
   - Mitigating the intersection by adding a WBL lane and signalizing the intersection improves queuing capacity and V/C<1 for all lanes.
   - **Assuming this intersection becomes signalized, the City of Albuquerque Deceleration Warrant Analysis** indicates that a new northbound left (NBL) deceleration lane is warranted with a minimum storage capacity of 240-ft not including a 300/150 transition.
   - A southbound left turn lane with 115-ft of queue capacity is also warranted but the existing SBL lane meets the warrant and has adequate capacity for anticipated queues.
   - 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.
   - Since the distance between the Serracino Pl. and Central Ave. intersections is only 935-ft., centerline to centerline, approval of the proposed signal would require a waiver of the COA DPM minimum standard spacing (1320 ft.) by the City of Albuquerque.

4. **Unser Blvd / Bluewater Rd. (Signalized)**
   Minimal Impact by Development with mitigation
   - Intersection LOS remains at LOS=C or better for the NO BUILD and BUILD conditions and delays become worse by less than 1 second per vehicle for 2025 and by less than 5 seconds per vehicle for 2035.

- LOS remains the same from the NO BUILD to BUILD condition for all movements in the intersection except the NBT during 2035 AM peak hour when the LOS degrades from LOS=D to LOS=F and PM peak hour when the LOS degrades from LOS=C to LOS=D
- Re-timing the signal improves the intersection LOS to better than NO BUILD conditions.
- Storage capacities are adequate except for the EBL, WBL, and WBR lanes for the NO BUILD and BUILD conditions.
- By 2035 V/C's exceed 1 for the EBL, WBT, and SBL lanes for the BUILD condition indicating a high level of congestion.
- Mitigating the intersection by extending the EBL lane from 90-ft to 250-ft and re-timing the signal improves overall queuing capacity.
- The WBR queue length becomes slightly worse with signal retiming which will cause the WBR lane queue to periodically spill over into the outside WBT lane. To resolve this issue, the existing WBR turn lane could be extended past the driveway east of the intersection (access to UPS) to create a continuous right turn lane or a second right-turn lane could be constructed. However, since the development does not contribute traffic to this movement, no recommendation is made on behalf of the development.

5. <u>Central Ave / 98th St. (Signalized)</u>

Minimal Impact by Development

- Intersection LOS remains acceptable (D or better) for all conditions except the 2035 PM BUILD condition when the LOS degrades to LOS=E for the BUILD condition.
- LOS for individual movements remain the same from the NO BUILD to BUILD conditions.
- WBL turn movement has an unacceptable LOS (E or F) for all conditions.
- EBL turn movement has LOS=E for the 2025 and 2035 AM peak hour.
- Retiming the signal improves the intersection LOS and delays to better than pre-development conditions.
- Storage capacity for the WBL and SBL lanes (BUILD condition) is inadequate and volume to capacity ratios (V/C's) exceed 1 for the WBL lane.
- Mitigating the intersection by retiming the signal for the PM BUILD condition significantly improves queuing capacity and restores the V/C<1 for the WBL lane.
- Re-timing the signal causes the queue length in the SBL lane to exceed the existing lane capacity by 73-ft (3 vehicles). But this does not occur for another 10 years and the benefit of re-timing the signal to the overall function of the intersection the intersection is significantly more beneficial than not re-timing the signal.
- No improvement was shown by retiming the signal for the AM BUILD condition.

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

- LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
- No deceleration lanes are warranted.

7. **Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)**
   - LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
   - No deceleration lanes are warranted.

8. **Central Ave / Driveway D (Unsignalized – Right-in, right-out ONLY)**
   - LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
   - No deceleration lanes are warranted.

9. **Central Ave / Driveway E (Unsignalized – Full Access)**
   - LOS is not acceptable (LOS=F) for the SBL movement. Since the southbound approach of this intersection is an unsignalized commercial driveway and traffic volumes indicate that a traffic signal (the preferred mitigation) is not likely warranted, no mitigation is recommended.
   - Storage capacity for the SBL lane (BUILD condition) is inadequate and the volume to capacity ratio (V/C) exceed 1. Mitigating the intersection by extending the on-site queue capacity from 125-ft to 250-ft would provide adequate capacity.
   - Due to the long queue and delays for traffic turning left from the driveway (south to east) it is expected that more on-site traffic will use the signalized driveway on Unser Blvd. (Driveway A) than predicted for the model. For Driveway E, this would improve delays and the V/C ratio.
   - No deceleration lanes are warranted.

10. **Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY**)
    - LOS and delays are acceptable (LOS=D or better) for all movements and existing queue capacities are sufficient.
    - No deceleration lanes are warranted.

Recommendations

1. **Unser Blvd / Bridge Blvd (Signalized) – *See Exhibit 1***
   No mitigation is recommended on behalf of the development; however, the COA should consider re-striping the West Leg of intersection to extend the EBL lane storage from 90' to 330'. The development does not contribute traffic to this movement.

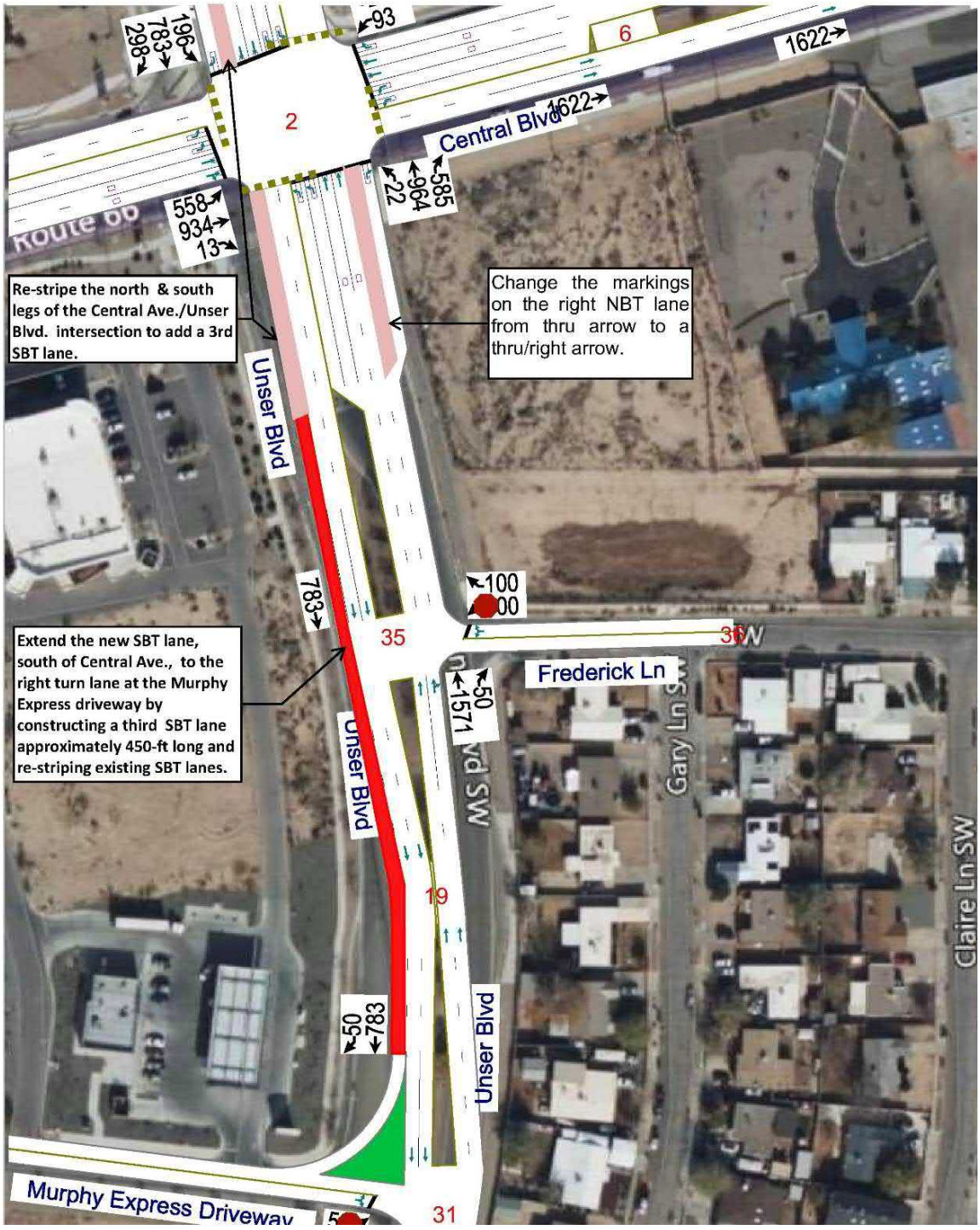
Recommended Mitigated Geometry

EXHIBIT 1
BRIDGE BLVD./UNSER BLVD. MITIGATION RECOMMENDATIONS
2021007 W. CENTRAL COMMERCIAL DEVELOPMENT

2. **Unser Blvd / Central Ave. (Signalized) – *See Exhibit 2***
   - Re-stripe the north & south legs of the Central Ave./Unser Blvd. intersection to add a 3rd SBT lane.
   - Extend the new SBT lane, south of Central Ave., to the right-turn lane at the Murphy Express driveway by constructing a third SBT lane 450-ft long and re-striping existing SBT lanes.
   - Change the markings on the right NBT lane from thru arrow to a thru/right arrow.
   - Consider re-timing the signal, as necessary.

Recommended Mitigated Geometry

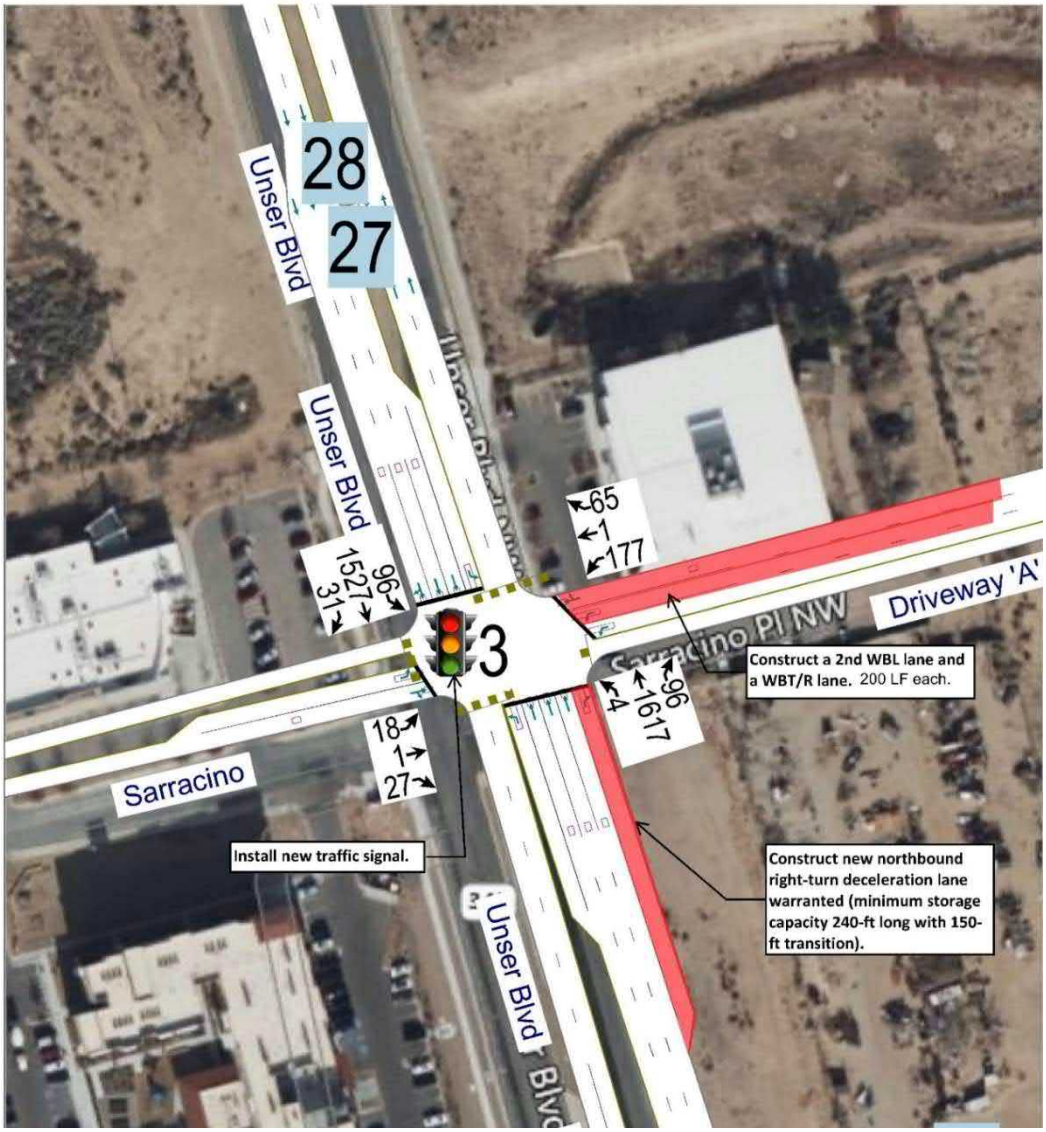
EXHIBIT 2
CENTRAL AVE./UNSER BLVD. MITIGATION RECOMMENDATIONS
2021007 W. CENTRAL COMMERCIAL DEVELOPMENT



3. **Unser Blvd / Sarracino Pl. (Driveway A) (Existing Unsignalized, Proposed Signalized) – See *Exhibit 3***
   - Construct a new northbound right-turn deceleration lane with 240-ft of queue storage and a 300/150 transition.
   - Replace the stop sign control with a new traffic signal when volumes at the intersection approach BUILD volumes or traffic conditions become problematic due to delays and obtain a waiver of COA Development Process Manual (DPM) minimum access spacing requirements from the City of Albuquerque.
   - Construct a second westbound left turn lane and a westbound thru/right lane, 200 lineal feet each.

Recommended Mitigated Geometry

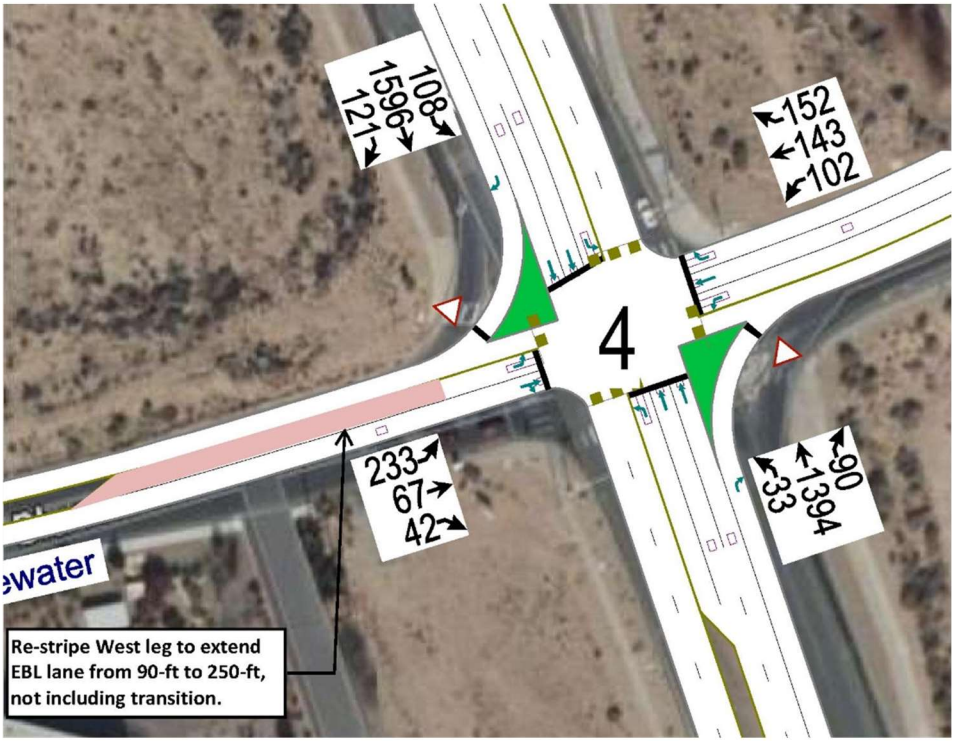
EXHIBIT 3
SARRACINO PL.-DRIVEWAY 'A'/UNSER BLVD. MITIGATION RECOMMENDATIONS
2021007 W. CENTRAL COMMERCIAL DEVELOPMENT



4. **Unser Blvd / Bluewater Rd. (Signalized) – *See Exhibit 4***
   - Re-stripe the west leg of the intersection to extend the EBL lane from 90-ft to 250-ft.
   - Consider re-timing the signal.

Recommended Mitigated Geometry

EXHIBIT 4
BLUEWATER/UNSER BLVD. MITIGATION RECOMMENDATIONS
2021007 W. CENTRAL COMMERCIAL DEVELOPMENT



5. **Central Ave / 98th St. (Signalized)**
   Consider re-timing the signal.
6. **Central Ave / Driveway B (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
7. **Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
8. **Central Ave / Driveway D (Unsignalized – Right-in, right-out ONLY)**
   No mitigation recommended.
9. **Central Ave / Driveway E (Unsignalized – Full Access)**
   On-site queue capacity should be 250-ft minimum.
10. **Unser Blvd / Driveway F (Unsignalized – Right-in, right-out ONLY)**
    No mitigation recommended.

Appendix

SITE INFORMATION	
Zone Atlas Map/Vicinity Map	*A-1*
Proposed Site Plan	*A-2*
HISTORIC GROWTH RATE	
Historic Growth Rate Table and Graphs	*A-3 thru A-7*
SOCIOECONOMIC TRIP DISTRIBUTION	
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Portion of Futures 2040 Long Range Roadway System	*A-26*
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3 - Unser Blvd / Sarracino Pl. (Driveway A) (Existing: Unsignalized, Proposed: Signalized)	*A-78 thru A-89*
4 - Unser Blvd / Bluewater Rd. (Signalized)	*A-90 thru A-101*
5 - Central Ave / 98th St. (Signalized)	*A-102 thru A-111*
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7 - Central Ave / Driveway C (Unsignalized – Right-in, right-out ONLY)	*A-116 thru A-119*
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Signal Warrant Report	*A-133 & A-134*
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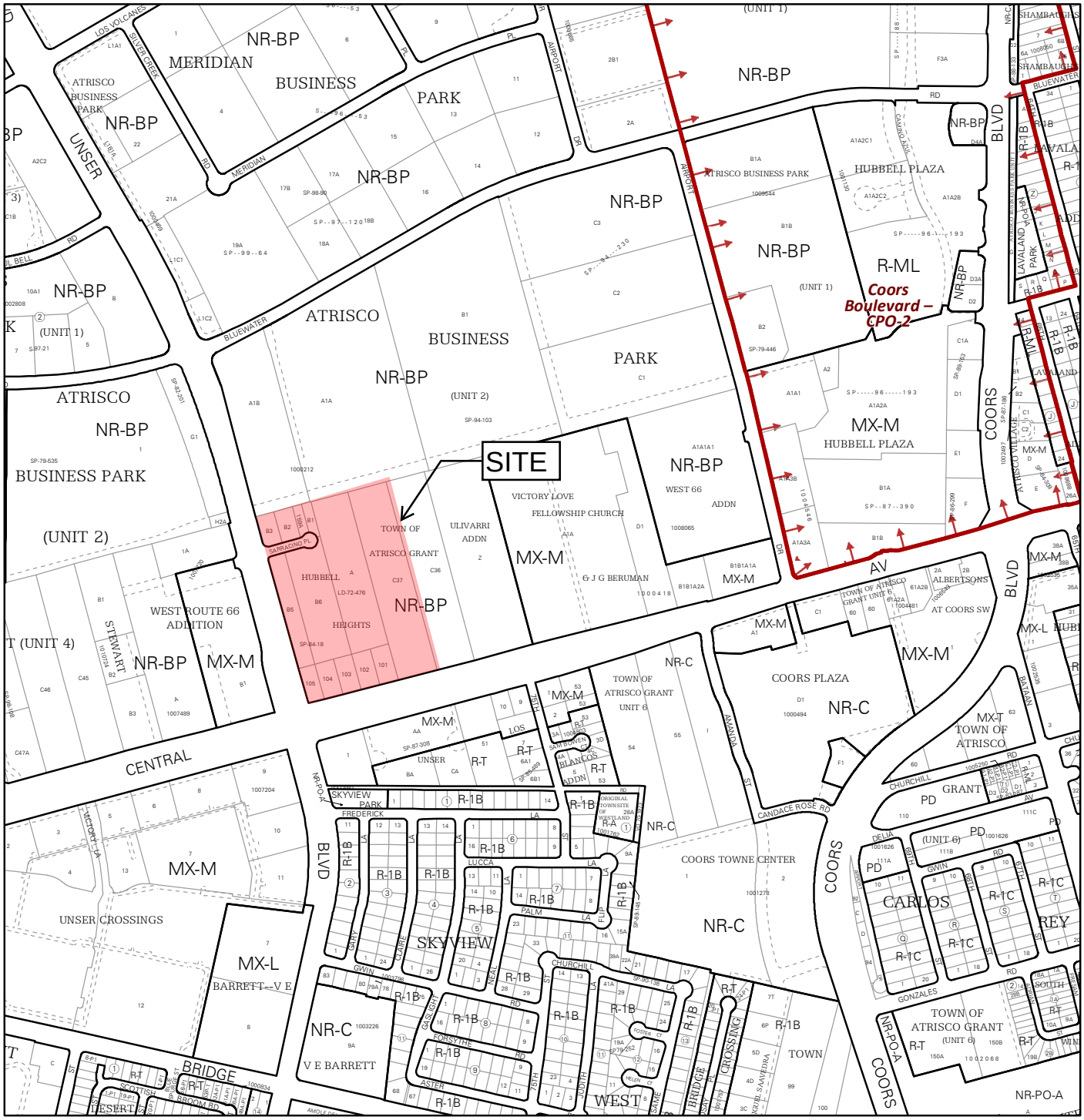
City of Albuquerque SCOPING FORM	*A-140 thru A-142*



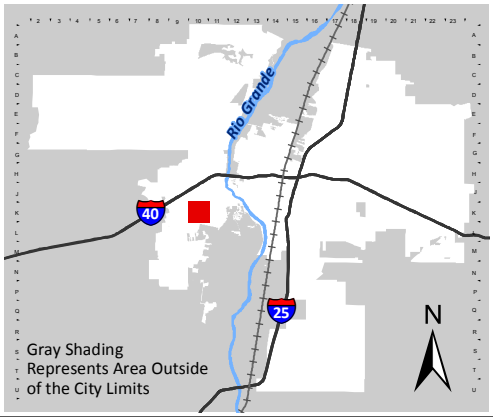
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

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).

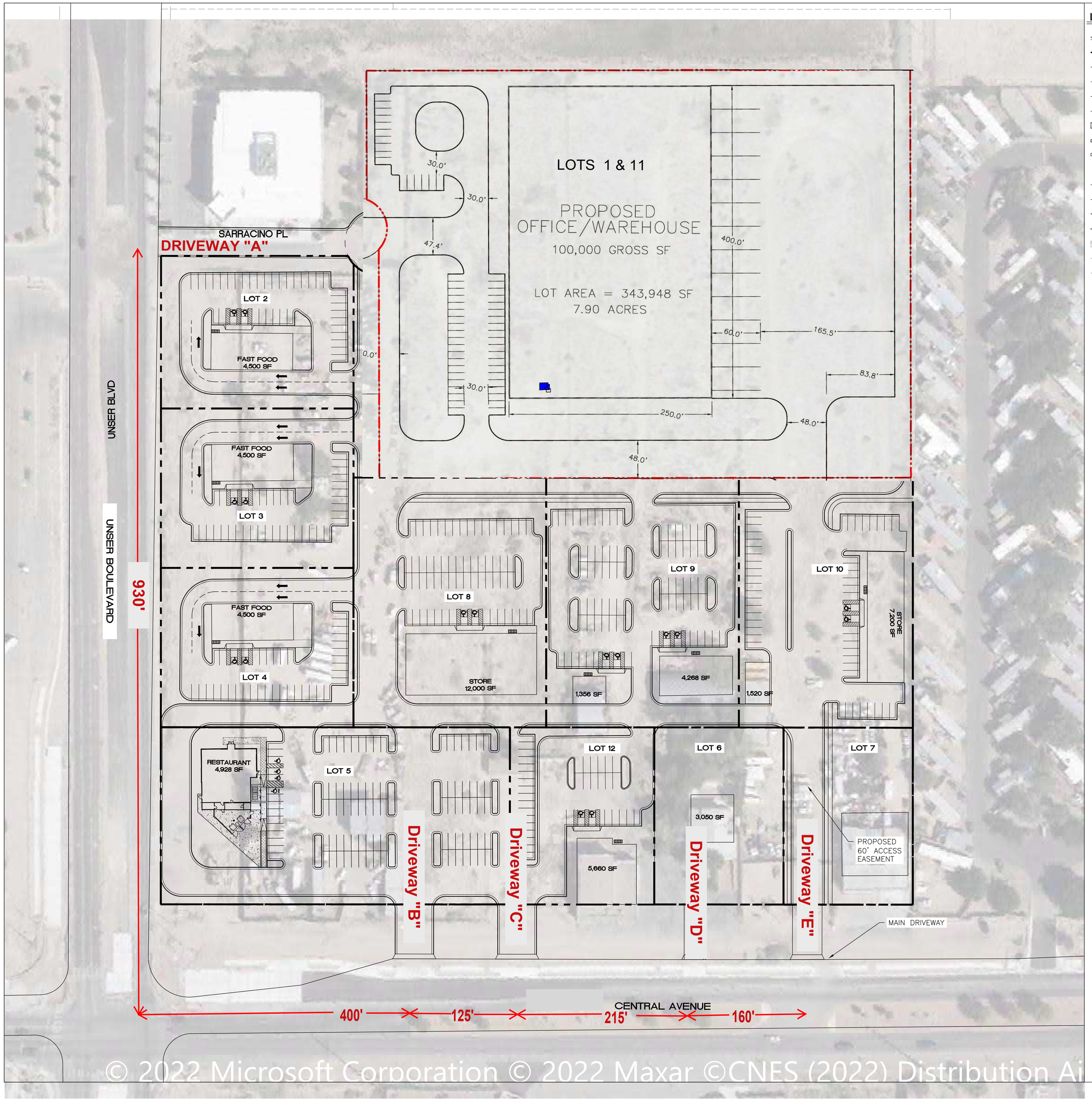


Zone Atlas Page:

