

PROJECT ORION TRAFFIC IMPACT STUDY

Draft Report, Phase 1

September 2020

Prepared for:

Bohannon  **Huston**

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received
9/24/2020



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Project Orion

Traffic Impact Study

DRAFT Report, Phase 1

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Prepared for:
Bohannon Huston, Inc.

Prepared By:



EXECUTIVE SUMMARY (TO BE COMPLETED IN THE NEXT SUBMITTAL)

The following Traffic Impact Analysis (TIA) evaluates a proposed multi-phase development to be located at the southeast corner of Gibson Blvd SE and Girard Blvd SE in Albuquerque, New Mexico, identified as Project Orion. Two phases are planned that will include manufacturing and assembly facilities, a laboratory building, office buildings and a parking garage. This report has been completed by Lee Engineering for Bohannon Huston, Inc. All analyses and items contained herein conform to scoping requirements set forth in a virtual scoping meeting held on August 4, 2020, that included representatives from New Mexico Department of Transportation (NMDOT), the Mid-Region Council of Governments (MRCOG), Bernalillo County, and the City of Albuquerque.

BACKGROUND

The proposed development is located on undeveloped property situated south of the Gibson and Girard Boulevard intersection and adjacent to the Albuquerque International Airport. Study intersections include traffic signals along the following corridors:

- Gibson Blvd between San Mateo Blvd and the I-25 interchange
- Sunport Blvd from 2nd Street east to the airport terminal buildings
- Girard Blvd south of Gibson Blvd and the site access points

Also included is analysis of the I-25 corridor from south of Sunport Blvd to north of Gibson Blvd.

To Be Updated in the Next Submittal.

SUMMARY OF RECOMMENDATIONS

To be updated in the next submittal.

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INTRODUCTION

This report details the procedures and findings of a Traffic Impact Analysis (TIA) performed by Lee Engineering for Bohannon Huston and Project Orion. This report and the analyses contained herein were performed for a two-phase development that includes a proposed assembly facility, laboratory buildings, office space, and other ancillary land uses to supplement project operations as well as a parking structure. The purpose of this study is to examine the impacts of the development on the surrounding roadway network leading to and from the subject site.

The scope of this report and analyses performed were conducted in agreement with requirements set forth by the three review agencies. Scoping meeting notes from the August 4, 2020 meeting are included in Appendix A. Analysis procedures, conclusions, and recommendations for this study were developed according to the *Highway Capacity Manual, 6th Edition* and the *Manual on Uniform Traffic Control Devices, 2009 Edition*.

Site construction is anticipated to begin in 2021 with completion and full operational capacity of Phase 1 anticipated for a 2025 horizon year. Future development, if constructed, is anticipated to begin immediately thereafter but is dependent on factors currently being considered by the client. For the purposes of this report, a 2030 horizon for the future development (Phase 2) has been established. A 10-year, 2040 horizon-year analysis has been conducted to quantify site impacts per agency guidelines. Because of project scale and employee shift times that have been identified by the client to be flexible, multi-period AM and PM peak-hour analyses have been performed.

PROJECT LOCATION & SITE PLAN

The subject site is to be located at the southeast corner of the Gibson Blvd SE and Girard Blvd SE intersection, extending south to the Albuquerque International Sunport (AIS) with parking and ancillary facilities situated on the west side of Girard Blvd south of Miles Road. Figure 1 shows the general location of the site. Figure 2 shows the conceptual site layout plan.

The site is located on approximately 110 acres of vacant property. Phase 1 development is planned to consist of a large assembly warehouse, a laboratory building, office space, ancillary development (food service, hotel, daycare), an electrical substation, and a parking facility. In total, about 2,575 employees are anticipated for the Phase 1 development.

SITE ACCESS

Access to the site is planned from multiple driveway locations located on Gibson Blvd (2), Girard Blvd (4) and from an extension of Columbia Drive south of Alamo Avenue. The majority of employee trips will utilize the parking areas/structure on the west side of Girard Blvd, accessible from the east (Girard Blvd) and from the west via Alamo Avenue with access to Yale Blvd. Remaining employee and visitor trips are anticipated to utilize localized surface parking areas on the east side of Girard Blvd, accessible from Girard Blvd and directly from the site's main Gibson Blvd driveway. Truck traffic is planned to enter via a gated Girard Blvd access just south of Miles Road and exit at the same point or from a second Gibson Blvd driveway located on the east side of the property. Site traffic is mostly anticipated to approach and depart the facility via Gibson Blvd; however, connection to and from the south via Sunport Blvd and the one-way roadway network serving the airport is an alternative.



Site Location

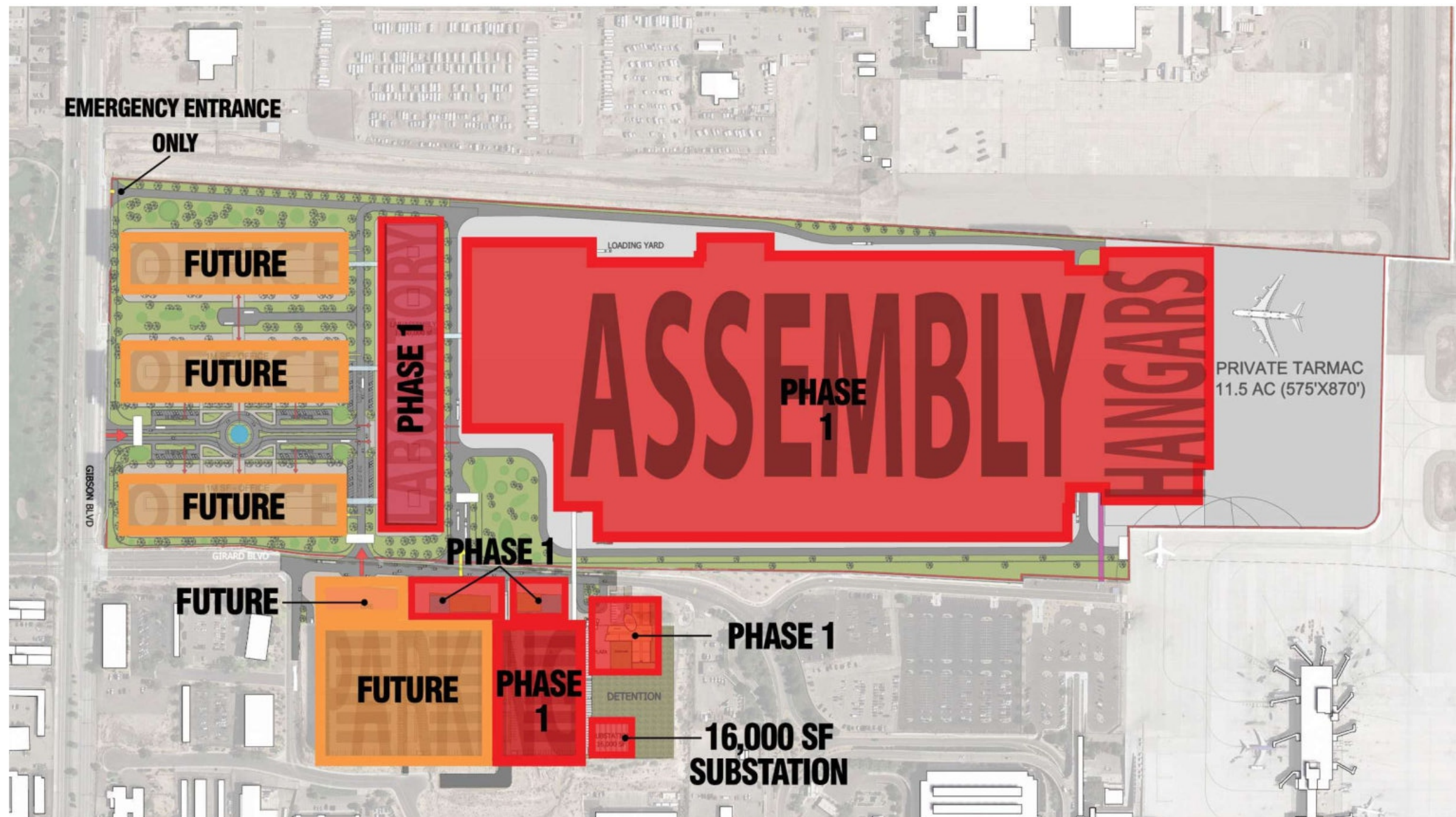


Enlargement



Not to scale

Project Orion - TIA



MASTER PLAN LAYOUT - OPTION #5

ORION CENTER

PROJECT NUMBER: 20910.00

DATE: 08.04.2020

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Project Orion - TIA



Conceptual Site Layout Plan

Figure 2

STUDY AREA, AREA LAND USE, AND STREETS NARRATIVE SUMMARY

STUDY AREA

The study area consists of the Gibson and Sunport Blvd corridors as well as the I-25 corridor and the ramp network to and from Sunport Blvd north to Gibson Blvd. The following 15 intersections, excluding the site access points, are included within the study area:

- Gibson Blvd & I-25 SB Intersection
- Gibson Blvd & I-25 NB Intersection
- Gibson Blvd & University Blvd
- Gibson Blvd & Yale Blvd
- Gibson Blvd & Girard Blvd
- Gibson Blvd & Carlisle Blvd
- Gibson Blvd & Maxwell St
- Gibson Blvd & Quincy St
- Gibson Blvd & Truman St
- Gibson Blvd & San Mateo Blvd/Ridgecrest Dr
- Girard Blvd & Miles Rd
- Sunport Blvd Extension & 2nd St
- Sunport Blvd Extension & Broadway Blvd
- Sunport Blvd & I-25 SB Intersection
- Sunport Blvd & I-25 NB Intersection

AREA LAND USE

The site property is vacant with an existing local roadway network that will be replaced as shown on the site plan. Adjacent to and surrounding the project site are land uses consisting of the following:

- Aviation: The site is adjacent to and is proposed to accommodate aircrafts from the AIS located to its south.
- Military: A US Army facility is located directly to the east.
- Office/Industrial: The Airport Industrial Park, containing office and light industrial facilities, is located to the west of the site.
- Residential: A large area of single-family homes is located north of Gibson Blvd.

STREETS

The following details the characteristics and features of major streets included in the study area. Highlights are taken from the MRCOG Highway Functional Classification System Map (Feb 2015) as well as from analysis of Google Earth imagery:

Interstate 25 is a six-lane north-south access-controlled facility located about 1.5 miles west of the subject site. This facility is anticipated to accommodate the majority of site-related traffic arriving at the site from longer distances. Its intersection ramps with Gibson Road are uncontrolled heading to and from the east, except for the westbound-to-southbound on-ramp, which is STOP controlled. At Sunport Blvd, a tight diamond interchange exists with intersections that are STOP controlled. A programmed extension of Sunport Blvd to the west will result in both the northbound and southbound intersections becoming signalized prior to the 2025 horizon year.

Gibson Blvd is a six-lane divided east-west facility currently classified as a Principal Arterial. The roadway provides access to the Kirtland Air Force Base to the east and the I-25 corridor and beyond to the west. The roadway contains many signalized intersections and unsignalized access points serving commercial and residential developments. It also incorporates curb, gutter, and sidewalk on both sides of the road and is signed with a speed limit between 35 and 45 MPH within the study area.

Sunport Blvd is an east-west Principal Arterial between I-25 and the AIS. Programmed improvements to extend Sunport Blvd west from I-25 to Broadway Road at the Woodward Road alignment are planned by the 2025 horizon year. From the west, local traffic east of the Rio Grande River can utilize this roadway passing through the airport to access Girard Blvd and the site. Routing through the airport places entering motorists



on a single travel lane adjacent to the arrivals frontage which is posted 15 MPH and has multiple pedestrian crossing areas between the terminal and parking structure that are STOP controlled. Return trips from the site to the I-25/Sunport intersections are more circuitous and can be accomplished along the local road network without travel through the airport.

Girard Blvd is a north-south oriented facility classified as a Major Collector that bisects site facilities. Originating from its airport access to the south, the roadway is a two-lane undivided facility to Miles Road, where recent improvements have widened its approach to Gibson Blvd. Further to the north, the roadway continues as a four-lane undivided roadway for a half-mile before transitioning back down to a two-lane roadway with bike lanes through adjacent residential areas before intersecting with Central Avenue. The roadway has posted speed limits between 30 and 35 MPH within the study area.

University Blvd is a four-lane divided north-south Minor Arterial roadway originating in the Kirtland residential community south of Gibson Blvd north through the University of New Mexico campus and beyond. The roadway provides access to I-25 via Avenida Cesar Chavez and the local residential community west of the freeway. The speed limit on this roadway is 40 MPH

Yale Blvd is a variable lane north-south Minor Arterial roadway originating as a divided six-lane facility near the AIS, transitioning to a four-lane then two-lane roadway as it continues north to Central Avenue. This roadway provides access to Project Orion's structured parking via Alamo Avenue and is anticipated to accommodate trips generated from the residential areas around the University of New Mexico campus. The roadway is posted 35 MPH south of Gibson Blvd, 40 MPH north of Gibson, and eventually, 30 MPH further north.

Carlisle Blvd is a north-south two-lane Minor Arterial facility north of Gibson Blvd that has on-street parking and a posted 30 MPH speed limit as it provides local access to residential properties. The roadway intersects Central Avenue 1.5 miles north of Gibson Blvd and continues north to I-40 and beyond. The roadway is anticipated to accommodate site-related trips originating from the residential areas to the northeast south of I-40.

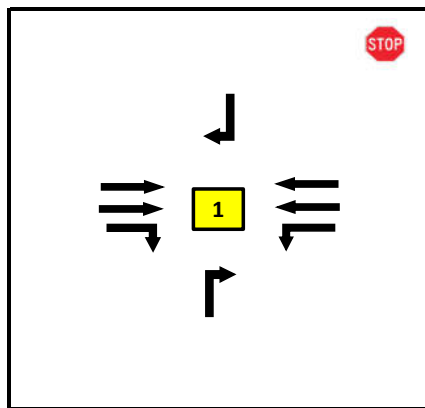
San Mateo Blvd is a divided north-south four-lane Principal Arterial north of Gibson Blvd. This roadway is anticipated to accommodate a portion of site generated trips to and from the east valley. The posted speed limit is 40 MPH.

INTERSECTIONS

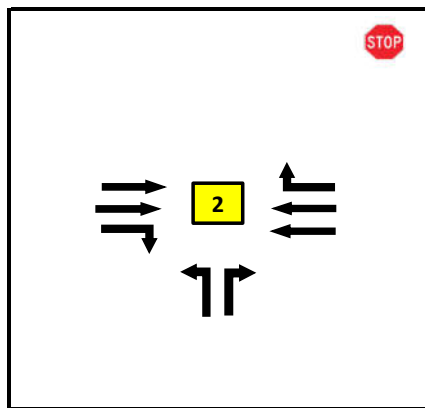
Figures 3 and 4 show the existing lane configurations and traffic control for the Gibson and Sunport corridors within the study area, respectively. Pedestrian crosswalks are present on all approaches of the intersections and U-turn movements are not restricted at any location. Timing data provided by the City indicate the Gibson Blvd corridor is coordinated throughout the day, operating with a 120-second background cycle length during the AM peak period (6:00 to 9:00 AM) and a 130-second cycle length during the PM peak period (2:00 to 6:30 PM). Most intersections consist of protected/permitted left turns with a few exceptions. Right turn overlaps are also hardwired at several the intersections.

The following list identifies the study area intersections existing traffic control, detection, and left-turn phasing operation:

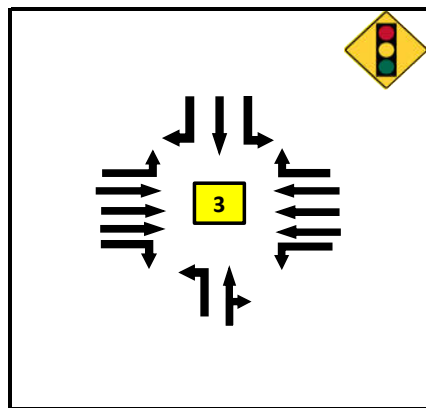
Location	Existing Traffic		EB/WB	NB/SB	Location	Existing Traffic		EB/WB	NB/SB
	Control	Detection	Lefts	Lefts		Control	Detection	Lefts	Lefts
Gibson & Interchange (SB)	MSS	None	--	--	Gibson & Truman	Signal	Loops	P/P, Perm	Perm
Gibson & Interchange (NB)	MSS	None	--	--	Gibson & San Mateo	Signal	Loops	P/P	Split
Gibson & University	Signal	Video	P/P	Perm	Sunport & 2nd St	MSS	None	--	--
Gibson & Yale	Signal	Video	P/P	P/P	Sunport & Broadway	Signal	None	Perm	Perm
Gibson & Girard	Signal	Video	P/P	Perm	Sunport & Interchange (SB)	AWS	None	--	--
Gibson & Carlisle	Signal	Loops	P/P	P/P	Sunport & Interchange (NB)	MSS	None	--	--
Gibson & Maxwell	Signal	Loops	P/P	Perm	Girard & Miles	MSS	None	--	--
Gibson & Quincy	MSS	None	--	--					