K-10-Z

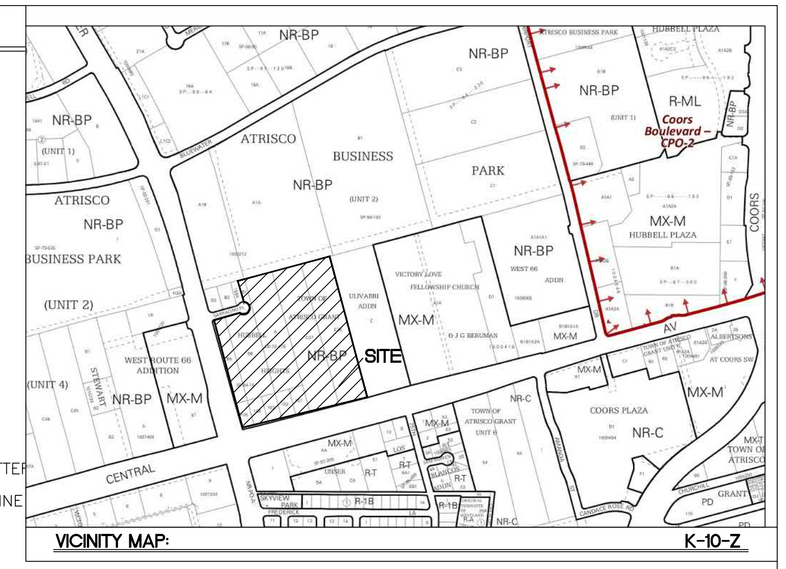
- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

0 250 500 1,000 Feet



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
30 0 30 30
(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

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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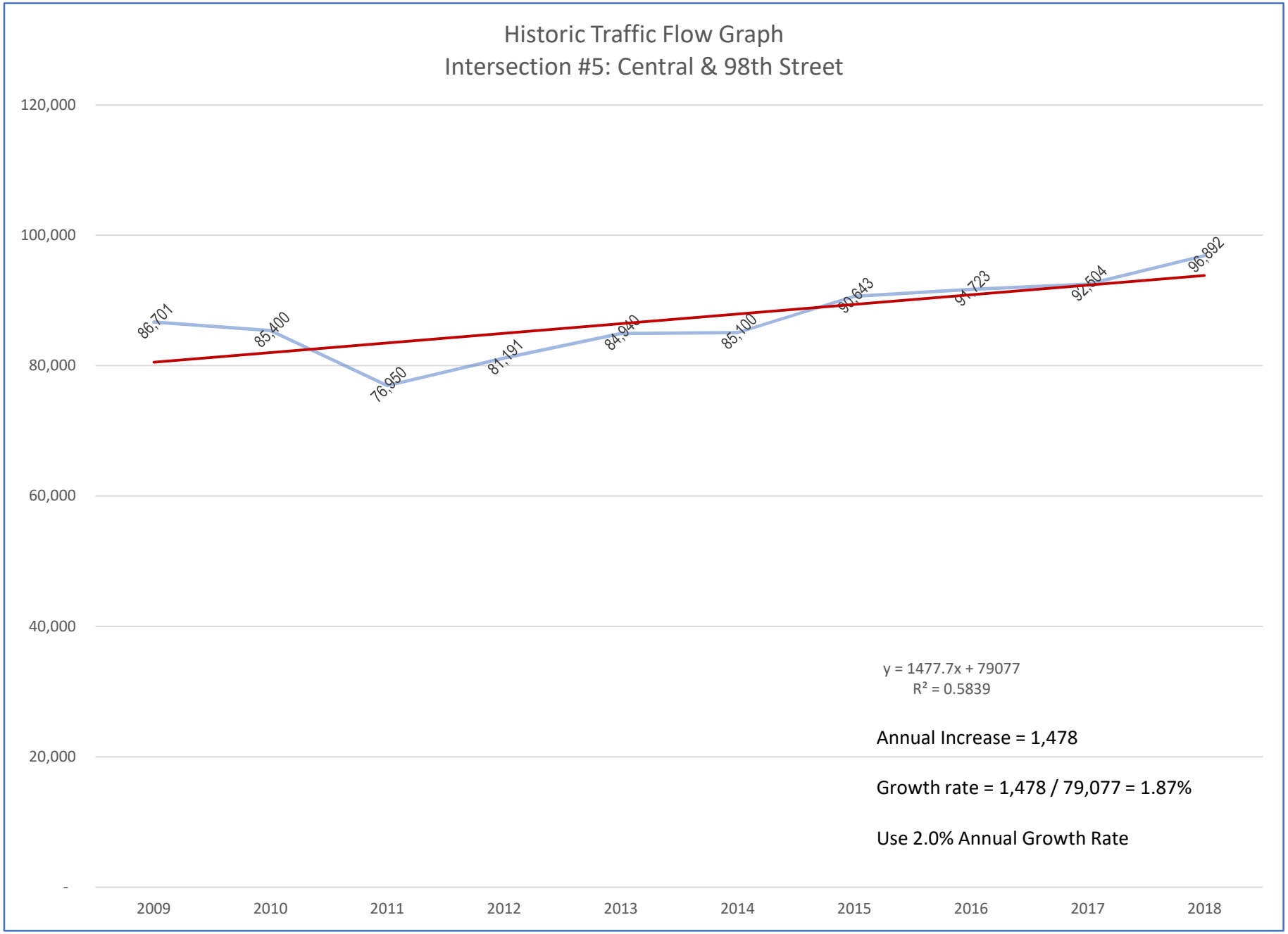
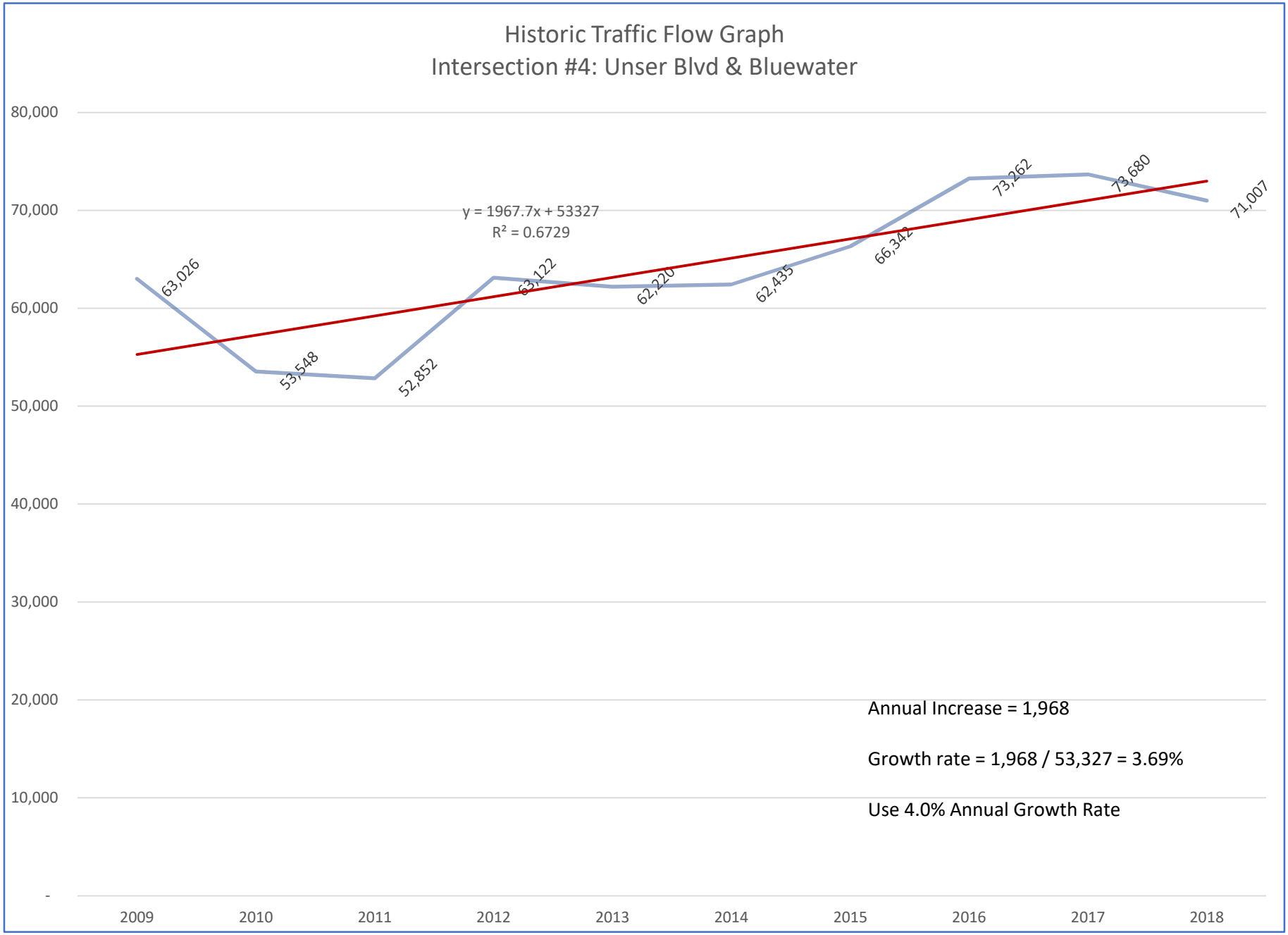
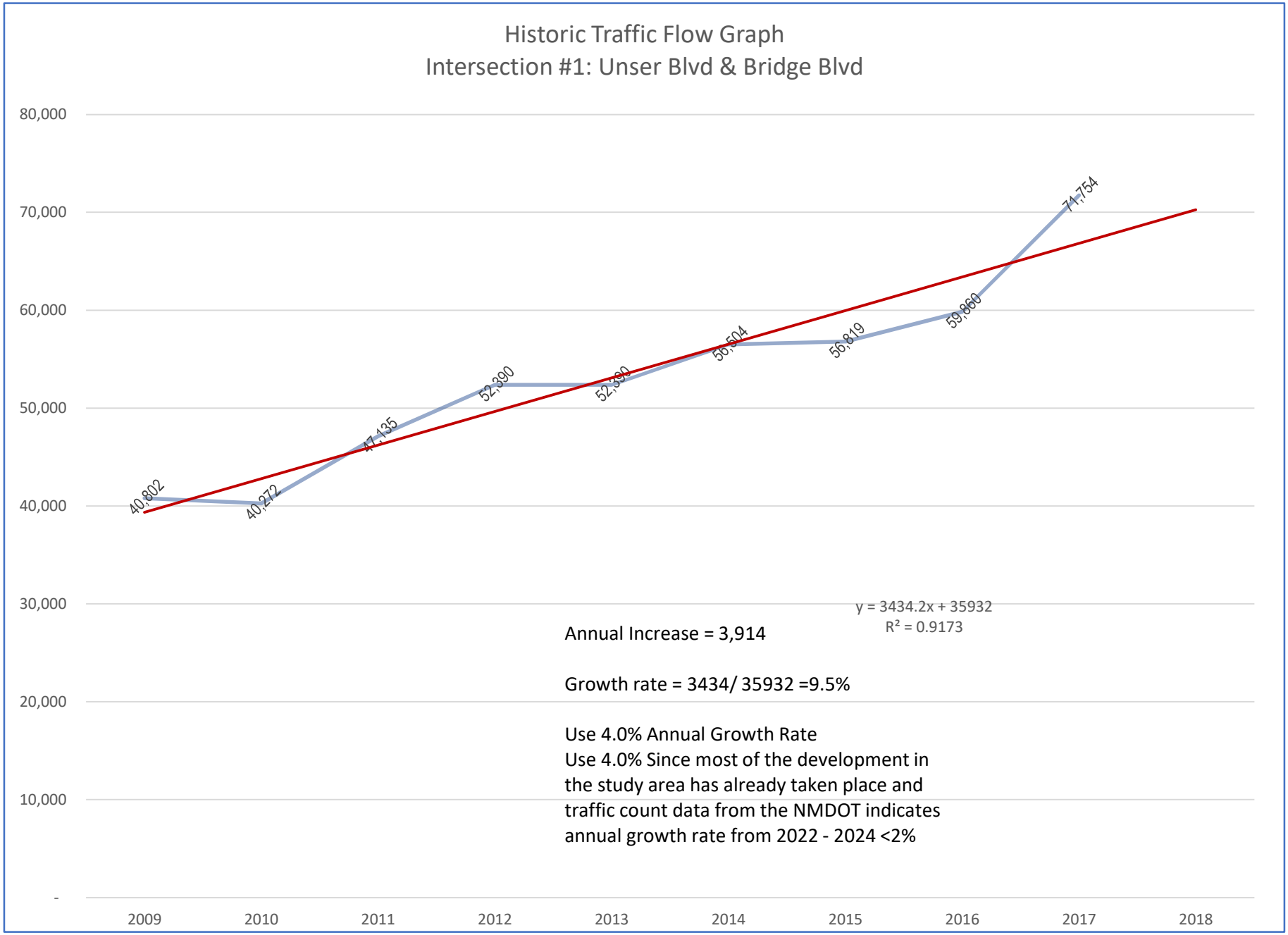
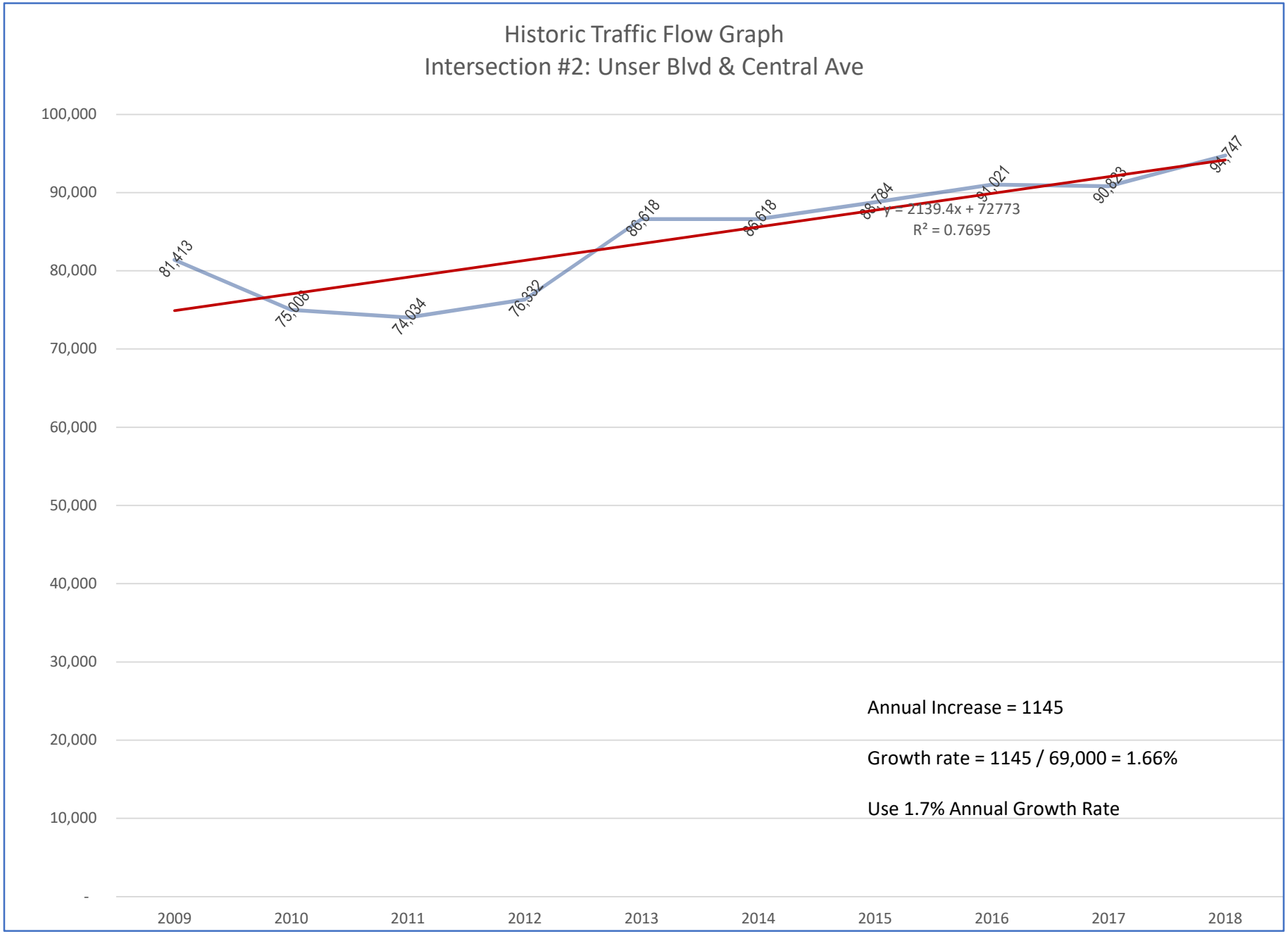
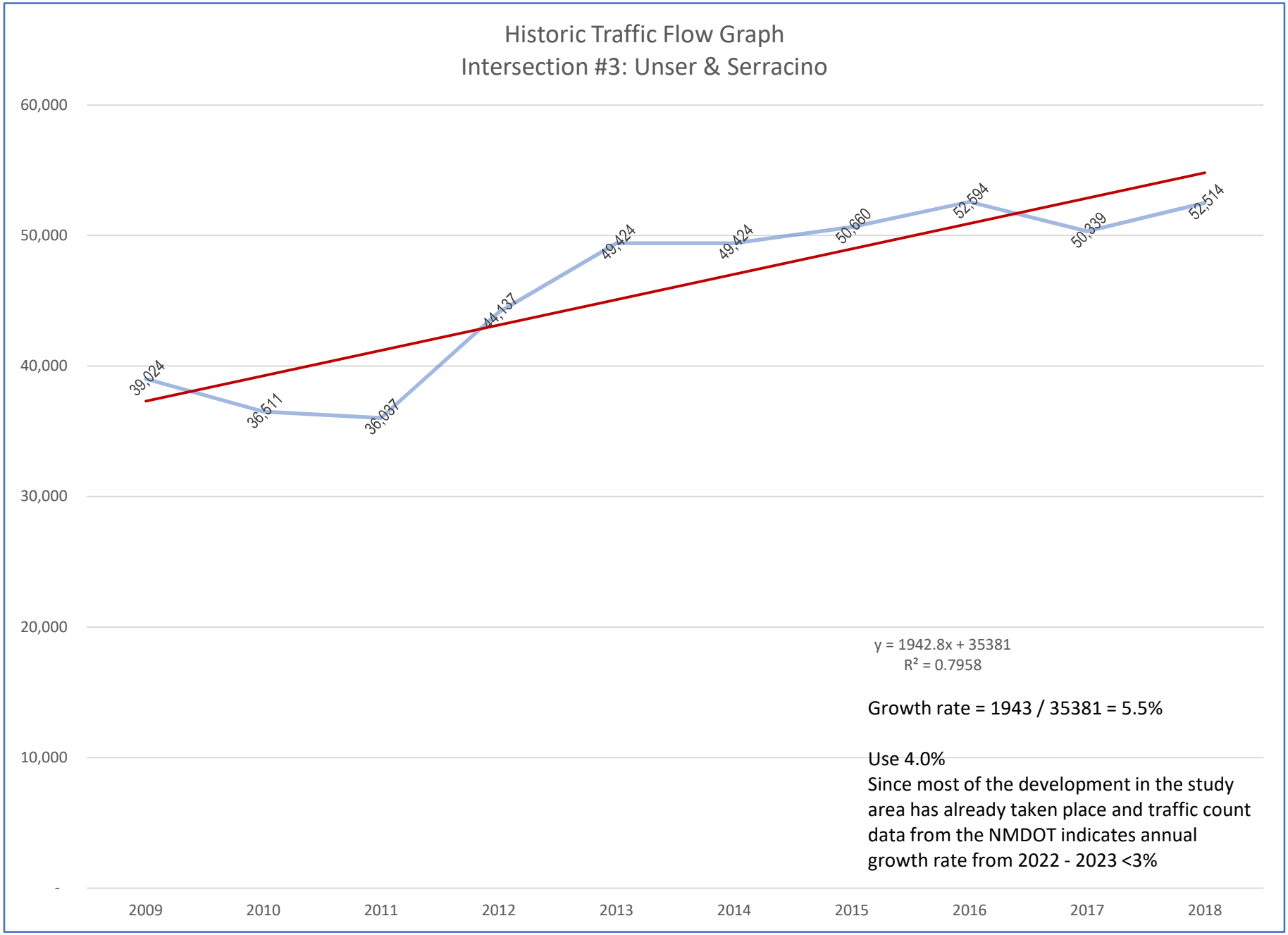

Historic Traffic Flow Graph
Intersection #5: Central & 98th Street
120,000
100,000
80,000
60,000
40,000
20,000
-
86,701
85,400
76,950
81,191
84,940
85,100
90,643
91,723
92,504
96,892
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1477.7x + 79077
R² = 0.5839
Annual Increase = 1,478
Growth rate = 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
-
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
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
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
-
40,802
40,272
47,135
52,390
52,390
56,504
56,819
59,860
74,754
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
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

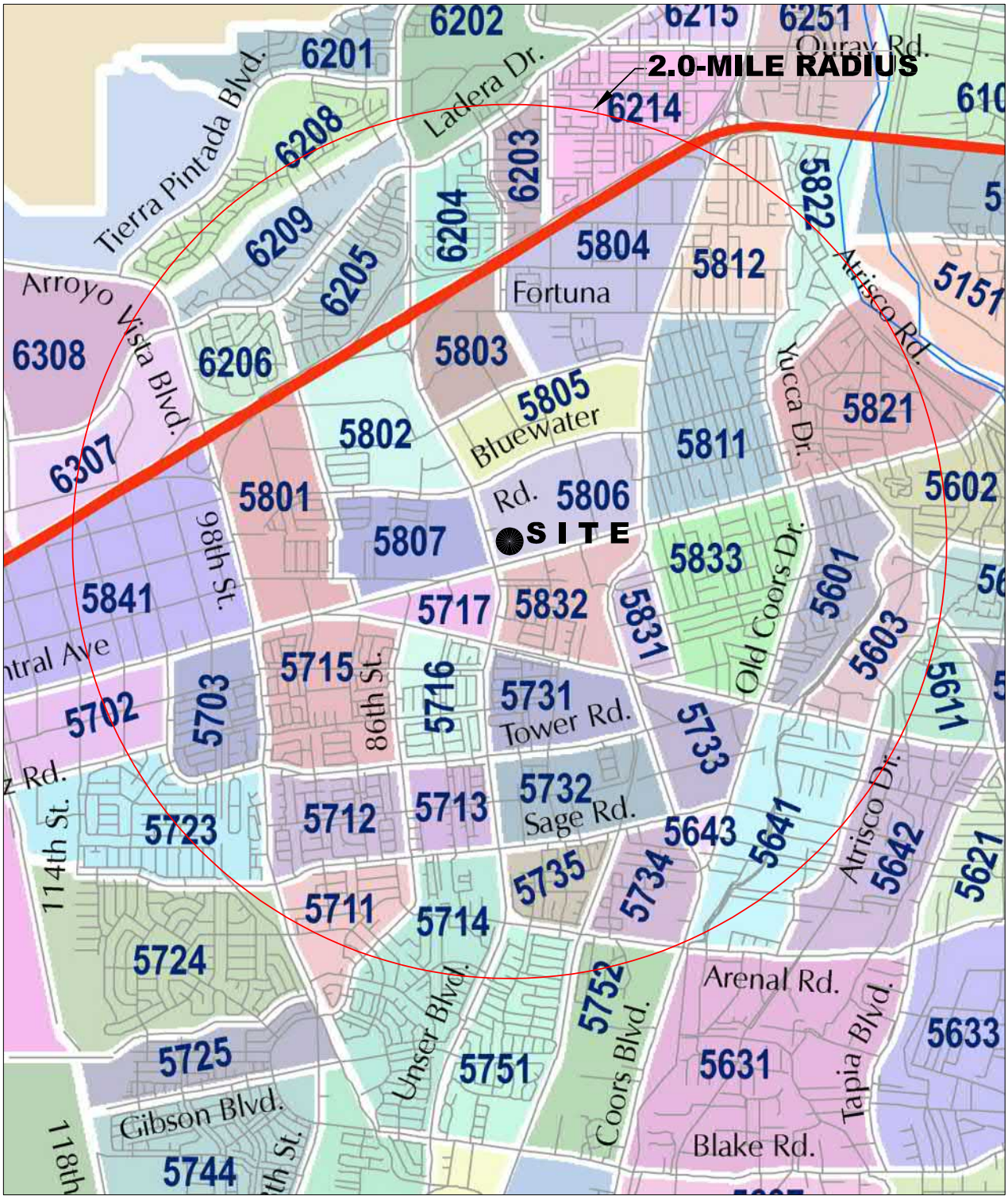
							(SW) Serracino West			(BWW) Bluewater West			(UN) Unser North		
DASZ #	% Sub Area in Study	2016 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% 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%



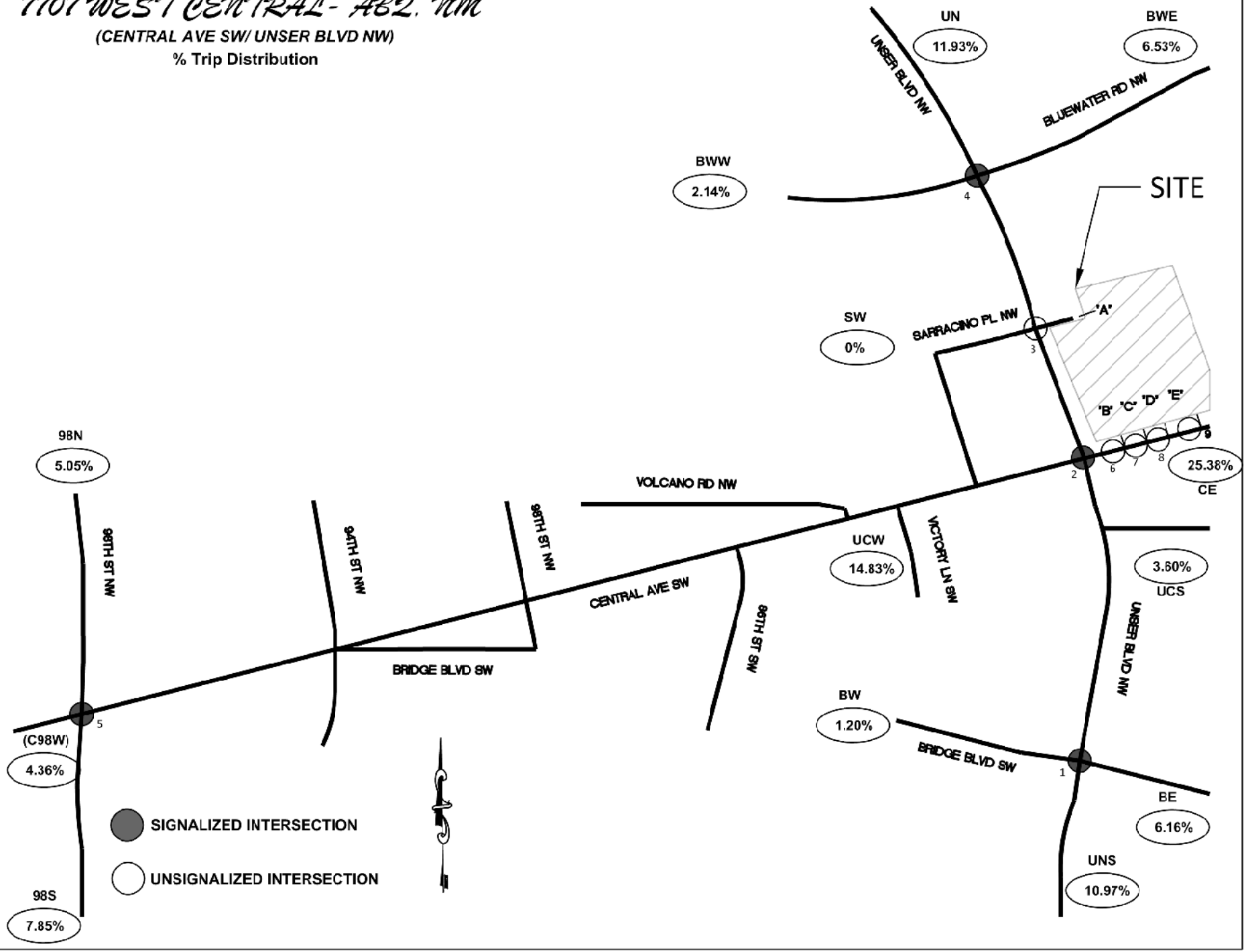
DATA ANALYSIS SUBZONE (DASZ) MAP

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

7707 WEST CENTRAL - ABQ, NM

(CENTRAL AVE SW/ UNSER BLVD NW)

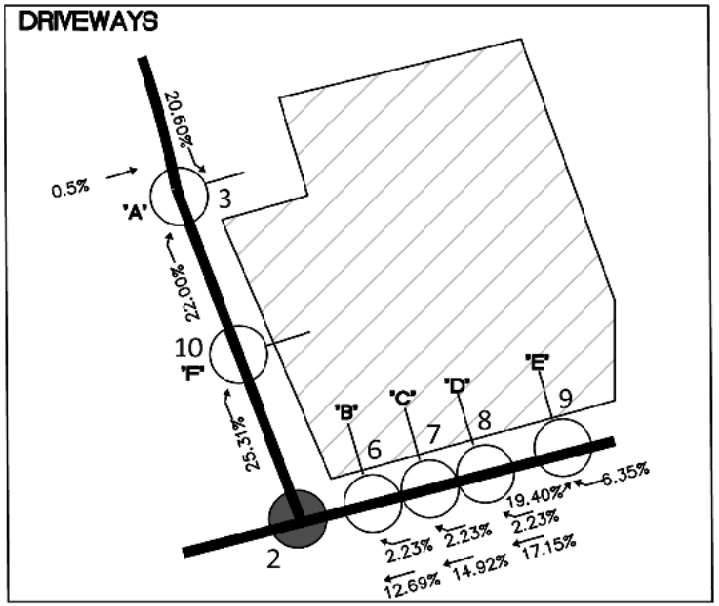
% Trip Distribution



7707 WEST CENTRAL - ABQ, NM

(CENTRAL AVE SW/ UNSER BLVD NW)

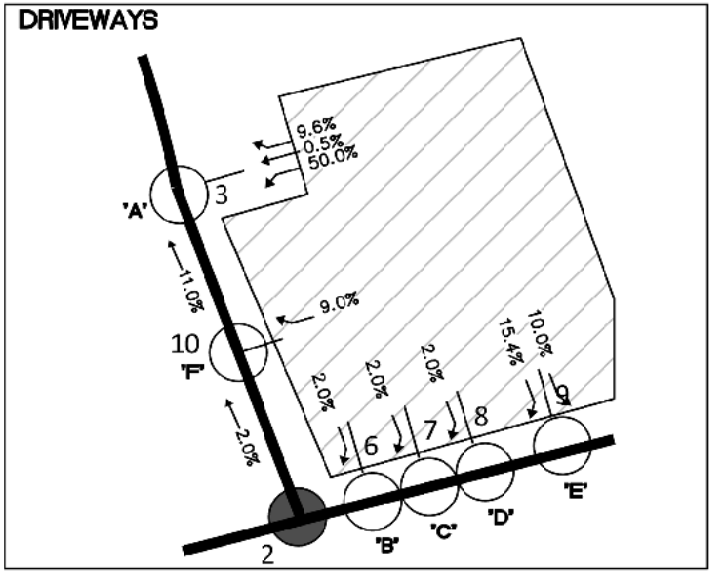
Trip Assignments (% Entering)



7707 WEST CENTRAL - ABQ, NM

(CENTRAL AVE SW/ UNSER BLVD NW)

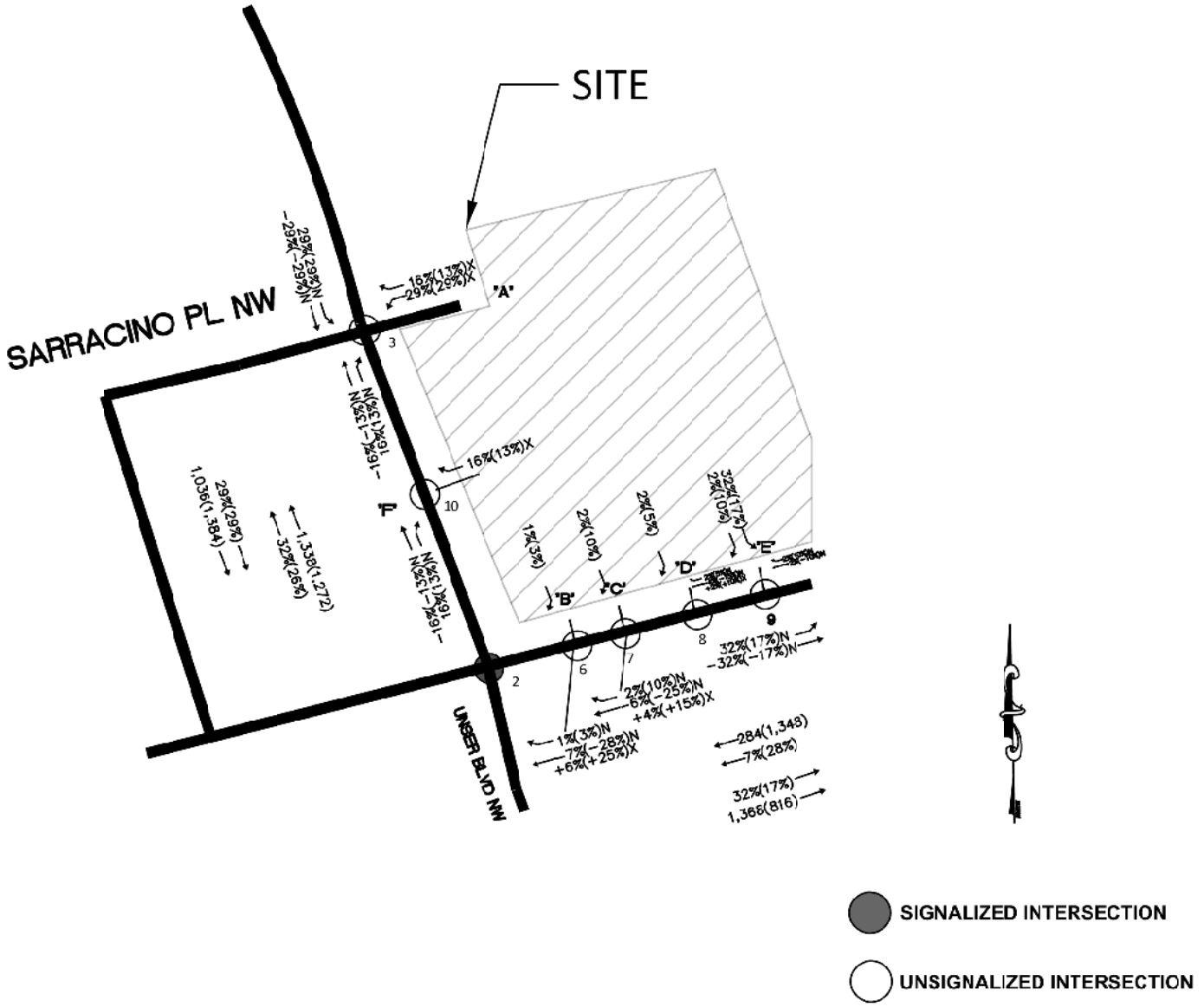
Trip Assignments (% Exiting)



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	Units (1k ft^2)	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						
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)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Warehousing (150)	***100.00***	171	13	4	5	13
	1,000 S.F.					

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

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

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

ITE Trip Generation Equations:

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

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

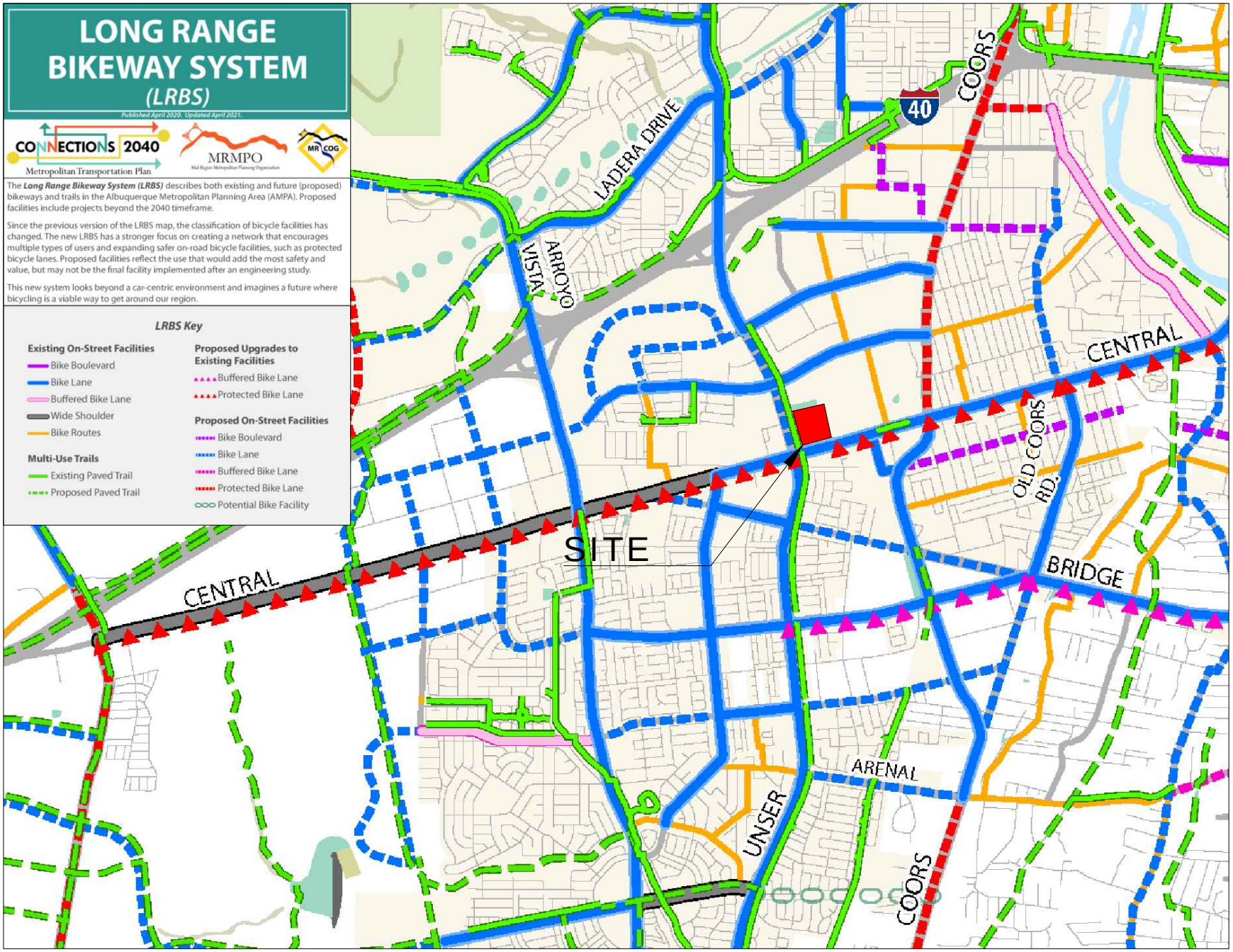
Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

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

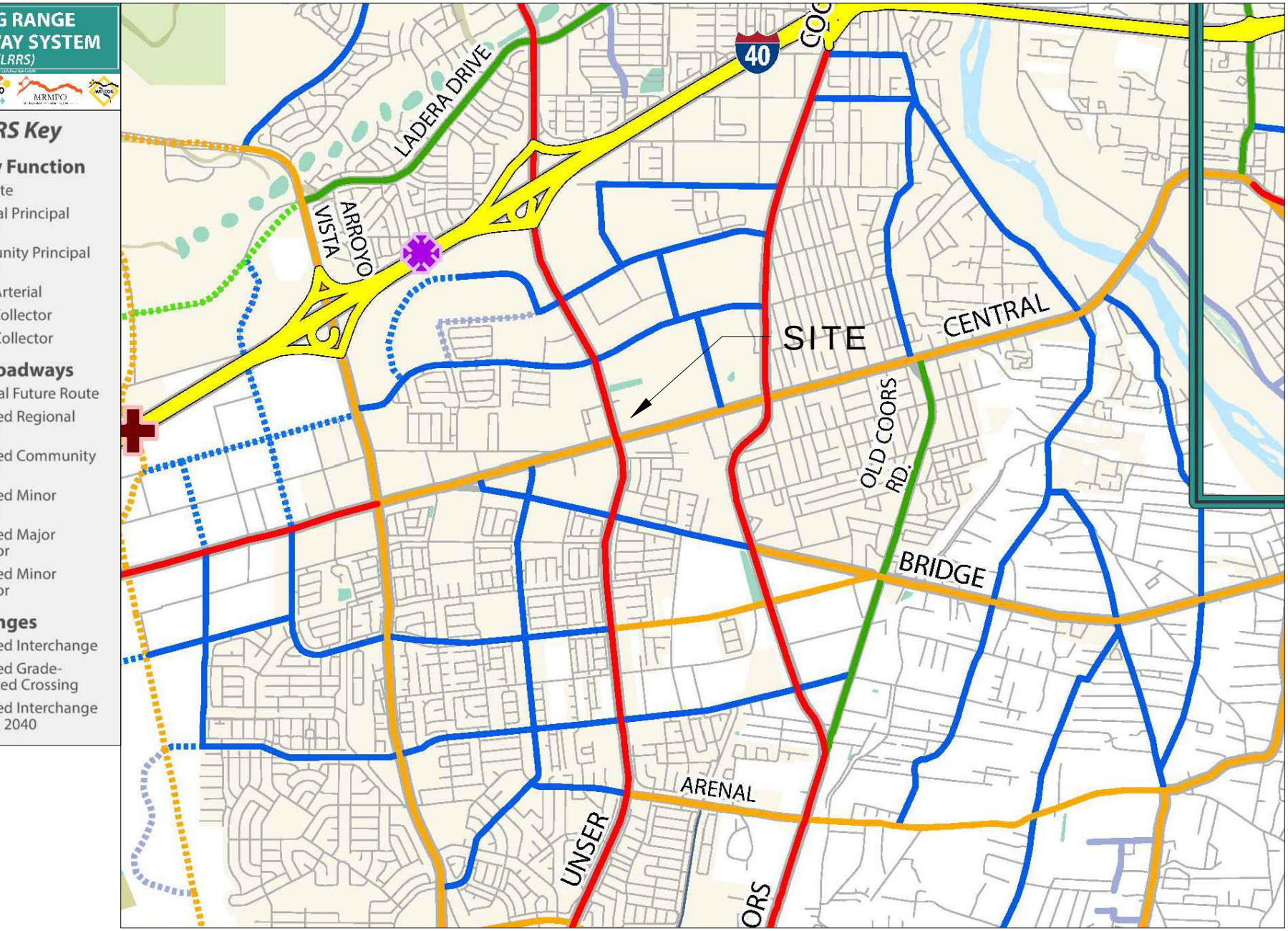
Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

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

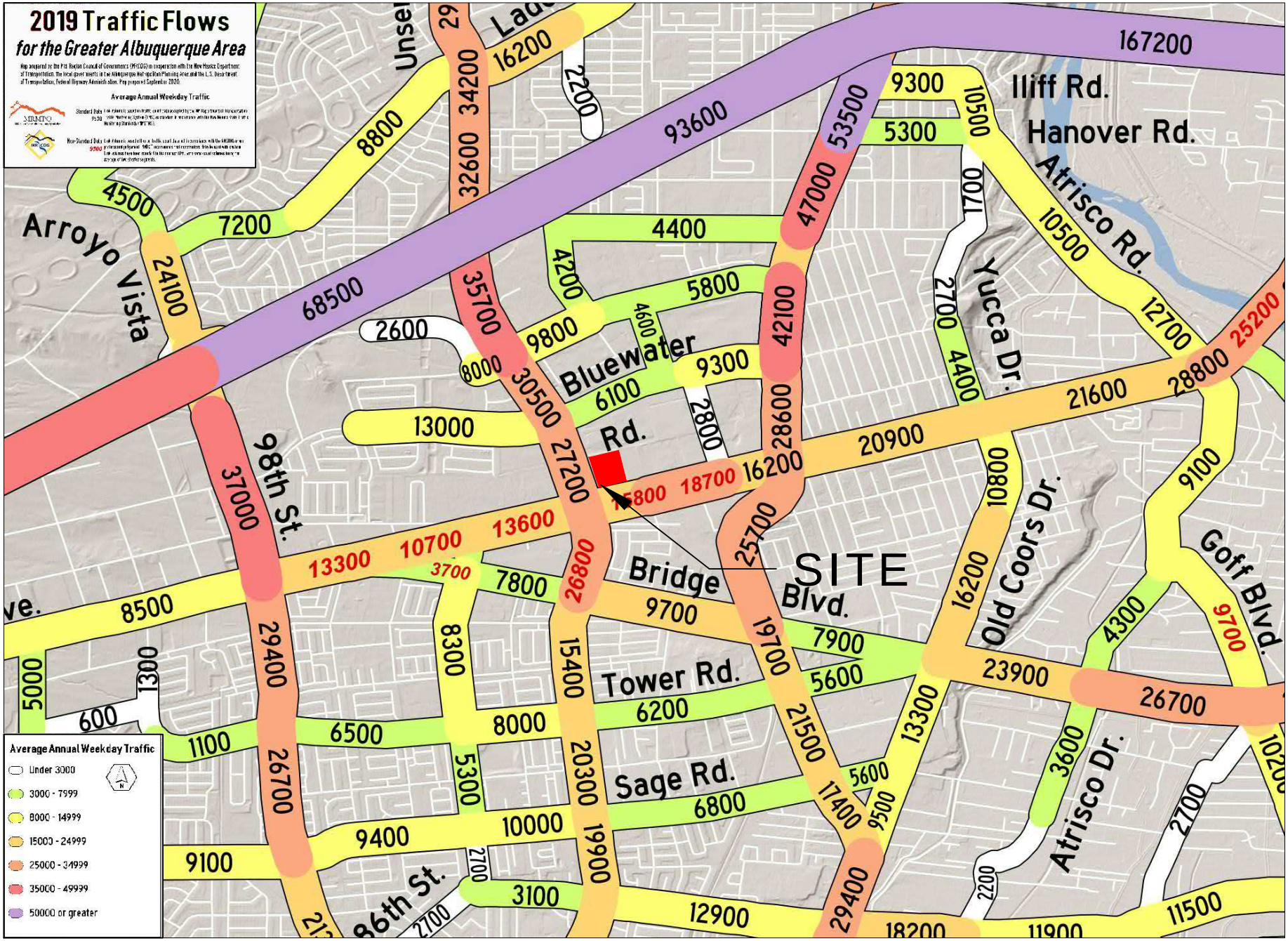
Comments:
Lot 12



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

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	160	121	95	52	130	82	39	1,231	86	78	670	39
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***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	121	134	52	86	125	117	48	968	22	86	1,322	130
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

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	484	868	13	39	190	78	22	937	497	112	765	242
2025 (NO BUILD - A.M.)	*502*	*900*	*13*	*40*	*197*	*81*	*22*	*972*	*515*	*116*	*793*	*251*
2025 (BUILD - A.M.)	***558***	***934***	***13***	***93***	***225***	***162***	***22***	***964***	***585***	***196***	***783***	***298***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	423	605	48	324	950	181	78	769	151	125	946	423
2025 (NO BUILD - P.M.)	*439*	*627*	*49*	*336*	*986*	*188*	*81*	*797*	*157*	*130*	*981*	*439*
2025 (BUILD - P.M.)	***492***	***659***	***49***	***398***	***1,019***	***265***	***81***	***799***	***213***	***212***	***979***	***493***

Serracino/Driveway 'A' & Unser Blvd
(3)
3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	39	0	30	22	0	4	30	1,633	4	9	1,076	35
2025 (NO BUILD - A.M.)	*40*	*0*	*31*	*22*	*0*	*4*	*31*	*1,693*	*4*	*9*	*1,116*	*36*
2025 (BUILD - A.M.)	***40***	***1***	***31***	***175***	***1***	***66***	***31***	***1,649***	***115***	***111***	***1,072***	***36***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	17	0	26	0	0	1	4	1,590	0	0	1,512	30
2025 (NO BUILD - P.M.)	*18*	*0*	*27*	*0*	*0*	*1*	*4*	*1,649*	*0*	*0*	*1,568*	*31*
2025 (BUILD - P.M.)	***18***	***1***	***27***	***177***	***1***	***65***	***4***	***1,617***	***96***	***96***	***1,527***	***31***

Bluewater / Unser Blvd
(4)
3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	156	156	95	17	86	117	108	1,391	134	104	946	134
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***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	225	65	35	82	138	147	26	1,313	69	104	1,508	117
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

	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 (2024)	200	287	33	154	225	141	100	998	420	83	308	108	
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***	

	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 (2024)	183	258	83	428	453	150	46	545	354	141	711	116	
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

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,531*	*0*	*0*	*318*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***0***	***1,622***	***0***	***0***	***396***	***8***	***0***	***0***	***0***	***0***	***0***	***6***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - P.M.)	*0*	*914*	*0*	*0*	*1,510*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - P.M.)	***0***	***1,008***	***0***	***0***	***1,592***	***10***	***0***	***0***	***0***	***0***	***0***	***9***	

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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,531*	*0*	*0*	*318*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***0***	***1,622***	***0***	***0***	***397***	***9***	***0***	***0***	***0***	***0***	***0***	***8***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - P.M.)	*0*	*914*	*0*	*0*	*1,510*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - P.M.)	***0***	***1,008***	***0***	***0***	***1,583***	***20***	***0***	***0***	***0***	***0***	***0***	***20***	

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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,531*	*0*	*0*	*318*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***0***	***1,622***	***0***	***0***	***404***	***12***	***0***	***0***	***0***	***0***	***0***	***8***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - P.M.)	*0*	*914*	*0*	*0*	*1,510*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - P.M.)	***0***	***1,008***	***0***	***0***	***1,597***	***15***	***0***	***0***	***0***	***0***	***0***	***12***	

Central Ave. / Driveway "E"

(9)

3% Heavy Commercial

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2025 (NO BUILD - A.M.)	*0*	*1,531*	*0*	*0*	*318*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2025 (BUILD - A.M.)	***104***	***1,518***	***0***	***0***	***369***	***21***	***0***	***0***	***0***	***76***	***0***	***26***	

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025) - 100% Development

INTERSECTION: **Summary**

Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	*0*	*914*	*0*	*0*	*1,510*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***76***	***932***	***0***	***0***	***1,548***	***31***	***0***	***0***	***0***	***67***	***0***	***42***

Central Ave. / Driveway "F"
(10)

3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "E")**			**Southbound (Driveway "E")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - A.M.)	*0*	*1,531*	*0*	*0*	*318*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***104***	***1,518***	***0***	***0***	***369***	***21***	***0***	***0***	***0***	***76***	***0***	***26***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "E")**			**Southbound (Driveway "E")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	*0*	*914*	*0*	*0*	*1,510*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***76***	***932***	***0***	***0***	***1,548***	***31***	***0***	***0***	***0***	***67***	***0***	***42***

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**

Growth Rates	**4.00%**			**4.00%**			**4.00%**			**4.00%**		
	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	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.	

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**
Growth Rates **4.00%** **4.00%** **4.00%** **4.00%**

	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	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)	***20.00%***	***12.09%***	*0.00%*	*0.00%*	*0.00%*	***12.69%***	*0.00%*	***14.62%***	***7.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.31%***	***12.09%***	***2.00%***	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***14.62%***	***20.00%***
Total Trips Generated	56	34	0	17	28	41	0	41	21	36	34	47
Subtotal AM Pk Hr. BUILD Volumes	**558**	**934**	**13**	**57**	**225**	**122**	**22**	**1,013**	**536**	**152**	**827**	**298**
Pass-by Trip Adjustments	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*-49*	*49*	*44*	*-44*	*0*
Total AM Peak Hour BUILD Volumes	**558**	**934**	**13**	**93**	**225**	**162**	**22**	**964**	**585**	**196**	**783**	**298**

	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)	***20.00%***	***12.09%***	*0.00%*	*0.00%*	*0.00%*	***12.69%***	*0.00%*	***14.62%***	***7.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.31%***	***12.09%***	***2.00%***	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***14.62%***	***20.00%***
Total Trips Generated	53	32	0	20	33	39	0	39	19	41	39	54
Subtotal PM Pk Hr. BUILD Volumes	**492**	**659**	**49**	**356**	**1,019**	**227**	**81**	**836**	**176**	**171**	**1,020**	**493**
Pass-by Trip Adjustments	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*-37*	*37*	*41*	*-41*	*0*
Total PM Peak Hour BUILD Volumes	**492**	**659**	**49**	**398**	**1,019**	**265**	**81**	**799**	**213**	**212**	**979**	**493**

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

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%*	*0.00%*	*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%*	***22.00%***	***20.60%***	*0.00%*	*0.00%*
Total Trips Generated	0	1	0	117	1	22	0	5	62	58	0	0
Subtotal AM Pk Hr. BUILD Volumes	**40**	**1**	**31**	**139**	**1**	**26**	**31**	**1,698**	**66**	**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**	**1**	**31**	**175**	**1**	**66**	**31**	**1,649**	**115**	**111**	**1,072**	**36**
	1.2%	**0.0%**	**0.9%**	**5.3%**	**0.0%**	**2.0%**	**0.9%**	**49.5%**	**3.5%**	**3.3%**	**32.2%**	**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
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%*	***22.00%***	***20.60%***	*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	1	0	135	1	26	0	5	59	55	0	0
Subtotal PM Pk Hr. BUILD Volumes	**18**	**1**	**27**	**135**	**1**	**27**	**4**	**1,654**	**59**	**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**	**1**	**27**	**177**	**1**	**65**	**4**	**1,617**	**96**	**96**	**1,527**	**31**
	0%	**0.0%**	**0.7%**	**4.8%**	**0.0%**	**1.8%**	**0.1%**	**44.2%**	**2.6%**	**2.6%**	**41.7%**	**0.8%**
	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**
Growth Rates **4.00%** **4.00%** **4.00%** **4.00%**

	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	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.	