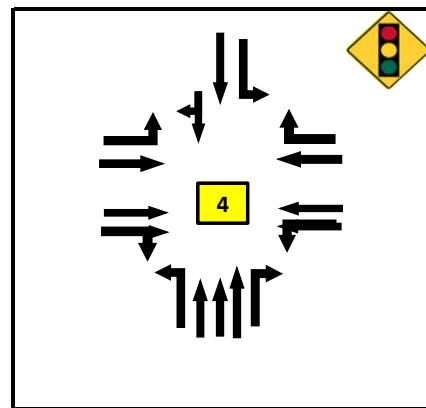
Gibson and I-25 SB Ramps



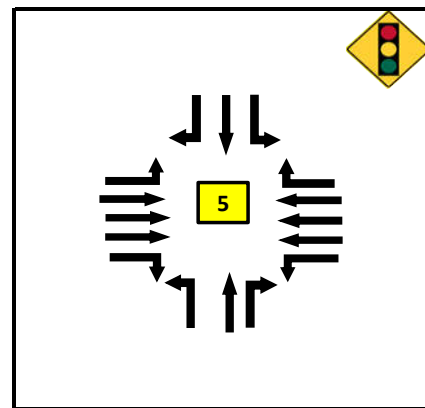
Gibson and I-25 NB Ramps



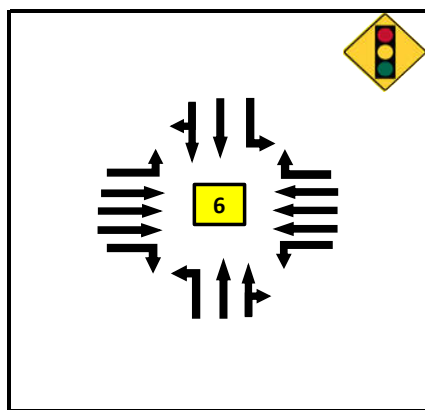
Gibson and University



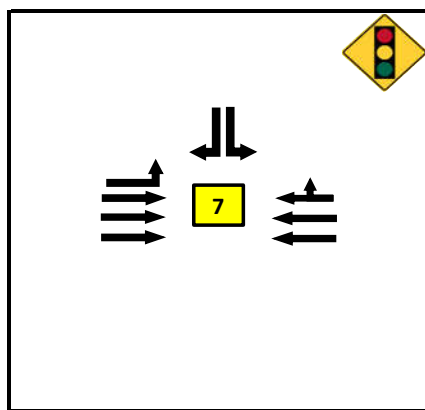
Gibson and Yale



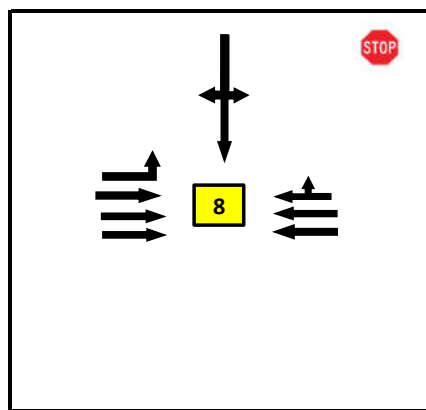
Gibson and Girard



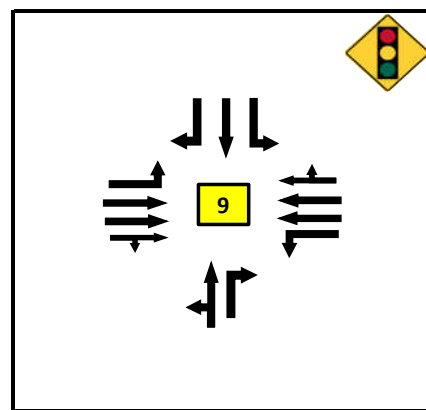
Gibson and Carlisle



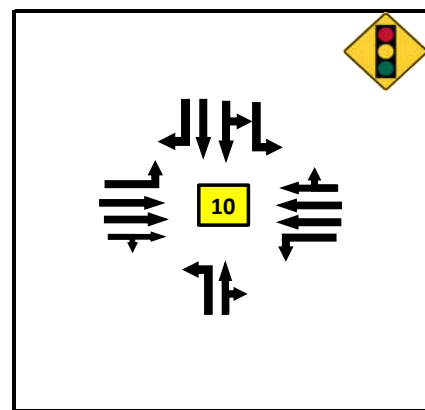
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman

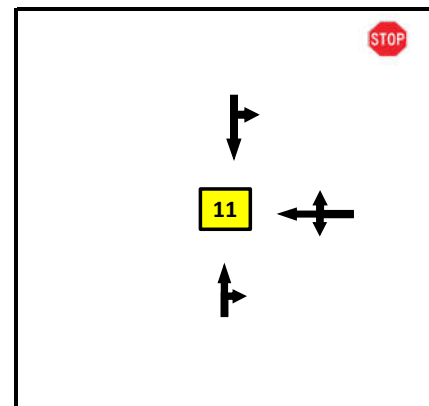


Gibson and San Mateo

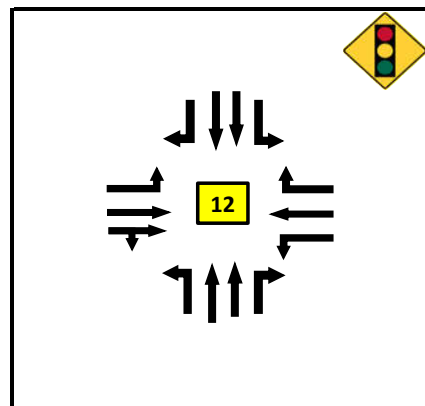
STUDY AREA LANE CONFIGURATIONS AND TRAFFIC CONTROL GIBSON BOULEVARD CORRIDOR 2020 EXISTING CONDITIONS

Notes: See Volume Development Methodology in Appendix

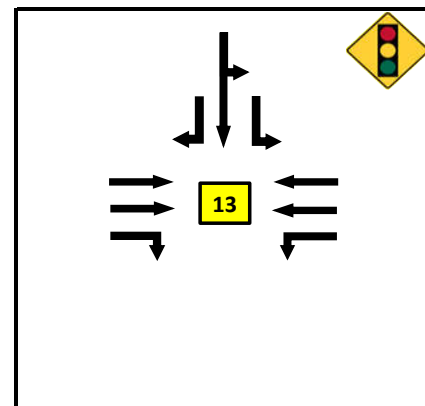
FIGURE 3



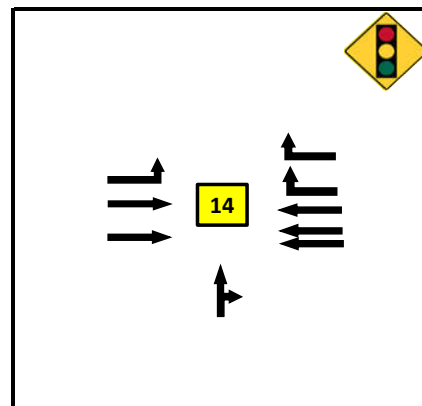
Woodward (Fut. Sunport Ext.) and 2nd Street



Woodward (Fut. Sunport Ext.) and Broadway



Sunport and I-25 SB Ramps



Sunport and I-25 NB Ramps

STUDY AREA LANE CONFIGURATIONS AND TRAFFIC CONTROL **SUNPORT BOULEVARD CORRIDOR** **2020 EXISTING CONDITIONS**

Notes: See Volume Development Methodology in Appendix

FIGURE 4

TRANSIT

The Albuquerque/Bernalillo County Comprehensive Plan indicates Gibson Blvd as a commuter corridor that accommodates faster and longer trips for personal vehicles, commuter bus service, freight movements and bicycles.

Transit stops exist throughout the corridor and at all north-south arterial street intersections for transfers to other service lines. Routes 16, 96, 217, and 222 travel the Gibson corridor with routes 92, 50, and 141 traveling the north/south arterials.

MULTIMODAL CONNECTIVITY

Sidewalks are present on both sides of Gibson Blvd as well as all cross-street facilities to accommodate pedestrian travel.

Bicycle facilities are present along the Gibson corridor. Beginning in the east, no bike facility is provided from San Mateo Blvd to Truman Street. From Truman Street to Carlisle Blvd, a shared-use sidepath is provided on the south side of the roadway while a bike lane is provided in the westbound direction. West of Carlisle Blvd, bike lanes are provided on both sides of the street to the I-25 corridor. Along the north-south corridors, only University Blvd has bike lanes, while Girard Blvd has bicycle shared-lane markings north of Thaxton Avenue (two-lane road segment).

CURRENT ADJACENT PROJECTS

As discussed in the scoping meeting, one known project within the study area will generate significant traffic along the Gibson corridor: the Kirtland Air Force Base Enhanced Use Lease/Max Q project (EUL, Bohannon Huston, 2019). The TIA for this project was provided to Lee Engineering to account for the site-generated traffic and intersection improvements anticipated to accommodate the development. Although the study assumed a 2030 horizon year for site build-out, all trips and improvements were accelerated to the 2025 horizon year as part of this study.

PROGRAMMED IMPROVEMENTS

The Sunport Blvd Extension is a multi-agency improvement programmed to be constructed prior to the 2025 horizon year. The project is to extend Sunport Blvd west as a four-lane divided roadway to Broadway Blvd at the Woodward Rd alignment. A copy of the roadway improvement plan was obtained to model its future lane configurations.

DATA COLLECTION

Because of the current pandemic, no data collection activities were conducted for this project. Instead, traffic data was obtained from the project stakeholders and recent traffic studies conducted in the study area. The following information was supplied:

- Peak period intersection turning movement counts on Gibson Blvd, obtained from MRCOG, the ACE TIA, and the EUL TIA.
- Peak period intersection turning movement counts on Sunport Blvd, obtained from the Sunport Boulevard Extension and Woodward Road Improvements study (IACR report, AECOM, 2016).
- 24-hour volume data in 15-minute intervals along Gibson Blvd, provided by the County.
- 24-hour volume data in 15-minute intervals for I-25 and the on/off ramps at Gibson and Sunport, provided by MRCOG.
- Signal timing data within the study area, provided by the City.

Count data provided were from different years, and required adjustments to develop a base-year condition where further uniform growth could be conducted to estimate current year volumes. Different study area locations required different development methodologies. The individual methodologies used for the study area locations can be found in Appendix B. Noting peak-hour conditions of the roadway may not correspond to the peak-hour of the generator (shift work times associated with the subject property is flexible) and potential movement volume/capacity (V/C) ratios along Gibson Blvd may exceed 1.0, additional volume adjustments to individual 15-minute intervals throughout the day (5:00 to 9:00 AM and 2:00 to 7:00 PM) were conducted.

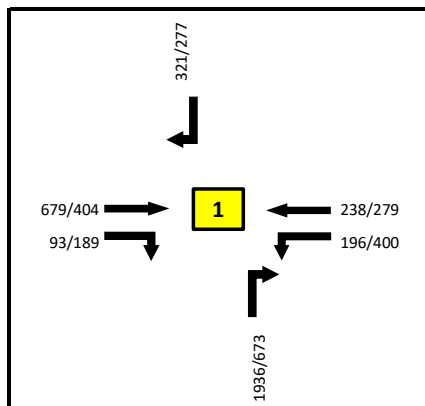
Results of the volume adjustment process indicate system-wide peak-hour conditions occurring in the morning from 6:45 to 7:45 AM while the evening peak hour begins at 4:00 PM. Figures 5 and 6 display the AM and PM peak-hour turn movement volumes for the study area.

HEAVY VEHICLES

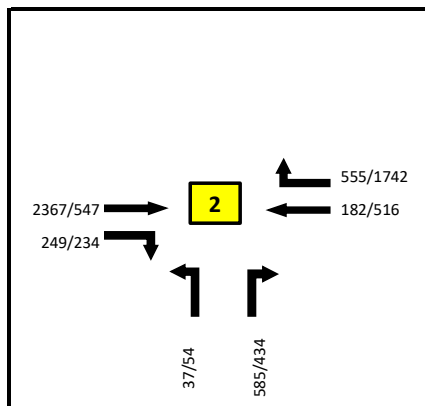
Heavy vehicle percentages along Gibson Blvd (also used for Sunport) were identified to be 2% in both AM and PM peak hours based on classification data provided by MRCOG. Vehicle classification counts on the freeway indicated 10% heavy trucks on the mainline and 3% on freeway on-off ramps. These percentages were used throughout the analysis process.