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**
Growth Rates 2.00% 2.00% 2.00% 2.00%

	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	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.	

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**

Growth Rates	**1.00%**			**1.00%**			**1.00%**			**1.00%**		
	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	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
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 - A.M.)	***0***	***1,531***	***0***	***0***	***318***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***12.69%***	***2.23%***	*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%*	***19.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	91	0	0	81	6	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,622**	**0**	**0**	**399**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-3*	*2*	*0*	*0*	*0*	*0*	*0*	*1*
Total AM Peak Hour BUILD Volumes	**0**	**1,622**	**0**	**0**	**396**	**8**	**0**	**0**	**0**	**0**	**0**	**6**

	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "B")**			**Southbound (Driveway "B")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***914***	***0***	***0***	***1,510***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***12.69%***	***2.23%***	*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%*	***19.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	86	6	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,596**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-4*	*4*	*0*	*0*	*0*	*0*	*0*	*4*
Total PM Peak Hour BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,592**	**10**	**0**	**0**	**0**	**0**	**0**	**9**

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

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**

Growth Rates	**1.00%**			**1.00%**			**1.00%**			**1.00%**		
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "C")**			**Southbound (Driveway "C")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***1,531***	***0***	***0***	***318***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***14.92%***	***2.23%***	*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%*	***17.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	91	0	0	83	6	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,622**	**0**	**0**	**401**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-4*	*3*	*0*	*0*	*0*	*0*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**0**	**1,622**	**0**	**0**	**397**	**9**	**0**	**0**	**0**	**0**	**0**	**8**

	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "C")**			**Southbound (Driveway "C")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***914***	***0***	***0***	***1,510***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***14.92%***	***2.23%***	*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%*	***17.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	87	6	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,597**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-14*	*14*	*0*	*0*	*0*	*0*	*0*	*15*
Total PM Peak Hour BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,583**	**20**	**0**	**0**	**0**	**0**	**0**	**20**

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

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**
Growth Rates **1.00%** **1.00%** **1.00%** **1.00%**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***1,531***	***0***	***0***	***318***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***19.03%***	***3.17%***	*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%*	***15.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	91	0	0	89	9	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,622**	**0**	**0**	**407**	**9**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-3*	*3*	*0*	*0*	*0*	*0*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**0**	**1,622**	**0**	**0**	**404**	**12**	**0**	**0**	**0**	**0**	**0**	**8**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***914***	***0***	***0***	***1,510***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***19.03%***	***3.17%***	*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%*	***15.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	93	8	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,603**	**8**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-6*	*7*	*0*	*0*	*0*	*0*	*0*	*7*
Total PM Peak Hour BUILD Volumes	**0**	**1,008**	**0**	**0**	**1,597**	**15**	**0**	**0**	**0**	**0**	**0**	**12**

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

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "E"

INTERSECTION: E-W Street: **Central Ave.** (9)
N-S Street: **Driveway "E"**

Year of Existing Counts 2022
Horizon Year **2025**
Growth Rates **1.00%** **1.00%** **1.00%** **1.00%**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,531***	***0***	***0***	***318***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***19.40%***	*0.00%*	*0.00%*	*0.00%*	***19.38%***	***6.35%***	*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%*	***15.40%***	*0.00%*	***10.00%***
Total Trips Generated	55	36	0	0	54	18	0	0	0	36	0	23
Subtotal AM Pk Hr. BUILD Volumes	**55**	**1,567**	**0**	**0**	**372**	**18**	**0**	**0**	**0**	**36**	**0**	**23**
Pass-by Trip Adjustments	*49*	*-49*	*0*	*0*	*-3*	*3*	*0*	*0*	*0*	*40*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**104**	**1,518**	**0**	**0**	**369**	**21**	**0**	**0**	**0**	**76**	**0**	**26**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***914***	***0***	***0***	***1,510***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***19.40%***	*0.00%*	*0.00%*	*0.00%*	***19.38%***	***6.35%***	*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%*	***15.40%***	*0.00%*	***10.00%***
Total Trips Generated	52	42	0	0	52	17	0	0	0	42	0	27
Subtotal PM Pk Hr. BUILD Volumes	**52**	**956**	**0**	**0**	**1,562**	**17**	**0**	**0**	**0**	**42**	**0**	**27**
Pass-by Trip Adjustments	*24*	*-24*	*0*	*0*	*-14*	*14*	*0*	*0*	*0*	*25*	*0*	*15*
Total PM Peak Hour BUILD Volumes	**76**	**932**	**0**	**0**	**1,548**	**31**	**0**	**0**	**0**	**67**	**0**	**42**

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

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Driveway "F" / Unser Blvd.

INTERSECTION: E-W Street: **Driveway "F"** (10)
N-S Street: **Unser Blvd.**

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

	Growth Rates	4.00%			4.00%			4.00%			4.00%		
		Eastbound (Driveway "F")			Westbound (Driveway "F")			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	0	0	0	0	0	0	1,544	0	0	996	0
Background Traffic Growth		0	0	0	0	0	0	0	185	0	0	120	0
Subtotal		0	0	0	0	0	0	0	1,729	0	0	1,116	0
Subtotal (NO BUILD - A.M.)		***0***	***0***	***0***	***0***	***0***	***0***	***0***	***1,729***	***0***	***0***	***1,116***	***0***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.00%***	***25.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.00%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	0	0	0	0	21	0	67	71	0	0	0
Subtotal AM Pk Hr. BUILD Volumes		**0**	**0**	**0**	**0**	**0**	**21**	**0**	**1,796**	**71**	**0**	**1,116**	**0**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*20*	*0*	*-24*	*24*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes		**0**	**0**	**0**	**0**	**0**	**41**	**0**	**1,772**	**95**	**0**	**1,116**	**0**

	Eastbound (Driveway "F")			Westbound (Driveway "F")			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	1,476	0	0	1,400	0
Background Traffic Growth	0	0	0	0	0	0	0	177	0	0	168	0
Subtotal	0	0	0	0	0	0	0	1,653	0	0	1,568	0
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***	***0***	***0***	***0***	***0***	***0***	***0***	***1,653***	***0***	***0***	***1,568***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.00%***	***25.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.00%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	24	0	64	67	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**1,717**	**67**	**0**	**1,568**	**0**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*19*	*0*	*-19*	*19*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**1,698**	**86**	**0**	**1,568**	**0**

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

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

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	160	121	95	52	130	82	39	1,231	86	78	670	39
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***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	121	134	52	86	125	117	48	968	22	86	1,322	130
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

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	484	868	13	39	190	78	22	937	497	112	765	242
2035 (NO BUILD - A.M.)	*681*	*1,222*	*18*	*55*	*268*	*109*	*30*	*1,319*	*699*	*158*	*1,076*	*340*
2035 (BUILD - A.M.)	***737***	***1,256***	***18***	***108***	***296***	***190***	***30***	***1,311***	***769***	***238***	***1,066***	***387***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	423	605	48	324	950	181	78	769	151	125	946	423
2035 (NO BUILD - P.M.)	*596*	*851*	*67*	*456*	*1,338*	*255*	*109*	*1,082*	*213*	*176*	*1,332*	*596*
2035 (BUILD - P.M.)	***649***	***883***	***67***	***518***	***1,371***	***332***	***109***	***1,084***	***269***	***258***	***1,330***	***650***

Serracino/Driveway 'A' & Unser Blvd
(3)
3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	39	0	30	22	0	4	30	1,633	4	9	1,076	35
2035 (NO BUILD - A.M.)	*55*	*0*	*43*	*30*	*0*	*6*	*43*	*2,298*	*6*	*12*	*1,514*	*49*
2035 (BUILD - A.M.)	***55***	***1***	***43***	***183***	***1***	***68***	***43***	***2,254***	***117***	***114***	***1,470***	***49***

	1.00			1.00			1.00			1.00		PHF
	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 (2024)	17	0	26	0	0	1	4	1,590	0	0	1,512	30
2035 (NO BUILD - P.M.)	*24*	*0*	*36*	*0*	*0*	*2*	*6*	*2,237*	*0*	*0*	*2,128*	*43*
2035 (BUILD - P.M.)	***24***	***1***	***36***	***177***	***1***	***66***	***6***	***2,205***	***96***	***96***	***2,087***	***43***

Bluewater / Unser Blvd
(4)
3% Heavy Commercial

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	156	156	95	17	86	117	108	1,391	134	104	946	134
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***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Bluewater)			Westbound (Bluewater)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	225	65	35	82	138	147	26	1,313	69	104	1,508	117
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 (2024)	200	287	33	154	225	141	100	998	420	83	308	108	
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 (2024)	183	258	83	428	453	150	46	545	354	141	711	116	
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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - A.M.)	*0*	*2,079*	*0*	*0*	*432*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - A.M.)	***0***	***2,170***	***0***	***0***	***510***	***8***	***0***	***0***	***0***	***0***	***0***	***6***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - P.M.)	*0*	*1,240*	*0*	*0*	*2,049*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - P.M.)	***0***	***1,334***	***0***	***0***	***2,131***	***10***	***0***	***0***	***0***	***0***	***0***	***9***	

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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - A.M.)	*0*	*2,079*	*0*	*0*	*432*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - A.M.)	***0***	***2,170***	***0***	***0***	***511***	***9***	***0***	***0***	***0***	***0***	***0***	***8***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - P.M.)	*0*	*1,240*	*0*	*0*	*2,049*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - P.M.)	***0***	***1,334***	***0***	***0***	***2,122***	***20***	***0***	***0***	***0***	***0***	***0***	***20***	

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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - A.M.)	*0*	*2,079*	*0*	*0*	*432*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - A.M.)	***0***	***2,170***	***0***	***0***	***518***	***12***	***0***	***0***	***0***	***0***	***0***	***8***	

	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 (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - P.M.)	*0*	*1,240*	*0*	*0*	*2,049*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - P.M.)	***0***	***1,334***	***0***	***0***	***2,136***	***15***	***0***	***0***	***0***	***0***	***0***	***12***	

Central Ave. / Driveway "E"

(9)

3% Heavy Commercial

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0	
2035 (NO BUILD - A.M.)	*0*	*2,079*	*0*	*0*	*432*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2035 (BUILD - A.M.)	***104***	***2,066***	***0***	***0***	***483***	***21***	***0***	***0***	***0***	***76***	***0***	***26***	

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2035) - 100% Development

INTERSECTION: **Summary**

Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2035 (NO BUILD - P.M.)	*0*	*1,240*	*0*	*0*	*2,049*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - P.M.)	***76***	***1,258***	***0***	***0***	***2,087***	***31***	***0***	***0***	***0***	***67***	***0***	***42***

Central Ave. / Driveway "F"
(10)

3% Heavy Commercial

	1.00			*1.00*			*1.00*			*1.00*		*PHF*
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "E")**			**Southbound (Driveway "E")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2035 (NO BUILD - A.M.)	*0*	*2,079*	*0*	*0*	*432*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - A.M.)	***104***	***2,066***	***0***	***0***	***483***	***21***	***0***	***0***	***0***	***76***	***0***	***26***

	1.00			*1.00*			*1.00*			*1.00*		*PHF*
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "E")**			**Southbound (Driveway "E")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2024)	0	0	0	0	0	0	0	0	0	0	0	0
2035 (NO BUILD - P.M.)	*0*	*1,240*	*0*	*0*	*2,049*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035 (BUILD - P.M.)	***76***	***1,258***	***0***	***0***	***2,087***	***31***	***0***	***0***	***0***	***67***	***0***	***42***

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**

Growth Rates	**4.00%**			**4.00%**			**4.00%**			**4.00%**		
	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	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.	

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**
Growth Rates **4.00%** **4.00%** **4.00%** **4.00%**

	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	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)	***20.00%***	***12.09%***	*0.00%*	*0.00%*	*0.00%*	***12.69%***	*0.00%*	***14.62%***	***7.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.31%***	***12.09%***	***2.00%***	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***14.62%***	***20.00%***
Total Trips Generated	56	34	0	17	28	41	0	41	21	36	34	47
Subtotal AM Pk Hr. BUILD Volumes	**737**	**1,256**	**18**	**72**	**296**	**150**	**30**	**1,360**	**720**	**194**	**1,110**	**387**
Pass-by Trip Adjustments	*0*	*0*	*0*	*36*	*0*	*40*	*0*	*-49*	*49*	*44*	*-44*	*0*
Total AM Peak Hour BUILD Volumes	**737**	**1,256**	**18**	**108**	**296**	**190**	**30**	**1,311**	**769**	**238**	**1,066**	**387**

	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)	***20.00%***	***12.09%***	*0.00%*	*0.00%*	*0.00%*	***12.69%***	*0.00%*	***14.62%***	***7.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***7.31%***	***12.09%***	***2.00%***	*0.00%*	*0.00%*	*0.00%*	***15.37%***	***14.62%***	***20.00%***
Total Trips Generated	53	32	0	20	33	39	0	39	19	41	39	54
Subtotal PM Pk Hr. BUILD Volumes	**649**	**883**	**67**	**476**	**1,371**	**294**	**109**	**1,121**	**232**	**217**	**1,371**	**650**
Pass-by Trip Adjustments	*0*	*0*	*0*	*42*	*0*	*38*	*0*	*-37*	*37*	*41*	*-41*	*0*
Total PM Peak Hour BUILD Volumes	**649**	**883**	**67**	**518**	**1,371**	**332**	**109**	**1,084**	**269**	**258**	**1,330**	**650**

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

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**
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	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***
	1.4%	***0.0%***	***1.1%***	***0.7%***	***0.0%***	***0.1%***	***1.1%***	***56.7%***	***0.1%***	***0.3%***	***37.3%***	***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%*	***22.00%***	***20.60%***	*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	1	0	117	1	22	0	5	62	58	0	0
Subtotal AM Pk Hr. BUILD Volumes	**55**	**1**	**43**	**147**	**1**	**28**	**43**	**2,303**	**68**	**70**	**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**	**1**	**43**	**183**	**1**	**68**	**43**	**2,254**	**117**	**114**	**1,470**	**49**
	1.3%	**0.0%**	**1.0%**	**4.2%**	**0.0%**	**1.5%**	**1.0%**	**51.3%**	**2.7%**	**2.6%**	**33.4%**	**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	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***
	0.5%	**0.0%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**50.0%**	**0.0%**	**0.0%**	**47.5%**	**1.0%**
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%*	***22.00%***	***20.60%***	*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	1	0	135	1	26	0	5	59	55	0	0
Subtotal PM Pk Hr. BUILD Volumes	**24**	**1**	**36**	**135**	**1**	**28**	**6**	**2,242**	**59**	**55**	**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**	**1**	**36**	**177**	**1**	**66**	**6**	**2,205**	**96**	**96**	**2,087**	**43**
	0%	**0.0%**	**0.7%**	**3.7%**	**0.0%**	**1.4%**	**0.1%**	**45.6%**	**2.0%**	**2.0%**	**43.1%**	**0.9%**
	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**

Growth Rates	**4.00%**			**4.00%**			**4.00%**			**4.00%**		
	Eastbound (Bluewater)			**Westbound (Bluewater)**			**Northbound (Unser Blvd)**			**Southbound (Unser Blvd)**		
	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.	

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**
Growth Rates 2.00% 2.00% 2.00% 2.00%

	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	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.	

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**

	Growth Rates	Eastbound (Central Ave.) 1.00%			Westbound (Central Ave.) 1.00%			Northbound (Driveway "B") 1.00%			Southbound (Driveway "B") 1.00%		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth		0	0	0	0	0	0	0	0	0	0	0	0
Subtotal		0	0	0	0	0	0	0	0	0	0	0	0
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 - A.M.)		***0***	***2,079***	***0***	***0***	***432***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
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%*	***19.40%***	*0.00%*	*0.00%*	***12.69%***	***2.23%***	*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%*	***19.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated		0	91	0	0	81	6	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes		**0**	**2,170**	**0**	**0**	**513**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*-3*	*2*	*0*	*0*	*0*	*0*	*0*	*1*
Total AM Peak Hour BUILD Volumes		**0**	**2,170**	**0**	**0**	**510**	**8**	**0**	**0**	**0**	**0**	**0**	**6**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***1,240***	***0***	***0***	***2,049***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***12.69%***	***2.23%***	*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%*	***19.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	86	6	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,135**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-4*	*4*	*0*	*0*	*0*	*0*	*0*	*4*
Total PM Peak Hour BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,131**	**10**	**0**	**0**	**0**	**0**	**0**	**9**

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

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**

Growth Rates	**1.00%**			**1.00%**			**1.00%**			**1.00%**		
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "C")**			**Southbound (Driveway "C")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***2,079***	***0***	***0***	***432***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***14.92%***	***2.23%***	*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%*	***17.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	91	0	0	83	6	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes	**0**	**2,170**	**0**	**0**	**515**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-4*	*3*	*0*	*0*	*0*	*0*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**0**	**2,170**	**0**	**0**	**511**	**9**	**0**	**0**	**0**	**0**	**0**	**8**

	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "C")**			**Southbound (Driveway "C")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***1,240***	***0***	***0***	***2,049***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***14.92%***	***2.23%***	*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%*	***17.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	87	6	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,136**	**6**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-14*	*14*	*0*	*0*	*0*	*0*	*0*	*15*
Total PM Peak Hour BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,122**	**20**	**0**	**0**	**0**	**0**	**0**	**20**

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

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**

Growth Rates	**1.00%**			**1.00%**			**1.00%**			**1.00%**		
	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "D")**			**Southbound (Driveway "D")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***2,079***	***0***	***0***	***432***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***19.03%***	***3.17%***	*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%*	***15.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	91	0	0	89	9	0	0	0	0	0	5
Subtotal AM Pk Hr. BUILD Volumes	**0**	**2,170**	**0**	**0**	**521**	**9**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-3*	*3*	*0*	*0*	*0*	*0*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**0**	**2,170**	**0**	**0**	**518**	**12**	**0**	**0**	**0**	**0**	**0**	**8**

	Eastbound (Central Ave.)			**Westbound (Central Ave.)**			**Northbound (Driveway "D")**			**Southbound (Driveway "D")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***1,240***	***0***	***0***	***2,049***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***19.40%***	*0.00%*	*0.00%*	***19.03%***	***3.17%***	*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%*	***15.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.00%***
Total Trips Generated	0	94	0	0	93	8	0	0	0	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,142**	**8**	**0**	**0**	**0**	**0**	**0**	**5**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-6*	*7*	*0*	*0*	*0*	*0*	*0*	*7*
Total PM Peak Hour BUILD Volumes	**0**	**1,334**	**0**	**0**	**2,136**	**15**	**0**	**0**	**0**	**0**	**0**	**12**

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

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Central Ave. / Driveway "E"

INTERSECTION: E-W Street: **Central Ave.** (9)
N-S Street: **Driveway "E"**

Year of Existing Counts 2022
Horizon Year **2035**
Growth Rates 1.00% 1.00% 1.00% 1.00%

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***2,079***	***0***	***0***	***432***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
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)	***19.40%***	*0.00%*	*0.00%*	*0.00%*	***19.38%***	***6.35%***	*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%*	***15.40%***	*0.00%*	***10.00%***
Percent Office 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 Office 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%*
Total Trips Generated	55	36	0	0	54	18	0	0	0	36	0	23
Subtotal AM Pk Hr. BUILD Volumes	**55**	**2,115**	**0**	**0**	**486**	**18**	**0**	**0**	**0**	**36**	**0**	**23**
Pass-by Trip Adjustments	*49*	*-49*	*0*	*0*	*-3*	*3*	*0*	*0*	*0*	*40*	*0*	*3*
Total AM Peak Hour BUILD Volumes	**104**	**2,066**	**0**	**0**	**483**	**21**	**0**	**0**	**0**	**76**	**0**	**26**

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***1,240***	***0***	***0***	***2,049***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***19.40%***	*0.00%*	*0.00%*	*0.00%*	***19.38%***	***6.35%***	*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%*	***15.40%***	*0.00%*	***10.00%***
Total Trips Generated	52	42	0	0	52	17	0	0	0	42	0	27
Subtotal PM Pk Hr. BUILD Volumes	**52**	**1,282**	**0**	**0**	**2,101**	**17**	**0**	**0**	**0**	**42**	**0**	**27**
Pass-by Trip Adjustments	*24*	*-24*	*0*	*0*	*-14*	*14*	*0*	*0*	*0*	*25*	*0*	*15*
Total PM Peak Hour BUILD Volumes	**76**	**1,258**	**0**	**0**	**2,087**	**31**	**0**	**0**	**0**	**67**	**0**	**42**

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

Ed Garcia - West Central (Central and Unser)

Projected Turning Movements Worksheet

Driveway "F" / Unser Blvd.

INTERSECTION: E-W Street: **Driveway "F"** (10)
N-S Street: **Unser Blvd.**

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

	Growth Rates	4.00%			4.00%			4.00%			4.00%		
		Eastbound (Driveway "F")			Westbound (Driveway "F")			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	0	0	0	0	0	0	1,544	0	0	996	0
Background Traffic Growth		0	0	0	0	0	0	0	803	0	0	518	0
Subtotal		0	0	0	0	0	0	0	2,347	0	0	1,514	0
Subtotal (NO BUILD - A.M.)		***0***	***0***	***0***	***0***	***0***	***0***	***0***	***2,347***	***0***	***0***	***1,514***	***0***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.00%***	***25.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.00%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	0	0	0	0	21	0	67	71	0	0	0
Subtotal AM Pk Hr. BUILD Volumes		**0**	**0**	**0**	**0**	**0**	**21**	**0**	**2,414**	**71**	**0**	**1,514**	**0**
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*20*	*0*	*-24*	*24*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes		**0**	**0**	**0**	**0**	**0**	**41**	**0**	**2,390**	**95**	**0**	**1,514**	**0**

	Eastbound (Driveway "F")			Westbound (Driveway "F")			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	1,476	0	0	1,400	0
Background Traffic Growth	0	0	0	0	0	0	0	768	0	0	728	0
Subtotal	0	0	0	0	0	0	0	2,244	0	0	2,128	0
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***	***0***	***0***	***0***	***0***	***0***	***0***	***2,244***	***0***	***0***	***2,128***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.00%***	***25.31%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.00%***	*0.00%*	***2.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	24	0	64	67	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**2,308**	**67**	**0**	**2,128**	**0**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*19*	*0*	*-19*	*19*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**2,289**	**86**	**0**	**2,128**	**0**

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

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
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	247	413	350	251	413	350	479	2173	969	273	2220	990
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.62	0.62	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	16.9	6.7	6.3	4.9	7.3	5.3	1.0	26.1	2.8	2.0	10.9	1.2
Cycle Q Clear(g_c), s	24.2	6.7	6.3	11.7	7.3	5.3	1.0	26.1	2.8	2.0	10.9	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	247	413	350	251	413	350	479	2173	969	273	2220	990
V/C Ratio(X)	0.67	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	306	509	431	310	509	431	592	2173	969	504	2220	990
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	49.2	38.9	38.7	43.7	39.1	38.3	8.6	13.8	9.4	11.4	10.3	8.4
Incr Delay (d2), s/veh	2.3	0.2	0.2	0.2	0.2	0.1	0.0	1.2	0.2	0.2	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	8.6	5.5	4.3	2.5	5.9	3.7	0.7	15.0	1.7	1.3	7.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	39.0	38.8	43.9	39.2	38.5	8.6	15.0	9.6	11.6	10.6	8.5
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		44.3			39.9			14.5			10.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	79.5		32.2	6.7	81.0		32.2				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	19.5	* 53		32.9	9.9	61.7		32.9				
Max Q Clear Time (g_c+I1), s	4.0	28.1		26.2	3.0	12.9		13.7				
Green Ext Time (p_c), s	0.0	13.9		0.6	0.0	8.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

* HCM 6th 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
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	247	414	350	248	414	350	466	2159	963	270	2219	990
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	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	16.9	6.7	7.4	5.3	7.3	5.3	1.0	27.4	2.8	2.4	11.4	1.3
Cycle Q Clear(g_c), s	24.2	6.7	7.4	12.0	7.3	5.3	1.0	27.4	2.8	2.4	11.4	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	247	414	350	248	414	350	466	2159	963	270	2219	990
V/C Ratio(X)	0.67	0.30	0.33	0.23	0.32	0.24	0.09	0.61	0.09	0.35	0.32	0.04
Avail Cap(c_a), veh/h	306	509	431	306	509	431	579	2159	963	494	2219	990
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	49.2	38.9	39.1	43.9	39.1	38.3	8.7	14.3	9.6	12.0	10.4	8.5
Incr Delay (d2), s/veh	2.3	0.2	0.2	0.2	0.2	0.1	0.0	1.3	0.2	0.3	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	8.6	5.5	5.1	2.7	5.9	3.7	0.7	15.7	1.7	1.6	7.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	39.0	39.3	44.0	39.2	38.4	8.8	15.6	9.8	12.3	10.7	8.6
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		44.2			40.0			15.0			10.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	79.0		32.2	6.7	81.0		32.2				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	19.5	* 53		32.9	9.9	61.7		32.9				
Max Q Clear Time (g_c+I1), s	4.4	29.4		26.2	3.0	13.4		14.0				
Green Ext Time (p_c), s	0.1	13.7		0.6	0.0	8.3		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th 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
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 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

* HCM 6th 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	134
Future Volume (veh/h)	125	139	54	90	130	121	49	1004	22	90	1371	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	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	134
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	201	355	301	204	355	301	250	2322	1036	395	2359	1052
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.66	0.66	0.03	0.67	0.67
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	134
Grp Sat Flow(s),veh/h/ln	1120	1856	1572	1181	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	14.2	8.5	3.7	9.4	7.9	8.8	1.2	17.7	0.6	2.2	27.4	4.0
Cycle Q Clear(g_c), s	22.1	8.5	3.7	17.9	7.9	8.8	1.2	17.7	0.6	2.2	27.4	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	201	355	301	204	355	301	250	2322	1036	395	2359	1052
V/C Ratio(X)	0.62	0.39	0.18	0.44	0.37	0.40	0.20	0.43	0.02	0.23	0.58	0.13
Avail Cap(c_a), veh/h	343	589	500	353	589	500	365	2322	1036	527	2359	1052
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	55.4	46.0	44.0	53.8	45.7	46.1	9.9	10.6	7.7	8.0	11.6	7.8
Incr Delay (d2), s/veh	1.2	0.3	0.1	0.6	0.2	0.3	0.1	0.6	0.0	0.1	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	7.0	2.6	5.0	6.5	6.2	0.8	10.7	0.4	1.4	15.2	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	46.2	44.1	54.3	46.0	46.4	10.1	11.2	7.7	8.1	12.7	8.0
LnGrp LOS	E	D	D	D	D	D	B	B	A	A	B	A
Approach Vol, veh/h		318			341			1075			1595	
Approach Delay, s/veh		49.9			48.3			11.1			12.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	91.1		30.4	7.2	92.5		30.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	4.2	19.7		24.1	3.2	29.4		19.9				
Green Ext Time (p_c), s	0.0	12.4		0.7	0.0	18.2		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

* HCM 6th 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
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	201	355	301	202	355	301	242	2307	1029	388	2358	1052
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.65	0.65	0.04	0.67	0.67
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	14.2	8.5	4.9	9.9	7.9	8.8	1.2	18.6	0.6	2.6	28.4	4.1
Cycle Q Clear(g_c), s	22.1	8.5	4.9	18.4	7.9	8.8	1.2	18.6	0.6	2.6	28.4	4.1
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	201	355	301	202	355	301	242	2307	1029	388	2358	1052
V/C Ratio(X)	0.62	0.39	0.23	0.46	0.37	0.40	0.20	0.45	0.02	0.28	0.59	0.13
Avail Cap(c_a), veh/h	343	589	500	349	589	500	357	2307	1029	513	2358	1052
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	55.3	45.9	44.5	54.0	45.7	46.0	10.2	11.0	7.9	8.3	11.8	7.8
Incr Delay (d2), s/veh	1.2	0.3	0.1	0.6	0.2	0.3	0.2	0.6	0.0	0.1	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	7.2	7.0	3.4	5.2	6.5	6.1	0.8	11.2	0.4	1.6	15.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	46.2	44.6	54.6	45.9	46.4	10.4	11.6	7.9	8.5	12.9	8.1
LnGrp LOS	E	D	D	D	D	D	B	B	A	A	B	A
Approach Vol, veh/h		334			344			1104			1645	
Approach Delay, s/veh		49.7			48.4			11.5			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	90.6		30.4	7.2	92.5		30.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	4.6	20.6		24.1	3.2	30.4		20.4				
Green Ext Time (p_c), s	0.0	12.8		0.7	0.0	18.3		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

* HCM 6th 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
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	210	369	312	211	369	312	239	2275	1015	385	2330	1039
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.65	0.65	0.04	0.66	0.66
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	14.1	8.4	4.9	9.8	7.8	8.7	1.2	19.1	0.7	2.7	29.1	4.2
Cycle Q Clear(g_c), s	21.9	8.4	4.9	18.2	7.8	8.7	1.2	19.1	0.7	2.7	29.1	4.2
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	210	369	312	211	369	312	239	2275	1015	385	2330	1039
V/C Ratio(X)	0.59	0.38	0.22	0.44	0.35	0.39	0.21	0.45	0.02	0.28	0.60	0.13
Avail Cap(c_a), veh/h	344	589	500	350	589	500	353	2275	1015	506	2330	1039
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	54.3	45.1	43.7	53.0	44.9	45.2	10.7	11.6	8.3	8.8	12.4	8.2
Incr Delay (d2), s/veh	3.8	0.9	0.5	2.1	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	7.4	7.1	3.5	5.3	6.6	6.2	0.9	11.5	0.4	1.8	16.1	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.1	46.0	44.2	55.1	45.7	46.3	11.3	12.2	8.3	9.3	13.6	8.4
LnGrp LOS	E	D	D	E	D	D	B	B	A	A	B	A
Approach Vol, veh/h		334			344			1104			1645	
Approach Delay, s/veh		50.2			48.4			12.1			12.9	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	89.4		31.3	7.2	91.4		31.3				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	4.7	21.1		23.9	3.2	31.1		20.2				
Green Ext Time (p_c), s	0.2	12.8		1.9	0.1	18.1		2.0				

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Notes

* HCM 6th 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
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	269	509	431	274	509	431	337	1954	871	165	2014	898
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.55	0.55	0.04	0.57	0.57
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	23.4	8.8	8.1	7.0	9.5	6.9	1.6	51.7	4.5	3.2	18.8	1.9
Cycle Q Clear(g_c), s	32.9	8.8	8.1	15.8	9.5	6.9	1.6	51.7	4.5	3.2	18.8	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	269	509	431	274	509	431	337	1954	871	165	2014	898
V/C Ratio(X)	0.84	0.33	0.31	0.27	0.36	0.27	0.16	0.89	0.14	0.66	0.47	0.06
Avail Cap(c_a), veh/h	269	509	431	274	509	431	438	1954	871	377	2014	898
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	49.1	34.8	34.6	41.1	35.0	34.1	12.2	23.5	12.9	26.8	15.1	11.4
Incr Delay (d2), s/veh	18.8	0.1	0.2	0.2	0.2	0.1	0.1	6.4	0.3	1.7	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	12.8	7.0	5.5	3.3	7.6	4.7	1.1	29.0	2.9	3.1	11.7	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	34.9	34.7	41.3	35.2	34.3	12.3	29.9	13.3	28.4	15.8	11.6
LnGrp LOS	E	C	C	D	D	C	B	C	B	C	B	B
Approach Vol, veh/h		529			371			1910			1106	
Approach Delay, s/veh		48.9			36.1			28.3			16.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	72.0		38.4	7.6	74.0		38.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	19.5	* 53		32.9	9.9	61.7		32.9				
Max Q Clear Time (g_c+I1), s	5.2	53.7		34.9	3.6	20.8		17.8				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	11.7		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Notes

* HCM 6th 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
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	269	509	431	271	509	431	328	1939	865	166	2014	898
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.55	0.55	0.05	0.57	0.57
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	23.4	8.8	9.3	7.5	9.5	6.9	1.6	54.1	4.5	3.6	19.5	2.0
Cycle Q Clear(g_c), s	32.9	8.8	9.3	16.3	9.5	6.9	1.6	54.1	4.5	3.6	19.5	2.0
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	269	509	431	271	509	431	328	1939	865	166	2014	898
V/C Ratio(X)	0.84	0.33	0.35	0.28	0.36	0.27	0.17	0.91	0.14	0.74	0.48	0.06
Avail Cap(c_a), veh/h	269	509	431	271	509	431	429	1939	865	371	2014	898
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	49.1	34.8	35.0	41.3	35.0	34.1	12.5	24.3	13.2	27.5	15.2	11.5
Incr Delay (d2), s/veh	18.8	0.1	0.2	0.2	0.2	0.1	0.1	7.8	0.3	2.4	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	12.8	7.0	6.3	3.5	7.6	4.7	1.1	30.5	2.9	3.5	12.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	34.9	35.1	41.5	35.2	34.3	12.6	32.1	13.5	29.9	16.0	11.6
LnGrp LOS	E	C	D	D	D	C	B	C	B	C	B	B
Approach Vol, veh/h		546			374			1941			1149	
Approach Delay, s/veh		48.6			36.2			30.4			17.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	71.5		38.4	7.6	74.0		38.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	19.5	* 53		32.9	9.9	61.7		32.9				
Max Q Clear Time (g_c+I1), s	5.6	56.1		34.9	3.6	21.5		18.3				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	12.1		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		29.7
HCM 6th LOS		C

Notes

* HCM 6th 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
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	269	509	431	271	509	431	328	1931	861	169	2012	897
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.55	0.55	0.05	0.57	0.57
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	23.4	8.8	9.3	7.5	9.5	6.9	1.6	54.4	4.6	3.6	19.5	2.0
Cycle Q Clear(g_c), s	32.9	8.8	9.3	16.3	9.5	6.9	1.6	54.4	4.6	3.6	19.5	2.0
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	269	509	431	271	509	431	328	1931	861	169	2012	897
V/C Ratio(X)	0.84	0.33	0.35	0.28	0.36	0.27	0.17	0.91	0.14	0.73	0.48	0.06
Avail Cap(c_a), veh/h	269	509	431	271	509	431	428	1931	861	370	2012	897
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	49.1	34.8	35.0	41.3	35.0	34.1	12.6	24.6	13.3	27.5	15.2	11.5
Incr Delay (d2), s/veh	20.5	0.5	0.7	0.8	0.6	0.5	0.3	8.1	0.3	8.2	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	12.9	7.2	6.4	3.5	7.7	4.8	1.2	30.7	2.9	4.0	12.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.6	35.3	35.7	42.1	35.7	34.6	12.9	32.7	13.7	35.7	16.1	11.6
LnGrp LOS	E	D	D	D	D	C	B	C	B	D	B	B
Approach Vol, veh/h		546			374			1941			1149	
Approach Delay, s/veh		49.5			36.6			30.9			17.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	71.2		38.4	7.6	74.0		38.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	19.5	* 53		32.9	9.9	61.7		32.9				
Max Q Clear Time (g_c+I1), s	5.6	56.4		34.9	3.6	21.5		18.3				
Green Ext Time (p_c), s	0.4	0.0		0.0	0.1	12.1		2.1				

Intersection Summary		
HCM 6th Ctrl Delay		30.3
HCM 6th LOS		C

Notes

* HCM 6th 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	1890	182
Future Volume (veh/h)	170	188	73	122	176	164	67	1362	30	122	1890	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	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	1890	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	244	483	409	252	483	409	129	2034	907	252	2088	931
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.58	0.58	0.04	0.59	0.59
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	1890	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	20.9	10.8	4.7	13.2	10.1	11.2	2.0	34.6	1.1	3.7	61.3	6.9
Cycle Q Clear(g_c), s	31.0	10.8	4.7	24.1	10.1	11.2	2.0	34.6	1.1	3.7	61.3	6.9
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	244	483	409	252	483	409	129	2034	907	252	2088	931
V/C Ratio(X)	0.70	0.39	0.18	0.48	0.36	0.40	0.52	0.67	0.03	0.48	0.91	0.20
Avail Cap(c_a), veh/h	303	589	500	315	589	500	230	2034	907	361	2088	931
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	52.0	39.6	37.3	49.5	39.3	39.7	29.3	18.9	11.9	16.8	23.3	12.2
Incr Delay (d2), s/veh	3.2	0.2	0.1	0.5	0.2	0.2	1.2	1.8	0.1	0.5	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	9.4	8.5	3.2	6.6	8.1	7.7	2.2	19.8	0.7	2.5	33.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	39.8	37.4	50.0	39.5	39.9	30.5	20.7	11.9	17.3	30.4	12.7
LnGrp LOS	E	D	D	D	D	D	C	C	B	B	C	B
Approach Vol, veh/h		431			462			1459			2194	
Approach Delay, s/veh		45.4			42.4			21.0			28.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	80.5		39.3	8.2	82.5		39.3				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	5.7	36.6		33.0	4.0	63.3		26.1				
Green Ext Time (p_c), s	0.1	14.1		0.8	0.0	0.0		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		29.0
HCM 6th LOS		C

Notes

* HCM 6th 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
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	244	483	410	249	483	410	130	2018	900	250	2086	931
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.57	0.57	0.05	0.59	0.59
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	20.9	10.8	5.8	13.8	10.1	11.2	2.0	36.2	1.1	4.2	61.3	7.1
Cycle Q Clear(g_c), s	31.0	10.8	5.8	24.6	10.1	11.2	2.0	36.2	1.1	4.2	61.3	7.1
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	244	483	410	249	483	410	130	2018	900	250	2086	931
V/C Ratio(X)	0.70	0.39	0.22	0.50	0.36	0.40	0.52	0.69	0.03	0.56	0.91	0.20
Avail Cap(c_a), veh/h	303	589	500	312	589	500	230	2018	900	352	2086	931
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	51.9	39.6	37.7	49.7	39.3	39.7	29.3	19.6	12.1	18.2	23.3	12.3
Incr Delay (d2), s/veh	3.2	0.2	0.1	0.6	0.2	0.2	1.2	2.0	0.1	0.7	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	9.4	8.5	4.0	6.8	8.1	7.7	2.2	20.7	0.7	2.9	33.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	39.7	37.8	50.3	39.4	39.9	30.5	21.6	12.2	18.9	30.5	12.8
LnGrp LOS	E	D	D	D	D	D	C	C	B	B	C	B
Approach Vol, veh/h		447			465			1488			2214	
Approach Delay, s/veh		45.2			42.5			21.8			28.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	79.9		39.4	8.2	82.4		39.4				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	6.2	38.2		33.0	4.0	63.3		26.6				
Green Ext Time (p_c), s	0.1	13.7		0.8	0.0	0.0		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		29.2
HCM 6th LOS		C

Notes

* HCM 6th 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
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	251	495	419	256	495	419	128	1989	887	249	2062	920
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	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	20.8	10.7	5.7	13.7	10.0	11.1	2.1	36.9	1.1	4.3	62.3	7.2
Cycle Q Clear(g_c), s	30.8	10.7	5.7	24.4	10.0	11.1	2.1	36.9	1.1	4.3	62.3	7.2
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	495	419	256	495	419	128	1989	887	249	2062	920
V/C Ratio(X)	0.68	0.38	0.21	0.49	0.36	0.39	0.52	0.70	0.03	0.56	0.92	0.20
Avail Cap(c_a), veh/h	304	589	500	312	589	500	227	1989	887	347	2062	920
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	51.1	38.9	37.1	48.9	38.6	39.0	29.7	20.4	12.6	18.8	24.1	12.7
Incr Delay (d2), s/veh	5.6	0.7	0.4	2.0	0.6	0.8	4.7	2.1	0.1	2.8	7.9	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	9.6	8.6	4.0	6.9	8.1	7.8	2.4	21.1	0.7	3.2	34.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	39.6	37.4	50.9	39.3	39.9	34.4	22.5	12.7	21.6	32.0	13.2
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		45.7			42.6			22.8			29.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	78.8		40.1	8.3	81.5		40.1				
Change Period (Y+Rc), s	4.5	* 5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	13.7	* 60		41.3	11.1	62.1		41.3				
Max Q Clear Time (g_c+I1), s	6.3	38.9		32.8	4.1	64.3		26.4				
Green Ext Time (p_c), s	0.3	13.4		1.9	0.1	0.0		2.5				

Intersection Summary		
HCM 6th Ctrl Delay		30.4
HCM 6th LOS		C

Notes

* HCM 6th 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
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	517	839	12	126	429	192	89	2589	804	170	1876	837
Arrive On Green	0.15	0.24	0.24	0.04	0.12	0.12	0.03	0.51	0.51	0.05	0.53	0.53
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	17.5	28.3	28.3	1.4	6.2	5.7	0.8	13.9	28.6	4.0	16.3	10.7
Cycle Q Clear(g_c), s	17.5	28.3	28.3	1.4	6.2	5.7	0.8	13.9	28.6	4.0	16.3	10.7
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	517	416	435	126	429	192	89	2589	804	170	1876	837
V/C Ratio(X)	0.97	1.07	1.07	0.32	0.46	0.42	0.25	0.38	0.64	0.68	0.42	0.30
Avail Cap(c_a), veh/h	517	416	435	311	635	283	303	2589	804	449	1876	837
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	50.7	45.8	45.9	56.3	49.0	48.8	57.3	17.7	21.3	56.1	16.9	15.6
Incr Delay (d2), s/veh	29.6	62.2	61.3	0.5	0.6	1.1	0.5	0.4	3.9	1.8	0.7	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	14.2	27.1	28.0	1.1	4.9	4.1	0.6	9.1	16.2	3.1	10.6	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.3	108.1	107.2	56.8	49.6	49.9	57.8	18.2	25.2	57.9	17.6	16.5
LnGrp LOS	F	F	F	E	D	D	E	B	C	E	B	B
Approach Vol, veh/h		1415			318			1509			1160	
Approach Delay, s/veh		97.9			50.6			21.1			21.4	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	67.8	7.9	34.8	6.9	70.4	21.6	21.1
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	5.9	45.1	10.9	28.3	* 11	* 50	18.1	* 22
Max Q Clear Time (g_c+I1), s	6.0	30.6	3.4	30.3	2.8	18.3	19.5	8.2
Green Ext Time (p_c), s	0.1	9.3	0.0	0.0	0.0	10.3	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Notes

* HCM 6th 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)	558	934	13	93	225	162	22	964	585	196	783	298
Future Volume (veh/h)	558	934	13	93	225	162	22	964	585	196	783	298
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	558	934	13	93	225	162	22	964	585	196	783	298
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	517	840	12	164	468	209	89	2411	748	253	1838	820
Arrive On Green	0.15	0.24	0.24	0.05	0.13	0.13	0.03	0.48	0.48	0.07	0.52	0.52
Sat Flow, veh/h	3428	3560	50	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	558	462	485	93	225	162	22	964	585	196	783	298
Grp Sat Flow(s),veh/h/ln	1714	1763	1847	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	18.1	28.3	28.3	3.2	7.1	12.0	0.8	14.8	37.3	6.7	16.4	13.4
Cycle Q Clear(g_c), s	18.1	28.3	28.3	3.2	7.1	12.0	0.8	14.8	37.3	6.7	16.4	13.4
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	517	416	435	164	468	209	89	2411	748	253	1838	820
V/C Ratio(X)	1.08	1.11	1.11	0.57	0.48	0.78	0.25	0.40	0.78	0.77	0.43	0.36
Avail Cap(c_a), veh/h	517	416	435	311	635	283	303	2411	748	449	1838	820
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)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	45.9	45.9	55.9	48.2	50.3	57.3	20.3	26.2	54.6	17.7	17.0
Incr Delay (d2), s/veh	59.9	75.4	74.5	1.2	0.6	7.8	0.5	0.5	8.0	1.9	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.8	29.4	30.5	2.5	5.6	8.8	0.6	9.6	21.1	5.3	10.7	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.8	121.2	120.4	57.1	48.8	58.1	57.8	20.8	34.2	56.5	18.4	18.2
LnGrp LOS	F	F	F	E	D	E	E	C	C	E	B	B
Approach Vol, veh/h		1505			480			1571			1277	
Approach Delay, s/veh		117.1			53.5			26.3			24.2	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	63.6	9.2	34.8	6.9	69.1	21.6	22.4
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	15.3	45.1	10.9	28.3	* 11	* 50	18.1	* 22
Max Q Clear Time (g_c+I1), s	8.7	39.3	5.2	30.3	2.8	18.4	20.1	14.0
Green Ext Time (p_c), s	0.1	4.5	0.0	0.0	0.0	10.5	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	56.7
HCM 6th LOS	E

Notes

* HCM 6th 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)	558	934	13	93	225	162	22	964	585	196	783	298
Future Volume (veh/h)	558	934	13	93	225	162	22	964	585	196	783	298
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	558	934	13	93	225	162	22	1261	387	196	783	298
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	674	1163	16	164	627	398	92	2137	679	258	2181	986
Arrive On Green	0.20	0.33	0.33	0.05	0.18	0.18	0.03	0.38	0.38	0.08	0.43	0.43
Sat Flow, veh/h	3428	3560	50	3428	3526	1572	3534	5567	1572	3428	5066	1572
Grp Volume(v), veh/h	558	462	485	93	225	162	22	1261	387	196	783	298
Grp Sat Flow(s),veh/h/ln	1714	1763	1847	1714	1763	1572	1767	1856	1572	1714	1689	1572
Q Serve(g_s), s	18.7	28.7	28.7	3.2	6.7	10.3	0.7	21.7	22.3	6.7	12.5	10.5
Cycle Q Clear(g_c), s	18.7	28.7	28.7	3.2	6.7	10.3	0.7	21.7	22.3	6.7	12.5	10.5
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	674	576	603	164	627	398	92	2137	679	258	2181	986
V/C Ratio(X)	0.83	0.80	0.80	0.57	0.36	0.41	0.24	0.59	0.57	0.76	0.36	0.30
Avail Cap(c_a), veh/h	1043	786	823	214	734	446	359	2137	679	357	2181	986
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	46.3	36.9	36.9	55.9	43.3	37.3	57.3	29.5	25.7	54.4	23.0	10.3
Incr Delay (d2), s/veh	3.8	4.5	4.4	4.4	0.5	1.0	1.9	1.2	3.5	7.8	0.5	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	12.5	18.2	18.9	2.6	5.3	7.2	0.6	14.5	13.5	5.6	8.6	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	41.4	41.2	60.3	43.8	38.3	59.2	30.7	29.2	62.2	23.5	11.1
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	B
Approach Vol, veh/h		1505			480			1670			1277	
Approach Delay, s/veh		44.6			45.1			30.7			26.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	52.6	9.2	45.7	6.9	58.2	27.1	27.8
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	12.5	26.5	7.5	53.5	* 12	* 27	36.5	* 25
Max Q Clear Time (g_c+I1), s	8.7	24.3	5.2	30.7	2.7	14.5	20.7	12.3
Green Ext Time (p_c), s	0.3	1.9	0.1	8.5	0.0	6.5	2.8	2.1

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th 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
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	353	905	71	390	1001	446	150	2058	639	182	1457	650
Arrive On Green	0.10	0.27	0.27	0.11	0.28	0.28	0.04	0.41	0.41	0.05	0.41	0.41
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	13.4	22.0	22.1	12.5	36.1	12.6	3.0	14.4	8.6	4.9	29.4	29.5
Cycle Q Clear(g_c), s	13.4	22.0	22.1	12.5	36.1	12.6	3.0	14.4	8.6	4.9	29.4	29.5
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	353	481	494	390	1001	446	150	2058	639	182	1457	650
V/C Ratio(X)	1.24	0.69	0.69	0.86	0.99	0.42	0.54	0.39	0.25	0.72	0.67	0.68
Avail Cap(c_a), veh/h	353	481	494	593	1001	446	311	2058	639	491	1457	650
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)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	42.4	42.4	56.6	46.3	37.9	60.9	27.2	25.5	60.6	31.0	31.0
Incr Delay (d2), s/veh	129.1	3.6	3.6	5.3	24.8	0.5	1.1	0.6	0.9	2.0	2.5	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.0	14.8	15.2	9.5	26.0	8.5	2.4	9.8	6.0	3.8	18.5	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	187.4	46.0	45.9	61.9	71.1	38.3	62.0	27.7	26.4	62.6	33.5	36.6
LnGrp LOS	F	D	D	E	E	D	E	C	C	E	C	D
Approach Vol, veh/h		1115			1510			1035			1550	
Approach Delay, s/veh		101.6			64.9			30.2			36.8	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	59.3	18.3	42.0	9.5	60.2	16.9	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	18.6	41.6	22.5	27.3	* 12	* 49	13.4	* 37
Max Q Clear Time (g_c+I1), s	6.9	16.4	14.5	24.1	5.0	31.5	15.4	38.1
Green Ext Time (p_c), s	0.1	8.7	0.3	1.0	0.0	10.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	57.5
HCM 6th LOS	E

Notes

* HCM 6th 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)	492	659	49	398	1019	265	81	799	213	212	979	493
Future Volume (veh/h)	492	659	49	398	1019	265	81	799	213	212	979	493
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	492	659	49	398	1019	265	81	799	213	212	979	493
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	353	849	63	451	1001	446	150	1934	600	265	1457	650
Arrive On Green	0.10	0.26	0.26	0.13	0.28	0.28	0.04	0.38	0.38	0.08	0.41	0.41
Sat Flow, veh/h	3428	3327	247	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	492	349	359	398	1019	265	81	799	213	212	979	493
Grp Sat Flow(s),veh/h/ln	1714	1763	1811	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	13.4	23.9	23.9	14.8	36.9	18.9	3.0	15.0	12.6	7.9	29.3	34.8
Cycle Q Clear(g_c), s	13.4	23.9	23.9	14.8	36.9	18.9	3.0	15.0	12.6	7.9	29.3	34.8
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	353	450	462	451	1001	446	150	1934	600	265	1457	650
V/C Ratio(X)	1.39	0.78	0.78	0.88	1.02	0.59	0.54	0.41	0.35	0.80	0.67	0.76
Avail Cap(c_a), veh/h	353	450	462	593	1001	446	311	1934	600	491	1457	650
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	58.3	44.9	45.0	55.4	46.5	40.1	60.9	29.5	28.7	59.0	31.0	32.6
Incr Delay (d2), s/veh	191.4	7.2	7.0	9.9	33.1	1.9	1.1	0.7	1.6	2.1	2.5	8.1
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	23.8	16.3	16.7	11.2	28.1	11.9	2.4	10.2	8.6	6.2	18.4	20.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	249.7	52.1	52.0	65.3	79.7	41.9	62.0	30.1	30.4	61.1	33.5	40.7
LnGrp LOS	F	D	D	E	F	D	E	C	C	E	C	D
Approach Vol, veh/h		1200			1682			1093			1684	
Approach Delay, s/veh		133.1			70.3			32.5			39.1	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	56.1	20.6	39.7	9.5	60.2	16.9	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	18.6	41.6	22.5	27.3	* 12	* 49	13.4	* 37
Max Q Clear Time (g_c+I1), s	10.9	17.0	16.8	25.9	5.0	36.8	15.4	38.9
Green Ext Time (p_c), s	0.2	9.0	0.3	0.5	0.0	8.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	67.0
HCM 6th LOS	E

Notes

* HCM 6th 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)	492	659	49	398	1019	265	81	799	213	212	979	493
Future Volume (veh/h)	492	659	49	398	1019	265	81	799	213	212	979	493
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	492	659	49	398	1019	265	81	799	213	212	979	493
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	566	1221	91	498	1224	667	154	1429	632	264	1457	712
Arrive On Green	0.17	0.37	0.37	0.15	0.35	0.35	0.04	0.26	0.26	0.10	0.38	0.38
Sat Flow, veh/h	3428	3327	247	3428	3526	1572	3534	5567	1572	3428	5066	1572
Grp Volume(v), veh/h	492	349	359	398	1019	265	81	799	213	212	979	493
Grp Sat Flow(s),veh/h/ln	1714	1763	1811	1714	1763	1572	1767	1856	1572	1714	1689	1572
Q Serve(g_s), s	18.2	20.3	20.3	14.6	34.5	15.2	2.9	16.2	12.2	7.9	20.9	33.1
Cycle Q Clear(g_c), s	18.2	20.3	20.3	14.6	34.5	15.2	2.9	16.2	12.2	7.9	20.9	33.1
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	566	647	665	498	1224	667	154	1429	632	264	1457	712
V/C Ratio(X)	0.87	0.54	0.54	0.80	0.83	0.40	0.52	0.56	0.34	0.80	0.67	0.69
Avail Cap(c_a), veh/h	672	647	665	1279	1383	738	196	1429	632	303	1457	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	32.5	32.5	53.7	38.9	25.9	60.8	41.9	26.9	57.4	35.0	24.7
Incr Delay (d2), s/veh	9.8	1.0	1.0	4.2	4.4	0.5	3.9	1.6	1.4	14.0	2.5	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	12.9	13.1	13.5	10.7	21.6	9.6	2.5	11.9	8.3	6.8	12.9	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	33.5	33.5	57.9	43.3	26.5	64.7	43.5	28.3	71.3	37.5	30.2
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	C
Approach Vol, veh/h		1200			1682			1093			1684	
Approach Delay, s/veh		45.4			44.1			42.1			39.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	39.9	22.4	54.2	9.5	43.9	25.0	51.6
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	10.0	33.5	18.9	47.7	* 5.7	* 37	21.5	* 45
Max Q Clear Time (g_c+I1), s	9.9	22.5	48.5	27.5	* 7.2	* 27	25.5	* 51
Green Ext Time (p_c), s	0.2	18.2	16.6	22.3	4.9	35.1	20.2	36.5
		2.7	2.3	2.4	0.1	0.0	1.3	8.7