RIGHT TURN ON RED

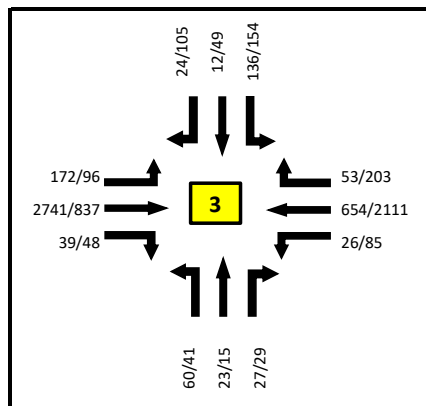
No information regarding right-turn-on-red (RTOR) traffic volume was provided for the study area. To account for this consideration, a 33% RTOR factor was utilized for analysis purposes based on a report from the International Journal of Transportation Science and Technology, *Right-Turn-On-Red Impact Assessment and Volume Estimation Model for Critical Intersections* (April 2020).



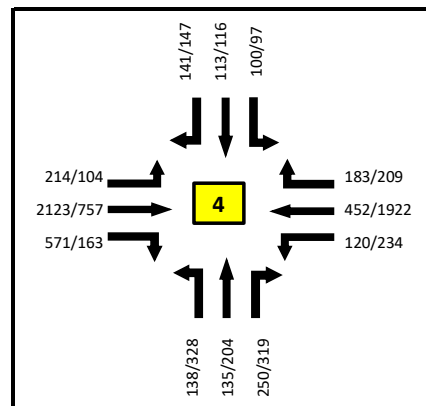
Gibson and I-25 SB Ramps



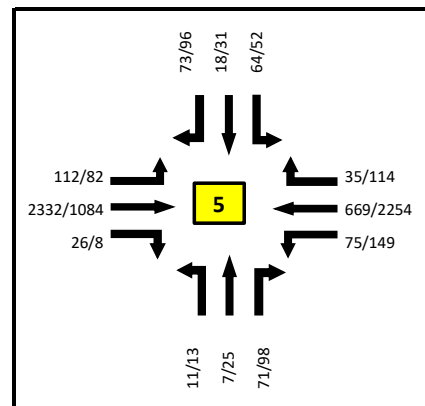
Gibson and I-25 NB Ramps



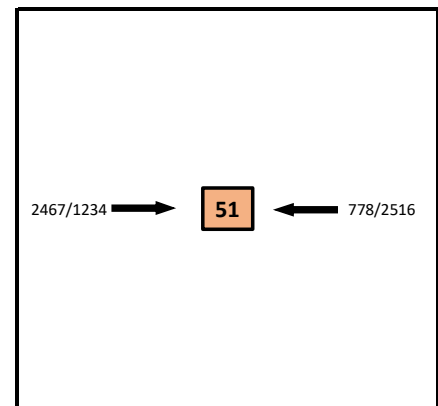
Gibson and University



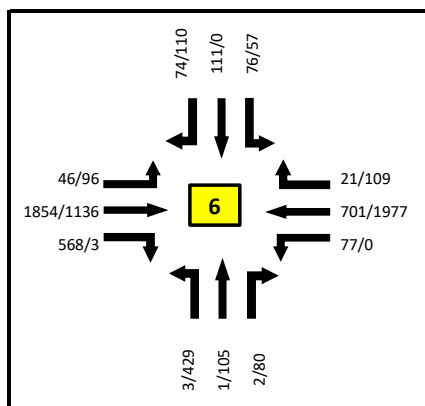
Gibson and Yale



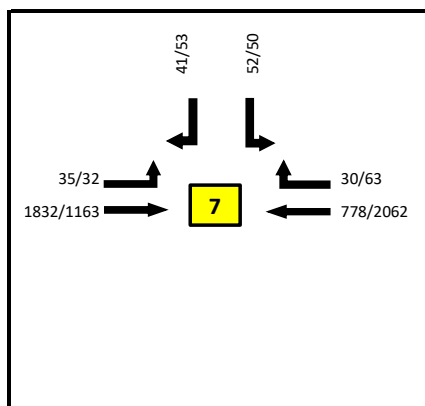
Gibson and Girard



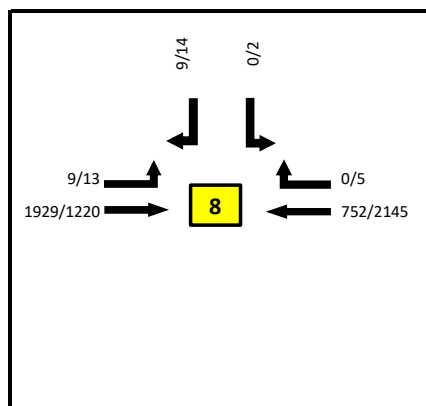
Gibson and Future Site Driveway



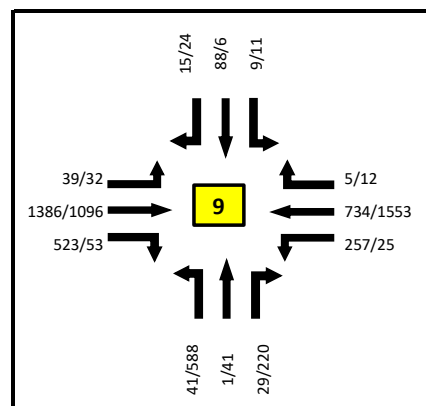
Gibson and Carlisle



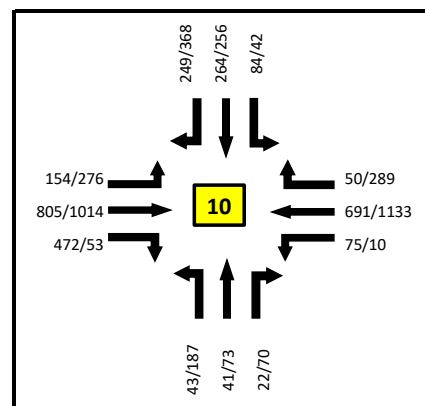
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



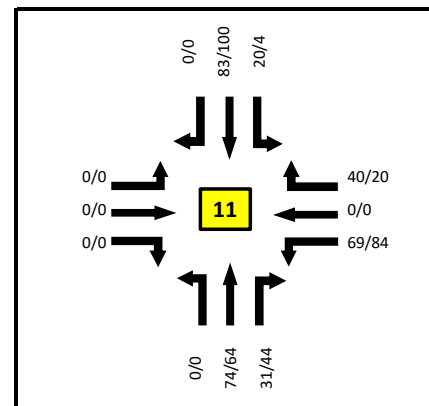
Gibson and San Mateo



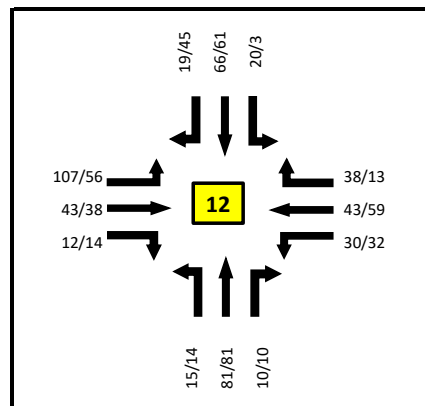
2020 EXISTING PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
GIBSON BOULEVARD CORRIDOR

Legend
 AM / PM Volumes

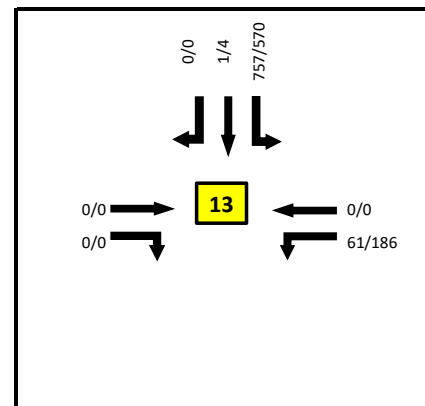
FIGURE 5



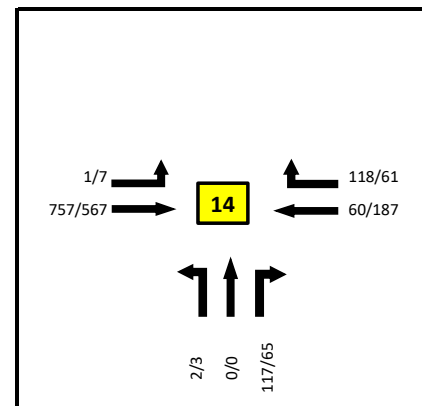
Woodward (Fut. Sunport Ext.) and 2nd Street



Woodward (Fut. Sunport Ext.) and Broadway



Sunport and I-25 SB Ramps



Sunport and I-25 NB Ramps

EXISTING CONDITIONS LEVEL OF SERVICE ANALYSIS

INTERSECTION ANALYSIS

Intersection capacity analyses were performed according to the methods and procedures provided in the *Highway Capacity Manual*, 6th Edition (HCM6). The PTV *Vistro 2020* software package was used to facilitate and produce the results of the intersection analysis. Lane configuration data shown in Figures 3 and 4 were used in conjunction with the volume data that was developed for the network to ascertain corridor performance. Signal timing data (provided in Appendix C) provided by the City were used to simulate the signal timing operations of the study area.

Per the HCM6, Level of Service (LOS) at intersections is presented as a letter grade (A through F) based on the calculated average delay for an intersection or movement. Delay is calculated as a function of several variables including signal phasing operations, cycle length, traffic volumes, and opposing traffic volumes, and is a measurement of the average wait time a driver can expect when moving through an intersection. Factors such as total cycle time (for all movements), queueing restrictions, and vehicle volumes can affect measurements of delay, especially for lower volume movements and side streets. Generally, these factors are only realized when delays reach or exceed LOS E. In such cases, a narrative is offered in subsequent sections specific to the individual movement in question.

Additional performance measures, such as volume to capacity (v/c) ratios and queue lengths, also provide an indication of operation. The HCM6 offers the following in Chapter 19:

“For a typical major street with two lanes in each direction and an average traffic volume in the range of 15,000 to 20,000 vehicles/day (roughly equivalent to a peak hour flow rate of 1,500 to 2,000 vehicles/hour), the delay equation will predict greater than 50s of delay (LOS F) for many urban two-way-stop-controlled (TWSC) intersections that allow minor-street left-turn movements. LOS F will be predicted regardless of the volume of minor-street left-turning traffic. Even with a LOS F estimate, most low-volume minor-street approaches would not meet any of the volume or delay warrants for signalization noted in the Manual on Uniform Traffic Control Devices. As a result, analysts who use the HCM LOS thresholds as the sole measure to determine the design accuracy of TWSC intersections should do so with caution. In evaluating the overall performance of TWSC intersections, it is important to consider measures of effectiveness such as volume-to-capacity ratios for individual movements, average queue lengths, and 95th percentile queue lengths in addition to considering delay. By focusing on a single measure of effectiveness for the worst movement only, such as delay for the minor-street left-turn, users may make less effective traffic control decisions.”

Table 1 below, reproduced from the HCM6, shows delay thresholds and the associated Level of Service assigned to delay ranges. As outlined in the NMDOT State Access Management Manual (SAMM) and for the purposes of this report, acceptable Levels of Service are defined to be a LOS D or better. Based on procedures outlined in the HCM6, intersection delay and Level of Service for stop-controlled intersections are reported as the delay and level of service for the worst-case movement at each intersection.

Table 1: LOS Criteria and Descriptions

Level of Service	Average Control Delay (seconds/vehicle)	
	Signalized	Unsignalized
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0

C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: *Highway Capacity Manual, 6th Edition*, Transportation Research Board, 2017.

ANALYSIS METHODOLOGY

With agency representatives noting the potential of V/C ratios to exceed 1.0, capacity analyses were conducted in 15-minute periods. To properly reflect results, individual 15-minute volumes were multiplied by 4 and a peak-hour factor (PHF) of 1 was utilized.

Table 2 below summarizes the intersection LOS conditions for the 2020 AM Peak-Hour Existing Conditions. Individual movements and the overall intersection operation, if applicable, is provided for each of the four 15-minute periods that constitute the peak hour of the roadway. Table 3 presents the PM peak hour results using the same format. Detailed output sheets of each intersection and additional time periods can be found in Appendix D. In addition, summary results including LOS, delay, V/C, and 95th-percentile vehicle queue in feet for each 15-minute period (5:00 to 8:00 AM and 3:00 to 6:00 PM) can be found in Appendix D. Some movement values are represented with a "0" or "-" to indicate analysis results are not provided for that movement.

Results indicate only one intersection (Gibson/University) in the AM peak-hour operates with an overall LOS E/F, occurring in one 15-minute period. Two individual movements on the Gibson corridor show LOS F operation including the northbound to westbound left turn movement at the Gibson/I-25 northbound off-ramp. In the PM peak hour, the intersection of Gibson and Truman operates at LOS E/F during all four 15-minute periods while the low volume southbound Quincy Street approach to Gibson operates at LOS F. The only other movement operating with LOS F operation is the Carlisle Blvd northbound left-turn movement. Overall, the intersections within the study area are identified to operate in an acceptable manner during peak-hour conditions, although some individual movements operate with elevated delays.

Table 2: 2020 Intersection LOS Analysis Summary, AM Peak Hour

Intersection	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 1 Gibson & Interchange (SB)	6:45	-	-	-	B	-	-	-	-	-	-	-	-	B
	7:00	-	-	-	B	-	-	-	-	-	-	-	-	B
	7:15	-	-	-	A	-	-	-	-	-	-	-	-	B
	7:30	-	-	-	A	-	-	-	-	-	-	-	-	B
Int 2 Gibson & Interchange (NB)	6:45	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:00	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:15	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:30	-	-	-	-	-	-	F	-	-	-	-	-	-
Int 3 Gibson & University	6:45	A	F	A	C	B	B	D	D	-	D	D	-	E
	7:00	A	C	A	D	B	A	D	D	-	E	D	-	C
	7:15	A	C	A	C	B	A	D	D	-	D	D	-	B
	7:30	A	C	A	B	B	B	D	C	-	D	D	-	C
Int 4 Gibson & Yale	6:45	A	C	B	C	B	A	D	D	C	D	D	D	C
	7:00	A	C	A	C	B	A	D	D	C	D	D	D	C
	7:15	A	C	A	C	B	A	D	D	C	D	D	D	C
	7:30	A	C	B	B	B	A	D	D	C	D	D	D	C
Int 5 Gibson & Girard	6:45	A	C	A	C	A	A	D	D	D	D	D	D	B
	7:00	A	B	A	C	A	A	D	D	D	D	D	D	B
	7:15	A	B	A	C	A	A	D	D	D	D	D	D	B
	7:30	A	B	A	C	B	A	D	D	D	D	D	D	B
Int 6 Gibson & Carlisle	6:45	A	A	A	A	A	A	D	E	D	D	D	D	B
	7:00	A	A	A	A	A	A	A	C	D	D	D	D	B
	7:15	A	A	A	B	A	A	D	D	D	D	E	D	B
	7:30	B	A	A	A	A	A	D	A	A	D	E	D	B
Int 7 Gibson & Maxwell	6:45	A	A	-	-	B	B	-	-	-	E	-	E	A
	7:00	A	A	-	-	B	B	-	-	-	E	-	E	A
	7:15	A	A	-	-	B	B	-	-	-	E	-	E	A
	7:30	A	A	-	-	B	B	-	-	-	E	-	E	A
Int 8 Gibson & Quincy	6:45	B	-	-	-	-	A	-	-	-	D	-	B	B
	7:00	B	-	-	-	-	A	-	-	-	C	-	B	B
	7:15	B	-	-	-	-	A	-	-	-	D	-	B	B
	7:30	B	-	-	-	-	A	-	-	-	D	-	B	B
Int 9 Gibson & Truman	6:45	A	A	A	D	A	A	D	D	D	E	E	E	B
	7:00	A	A	A	B	A	A	D	D	D	E	E	E	B
	7:15	B	B	B	C	A	A	D	D	C	D	D	D	B
	7:30	A	A	A	B	A	A	D	D	D	D	D	D	A
Int 10 Gibson & San Mateo	6:45	B	C	C	B	C	C	E	E	E	E	E	C	C
	7:00	C	C	C	C	C	C	E	E	E	E	E	C	D
	7:15	C	C	C	C	C	C	E	E	E	E	E	C	C
	7:30	B	C	C	B	C	C	E	E	E	E	E	C	C
Int 11 Sunport & 2nd St	6:45	A	-	B	-	A	-	A	-	A	-	A	-	B
	7:00	A	-	B	-	A	-	A	-	A	-	A	-	B
	7:15	A	-	B	-	A	-	A	-	A	-	A	-	B
	7:30	A	-	B	-	A	-	A	-	A	-	A	-	B
Int 12 Sunport & Broadway	6:45	C	C	C	C	C	C	C	B	B	C	B	B	C
	7:00	C	C	C	D	D	D	C	B	B	C	B	B	C
	7:15	C	C	C	D	D	D	C	B	B	C	B	B	C
	7:30	C	C	C	C	C	C	C	B	B	C	B	B	C
Int 13 Sunport & Interchange (SB)	6:45	A	0	0	A	0	0	A	0	0	B	0	0	C
	7:00	A	0	0	A	0	0	A	0	0	B	0	0	B
	7:15	A	0	0	A	0	0	A	0	0	B	0	0	B
	7:30	A	0	0	A	0	0	A	0	0	B	0	0	B
Int 14 Sunport & Interchange (NB)	6:45	A	A	-	-	A	A	C	C	B	-	-	-	C
	7:00	A	A	-	-	A	A	C	C	B	-	-	-	C
	7:15	A	A	-	-	A	A	C	C	B	-	-	-	B
	7:30	A	A	-	-	A	A	C	C	B	-	-	-	B