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th 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
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	517	839	12	144	448	200	108	2497	775	214	1838	820
Arrive On Green	0.15	0.24	0.24	0.04	0.13	0.13	0.03	0.49	0.49	0.06	0.52	0.52
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	18.1	28.3	28.3	1.9	8.6	7.8	1.0	21.4	48.7	5.4	25.2	15.8
Cycle Q Clear(g_c), s	18.1	28.3	28.3	1.9	8.6	7.8	1.0	21.4	48.7	5.4	25.2	15.8
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	517	416	435	144	448	200	108	2497	775	214	1838	820
V/C Ratio(X)	1.32	1.46	1.46	0.38	0.60	0.55	0.28	0.53	0.90	0.74	0.59	0.41
Avail Cap(c_a), veh/h	517	416	435	311	635	283	303	2497	775	449	1838	820
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)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	45.9	45.9	56.0	49.5	49.1	56.8	20.9	27.8	55.3	19.8	17.5
Incr Delay (d2), s/veh	153.4	216.0	215.8	0.6	1.0	1.7	0.5	0.8	15.7	1.9	1.4	1.5
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	28.1	55.2	57.5	1.5	6.8	5.6	0.8	13.0	27.9	4.3	15.3	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	204.3	261.9	261.7	56.6	50.4	50.9	57.3	21.7	43.5	57.1	21.2	19.1
LnGrp LOS	F	F	F	E	D	D	E	C	D	E	C	B
Approach Vol, veh/h		1921			432			2048			1574	
Approach Delay, s/veh		241.4			51.3			29.6			24.3	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	65.7	8.5	34.8	7.6	69.1	21.6	21.7
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	15.5	45.1	10.9	28.3	* 11	* 50	18.1	* 22
Max Q Clear Time (g_c+I1), s	7.4	50.7	3.9	30.3	3.0	27.2	20.1	10.6
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	12.7	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	97.9
HCM 6th LOS	F

Notes

* HCM 6th 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)	737	1256	18	108	296	190	30	1311	769	238	1066	387
Future Volume (veh/h)	737	1256	18	108	296	190	30	1311	769	238	1066	387
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	737	1256	18	108	296	190	30	1311	769	238	1066	387
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	517	871	12	167	503	224	108	2299	714	295	1783	795
Arrive On Green	0.15	0.24	0.24	0.05	0.14	0.14	0.03	0.45	0.45	0.09	0.51	0.51
Sat Flow, veh/h	3428	3558	51	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	737	622	652	108	296	190	30	1311	769	238	1066	387
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	18.1	29.4	29.4	3.7	9.4	14.1	1.0	22.9	54.5	8.2	25.7	19.4
Cycle Q Clear(g_c), s	18.1	29.4	29.4	3.7	9.4	14.1	1.0	22.9	54.5	8.2	25.7	19.4
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	517	432	452	167	503	224	108	2299	714	295	1783	795
V/C Ratio(X)	1.43	1.44	1.44	0.65	0.59	0.85	0.28	0.57	1.08	0.81	0.60	0.49
Avail Cap(c_a), veh/h	517	432	452	311	635	283	303	2299	714	449	1783	795
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)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	45.3	45.3	56.1	48.1	50.2	56.8	24.1	32.8	53.9	21.0	19.4
Incr Delay (d2), s/veh	200.1	208.8	208.6	1.6	0.8	16.1	0.5	1.0	56.5	3.4	1.5	2.1
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	33.3	55.7	58.1	2.9	7.4	10.6	0.8	13.9	42.0	6.5	15.7	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	251.0	254.1	253.9	57.6	49.0	66.3	57.3	25.2	89.3	57.2	22.5	21.6
LnGrp LOS	F	F	F	E	D	E	E	C	F	E	C	C
Approach Vol, veh/h		2011			594			2110			1691	
Approach Delay, s/veh		252.9			56.1			49.0			27.2	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	61.0	9.3	35.9	7.6	67.2	21.6	23.6
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	15.3	45.1	10.9	28.3	* 11	* 50	18.1	* 22
Max Q Clear Time (g_c+I1), s	10.2	56.5	5.7	31.4	3.0	27.7	20.1	16.1
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	12.8	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	107.9
HCM 6th LOS	F

Notes

* HCM 6th 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)	737	1256	18	108	296	190	30	1311	769	238	1066	387
Future Volume (veh/h)	737	1256	18	108	296	190	30	1311	769	238	1066	387
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	737	1256	18	108	296	190	30	1684	520	238	1066	387
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	841	1333	19	167	628	416	112	1803	586	295	1904	977
Arrive On Green	0.25	0.37	0.37	0.05	0.18	0.18	0.03	0.32	0.32	0.09	0.38	0.38
Sat Flow, veh/h	3428	3558	51	3428	3526	1572	3534	5567	1572	3428	5066	1572
Grp Volume(v), veh/h	737	622	652	108	296	190	30	1684	520	238	1066	387
Grp Sat Flow(s),veh/h/ln	1714	1763	1846	1714	1763	1572	1767	1856	1572	1714	1689	1572
Q Serve(g_s), s	24.8	40.9	41.0	3.7	9.0	12.1	1.0	35.2	37.2	8.2	20.0	14.8
Cycle Q Clear(g_c), s	24.8	40.9	41.0	3.7	9.0	12.1	1.0	35.2	37.2	8.2	20.0	14.8
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	841	661	692	167	628	416	112	1803	586	295	1904	977
V/C Ratio(X)	0.88	0.94	0.94	0.65	0.47	0.46	0.27	0.93	0.89	0.81	0.56	0.40
Avail Cap(c_a), veh/h	986	668	700	243	628	416	330	1803	586	329	1904	977
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	43.5	36.3	36.3	56.1	44.2	36.9	56.7	39.3	35.3	53.9	29.6	11.4
Incr Delay (d2), s/veh	7.0	18.5	18.0	5.9	0.8	1.1	1.8	10.4	17.9	13.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.9	26.8	27.8	3.1	7.1	8.3	0.8	23.8	23.2	7.2	12.7	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	54.7	54.2	62.0	45.0	38.1	58.6	49.8	53.2	67.4	30.8	12.6
LnGrp LOS	D	D	D	E	D	D	E	D	D	E	C	B
Approach Vol, veh/h		2011			594			2234			1691	
Approach Delay, s/veh		53.0			45.9			50.7			31.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	45.4	9.3	51.5	7.6	51.6	32.9	27.9
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	11.5	34.5	8.5	45.5	* 11	* 35	34.5	* 20
Max Q Clear Time (g_c+I1), s	10.2	39.2	5.7	43.0	3.0	22.0	26.8	14.1
Green Ext Time (p_c), s	0.2	0.0	0.1	2.0	0.0	8.6	2.6	1.6

Intersection Summary	
HCM 6th Ctrl Delay	46.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
* HCM 6th 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)	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
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	353	791	62	508	1001	446	158	1988	617	229	1448	646
Arrive On Green	0.10	0.24	0.24	0.15	0.28	0.28	0.05	0.39	0.39	0.07	0.41	0.41
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	13.4	31.1	31.1	17.0	36.9	18.0	4.1	21.5	12.4	6.6	46.5	46.8
Cycle Q Clear(g_c), s	13.4	31.1	31.1	17.0	36.9	18.0	4.1	21.5	12.4	6.6	46.5	46.8
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	353	421	432	508	1001	446	158	1988	617	229	1448	646
V/C Ratio(X)	1.69	1.08	1.08	0.90	1.34	0.57	0.69	0.54	0.35	0.77	0.92	0.92
Avail Cap(c_a), veh/h	353	421	432	593	1001	446	311	1988	617	491	1448	646
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)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	49.5	49.5	54.4	46.5	39.8	61.1	30.5	27.8	59.7	36.3	36.3
Incr Delay (d2), s/veh	319.2	62.4	62.0	13.8	158.5	1.5	2.0	1.1	1.5	2.0	10.9	20.8
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	33.5	28.8	29.3	12.9	56.1	11.4	3.2	13.6	8.4	5.2	29.0	28.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	377.5	111.9	111.4	68.2	205.1	41.3	63.1	31.6	29.3	61.7	47.2	57.2
LnGrp LOS	F	F	F	E	F	D	E	C	C	E	D	E
Approach Vol, veh/h		1514			2049			1404			2104	
Approach Delay, s/veh		216.3			154.2			33.7			51.2	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	57.5	22.7	37.6	9.8	59.9	16.9	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	8.6	41.6	22.5	27.3	* 12	* 49	13.4	* 37
Max Q Clear Time (g_c+I1), s	8.6	23.5	19.0	33.1	6.1	48.8	15.4	38.9
Green Ext Time (p_c), s	0.1	10.1	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	112.9
HCM 6th LOS	F

Notes

* HCM 6th 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)	649	883	67	518	1371	332	109	1084	269	258	1330	650
Future Volume (veh/h)	649	883	67	518	1371	332	109	1084	269	258	1330	650
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	649	883	67	518	1371	332	109	1084	269	258	1330	650
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	353	737	56	566	1001	446	158	1866	579	311	1448	646
Arrive On Green	0.10	0.22	0.22	0.16	0.28	0.28	0.05	0.37	0.37	0.09	0.41	0.41
Sat Flow, veh/h	3428	3321	252	3428	3526	1572	3428	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	649	469	481	518	1371	332	109	1084	269	258	1330	650
Grp Sat Flow(s),veh/h/ln	1714	1763	1810	1714	1763	1572	1714	1689	1572	1714	1763	1572
Q Serve(g_s), s	13.4	28.9	28.9	19.3	36.9	24.9	4.1	22.4	16.9	9.6	46.4	53.4
Cycle Q Clear(g_c), s	13.4	28.9	28.9	19.3	36.9	24.9	4.1	22.4	16.9	9.6	46.4	53.4
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	353	391	402	566	1001	446	158	1866	579	311	1448	646
V/C Ratio(X)	1.84	1.20	1.20	0.92	1.37	0.74	0.69	0.58	0.46	0.83	0.92	1.01
Avail Cap(c_a), veh/h	353	391	402	593	1001	446	311	1866	579	491	1448	646
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)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	50.6	50.6	53.4	46.5	42.3	61.1	33.0	31.3	58.1	36.2	38.3
Incr Delay (d2), s/veh	385.6	108.3	107.9	18.0	172.9	6.3	2.0	1.3	2.7	3.4	10.8	37.0
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	38.5	34.9	35.6	14.7	59.4	15.5	3.2	14.2	11.0	7.6	28.9	34.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	443.9	158.9	158.5	71.4	219.5	48.6	63.1	34.3	33.9	61.5	47.0	75.3
LnGrp LOS	F	F	F	E	F	D	E	C	C	E	D	F
Approach Vol, veh/h		1599			2221			1462			2238	
Approach Delay, s/veh		274.5			159.4			36.4			56.9	
Approach LOS		F			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	54.4	24.9	35.4	9.8	59.9	16.9	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	18.6	41.6	22.5	27.3	* 12	* 49	13.4	* 37
Max Q Clear Time (g_c+I1), s	11.6	24.4	21.3	30.9	6.1	55.4	15.4	38.9
Green Ext Time (p_c), s	0.2	10.1	0.1	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	129.4
HCM 6th LOS	F

Notes

* HCM 6th 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)	649	883	67	518	1371	332	109	1084	269	258	1330	650
Future Volume (veh/h)	649	883	67	518	1371	332	109	1084	269	258	1330	650
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	649	883	67	518	1371	332	109	1084	269	258	1330	650
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	672	1343	102	631	1383	756	160	1670	761	303	1727	845
Arrive On Green	0.20	0.40	0.40	0.18	0.39	0.39	0.05	0.30	0.30	0.06	0.23	0.23
Sat Flow, veh/h	3428	3321	252	3428	3526	1572	3534	5567	1572	3428	5066	1572
Grp Volume(v), veh/h	649	469	481	518	1371	332	109	1084	269	258	1330	650
Grp Sat Flow(s),veh/h/ln	1714	1763	1810	1714	1763	1572	1767	1856	1572	1714	1689	1572
Q Serve(g_s), s	24.4	28.0	28.0	18.9	50.3	18.1	3.9	22.0	13.8	9.7	32.0	40.3
Cycle Q Clear(g_c), s	24.4	28.0	28.0	18.9	50.3	18.1	3.9	22.0	13.8	9.7	32.0	40.3
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	672	713	732	631	1383	756	160	1670	761	303	1727	845
V/C Ratio(X)	0.97	0.66	0.66	0.82	0.99	0.44	0.68	0.65	0.35	0.85	0.77	0.77
Avail Cap(c_a), veh/h	672	713	732	1279	1383	756	196	1670	761	303	1727	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	31.4	31.4	51.0	39.3	22.2	61.1	39.6	20.9	60.3	45.4	27.2
Incr Delay (d2), s/veh	22.6	2.0	1.9	3.8	22.1	0.6	8.8	2.0	1.3	20.5	3.4	6.7
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	17.5	17.0	17.4	13.0	33.3	10.8	3.5	15.2	9.0	8.8	20.5	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	33.4	33.3	54.8	61.3	22.8	69.9	41.5	22.2	80.8	48.8	33.9
LnGrp LOS	E	C	C	D	E	C	E	D	C	F	D	C
Approach Vol, veh/h		1599			2221			1462			2238	
Approach Delay, s/veh		50.0			54.1			40.1			48.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	46.0	27.4	59.1	9.7	51.3	29.0	57.5
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	11.5	22.5	48.5	27.5	* 7.2	* 27	25.5	* 51
Max Q Clear Time (g_c+I1), s	11.7	24.0	20.9	30.0	5.9	42.3	26.4	52.3
Green Ext Time (p_c), s	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.6

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	-	-	-	-	-	-	150	-	-	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	2221	2927	849	1152	0	0	1697	0	0
Stage 1	1152	1152	-	1757	1757	-	-	-	-	-	-	-
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	260	328	-	-	176	-	-
Stage 1	155	268	-	57	135	-	-	-	-	-	-	-
Stage 2	339	135	-	498	263	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	13	392	38	13	260	328	-	-	176	-	-
Mov Cap-2 Maneuver	64	13	-	38	13	-	-	-	-	-	-	-
Stage 1	140	254	-	52	122	-	-	-	-	-	-	-
Stage 2	302	122	-	435	250	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	78.8	168.6	0.3	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	328	-	-	64	392	44	176	-	-
HCM Lane V/C Ratio	0.095	-	-	0.625	0.079	0.591	0.051	-	-
HCM Control Delay (s)	17.1	-	-	128.3	15	168.6	26.6	-	-
HCM Lane LOS	C	-	-	F	C	F	D	-	-
HCM 95th %tile Q(veh)	0.3	-	-	2.7	0.3	2.2	0.2	-	-

Intersection	
Int Delay, s/veh	637.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	1	31	175	1	66	31	1649	115	111	1072	36
Future Vol, veh/h	40	1	31	175	1	66	31	1649	115	111	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	-	-	-	-	-	-	150	-	-	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	175	1	66	31	1649	115	111	1072	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2034	3138	554	2420	3099	882	1108	0	0	1764	0	0
Stage 1	1312	1312	-	1769	1769	-	-	-	-	-	-	-
Stage 2	722	1826	-	651	1330	-	-	-	-	-	-	-
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	60	11	406	~ 34	11	247	344	-	-	163	-	-
Stage 1	119	225	-	~ 56	134	-	-	-	-	-	-	-
Stage 2	347	125	-	384	220	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 14	3	406	~ 10	3	247	344	-	-	163	-	-
Mov Cap-2 Maneuver	~ 14	3	-	~ 10	3	-	-	-	-	-	-	-
Stage 1	108	72	-	~ 51	122	-	-	-	-	-	-	-
Stage 2	229	114	-	~ 112	70	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 808.3	$ 8491.4	0.3	5.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	344	-	-	14	78	13	163	-	-
HCM Lane V/C Ratio	0.09	-	-	2.857	0.41	18.615	0.681	-	-
HCM Control Delay (s)	16.5	-	-	$ 1390.8	80.3	$ 8491.4	64.5	-	-
HCM Lane LOS	C	-	-	F	F	F	F	-	-
HCM 95th %tile Q(veh)	0.3	-	-	5.8	1.6	31.5	4	-	-

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	175	1	66	31	1649	115	111	1072	36
Future Volume (veh/h)	40	1	31	175	1	66	31	1649	115	111	1072	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	1	31	175	1	66	31	1649	115	111	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	114	2	70	254	4	244	443	3186	222	312	3428	115
Arrive On Green	0.05	0.05	0.05	0.07	0.16	0.16	0.05	0.66	0.66	0.07	0.68	0.68
Sat Flow, veh/h	1324	49	1531	3428	24	1553	1767	4835	337	1767	5033	169
Grp Volume(v), veh/h	40	0	32	175	0	67	31	1151	613	111	719	389
Grp Sat Flow(s),veh/h/ln	1324	0	1580	1714	0	1576	1767	1689	1795	1767	1689	1825
Q Serve(g_s), s	4.0	0.0	2.7	6.7	0.0	5.1	0.7	23.8	23.9	2.4	11.7	11.7
Cycle Q Clear(g_c), s	4.0	0.0	2.7	6.7	0.0	5.1	0.7	23.8	23.9	2.4	11.7	11.7
Prop In Lane	1.00		0.97	1.00		0.99	1.00		0.19	1.00		0.09
Lane Grp Cap(c), veh/h	114	0	73	254	0	247	443	2225	1183	312	2300	1243
V/C Ratio(X)	0.35	0.00	0.44	0.69	0.00	0.27	0.07	0.52	0.52	0.36	0.31	0.31
Avail Cap(c_a), veh/h	230	0	211	457	0	479	484	2225	1183	327	2300	1243
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	0.0	62.7	61.0	0.0	50.1	6.1	11.9	11.9	8.8	8.7	8.7
Incr Delay (d2), s/veh	2.6	0.0	5.9	4.7	0.0	0.8	0.1	0.9	1.6	1.0	0.4	0.7
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	2.6	0.0	2.2	5.6	0.0	3.8	0.4	13.3	14.3	1.6	7.3	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	0.0	68.6	65.7	0.0	50.9	6.2	12.8	13.5	9.7	9.1	9.4
LnGrp LOS	E	A	E	E	A	D	A	B	B	A	A	A
Approach Vol, veh/h		72			242			1795			1219	
Approach Delay, s/veh		67.1			61.6			12.9			9.2	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	14.8	94.0	15.0	11.2	11.9	96.9		26.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.8	68.0	18.0	18.0	10.0	69.0		41.0
Max Q Clear Time (g_c+I1), s	4.4	25.9	8.7	6.0	2.7	13.7		7.1
Green Ext Time (p_c), s	0.2	24.9	0.5	0.2	0.0	13.7		0.5

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	27	0	0	1	0	1649	0	0	1568	31
Future Vol, veh/h	18	0	27	0	0	1	0	1649	0	0	1568	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	-	-	-	-	-	-	150	-	-	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	0	27	0	0	1	0	1649	0	0	1568	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2244	3233	800	2276	3248	825	1599	0	0	1649	0	0
Stage 1	1584	1584	-	1649	1649	-	-	-	-	-	-	-
Stage 2	660	1649	-	627	1599	-	-	-	-	-	-	-
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	44	9	280	42	9	269	197	-	-	186	-	-
Stage 1	76	165	-	68	153	-	-	-	-	-	-	-
Stage 2	379	153	-	397	162	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	44	9	280	38	9	269	197	-	-	186	-	-
Mov Cap-2 Maneuver	44	9	-	38	9	-	-	-	-	-	-	-
Stage 1	76	165	-	68	153	-	-	-	-	-	-	-
Stage 2	378	153	-	359	162	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.4	18.4	0	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	197	-	-	44	280	269	186	-	-
HCM Lane V/C Ratio	-	-	-	0.409	0.096	0.004	-	-	-
HCM Control Delay (s)	0	-	-	134.8	19.2	18.4	0	-	-
HCM Lane LOS	A	-	-	F	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	461.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	1	27	177	1	65	4	1617	96	96	1527	31
Future Vol, veh/h	18	1	27	177	1	65	4	1617	96	96	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	-	-	-	-	-	-	150	-	-	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	177	1	65	4	1617	96	96	1527	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2390	3456	779	2476	3423	857	1558	0	0	1713	0	0
Stage 1	1735	1735	-	1673	1673	-	-	-	-	-	-	-
Stage 2	655	1721	-	803	1750	-	-	-	-	-	-	-
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	36	6	289	~ 31	7	257	206	-	-	173	-	-
Stage 1	59	139	-	~ 66	149	-	-	-	-	-	-	-
Stage 2	382	141	-	309	137	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	3	289	~ 12	3	257	206	-	-	173	-	-
Mov Cap-2 Maneuver	~ 11	3	-	~ 12	3	-	-	-	-	-	-	-
Stage 1	58	62	-	~ 65	146	-	-	-	-	-	-	-
Stage 2	278	138	-	~ 123	61	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 443.9	$ 6846.8	0.1	2.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	206	-	-	11	66	16	173	-	-
HCM Lane V/C Ratio	0.019	-	-	1.636	0.424	15.188	0.555	-	-
HCM Control Delay (s)	22.8	-	-	$ 986.8	94.9	$ 6846.8	49.1	-	-
HCM Lane LOS	C	-	-	F	F	F	E	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.1	1.6	31.3	2.9	-	-

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	177	1	65	4	1617	96	96	1527	31
Future Volume (veh/h)	18	1	27	177	1	65	4	1617	96	96	1527	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	18	1	27	177	1	65	4	1617	96	96	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	105	2	58	263	4	244	270	3232	192	374	3666	74
Arrive On Green	0.04	0.04	0.04	0.08	0.16	0.16	0.02	1.00	1.00	0.07	0.72	0.72
Sat Flow, veh/h	1325	56	1525	3428	24	1552	1767	4890	290	1767	5110	104
Grp Volume(v), veh/h	18	0	28	177	0	66	4	1116	597	96	1009	549
Grp Sat Flow(s),veh/h/ln	1325	0	1581	1714	0	1576	1767	1689	1803	1767	1689	1837
Q Serve(g_s), s	1.7	0.0	2.3	6.5	0.0	4.8	0.1	0.0	0.0	1.9	15.7	15.7
Cycle Q Clear(g_c), s	1.7	0.0	2.3	6.5	0.0	4.8	0.1	0.0	0.0	1.9	15.7	15.7
Prop In Lane	1.00		0.96	1.00		0.98	1.00		0.16	1.00		0.06
Lane Grp Cap(c), veh/h	105	0	60	263	0	247	270	2232	1192	374	2423	1318
V/C Ratio(X)	0.17	0.00	0.47	0.67	0.00	0.27	0.01	0.50	0.50	0.26	0.42	0.42
Avail Cap(c_a), veh/h	244	0	225	435	0	479	408	2232	1192	398	2423	1318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	61.3	58.4	0.0	48.2	7.2	0.0	0.0	4.3	7.4	7.4
Incr Delay (d2), s/veh	1.1	0.0	7.9	4.2	0.0	0.8	0.0	0.8	1.5	0.5	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	1.1	0.0	1.9	5.4	0.0	3.5	0.1	0.4	0.9	1.1	8.8	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	0.0	69.2	62.6	0.0	49.0	7.3	0.8	1.5	4.8	7.9	8.4
LnGrp LOS	E	A	E	E	A	D	A	A	A	A	A	A
Approach Vol, veh/h		46			243			1717			1654	
Approach Delay, s/veh		66.4			58.9			1.1			7.9	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	13.2	90.9	15.5	10.4	5.8	98.3		25.9
Change Period (Y+Rc), s	3.5	5.0	5.5	* 5.5	4.5	5.0		5.5
Max Green Setting (Gmax), s	11.5	65.0	16.5	* 19	11.5	64.0		39.5
Max Q Clear Time (g_c+I1), s	3.9	2.0	8.5	4.3	2.1	17.7		6.8
Green Ext Time (p_c), s	0.2	29.1	0.5	0.1	0.0	21.9		0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	32

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	-	-	-	-	-	-	150	-	-	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	3017	3974	1152	1563	0	0	2304	0	0
Stage 1	1563	1563	-	2387	2387	-	-	-	-	-	-	-
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	163	205	-	-	86	-	-
Stage 1	79	169	-	~ 20	64	-	-	-	-	-	-	-
Stage 2	232	64	-	395	165	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 20	2	288	~ 9	2	163	205	-	-	86	-	-
Mov Cap-2 Maneuver	~ 20	2	-	~ 9	2	-	-	-	-	-	-	-
Stage 1	62	145	-	~ 16	51	-	-	-	-	-	-	-
Stage 2	177	51	-	289	142	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 678.4	$ 1705.9	0.5	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	205	-	-	20	288	11	86	-	-
HCM Lane V/C Ratio	0.21	-	-	2.75	0.149	3.273	0.14	-	-
HCM Control Delay (s)	27.2	-	-	$ 1193.4	19.3	$ 1705.9	53.5	-	-
HCM Lane LOS	D	-	-	F	C	F	F	-	-
HCM 95th %tile Q(veh)	0.8	-	-	7.2	0.5	5.6	0.5	-	-

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

Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	1	43	183	1	68	43	2254	117	114	1470	49
Future Vol, veh/h	55	1	43	183	1	68	43	2254	117	114	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	-	-	-	-	-	-	150	-	-	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	1	43	183	1	68	43	2254	117	114	1470	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2711	4180	760	3216	4146	1186	1519	0	0	2371	0	0
Stage 1	1723	1723	-	2399	2399	-	-	-	-	-	-	-
Stage 2	988	2457	-	817	1747	-	-	-	-	-	-	-
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	~ 22	2	297	~ 10	2	154	216	-	-	~ 80	-	-
Stage 1	61	141	-	~ 19	63	-	-	-	-	-	-	-
Stage 2	238	59	-	303	137	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	297	-	0	154	216	-	-	~ 80	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 49	0	-	~ 15	50	-	-	-	-	-	-	-
Stage 2	104	47	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.5	23.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	216	-	-	-	297	-	~ 80	-	-
HCM Lane V/C Ratio	0.199	-	-	-	0.148	-	1.425	-	-
HCM Control Delay (s)	25.8	-	-	-	19.2	-	$ 340.6	-	-
HCM Lane LOS	D	-	-	-	C	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	0.5	-	9	-	-