Table 3: 2020 Intersection LOS Analysis Summary, PM Peak Hour

Int 1	Gibson & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	-	-	-	A	-	-	-	-	-	-	-	-	B
		16:15	-	-	-	A	-	-	-	-	-	-	-	-	B
		16:30	-	-	-	A	-	-	-	-	-	-	-	-	B
		16:45	-	-	-	A	-	-	-	-	-	-	-	-	B
Int 2	Gibson & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	-	-	-	-	-	-	B	-	-	-	-	-	-
		16:15	-	-	-	-	-	-	B	-	-	-	-	-	-
		16:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:45	-	-	-	-	-	-	B	-	-	-	-	-	-
Int 3	Gibson & University	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	C	A	A	A	B	A	D	0	-	E	D	-	B
		16:15	C	B	A	A	B	A	D	0	-	E	D	-	B
		16:30	C	A	A	A	B	A	D	0	-	E	D	-	B
		16:45	C	B	A	A	C	B	D	0	-	E	D	-	C
Int 4	Gibson & Yale	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	B	B	A	B	B	A	D	D	C	D	E	E	C
		16:15	C	B	A	B	B	A	D	D	D	D	E	E	C
		16:30	C	B	A	B	B	A	D	D	C	D	E	E	C
		16:45	C	B	A	B	B	A	D	D	D	D	E	E	C
Int 5	Gibson & Girard	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	B	A	A	A	B	A	D	E	D	D	E	D	B
		16:15	C	A	A	A	B	A	D	E	D	D	D	D	B
		16:30	C	B	A	A	B	A	D	E	D	D	D	D	B
		16:45	C	B	A	A	B	A	D	E	D	D	D	D	B
Int 6	Gibson & Carlisle	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	B	A	A	A	B	A	F	D	D	D	C	D	D
		16:15	C	A	A	A	B	A	F	D	D	D	E	D	C
		16:30	B	A	A	A	B	A	F	D	D	D	C	D	C
		16:45	D	A	A	A	B	A	E	D	D	D	C	D	C
Int 7	Gibson & Maxwell	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	A	A	-	-	C	C	-	-	-	E	-	E	C
		16:15	A	A	-	-	D	D	-	-	-	E	-	E	C
		16:30	A	A	-	-	D	D	-	-	-	E	-	E	C
		16:45	A	A	-	-	D	D	-	-	-	E	-	E	C
Int 8	Gibson & Quincy	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:45	E	--	-	-	--	A	-	-	-	F	-	D	E
		17:00	D	--	-	-	--	A	-	-	-	F	-	C	D
		17:15	E	--	-	-	--	A	-	-	-	F	-	C	E
		17:30	E	--	-	-	--	A	-	-	-	F	-	C	E
Int 9	Gibson & Truman	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	C	C	C	B	B	B	F	F	C	D	D	D	E
		16:15	D	C	C	B	C	C	F	F	C	D	D	D	F
		16:30	D	C	C	B	C	C	F	F	C	C	C	C	F
		16:45	D	C	C	B	B	C	F	F	C	D	D	D	F
Int 10	Gibson & San Mateo	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	C	B	B	A	C	C	E	D	D	D	D	D	C
		16:15	C	B	B	B	C	C	E	D	D	D	D	D	C
		16:30	C	B	C	A	C	C	E	D	D	D	D	D	C
		16:45	C	B	B	B	C	C	E	D	D	D	D	D	C
Int 11	Sunport & 2nd St	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	A	-	B	-	A	-	A	-	A	-	A	-	B
		16:15	A	-	B	-	A	-	A	-	A	-	A	-	B
		16:30	A	-	B	-	A	-	A	-	A	-	A	-	B
		16:45	A	-	B	-	A	-	A	-	A	-	A	-	B
Int 12	Sunport & Broadway	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	C	C	C	C	C	C	C	C	B	C	B	B	C
		16:15	C	C	C	C	C	C	C	C	B	C	B	B	C
		16:30	C	C	C	C	C	C	C	C	B	C	B	B	C
		16:45	C	C	C	C	C	C	C	C	B	A	B	B	C
Int 13	Sunport & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	A	0	0	A	0	0	A	0	0	B	0	0	B
		16:15	A	0	0	A	0	0	A	0	0	B	0	0	B
		16:30	A	0	0	A	0	0	A	0	0	B	0	0	B
		16:45	A	0	0	A	0	0	A	0	0	B	0	0	B
Int 14	Sunport & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	A	A	-	-	A	A	C	C	B	-	-	-	B
		16:15	A	A	-	-	A	A	C	C	B	-	-	-	C
		16:30	A	A	-	-	A	A	C	C	B	-	-	-	C
		16:45	A	A	-	-	A	A	C	C	B	-	-	-	C



FREEWAY ANALYSIS

A methodology similar to the intersection analysis was utilized to analyze the I-25 corridor from north of Gibson Blvd to south of the Sunport interchange. Freeway segment and ramp volumes provided by MRCOG were used to develop a base 2019 volume condition. The base volumes were then increased by 1% to estimate 2020 conditions.

LOS analysis was performed according to the methods and procedures provided in the HCM, 6th Edition. The McTrans Highway Capacity Software, Version 7.8.5, was used to analyze the northbound and southbound operation of the freeway. The software provides multiple results based on LOS, speed, density and density/capacity for individual segments. A summary of all results is provided in Appendix E. Tables 4 and 5 present the LOS results for the AM and PM peak periods separately for the northbound and southbound directions.

Overall, the results presented in the two tables indicate LOS D or better conditions exist on all freeway segments with the identified 2020 existing volumes. However, informational notes identified within the software identify the following warning:

Southbound I-25 AM Peak Period: Diverge capacity is less than diverge demand on Segment 4 (off-ramp to EB Gibson Blvd) and may result in off-ramp queue affecting mainline flow.

Table 4: 2020 Freeway LOS Analysis Summary, Northbound I-25

		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
Time Period	5:00	A	A	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	A	B	A	A	A	B	A	B	A
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	B	C	B	B	B	B	B	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	B	C	B	B	B	B	B	C	C
	7:00	C	C	C	C	C	C	C	C	D
	7:15	D	D	D	C	C	C	D	D	D
	7:30	C	C	C	C	C	C	C	C	D
	7:45	B	C	B	B	B	B	B	B	B
	8:00	B	C	B	B	B	B	B	B	C
	8:15	B	C	B	B	B	B	B	B	B
	8:30	B	C	B	B	B	B	B	B	C
	8:45	B	B	A	B	A	B	B	B	B
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
Time Period	2:00	A	B	A	B	B	B	B	B	B
	2:15	B	B	A	B	B	B	B	B	B
	2:30	B	B	A	B	B	B	B	B	B
	2:45	B	B	A	B	B	B	B	C	C
	3:00	B	B	B	B	B	B	B	C	C
	3:15	B	B	A	B	B	B	B	C	C
	3:30	B	B	B	B	B	B	B	C	C
	3:45	B	B	B	B	B	B	B	C	C
	4:00	B	B	B	B	B	B	B	D	D
	4:15	B	B	B	B	B	B	B	D	D
	4:30	B	B	B	B	B	B	B	C	C
	4:45	B	B	B	B	B	B	B	C	C
	5:00	B	B	A	B	B	B	B	D	D
	5:15	A	B	A	B	B	B	B	C	C
	5:30	A	B	A	B	A	B	A	B	B
	5:45	A	B	A	B	A	A	A	B	B
	6:00	A	B	A	B	A	B	A	B	B
	6:15	A	B	A	A	A	B	A	B	B
	6:30	A	B	A	A	A	B	A	B	B
	6:45	A	B	A	A	A	A	A	B	B
Type		Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Merge	Basic
Length, ft		5280	1500	3070	1750	1155	700	400	800	1500
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport Off and On Ramps	Btw Sunport On and Gibson Off and On Ramps	Btw Gibson Off and EB On Ramps	Gibson EB On-Ramp	Btw Gibson On Ramps	Gibson WB On-Ramp	North of Gibson
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	3	3	3	4	3	3	3	3	3	3

Table 5: 2020 Freeway LOS Analysis Summary, Southbound I-25

		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	A	A	A	A
	5:30	B	B	B	A	A	A	A	A	A
	5:45	B	C	B	A	A	A	A	A	A
	6:00	B	C	B	A	A	A	A	A	A
	6:15	C	C	C	B	B	B	A	B	A
	6:30	C	D	C	B	B	B	A	B	A
	6:45	D	D	C	B	B	B	A	B	A
	7:00	C	D	C	B	B	B	A	A	A
	7:15	D	D	C	B	B	B	A	B	A
	7:30	C	D	C	B	B	B	A	B	A
	7:45	C	D	C	B	B	B	A	B	A
	8:00	C	C	C	B	B	B	A	B	A
	8:15	C	C	C	B	B	B	A	B	A
	8:30	C	C	B	B	A	B	A	B	A
	8:45	C	C	B	B	B	B	A	B	A
Time Period	2:00	B	C	B	B	B	B	B	B	B
	2:15	B	C	B	B	B	B	B	B	B
	2:30	C	C	B	B	B	B	B	B	B
	2:45	C	D	C	B	B	B	B	B	B
	3:00	C	D	C	B	B	B	B	B	B
	3:15	C	C	C	B	B	B	B	B	B
	3:30	C	C	C	B	B	B	B	B	B
	3:45	C	C	C	B	B	B	B	B	B
	4:00	C	C	C	B	B	B	B	B	B
	4:15	C	D	C	B	B	B	B	B	B
	4:30	C	C	B	B	B	B	B	B	B
	4:45	C	C	C	B	B	B	B	B	B
	5:00	C	C	C	B	B	B	B	B	B
	5:15	C	C	C	B	B	B	B	B	B
	5:30	C	C	C	B	B	B	B	B	B
	5:45	C	C	C	B	B	B	B	B	B
	6:00	C	C	C	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	B	B	B
	6:30	B	C	B	B	B	B	B	B	B
	6:45	B	C	B	A	B	B	B	B	B
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		2640	1500	200	750	620	2250	2950	875	2640
Segment ID		1	2	3	4	5	6	7	8	9
Southbound Locations		North of Gibson	Off-Ramp to WB Gibson	Btw Gibson Off-Ramps	Off-Ramp to EB Gibson	Btw Gibson Off and On Ramps	Btw Gibson and Sunport	Btw Sunport Off and On Ramps	On-Ramp from Sunport	South of Sunport
Segment ID		1	2	3	4	5	6	7	8	9
Lanes		3	3	3	4	3	4	3	3	3

BUILD YEAR ANALYSIS

The following sections detail the methods and calculations used to obtain traffic volumes for each analysis-year scenario.

Site construction is anticipated to begin in 2021 with a Phase 1 opening scheduled for 2023 and full build-out and operation anticipated for year 2025. Future construction phases, if favorable market conditions exist, assumes build-out for year 2030. Therefore, the following analysis periods are to be analyzed:

- 2025 No-Build (2020 Existing conditions plus 5 years of background traffic growth plus non-site development traffic)
- 2025 Build (2025 No-Build conditions plus Phase 1 site-generated trips)
- 2030 No-Build (2020 Existing conditions plus 10 years of background traffic growth plus non-site development traffic plus Phase 1 site traffic)
- 2030 Build (2025 No-Build conditions plus Phase 2 site generated trips)
- 2040 Build (2020 Existing Conditions plus 20 years of background traffic growth plus non-site development traffic plus Phase 1 and Phase 2 site traffic).

NON-SITE TRAFFIC FORECASTING

Development of background traffic growth is comprised of two components: traffic growth due to the ambient growth of the community and additional traffic due to site-adjacent development.

Background Traffic Growth. Traffic volumes on study-area roadways were provided by MRCOG from their 2016 and 2040 transportation model. The AM and PM peak-hour load volumes were compared for each study area intersection approach and a yearly growth rate between values calculated. An average yearly growth rate for the Gibson and I-25 corridors was calculated noting programmed improvements along the Sunport corridor made its growth calculations inappropriate to use. Growth calculations were then rounded downward to the next whole number noting the site and non-site development traffic are contained within the model forecasts. Table 6 shows these volumes and calculations. Based on table results, a background traffic growth rate of 1% per year was used to adjust study area traffic volumes to horizon year conditions.

Non-Site Generated Trips. One non-site development was identified to be constructed prior to the 2025 analysis year that may result in significant traffic volume impact for the study intersections, the EUL project. Although the EUL project assumed a 2030 build-out year, all site-generated traffic was assumed for the 2025 horizon year. For intersections west of Carlisle Blvd, site traffic was distributed based on the distribution percentages calculated for Project Orion. Figure 7 shows the AM and PM peak-hour trips estimated for the EUL site.

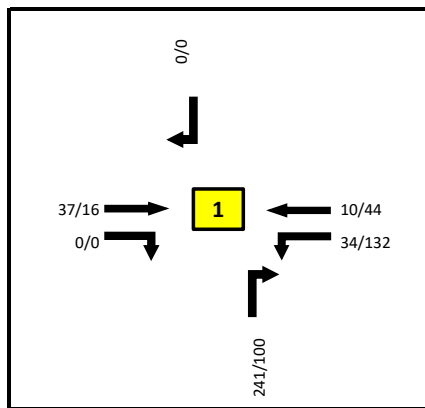
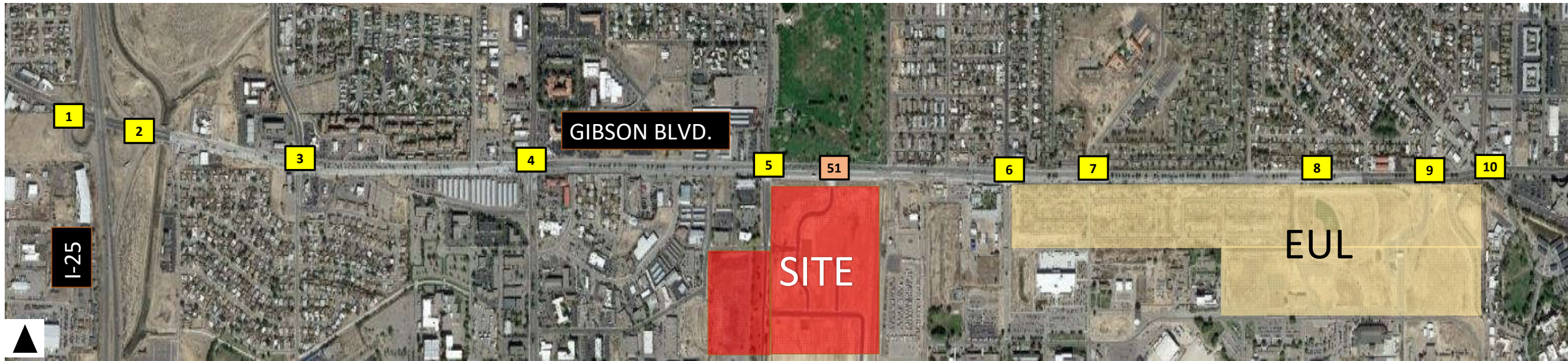
Other Considerations. Traffic volumes along the Sunport corridor were developed based on the 2020 estimated traffic volumes provided in Figure 2 of the Sunport Boulevard Extension Technical Memorandum (AECOM, Nov 2017). The I-25 ramp volumes to and from the east were taken to be the higher than both the memorandum volumes or the MRCOG volumes.

When reviewing the peak-hour volumes associated with the background growth and comparing them to the 2020 Existing conditions, the following items are noted for the Gibson Corridor:

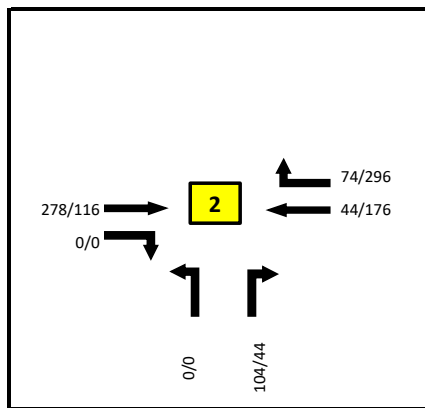
- At a representative intersection near the Orion site (Yale intersection), the eastbound through movement volume increases by 500 vehicles in the AM peak hour. During the PM peak hour, the westbound through movement volume increases by 580 vehicles. The high increase in volumes are associated with the current volumes travelling the Gibson corridor (over 2000 hourly vehicles) while the EUL development contributes nearly 400 eastbound vehicles in the AM peak-hour and nearly 500 westbound vehicles in the PM peak-hour.

Table 6: Study Area Background Traffic Growth

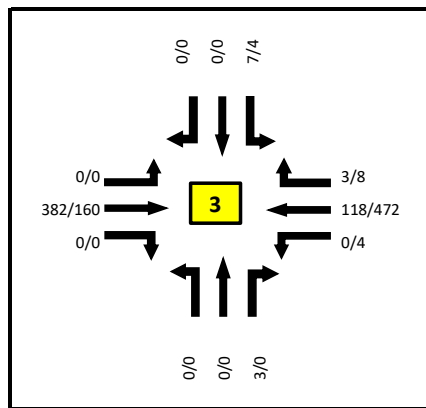
Roadway			MRCOG 2016 Model "Peak Hour Load"	MRCOG 2040 Model "Peak Hour Load"	Yearly Growth Rate	Average Yearly Growth	Growth Rate for Analysis
GIBSON CORRIDOR							
San Mateo North of Gibson Blvd	AM	PH	954	963	0.04%	0.77%	1.00%
	PM	PH	473	685	1.55%		
San Mateo South of Gibson Blvd	AM	PH	345	383	0.44%		
	PM	PH	863	973	0.50%		
Gibson Blvd East of San Mateo Blvd	AM	PH	1512	1981	1.13%		
	PM	PH	1967	2311	0.67%		
Gibson Blvd West of San Mateo Blvd	AM	PH	2045	2186	0.28%		
	PM	PH	1759	2521	1.51%		
Gibson Blvd East of Truman St	AM	PH	2045	2186	0.28%		
	PM	PH	1759	2521	1.51%		
Gibson Blvd West of Truman St	AM	PH	1420	1876	1.17%		
	PM	PH	1324	1703	1.05%		
Gibson Blvd East of Quincy St	AM	PH	1420	1876	1.17%		
	PM	PH	1324	1703	1.05%		
Gibson Blvd West of Quincy St	AM	PH	1420	1876	N/A		
	PM	PH	1324	1703	N/A		
Gibson Blvd East of Maxwell St	AM	PH	1420	1876	1.17%		
	PM	PH	1324	1703	1.05%		
Gibson Blvd West of Maxwell St	AM	PH	1420	1876	1.17%		
	PM	PH	1324	1703	1.05%		
Gibson Blvd East of Carlisle Blvd	AM	PH	1420	1876	1.17%		
	PM	PH	1324	1703	1.05%		
Gibson Blvd West of Carlisle Blvd	AM	PH	2272	2484	0.37%		
	PM	PH	1724	2348	1.30%		
Girard Blvd North of Gibson Blvd	AM	PH	459	283	-1.99%		
	PM	PH	380	464	0.84%		
Girard Blvd South of Gibson Blvd	AM	PH	133	163	0.85%		
	PM	PH	102	123	0.78%		
Gibson Blvd East of Girard Blvd	AM	PH	2179	2484	0.55%		
	PM	PH	1653	2374	1.52%		
Gibson Blvd West of Girard Blvd	AM	PH	1986	2244	0.51%		
	PM	PH	1275	1835	1.53%		
Yale Blvd North of Gibson Blvd	AM	PH	338	540	1.97%		
	PM	PH	344	748	3.29%		
Yale Blvd South of Gibson Blvd	AM	PH	689	975	1.46%		
	PM	PH	698	1465	3.14%		
Gibson Blvd East of Yale Blvd	AM	PH	1986	2244	0.51%		
	PM	PH	1275	1835	1.53%		
Gibson Blvd West of Yale Blvd	AM	PH	2202	2117	-0.16%		
	PM	PH	1460	1783	0.84%		
University Blvd North of Gibson Blvd	AM	PH	320	399	0.92%		
	PM	PH	675	1132	2.18%		
University Blvd South of Gibson Blvd	AM	PH	171	206	0.78%		
	PM	PH	292	253	-0.60%		
Gibson Blvd East of University Blvd	AM	PH	2134	2043	-0.18%		
	PM	PH	1390	1694	0.83%		
Gibson Blvd West of University Blvd	AM	PH	2645	2781	0.21%		
	PM	PH	1644	2141	1.11%		
Gibson Blvd East of I- 25	AM	PH	2645	2781	0.21%		
	PM	PH	1644	2141	1.11%		
Gibson Blvd West of I- 25	AM	PH	989	1194	0.79%		
	PM	PH	744	1074	1.54%		
I-25 CORRIDOR							
I-25 NB Bet Gibson & Sunport	AM	PH	3816	5288	1.37%		
	PM	PH	3279	4746	1.55%		
I-25 SB Bet Gibson & Sunport	AM	PH	3072	3946	1.05%		
	PM	PH	3961	4951	0.93%		