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	1	43	183	1	68	43	2254	117	114	1470	49
Future Volume (veh/h)	55	1	43	183	1	68	43	2254	117	114	1470	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	55	1	43	183	1	68	43	2254	117	114	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	130	2	90	254	4	263	336	3190	165	234	3325	111
Arrive On Green	0.06	0.06	0.06	0.07	0.17	0.17	0.06	0.65	0.65	0.07	0.66	0.66
Sat Flow, veh/h	1321	36	1542	3428	23	1553	1767	4932	254	1767	5035	168
Grp Volume(v), veh/h	55	0	44	183	0	69	43	1539	832	114	986	533
Grp Sat Flow(s),veh/h/ln	1321	0	1578	1714	0	1576	1767	1689	1810	1767	1689	1825
Q Serve(g_s), s	5.5	0.0	3.6	7.0	0.0	5.1	1.0	39.9	40.6	2.6	18.9	18.9
Cycle Q Clear(g_c), s	5.5	0.0	3.6	7.0	0.0	5.1	1.0	39.9	40.6	2.6	18.9	18.9
Prop In Lane	1.00		0.98	1.00		0.99	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	130	0	92	254	0	266	336	2184	1170	234	2231	1206
V/C Ratio(X)	0.42	0.00	0.48	0.72	0.00	0.26	0.13	0.70	0.71	0.49	0.44	0.44
Avail Cap(c_a), veh/h	229	0	210	457	0	479	362	2184	1170	249	2231	1206
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.5	0.0	61.6	61.1	0.0	48.7	7.2	15.5	15.6	23.4	11.0	11.0
Incr Delay (d2), s/veh	3.1	0.0	5.5	5.4	0.0	0.7	0.2	1.9	3.7	2.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	2.9	5.9	0.0	3.8	0.6	20.8	23.1	4.6	11.0	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.6	0.0	67.1	66.6	0.0	49.5	7.5	17.4	19.3	25.7	11.6	12.2
LnGrp LOS	E	A	E	E	A	D	A	B	B	C	B	B
Approach Vol, veh/h		99			252			2414			1633	
Approach Delay, s/veh		66.2			61.9			17.9			12.8	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	14.9	92.3	15.0	12.8	13.0	94.2		27.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	68.0	18.0	18.0	10.0	69.0		41.0
Max Q Clear Time (g_c+I1), s	7.6	42.6	9.0	7.5	3.0	20.9		7.1
Green Ext Time (p_c), s	0.2	22.3	0.6	0.3	0.0	21.5		0.6

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	5.6

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	0	2237	0	0	2128	43
Future Vol, veh/h	24	0	36	0	0	2	0	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	-	-	-	-	-	-	150	-	-	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	0	2237	0	0	2128	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3045	4387	1086	3088	4408	1119	2171	0	0	2237	0	0
Stage 1	2150	2150	-	2237	2237	-	-	-	-	-	-	-
Stage 2	895	2237	-	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	180	13	1	171	101	-	-	93	-	-
Stage 1	30	85	-	25	77	-	-	-	-	-	-	-
Stage 2	271	77	-	289	83	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 13	1	180	10	1	171	101	-	-	93	-	-
Mov Cap-2 Maneuver	~ 13	1	-	10	1	-	-	-	-	-	-	-
Stage 1	30	85	-	25	77	-	-	-	-	-	-	-
Stage 2	268	77	-	231	83	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 413.3	26.3	0	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	101	-	-	13	180	171	93	-	-
HCM Lane V/C Ratio	-	-	-	1.846	0.2	0.012	-	-	-
HCM Control Delay (s)	0	-	-	-$ 988.4	29.9	26.3	0	-	-
HCM Lane LOS	A	-	-	F	D	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	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	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	1	36	177	1	66	6	2205	96	96	2087	43
Future Vol, veh/h	24	1	36	177	1	66	6	2205	96	96	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	-	-	-	-	-	150	-	-	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	1	36	177	1	66	6	2205	96	96	2087	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3196	4614	1065	3292	4587	1151	2130	0	0	2301	0	0
Stage 1	2301	2301	-	2265	2265	-	-	-	-	-	-	-
Stage 2	895	2313	-	1027	2322	-	-	-	-	-	-	-
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	~ 11	1	186	~ 9	1	163	106	-	-	~ 87	-	-
Stage 1	~ 23	71	-	~ 24	74	-	-	-	-	-	-	-
Stage 2	271	70	-	225	69	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	186	-	0	163	106	-	-	~ 87	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 22	0	-	~ 23	70	-	-	-	-	-	-	-
Stage 2	150	66	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.1	9.3
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	106	-	-	-	186	-	~ 87	-	-
HCM Lane V/C Ratio	0.057	-	-	-	0.199	-	1.103	-	-
HCM Control Delay (s)	41	-	-	-	29.1	-	214.9	-	-
HCM Lane LOS	E	-	-	-	D	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7	-	6.6	-	-

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	1	36	177	1	66	6	2205	96	96	2087	43
Future Volume (veh/h)	24	1	36	177	1	66	6	2205	96	96	2087	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	24	1	36	177	1	66	6	2205	96	96	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	108	2	61	263	4	247	178	3281	142	292	3631	75
Arrive On Green	0.04	0.04	0.04	0.08	0.16	0.16	0.03	1.00	1.00	0.07	0.71	0.71
Sat Flow, veh/h	1324	43	1536	3428	24	1553	1767	4978	216	1767	5109	105
Grp Volume(v), veh/h	24	0	37	177	0	67	6	1492	809	96	1379	751
Grp Sat Flow(s),veh/h/ln	1324	0	1579	1714	0	1576	1767	1689	1817	1767	1689	1837
Q Serve(g_s), s	2.3	0.0	3.0	6.5	0.0	4.9	0.1	0.0	0.0	1.9	25.9	26.0
Cycle Q Clear(g_c), s	2.3	0.0	3.0	6.5	0.0	4.9	0.1	0.0	0.0	1.9	25.9	26.0
Prop In Lane	1.00		0.97	1.00		0.99	1.00		0.12	1.00		0.06
Lane Grp Cap(c), veh/h	108	0	63	263	0	250	178	2225	1197	292	2401	1306
V/C Ratio(X)	0.22	0.00	0.59	0.67	0.00	0.27	0.03	0.67	0.68	0.33	0.57	0.58
Avail Cap(c_a), veh/h	244	0	225	435	0	479	308	2225	1197	316	2401	1306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	61.4	58.4	0.0	48.0	8.3	0.0	0.0	4.4	9.2	9.2
Incr Delay (d2), s/veh	1.5	0.0	12.0	4.2	0.0	0.8	0.1	1.6	3.1	0.9	1.0	1.9
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	1.5	0.0	2.6	5.4	0.0	3.6	0.1	0.9	1.8	1.2	13.4	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	73.4	62.6	0.0	48.8	8.4	1.6	3.1	5.3	10.2	11.0
LnGrp LOS	E	A	E	E	A	D	A	A	A	A	B	B
Approach Vol, veh/h		61			244			2307			2226	
Approach Delay, s/veh		69.1			58.8			2.1			10.3	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	13.2	90.7	15.5	10.7	6.4	97.4		26.1
Change Period (Y+Rc), s	3.5	5.0	5.5	* 5.5	4.5	5.0		5.5
Max Green Setting (Gmax), s	11.5	65.0	16.5	* 19	11.5	64.0		39.5
Max Q Clear Time (g_c+I1), s	3.3	2.0	8.5	5.0	2.1	28.0		6.9
Green Ext Time (p_c), s	0.2	45.6	0.5	0.2	0.0	27.5		0.5

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th 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)	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
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	261	221	136	133	178	151	406	2227		264	2224	
Arrive On Green	0.08	0.21	0.21	0.10	0.10	0.10	0.04	0.63	0.00	0.04	0.63	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	9.7	0.0	16.8	1.8	5.5	9.0	2.7	30.6	0.0	2.6	17.1	0.0
Cycle Q Clear(g_c), s	9.7	0.0	16.8	5.4	5.5	9.0	2.7	30.6	0.0	2.6	17.1	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	261	0	357	133	178	151	406	2227		264	2224	
V/C Ratio(X)	0.62	0.00	0.73	0.14	0.51	0.80	0.28	0.65		0.41	0.44	
Avail Cap(c_a), veh/h	261	0	643	320	490	415	498	2227		412	2224	
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	43.2	0.0	44.5	53.2	51.6	53.1	8.5	13.8	0.0	12.5	11.3	0.0
Incr Delay (d2), s/veh	3.3	0.0	1.1	0.2	0.8	3.8	0.1	1.5	0.0	0.4	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	7.8	0.0	11.5	0.9	4.6	6.6	1.7	16.9	0.0	1.6	10.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	45.6	53.4	52.4	56.9	8.7	15.3	0.0	12.9	12.0	0.0
LnGrp LOS	D	A	D	D	D	E	A	B		B	B	
Approach Vol, veh/h		421			229			1555			1089	
Approach Delay, s/veh		45.9			54.8			14.8			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	81.3		30.7	8.1	81.2	13.2	17.5				
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6				
Max Green Setting (Gmax), s	14.5	* 47		44.4	10.9	49.7	9.7	* 32				
Max Q Clear Time (g_c+I1), s	4.6	32.6		18.8	4.7	19.1	11.7	11.0				
Green Ext Time (p_c), s	0.0	8.3		0.9	0.0	7.6	0.0	0.5				

Intersection Summary		
HCM 6th Ctrl Delay		20.7
HCM 6th LOS		C

Notes

* HCM 6th 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
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	261	216	141	129	178	151	394	2225		258	2218	
Arrive On Green	0.08	0.21	0.21	0.10	0.10	0.10	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	9.7	0.0	17.3	3.8	5.5	9.0	2.8	31.7	0.0	2.6	18.0	0.0
Cycle Q Clear(g_c), s	9.7	0.0	17.3	7.9	5.5	9.0	2.8	31.7	0.0	2.6	18.0	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	261	0	357	129	178	151	394	2225		258	2218	
V/C Ratio(X)	0.62	0.00	0.74	0.28	0.50	0.80	0.30	0.66		0.42	0.46	
Avail Cap(c_a), veh/h	261	0	641	314	490	415	485	2225		405	2218	
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	43.2	0.0	44.7	54.6	51.5	53.1	8.8	14.0	0.0	13.0	11.6	0.0
Incr Delay (d2), s/veh	3.2	0.0	1.2	0.4	0.8	3.7	0.2	1.6	0.0	0.4	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	7.8	0.0	11.7	1.9	4.6	6.5	1.8	17.4	0.0	1.7	10.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	45.8	55.0	52.3	56.8	8.9	15.6	0.0	13.4	12.3	0.0
LnGrp LOS	D	A	D	D	D	E	A	B		B	B	
Approach Vol, veh/h		427			247			1588			1123	
Approach Delay, s/veh		46.1			54.9			15.1			12.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	81.2		30.7	8.3	81.0	13.2	17.5
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	14.5	* 47		44.4	10.9	49.7	9.7	* 32
Max Q Clear Time (g_c+I1), s	4.6	33.7		19.3	4.8	20.0	11.7	11.0
Green Ext Time (p_c), s	0.0	8.0		0.9	0.0	7.9	0.0	0.5

Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Notes

* HCM 6th 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
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	A	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 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th 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
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	243	254	136	204	215	182	200	2203		274	2280	
Arrive On Green	0.08	0.22	0.22	0.12	0.12	0.12	0.01	0.62	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	10.5	0.0	6.3	8.2	9.6	12.3	0.7	30.7	0.0	2.8	36.6	0.0
Cycle Q Clear(g_c), s	10.5	0.0	6.3	8.2	9.6	12.3	0.7	30.7	0.0	2.8	36.6	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	243	0	390	204	215	182	200	2203		274	2280	
V/C Ratio(X)	0.96	0.00	0.26	0.42	0.67	0.84	0.14	0.62		0.39	0.69	
Avail Cap(c_a), veh/h	243	0	618	376	464	393	317	2203		352	2280	
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	50.8	0.0	41.7	54.4	55.1	56.3	13.4	14.9	0.0	12.9	14.6	0.0
Incr Delay (d2), s/veh	45.7	0.0	0.1	0.5	1.3	3.8	0.1	1.3	0.0	0.3	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	9.4	0.0	4.8	4.7	7.9	8.6	0.5	17.3	0.0	1.8	19.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.5	0.0	41.8	54.9	56.4	60.1	13.5	16.2	0.0	13.2	16.3	0.0
LnGrp LOS	F	A	D	D	E	E	B	B		B	B	
Approach Vol, veh/h		336			380			1389			1672	
Approach Delay, s/veh		79.7			57.5			16.2			16.1	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	86.7		35.0	5.4	89.6	14.0	21.0				
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6				
Max Green Setting (Gmax), s	10.5	* 59		46.0	10.5	58.5	10.5	* 33				
Max Q Clear Time (g_c+I1), s	4.8	32.7		8.3	2.7	38.6	12.5	14.3				
Green Ext Time (p_c), s	0.0	11.2		0.3	0.0	11.5	0.0	0.7				

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th 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
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	324	286	179	199	210	178	169	2035		240	2116	
Arrive On Green	0.13	0.27	0.27	0.11	0.11	0.11	0.02	0.58	0.00	0.04	0.60	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	14.7	0.0	6.4	10.0	9.6	12.3	1.0	35.9	0.0	3.1	43.0	0.0
Cycle Q Clear(g_c), s	14.7	0.0	6.4	10.0	9.6	12.3	1.0	35.9	0.0	3.1	43.0	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	324	0	465	199	210	178	169	2035		240	2116	
V/C Ratio(X)	0.72	0.00	0.23	0.51	0.68	0.86	0.20	0.68		0.45	0.75	
Avail Cap(c_a), veh/h	328	0	507	232	257	218	202	2035		314	2116	
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	42.0	0.0	37.1	55.6	55.4	56.6	17.8	19.2	0.0	17.1	19.0	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.1	0.8	3.3	20.3	0.2	1.9	0.0	0.5	2.5	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	11.1	0.0	4.8	5.8	8.1	9.7	0.7	20.5	0.0	2.1	23.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.0	37.2	56.3	58.7	76.9	18.0	21.1	0.0	17.6	21.5	0.0
LnGrp LOS	D	A	D	E	E	E	B	C		B	C	
Approach Vol, veh/h		342			397			1427			1704	
Approach Delay, s/veh		44.8			65.1			21.0			21.3	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	80.6		40.9	5.6	83.5	20.2	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	10.5	* 67		38.0	4.5	72.5	17.0	* 18				
Max Q Clear Time (g_c+I1), s	5.1	37.9		8.4	3.0	45.0	16.7	14.3				
Green Ext Time (p_c), s	0.0	12.1		0.3	0.0	14.2	0.0	0.3				

Intersection Summary		
HCM 6th Ctrl Delay		27.8
HCM 6th LOS		C

Notes

* HCM 6th 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
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	327	289	181	203	215	182	168	2024		239	2106	
Arrive On Green	0.13	0.27	0.27	0.12	0.12	0.12	0.02	0.57	0.00	0.04	0.60	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	14.6	0.0	6.4	10.0	9.6	12.3	1.0	36.2	0.0	3.2	43.3	0.0
Cycle Q Clear(g_c), s	14.6	0.0	6.4	10.0	9.6	12.3	1.0	36.2	0.0	3.2	43.3	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	327	0	470	203	215	182	168	2024		239	2106	
V/C Ratio(X)	0.71	0.00	0.23	0.50	0.66	0.83	0.20	0.69		0.45	0.76	
Avail Cap(c_a), veh/h	332	0	507	232	257	218	200	2024		257	2106	
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	41.7	0.0	36.9	55.2	55.0	56.2	18.1	19.5	0.0	17.3	19.3	0.0
Incr Delay (d2), s/veh	7.6	0.0	0.4	2.7	6.1	22.1	0.8	1.9	0.0	1.9	2.6	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	11.2	0.0	4.8	5.9	8.3	9.9	0.8	20.7	0.0	2.3	23.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	0.0	37.2	57.9	61.2	78.4	18.9	21.4	0.0	19.2	21.9	0.0
LnGrp LOS	D	A	D	E	E	E	B	C		B	C	
Approach Vol, veh/h		342			397			1427			1704	
Approach Delay, s/veh		45.4			66.9			21.4			21.7	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	80.1		41.2	5.6	83.2	20.2	21.1
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	5.5	* 71		38.0	4.5	72.5	17.0	* 18
Max Q Clear Time (g_c+I1), s	5.2	38.2		8.4	3.0	45.3	16.6	14.3
Green Ext Time (p_c), s	0.0	17.5		0.8	0.0	18.2	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

* HCM 6th 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	1986	188	146	1332	188
Future Volume (veh/h)	219	219	134	24	122	164	152	1986	188	146	1332	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	219	219	134	24	122	164	152	1986	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	276	257	158	106	239	203	287	2029		173	2060	
Arrive On Green	0.08	0.24	0.24	0.13	0.13	0.13	0.05	0.58	0.00	0.06	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	1986	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	9.7	0.0	23.3	2.8	7.4	12.2	4.2	65.7	0.0	5.3	30.3	0.0
Cycle Q Clear(g_c), s	9.7	0.0	23.3	12.9	7.4	12.2	4.2	65.7	0.0	5.3	30.3	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	276	0	415	106	239	203	287	2029		173	2060	
V/C Ratio(X)	0.79	0.00	0.85	0.23	0.51	0.81	0.53	0.98		0.84	0.65	
Avail Cap(c_a), veh/h	276	0	643	244	490	415	356	2029		280	2060	
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	44.1	0.0	43.6	56.1	48.7	50.8	14.8	24.8	0.0	34.4	16.7	0.0
Incr Delay (d2), s/veh	13.5	0.0	4.0	0.4	0.6	2.9	0.6	15.6	0.0	6.2	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	4.7	0.0	15.3	1.3	6.1	8.4	2.8	37.9	0.0	8.0	17.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	0.0	47.6	56.5	49.4	53.7	15.4	40.3	0.0	40.6	18.3	0.0
LnGrp LOS	E	A	D	E	D	D	B	D		D	B	
Approach Vol, veh/h		572			310			2138			1478	
Approach Delay, s/veh		51.4			52.2			38.6			20.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	74.6		34.7	9.7	75.6	13.2	21.5				
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6				
Max Green Setting (Gmax), s	14.5	* 47		44.4	10.9	49.7	9.7	* 32				
Max Q Clear Time (g_c+I1), s	7.3	67.7		25.3	6.2	32.3	11.7	14.9				
Green Ext Time (p_c), s	0.1	0.0		1.2	0.0	8.8	0.0	0.6				

Intersection Summary		
HCM 6th Ctrl Delay		35.2
HCM 6th LOS		D

Notes

* HCM 6th 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
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	297	271	173	123	272	231	270	1955		173	1987	
Arrive On Green	0.08	0.26	0.26	0.15	0.15	0.15	0.05	0.55	0.00	0.06	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	9.7	0.0	23.3	4.9	7.2	11.9	4.6	66.5	0.0	5.7	33.1	0.0
Cycle Q Clear(g_c), s	9.7	0.0	23.3	15.0	7.2	11.9	4.6	66.5	0.0	5.7	33.1	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	297	0	445	123	272	231	270	1955		173	1987	
V/C Ratio(X)	0.74	0.00	0.81	0.34	0.45	0.71	0.58	1.02		0.84	0.69	
Avail Cap(c_a), veh/h	297	0	642	243	490	415	334	1955		274	1987	
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	41.9	0.0	41.8	55.0	46.8	48.8	17.2	26.7	0.0	35.2	18.7	0.0
Incr Delay (d2), s/veh	8.3	0.0	3.1	0.6	0.4	1.5	0.7	24.4	0.0	7.2	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	3.8	0.0	15.2	2.2	5.9	8.2	3.1	41.7	0.0	8.1	19.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	0.0	44.9	55.6	47.2	50.3	17.9	51.2	0.0	42.5	20.6	0.0
LnGrp LOS	D	A	D	E	D	D	B	F		D	C	
Approach Vol, veh/h		578			328			2143			1512	
Approach Delay, s/veh		46.9			49.8			48.7			22.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	72.0		36.8	10.1	73.1	13.2	23.6				
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6				
Max Green Setting (Gmax), s	14.5	* 47		44.4	10.9	49.7	9.7	* 32				
Max Q Clear Time (g_c+I1), s	7.7	68.5		25.3	6.6	35.1	11.7	17.0				
Green Ext Time (p_c), s	0.1	0.0		1.2	0.0	8.1	0.0	0.6				

Intersection Summary			
HCM 6th Ctrl Delay		40.0	
HCM 6th LOS		D	

Notes

* HCM 6th 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
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	254	247	158	94	278	308	305	2240		177	2226	
Arrive On Green	0.05	0.23	0.23	0.15	0.15	0.15	0.05	0.64	0.00	0.05	0.63	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	24.0	4.0	7.2	11.2	3.7	56.4	0.0	3.5	28.0	0.0
Cycle Q Clear(g_c), s	6.5	0.0	24.0	18.0	7.2	11.2	3.7	56.4	0.0	3.5	28.0	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	254	0	405	94	278	308	305	2240		177	2226	
V/C Ratio(X)	0.86	0.00	0.89	0.45	0.44	0.53	0.51	0.89		0.83	0.61	
Avail Cap(c_a), veh/h	254	0	405	94	278	308	387	2240		191	2226	
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	47.4	0.0	44.5	58.4	46.4	43.3	12.1	18.3	0.0	28.3	13.3	0.0
Incr Delay (d2), s/veh	25.7	0.0	20.9	4.7	1.5	2.3	1.9	5.7	0.0	24.7	1.3	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	8.9	0.0	18.1	2.5	6.0	7.9	2.5	29.5	0.0	6.8	15.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	0.0	65.4	63.1	47.9	45.6	14.0	23.9	0.0	53.0	14.6	0.0
LnGrp LOS	E	A	E	E	D	D	B	C		D	B	
Approach Vol, veh/h		578			328			2143			1512	
Approach Delay, s/veh		68.4			48.7			23.2			18.3	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	81.7		34.0	9.5	81.3	10.0	24.0
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	5.5	* 72		27.5	11.5	66.0	6.5	* 18
Max Q Clear Time (g_c+I1), s	5.5	58.4		26.0	5.7	30.0	8.5	20.0
Green Ext Time (p_c), s	0.1	11.6		0.4	0.3	18.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

* HCM 6th 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
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	249	294	158	243	282	239	89	2026		171	2143	
Arrive On Green	0.08	0.26	0.26	0.15	0.15	0.15	0.02	0.57	0.00	0.05	0.61	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	10.5	0.0	8.4	11.4	12.9	16.7	1.1	60.9	0.0	4.6	77.1	0.0
Cycle Q Clear(g_c), s	10.5	0.0	8.4	11.4	12.9	16.7	1.1	60.9	0.0	4.6	77.1	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	249	0	453	243	282	239	89	2026		171	2143	
V/C Ratio(X)	1.27	0.00	0.31	0.48	0.69	0.87	0.40	0.91		0.85	0.99	
Avail Cap(c_a), veh/h	249	0	618	365	464	393	201	2026		224	2143	
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	48.8	0.0	38.8	51.6	52.3	53.9	32.4	24.7	0.0	32.1	25.1	0.0
Incr Delay (d2), s/veh	149.0	0.0	0.1	0.5	1.1	5.8	1.1	7.7	0.0	17.4	17.3	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	20.9	0.0	6.4	6.3	10.0	11.1	1.2	33.8	0.0	6.2	43.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	197.8	0.0	38.9	52.1	53.4	59.7	33.5	32.4	0.0	49.5	42.4	0.0
LnGrp LOS	F	A	D	D	D	E	C	C		D	D	
Approach Vol, veh/h		456			518			1884			2268	
Approach Delay, s/veh		149.0			55.6			32.5			42.9	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	80.2		39.7	5.8	84.5	14.0	25.7
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	10.5	* 59		46.0	10.5	58.5	10.5	* 33
Max Q Clear Time (g_c+I1), s	6.6	62.9		10.4	3.1	79.1	12.5	18.7
Green Ext Time (p_c), s	0.0	0.0		0.4	0.0	0.0	0.0	1.0

Intersection Summary		
HCM 6th Ctrl Delay		49.8
HCM 6th LOS		D

Notes

* HCM 6th 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
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	249	281	170	243	282	239	90	2011		171	2133	
Arrive On Green	0.08	0.26	0.26	0.15	0.15	0.15	0.02	0.57	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	10.5	0.0	8.8	13.3	12.9	16.7	1.3	63.8	0.0	5.1	78.7	0.0
Cycle Q Clear(g_c), s	10.5	0.0	8.8	13.3	12.9	16.7	1.3	63.8	0.0	5.1	78.7	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	249	0	451	243	282	239	90	2011		171	2133	
V/C Ratio(X)	1.27	0.00	0.32	0.55	0.69	0.87	0.46	0.93		0.85	1.01	
Avail Cap(c_a), veh/h	249	0	615	363	464	393	198	2011		217	2133	
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	48.8	0.0	38.9	52.4	52.2	53.8	32.3	25.7	0.0	34.7	25.7	0.0
Incr Delay (d2), s/veh	148.5	0.0	0.2	0.7	1.1	5.8	1.4	9.7	0.0	19.0	21.9	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	20.8	0.0	6.7	7.3	10.0	11.1	1.4	35.8	0.0	6.3	46.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	197.3	0.0	39.1	53.1	53.4	59.6	33.7	35.4	0.0	53.6	47.5	0.0
LnGrp LOS	F	A	D	D	D	E	C	D		D	F	
Approach Vol, veh/h		462			535			1922			2300	
Approach Delay, s/veh		147.3			55.7			35.3			47.9	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	79.7		39.8	6.1	84.2	14.0	25.8
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	10.5	* 59		46.0	10.5	58.5	10.5	* 33
Max Q Clear Time (g_c+I1), s	7.1	65.8		10.8	3.3	80.7	12.5	18.7
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	0.0	0.0	1.0

Intersection Summary		
HCM 6th Ctrl Delay		52.9
HCM 6th LOS		D

Notes

* HCM 6th 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
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	323	321	194	226	257	218	115	2271		188	2356	
Arrive On Green	0.13	0.30	0.30	0.14	0.14	0.14	0.02	0.64	0.00	0.04	0.67	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	17.0	0.0	8.4	13.6	13.2	17.0	1.1	52.9	0.0	3.5	67.7	0.0
Cycle Q Clear(g_c), s	17.0	0.0	8.4	13.6	13.2	17.0	1.1	52.9	0.0	3.5	67.7	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	323	0	515	226	257	218	115	2271		188	2356	
V/C Ratio(X)	0.98	0.00	0.28	0.59	0.76	0.95	0.37	0.83		0.78	0.91	
Avail Cap(c_a), veh/h	323	0	515	226	257	218	143	2271		200	2356	
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	43.9	0.0	35.2	54.1	53.9	55.6	28.5	17.6	0.0	28.5	18.4	0.0
Incr Delay (d2), s/veh	44.3	0.0	0.4	4.8	13.1	47.4	2.8	3.6	0.0	17.9	6.9	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	9.9	0.0	6.4	7.9	11.3	14.5	1.6	27.7	0.0	7.0	34.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	0.0	35.6	58.9	67.0	102.9	31.3	21.3	0.0	46.3	25.3	0.0
LnGrp LOS	F	A	D	E	E	F	C	C		D	C	
Approach Vol, veh/h		462			535			1922			2300	
Approach Delay, s/veh		71.5			78.9			21.5			26.6	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	89.3		44.5	5.9	92.4	20.5	24.0
Change Period (Y+Rc), s	3.5	* 5.5		6.0	3.5	5.5	3.5	* 6
Max Green Setting (Gmax), s	5.5	* 71		38.0	4.5	72.5	17.0	* 18
Max Q Clear Time (g_c+I1), s	5.5	54.9		10.4	3.1	69.7	19.0	19.0
Green Ext Time (p_c), s	0.1	13.7		1.0	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes

* HCM 6th 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
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	257	484		208	434		725	2035		210	1502	
Arrive On Green	0.07	0.14	0.00	0.06	0.12	0.00	0.19	0.58	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	10.2	0.0	5.9	7.9	0.0	0.0	22.3	0.0	4.0	7.3	0.0
Cycle Q Clear(g_c), s	7.6	10.2	0.0	5.9	7.9	0.0	0.0	22.3	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	257	484		208	434		725	2035		210	1502	
V/C Ratio(X)	0.79	0.60		0.75	0.53		0.14	0.50		0.41	0.21	
Avail Cap(c_a), veh/h	464	930		293	754		725	2035		210	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	59.1	52.7	0.0	60.1	53.5	0.0	17.4	16.3	0.0	28.3	23.5	0.0
Incr Delay (d2), s/veh	2.1	0.5	0.0	3.7	0.4	0.0	0.0	0.9	0.0	0.5	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	6.0	7.9	0.0	4.7	6.3	0.0	2.9	13.5	0.0	3.0	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	53.2	0.0	63.8	53.8	0.0	17.4	17.2	0.0	28.8	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		56.5			57.9			17.2			24.9	
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	82.1	12.4	23.9	31.4	62.4	14.2	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	24.3	7.9	12.2	2.0	9.3	9.6	9.9
Green Ext Time (p_c), s	0.0	7.7	0.1	1.1	0.0	2.0	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

* HCM 6th 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
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	257	466		226	434		725	2035		210	1502	
Arrive On Green	0.07	0.13	0.00	0.07	0.12	0.00	0.19	0.58	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	22.3	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	22.3	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	257	466		226	434		725	2035		210	1502	
V/C Ratio(X)	0.79	0.65		0.77	0.55		0.14	0.50		0.47	0.21	
Avail Cap(c_a), veh/h	464	930		293	754		725	2035		210	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	59.1	53.6	0.0	59.8	53.6	0.0	17.4	16.3	0.0	28.7	23.5	0.0
Incr Delay (d2), s/veh	2.1	0.6	0.0	6.4	0.4	0.0	0.0	0.9	0.0	0.6	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	6.0	8.3	0.0	5.4	6.6	0.0	2.9	13.5	0.0	3.6	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	54.2	0.0	66.1	54.0	0.0	17.4	17.2	0.0	29.3	23.8	0.0
LnGrp LOS	E	D		E	D		B	B		C	C	
Approach Vol, veh/h		509			414			1120			413	
Approach Delay, s/veh		57.0			59.1			17.2			25.1	
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	82.1	13.1	23.2	31.4	62.4	14.2	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	24.3	8.5	12.7	2.0	9.3	9.6	10.3
Green Ext Time (p_c), s	0.0	7.7	0.1	1.1	0.0	2.0	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

Notes

* HCM 6th 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
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	248	513		421	690		469	1603		268	1218	
Arrive On Green	0.07	0.15	0.00	0.12	0.20	0.00	0.16	0.45	0.00	0.05	0.35	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	5.9	7.6	0.0	13.5	13.3	0.0	0.0	11.2	0.0	6.0	18.6	0.0
Cycle Q Clear(g_c), s	5.9	7.6	0.0	13.5	13.3	0.0	0.0	11.2	0.0	6.0	18.6	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	248	513		421	690		469	1603		268	1218	
V/C Ratio(X)	0.75	0.51		1.04	0.67		0.10	0.35		0.54	0.60	
Avail Cap(c_a), veh/h	421	897		421	897		469	1603		268	1218	
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	0.45	0.45	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	43.4	0.0	48.3	40.9	0.0	27.1	19.4	0.0	31.7	29.7	0.0
Incr Delay (d2), s/veh	1.7	0.3	0.0	39.9	0.3	0.0	0.0	0.6	0.0	1.2	2.1	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	4.6	5.9	0.0	11.3	8.3	0.0	1.6	7.9	0.0	5.2	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	43.7	0.0	88.2	41.2	0.0	27.1	20.0	0.0	32.9	31.8	0.0
LnGrp LOS	D	D		F	D		C	C		C	C	
Approach Vol, veh/h		450			899			602			869	
Approach Delay, s/veh		47.1			64.0			20.6			32.0	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	57.0	18.0	22.0	25.0	45.0	12.5	27.5
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	6.0	38.0	13.5	28.0	8.5	* 38	13.5	28.0
Max Q Clear Time (g_c+I1), s	8.0	13.2	15.5	9.6	2.0	20.6	7.9	15.3
Green Ext Time (p_c), s	0.0	3.5	0.0	0.9	0.0	4.2	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Notes

* HCM 6th 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
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	248	513		421	690		469	1603		268	1218	
Arrive On Green	0.07	0.15	0.00	0.12	0.20	0.00	0.16	0.45	0.00	0.05	0.35	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	5.9	8.0	0.0	13.5	13.7	0.0	0.0	11.2	0.0	6.0	18.6	0.0
Cycle Q Clear(g_c), s	5.9	8.0	0.0	13.5	13.7	0.0	0.0	11.2	0.0	6.0	18.6	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	248	513		421	690		469	1603		268	1218	
V/C Ratio(X)	0.75	0.54		1.09	0.69		0.10	0.35		0.59	0.60	
Avail Cap(c_a), veh/h	421	897		421	897		469	1603		268	1218	
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	0.39	0.39	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	43.6	0.0	48.3	41.1	0.0	27.1	19.4	0.0	33.0	29.7	0.0
Incr Delay (d2), s/veh	1.7	0.3	0.0	54.8	0.3	0.0	0.0	0.6	0.0	2.2	2.1	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	4.6	6.2	0.0	12.3	8.3	0.0	1.6	7.9	0.0	1.8	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	43.9	0.0	103.0	41.4	0.0	27.1	20.0	0.0	35.2	31.8	0.0
LnGrp LOS	D	D		F	D		C	C		D	C	
Approach Vol, veh/h		462			932			602			882	
Approach Delay, s/veh		47.1			71.7			20.6			32.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	57.0	18.0	22.0	25.0	45.0	12.5	27.5
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	6.0	38.0	13.5	28.0	8.5	* 38	13.5	28.0
Max Q Clear Time (g_c+I1), s	8.0	13.2	15.5	10.0	2.0	20.6	7.9	15.7
Green Ext Time (p_c), s	0.0	3.5	0.0	1.0	0.0	4.2	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	45.0
HCM 6th LOS	D

Notes

* HCM 6th 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
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	255	513		552	818		378	1361		308	1314	
Arrive On Green	0.07	0.15	0.00	0.16	0.23	0.00	0.10	0.39	0.00	0.08	0.37	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	5.9	8.0	0.0	14.2	13.1	0.0	0.0	12.6	0.0	7.2	17.9	0.0
Cycle Q Clear(g_c), s	5.9	8.0	0.0	14.2	13.1	0.0	0.0	12.6	0.0	7.2	17.9	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	255	513		552	818		378	1361		308	1314	
V/C Ratio(X)	0.73	0.54		0.83	0.58		0.12	0.41		0.51	0.55	
Avail Cap(c_a), veh/h	390	577		732	929		378	1361		367	1314	
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	0.62	0.62	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	43.6	0.0	44.7	37.5	0.0	29.6	24.6	0.0	28.5	27.2	0.0
Incr Delay (d2), s/veh	5.7	1.2	0.0	4.5	0.4	0.0	0.2	0.9	0.0	1.9	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	4.8	6.3	0.0	9.5	8.6	0.0	1.7	8.9	0.0	5.5	11.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	44.8	0.0	49.2	37.9	0.0	29.8	25.5	0.0	30.4	28.9	0.0
LnGrp LOS	E	D		D	D		C	C		C	C	
Approach Vol, veh/h		462			932			602			882	
Approach Delay, s/veh		49.1			43.4			25.9			29.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	49.5	22.2	22.0	17.8	48.0	12.7	31.5
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	13.3	31.0	23.5	18.0	5.5	* 41	12.5	29.0
Max Q Clear Time (g_c+I1), s	9.2	14.6	16.2	10.0	2.0	19.9	7.9	15.1
Green Ext Time (p_c), s	0.2	4.2	1.5	1.2	0.0	6.3	0.3	2.4

Intersection Summary	
HCM 6th Ctrl Delay	36.3
HCM 6th LOS	D

Notes

* HCM 6th 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
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	295	494		237	434		688	1996		169	1502	
Arrive On Green	0.09	0.14	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	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	29.5	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	29.5	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	295	494		237	434		688	1996		169	1502	
V/C Ratio(X)	0.82	0.70		0.79	0.63		0.18	0.61		0.60	0.25	
Avail Cap(c_a), veh/h	464	930		293	754		688	1996		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	0.93	0.93	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.4	53.3	0.0	59.6	54.2	0.0	18.7	18.6	0.0	31.4	23.9	0.0
Incr Delay (d2), s/veh	3.2	0.7	0.0	7.9	0.5	0.0	0.0	1.4	0.0	3.9	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	7.2	9.2	0.0	5.8	7.4	0.0	3.6	17.1	0.0	3.9	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	54.0	0.0	67.4	54.7	0.0	18.7	20.0	0.0	35.3	24.3	0.0
LnGrp LOS	E	D		E	D		B	B		D	C	
Approach Vol, veh/h		590			458			1331			474	
Approach Delay, s/veh		57.1			59.9			19.9			26.7	
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	80.6	13.5	24.2	29.9	62.4	15.7	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	6.7	31.5	8.9	14.2	2.0	10.8	11.0	11.5
Green Ext Time (p_c), s	0.0	8.9	0.0	1.3	0.0	2.4	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

* HCM 6th 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
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	295	476		254	434		688	1996		169	1502	
Arrive On Green	0.09	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	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	29.5	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	29.5	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	295	476		254	434		688	1996		169	1502	
V/C Ratio(X)	0.82	0.76		0.80	0.65		0.18	0.61		0.68	0.25	
Avail Cap(c_a), veh/h	464	930		293	754		688	1996		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	0.91	0.91	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.4	54.2	0.0	59.2	54.3	0.0	18.7	18.6	0.0	35.2	23.9	0.0
Incr Delay (d2), s/veh	3.2	0.9	0.0	10.3	0.6	0.0	0.0	1.4	0.0	8.7	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	7.2	9.6	0.0	6.5	7.6	0.0	3.6	17.1	0.0	4.8	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	55.1	0.0	69.6	54.9	0.0	18.7	20.0	0.0	43.9	24.3	0.0
LnGrp LOS	E	E		E	D		B	B		D	C	
Approach Vol, veh/h		602			486			1331			488	
Approach Delay, s/veh		57.7			61.0			19.9			28.9	
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	80.6	14.1	23.5	29.9	62.4	15.7	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	6.7	31.5	9.6	14.8	2.0	10.8	11.0	11.9
Green Ext Time (p_c), s	0.0	8.9	0.0	1.3	0.0	2.4	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

* HCM 6th 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
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	283	513		421	654		428	1603		240	1218	
Arrive On Green	0.08	0.15	0.00	0.12	0.19	0.00	0.16	0.45	0.00	0.05	0.35	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	7.0	9.1	0.0	13.5	16.5	0.0	0.0	13.8	0.0	6.0	23.3	0.0
Cycle Q Clear(g_c), s	7.0	9.1	0.0	13.5	16.5	0.0	0.0	13.8	0.0	6.0	23.3	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	283	513		421	654		428	1603		240	1218	
V/C Ratio(X)	0.78	0.61		1.23	0.84		0.13	0.41		0.71	0.71	
Avail Cap(c_a), veh/h	421	897		421	897		428	1603		240	1218	
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	49.5	44.1	0.0	48.3	43.2	0.0	31.3	20.1	0.0	35.5	31.2	0.0
Incr Delay (d2), s/veh	2.9	0.4	0.0	107.1	0.4	0.0	0.0	0.8	0.0	8.2	3.5	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	5.5	7.1	0.0	15.1	8.3	0.0	2.0	9.3	0.0	3.6	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	44.5	0.0	155.3	43.6	0.0	31.3	20.9	0.0	43.8	34.7	0.0
LnGrp LOS	D	D		F	D		C	C		D	C	
Approach Vol, veh/h		534			1068			715			1033	
Approach Delay, s/veh		47.8			97.9			21.7			36.2	
Approach LOS		D			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	57.0	18.0	22.0	25.0	45.0	13.6	26.4
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	6.0	38.0	13.5	28.0	8.5	* 38	13.5	28.0
Max Q Clear Time (g_c+I1), s	8.0	15.8	15.5	11.1	2.0	25.3	9.0	18.5
Green Ext Time (p_c), s	0.0	4.1	0.0	1.1	0.0	4.4	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

* HCM 6th 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
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	283	518		421	659		426	1597		240	1218	
Arrive On Green	0.08	0.15	0.00	0.12	0.19	0.00	0.16	0.45	0.00	0.05	0.35	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	7.0	9.5	0.0	13.5	16.9	0.0	0.0	13.9	0.0	6.0	23.3	0.0
Cycle Q Clear(g_c), s	7.0	9.5	0.0	13.5	16.9	0.0	0.0	13.9	0.0	6.0	23.3	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	283	518		421	659		426	1597		240	1218	
V/C Ratio(X)	0.78	0.63		1.28	0.85		0.13	0.41		0.77	0.71	
Avail Cap(c_a), veh/h	421	897		421	897		426	1597		240	1218	
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	49.5	44.1	0.0	48.3	43.2	0.0	31.4	20.2	0.0	36.9	31.2	0.0
Incr Delay (d2), s/veh	2.9	0.5	0.0	129.3	0.4	0.0	0.1	0.8	0.0	12.7	3.5	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	5.5	7.4	0.0	16.9	8.5	0.0	2.0	9.4	0.0	5.0	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	44.5	0.0	177.5	43.7	0.0	31.5	21.0	0.0	49.6	34.7	0.0
LnGrp LOS	D	D		F	D		C	C		D	C	
Approach Vol, veh/h		546			1101			715			1046	
Approach Delay, s/veh		47.7			109.3			21.8			37.3	
Approach LOS		D			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	56.8	18.0	22.2	24.8	45.0	13.6	26.6
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	6.0	38.0	13.5	28.0	8.5	* 38	13.5	28.0
Max Q Clear Time (g_c+I1), s	8.0	15.9	15.5	11.5	2.0	25.3	9.0	18.9
Green Ext Time (p_c), s	0.0	4.1	0.0	1.1	0.0	4.4	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	59.0
HCM 6th LOS	E

Notes

* HCM 6th 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
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	290	513		627	859		297	1239		286	1314	
Arrive On Green	0.08	0.15	0.00	0.18	0.24	0.00	0.08	0.35	0.00	0.10	0.37	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	7.0	9.5	0.0	16.8	15.7	0.0	0.0	16.4	0.0	8.6	22.3	0.0
Cycle Q Clear(g_c), s	7.0	9.5	0.0	16.8	15.7	0.0	0.0	16.4	0.0	8.6	22.3	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	290	513		627	859		297	1239		286	1314	
V/C Ratio(X)	0.77	0.63		0.86	0.65		0.19	0.53		0.64	0.66	
Avail Cap(c_a), veh/h	390	577		732	929		297	1239		322	1314	
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	0.24	0.24	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.3	44.2	0.0	43.6	37.4	0.0	35.9	28.5	0.0	29.8	28.6	0.0
Incr Delay (d2), s/veh	7.7	2.3	0.0	2.6	0.4	0.0	0.4	1.6	0.0	4.5	2.6	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	5.8	7.6	0.0	9.3	8.7	0.0	2.2	11.2	0.0	6.9	14.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	46.6	0.0	46.2	37.8	0.0	36.3	30.1	0.0	34.3	31.2	0.0
LnGrp LOS	E	D		D	D		D	C		C	C	
Approach Vol, veh/h		546			1101			715			1046	
Approach Delay, s/veh		50.8			41.9			30.6			31.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	45.7	24.6	22.0	15.4	48.0	13.8	32.8
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	13.0	31.0	23.5	18.0	5.5	* 41	12.5	29.0
Max Q Clear Time (g_c+I1), s	10.6	18.4	18.8	11.5	2.0	24.3	9.0	17.7
Green Ext Time (p_c), s	0.2	4.4	1.3	1.3	0.0	6.8	0.3	2.7

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Notes

* HCM 6th 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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Vol, veh/h	0	1622	396	8	0	6
Future Vol, veh/h	0	1622	396	8	0	6
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	1622	396	8	0	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	202
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	802
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	802
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	802
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1334	1592	10	0	9
Future Vol, veh/h	0	1334	1592	10	0	9
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	1334	1592	10	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	801
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	325
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	325
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	325
HCM Lane V/C Ratio	-	-	-	0.028
HCM Control Delay (s)	-	-	-	16.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2170	510	8	0	6
Future Vol, veh/h	0	2170	510	8	0	6
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	2170	510	8	0	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	259
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	737
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	737
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	737
HCM Lane V/C Ratio	-	-	-	0.008
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Vol, veh/h	0	1334	2131	10	0	9
Future Vol, veh/h	0	1334	2131	10	0	9
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	1334	2131	10	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1071
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	215
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	215
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	215
HCM Lane V/C Ratio	-	-	-	0.042
HCM Control Delay (s)	-	-	-	22.5
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1622	397	9	0	8
Future Vol, veh/h	0	1622	397	9	0	8
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	1622	397	9	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	203
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	801
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	801
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	801
HCM Lane V/C Ratio	-	-	-	0.01
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1008	1583	20	0	20
Future Vol, veh/h	0	1008	1583	20	0	20
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	1008	1583	20	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	802
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	325
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	325
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	325
HCM Lane V/C Ratio	-	-	-	0.062
HCM Control Delay (s)	-	-	-	16.8
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	2170	511	9	0	8
Future Vol, veh/h	0	2170	511	9	0	8
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	2170	511	9	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	260
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	736
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	736
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	736
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1334	2122	20	0	20
Future Vol, veh/h	0	1334	2122	20	0	20
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	1334	2122	20	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1071
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	215
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	215
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	215
HCM Lane V/C Ratio	-	-	-	0.093
HCM Control Delay (s)	-	-	-	23.5
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1622	404	12	0	8
Future Vol, veh/h	0	1622	404	12	0	8
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	1622	404	12	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	208
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	795
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	795
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	795
HCM Lane V/C Ratio	-	-	-	0.01
HCM Control Delay (s)	-	-	-	9.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1008	1597	15	0	12
Future Vol, veh/h	0	1008	1597	15	0	12
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	1008	1597	15	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	806
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	323
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	323
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	323
HCM Lane V/C Ratio	-	-	-	0.037
HCM Control Delay (s)	-	-	-	16.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Vol, veh/h	0	2170	518	12	0	8
Future Vol, veh/h	0	2170	518	12	0	8
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	2170	518	12	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	265
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	730
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	730
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	730
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1334	2136	15	0	12
Future Vol, veh/h	0	1334	2136	15	0	12
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	1334	2136	15	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1076
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	213
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	213
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	213
HCM Lane V/C Ratio	-	-	-	0.056
HCM Control Delay (s)	-	-	-	22.9
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	104	1518	369	21	76	26
Future Vol, veh/h	104	1518	369	21	76	26
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	-	-	-	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	104	1518	369	21	76	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	390	0	-	0	1347	195
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	967	-
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	1158	-	-	-	*438	810
Stage 1	-	-	-	-	*658	-
Stage 2	-	-	-	-	*438	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1158	-	-	-	*398	810
Mov Cap-2 Maneuver	-	-	-	-	*394	-
Stage 1	-	-	-	-	*599	-
Stage 2	-	-	-	-	*438	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1158	-	-	-	453
HCM Lane V/C Ratio	0.09	-	-	-	0.225
HCM Control Delay (s)	8.4	-	-	-	15.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.9

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

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	932	1584	31	67	42
Future Vol, veh/h	76	932	1584	31	67	42
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	76	932	1584	31	67	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1615	0	-	0	2218	808
Stage 1	-	-	-	-	1600	-
Stage 2	-	-	-	-	618	-
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	395	-	-	-	*~ 46	322
Stage 1	-	-	-	-	*149	-
Stage 2	-	-	-	-	*660	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	395	-	-	-	*~ 37	322
Mov Cap-2 Maneuver	-	-	-	-	*113	-
Stage 1	-	-	-	-	*120	-
Stage 2	-	-	-	-	*660	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	74.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	395	-	-	-	151
HCM Lane V/C Ratio	0.192	-	-	-	0.722
HCM Control Delay (s)	16.3	-	-	-	74.2
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	0.7	-	-	-	4.3

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

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	104	2066	483	21	76	26
Future Vol, veh/h	104	2066	483	21	76	26
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	-	-	-	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	104	2066	483	21	76	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	504	0	-	0	1735	252
Stage 1	-	-	-	-	494	-
Stage 2	-	-	-	-	1241	-
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	1050	-	-	-	*222	745
Stage 1	-	-	-	-	*576	-
Stage 2	-	-	-	-	*222	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1050	-	-	-	*200	745
Mov Cap-2 Maneuver	-	-	-	-	*201	-
Stage 1	-	-	-	-	*519	-
Stage 2	-	-	-	-	*222	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	29.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1050	-	-	-	247
HCM Lane V/C Ratio	0.099	-	-	-	0.413
HCM Control Delay (s)	8.8	-	-	-	29.5
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	1.9

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

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	1258	2087	31	67	42
Future Vol, veh/h	76	1258	2087	31	67	42
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	-	-	-	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	76	1258	2087	31	67	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2118	0	-	0	2884	1059
Stage 1	-	-	-	-	2103	-
Stage 2	-	-	-	-	781	-
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	251	-	-	-	*~ 8	219
Stage 1	-	-	-	-	*79	-
Stage 2	-	-	-	-	*549	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	251	-	-	-	*~ 6	219
Mov Cap-2 Maneuver	-	-	-	-	*~ 47	-
Stage 1	-	-	-	-	*~ 55	-
Stage 2	-	-	-	-	*549	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	$ 443.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	251	-	-	-	67
HCM Lane V/C Ratio	0.303	-	-	-	1.627
HCM Control Delay (s)	25.5	-	-	-	$ 443.1
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	1.2	-	-	-	9.5

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

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	41	1772	95	0	1116
Future Vol, veh/h	0	41	1772	95	0	1116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	240	-	-
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	41	1772	95	0	1116

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	886	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	245	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	245	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	245	-
HCM Lane V/C Ratio	-	-	0.167	-
HCM Control Delay (s)	-	-	22.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	43	1698	86	0	1568
Future Vol, veh/h	0	43	1698	86	0	1568
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	240	-	-
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	43	1698	86	0	1568

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	849	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	260	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	260	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	260	-
HCM Lane V/C Ratio	-	-	0.165	-
HCM Control Delay (s)	-	-	21.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	41	2390	95	0	1514
Future Vol, veh/h	0	41	2390	95	0	1514
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	240	-	-
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	41	2390	95	0	1514

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1195	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	152	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	152	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.2	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	152	-
HCM Lane V/C Ratio	-	-	0.27	-
HCM Control Delay (s)	-	-	37.2	-
HCM Lane LOS	-	-	E	-
HCM 95th %tile Q(veh)	-	-	1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	43	2289	86	0	2128
Future Vol, veh/h	0	43	2289	86	0	2128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	240	-	-
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	43	2289	86	0	2128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1145	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	165	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	165	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	165	-
HCM Lane V/C Ratio	-	-	0.261	-
HCM Control Delay (s)	-	-	34.3	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	1	-

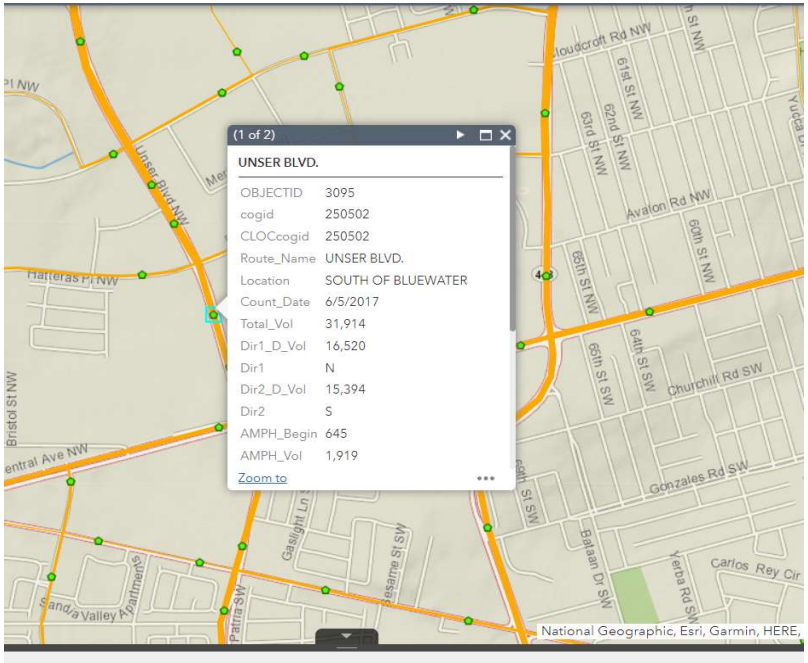
2021007 - 7707 W. Central (Ed Garcia) -Signal Warrant Traffic Volume Data

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
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***
	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

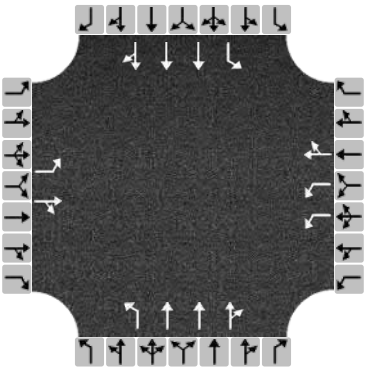
Project Information

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	

Traffic Count Data Sheet

Year Counts Taken: **2022**

E-W Street: **Bridge Blvd.**

N-S Street: **Unser Bd.**

Signalized

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

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

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.**
Signalized

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

Signalized

Speed Limit (Bluewater)= **40** MPH

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

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

MP P.E. 4/12/2022

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

via: email