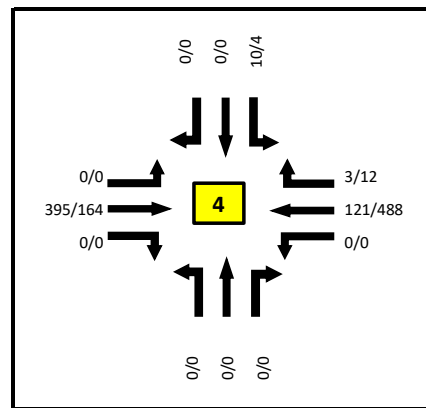
Gibson and I-25 SB Ramps



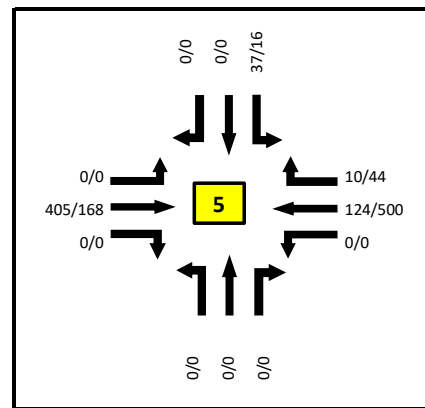
Gibson and I-25 NB Ramps



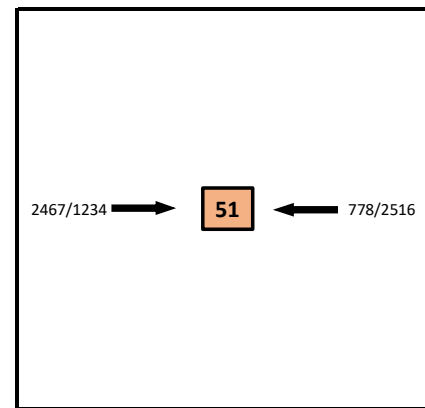
Gibson and University



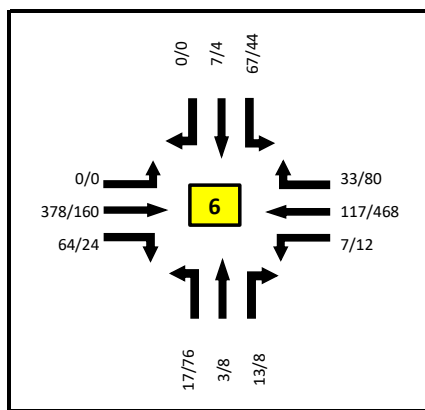
Gibson and Yale



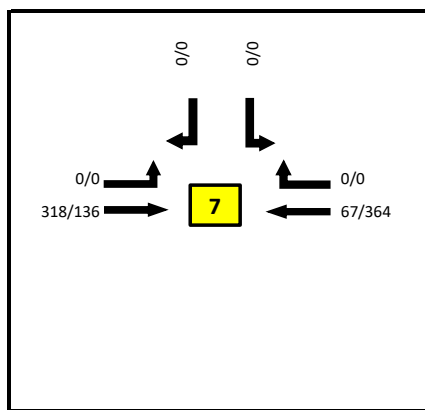
Gibson and Girard



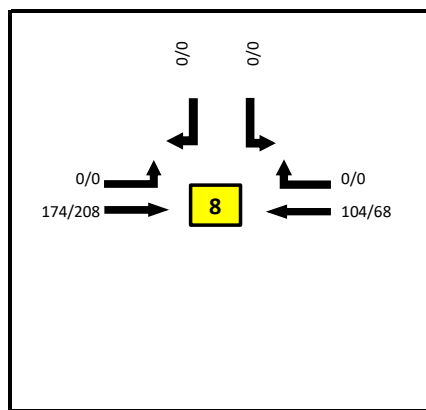
Gibson and Future Site Driveway



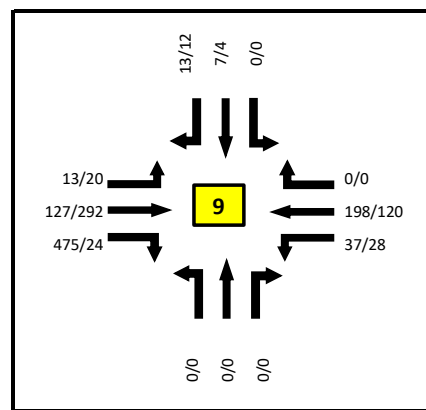
Gibson and Carlisle



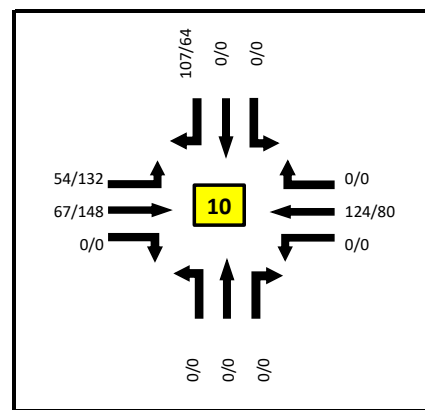
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo



2020 EXISTING PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
EUL SITE GENERATED TRIPS

Legend
 AM / PM Volumes

FIGURE 7

SITE-GENERATED TRAFFIC FORECASTING

The trip generation forecast for Phase 1 of the subject site was discussed during an August 18, 2020, virtual scoping meeting conducted with the project stakeholders. As discussed, it was determined that:

- Three work shifts are proposed by the client; 6 AM to 3 PM, 3 to 10 PM, and 10 PM to 6 AM. These shifts are flexible within reason.
- The land use most representative of the Phase 1 development is ITE Land Use Code 130, Industrial Park.
- Due to the work hours associated with the site, generated site trips would be developed in a 2-step manner. Employee trips would be developed by the number of employees per shift, arriving in the 60-minute period prior to shift start and exiting in the 60-minute period after their shift. Non-employee trips would arrive throughout the normal work-day hours, 6 AM to 7 PM.

In addition, site-related trips were to be developed in 15-minute intervals due to the potential impact of site trips on peak-hour traffic conditions within the study area. Because of locale, availability of transit options, ride-sharing opportunities, and on-site interactions, it was assumed employee vehicular trips could be reduced by 20 percent. Employee trips were assumed to occur evenly within the four 15-minute periods prior to and after their shifts. Non-employee trips were assumed to be the difference between the daily trips estimated using the ITE average rates (based on number of employees) minus the employee trips. The non-employee trips were distributed through the day based on existing hourly volumes on Gibson Blvd.

Table 7 provides the Phase 1 trip generation estimate for the subject site.

Phase 2 of the site has not been determined and therefore, trip estimates have not been developed.

Table 7: Trip Generation, Phase 1

Shift Time	Shift	Employees	ITE Daily Trips*	ITE LUC 130 Estimated Trips			
				AMN	AMX	PMN	PMX
6A-3P	Day Shift	1450	--	549	89	122	487
3P-10P	Evening Shift	850	--	0	0	322	52
10P-6A	Night Shift	275	--	32	130	0	0
Total Phase 1		2575	7493	581	219	444	539

* ITE Trip Generation 10th Edition, ITE LUC 130, Total Employees, Average Rate

Employee Carpool and Transit % = 20%

Employee Veh. Trips =	4120
Employee Transit Trips =	1030
Non-Employee Veh. Trips =	2343
Total Trip Ends (all modes) =	7493
Total Vehicle Trip Ends =	6463

EMPLOYEE TRIPS (EMPLOYEES - CAR POOL & TRANSIT TRIPS)							NON-EMPLOYEE TRIPS		SITE TOTAL Veh. Trips		
Time	Day Shift Percent		Evening Shift Percent		Night Shift Percent		Total Employee Based Veh. Trips		In	Out	Total
	In	Out	In	Out	In	Out	In	Out			
12-1 AM							0	0	0	0	0
1-2 AM							0	0	0	0	0
2-3 AM							0	0	0	0	0
3-4 AM							0	0	0	0	0
4-5 AM							0	0	0	0	0
5-6 AM	1160						1160	0	1160	0	1160
6-7 AM					220		0	220	80	79	379
7-8 AM							0	0	108	107	215
8-9 AM							0	0	97	97	194
9-10 AM							0	0	72	71	143
10-11 AM							0	0	72	72	144
11-12 PM							0	0	81	80	161
12-1 PM							0	0	87	87	174
1-2 PM							0	0	81	80	161
2-3 PM			680				680	0	88	87	855
3-4 PM		1160					0	1160	109	109	1378
4-5 PM							0	0	120	119	239
5-6 PM							0	0	107	106	213
6-7 PM							0	0	74	73	147
7-8 PM							0	0	0	0	0
8-9 PM							0	0	0	0	0
9-10 PM					220		220	0	0	220	220
10-11 PM				680			0	680	0	680	680
11-12 AM							0	0	0	0	0
Total	1160	1160	680	680	220	220	2060	2060	1176	1167	3236
	2320		1360		440		4120		2343		6463

Time Period	Raw Gibson Traffic *	Conversion, All Non-Employee Trips Throughout Day (%)	Trip distribution of Non-Employee Trips		
			TOTAL	IN	OUT
12-1 AM	0.0077	0	0	0	0
1-2 AM	0.0039	0	0	0	0
2-3 AM	0.0028	0	0	0	0
3-4 AM	0.0034	0	0	0	0
4-5 AM	0.0076	0	0	0	0
5-6 AM	0.0251	0	0	0	0
6-7 AM	0.0564	0.0679	159	80	79
7-8 AM	0.0761	0.0916	215	108	107
8-9 AM	0.0689	0.0830	194	97	97
9-10 AM	0.0508	0.0611	143	72	71
10-11 AM	0.0511	0.0615	144	72	72
11-12 PM	0.0570	0.0686	161	81	80
12-1 PM	0.0616	0.0742	174	87	87
1-2 PM	0.0570	0.0687	161	81	80
2-3 PM	0.0620	0.0747	175	88	87
3-4 PM	0.0772	0.0929	218	109	109
4-5 PM	0.0847	0.1020	239	120	119
5-6 PM	0.0756	0.0911	213	107	106
6-7 PM	0.0522	0.0628	147	74	73
7-8 PM	0.0383	0	0	0	0
8-9 PM	0.0291	0	0	0	0
9-10 PM	0.0218	0	0	0	0
10-11 PM	0.0170	0	0	0	0
11-12 AM	0.0126	0	0	0	0
Total		1	2343	1176	1167

* From Gibson Road Corridor 24-hour Volumes.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution for site-generated trips was based on a standard gravity model using socioeconomic data provided by Bohannon Huston previously obtained from MRCOG. The site trips were distributed based on population estimates for the 25 subareas within the Albuquerque Metropolitan Planning Area. Routing to and from the subject site was based on the logical routes available for the 2025 horizon year. Figure 8 shows the distribution and routing map for the site.

Phase 1 site trips generated by the development were assigned to site driveways and the adjacent street network as indicated in Figure 8. For presentation purposes, two AM and two PM peak-hour time periods are presented below. It is noted that all site trips were assigned in 15-minute intervals such that any 15-minute period could be analyzed.

- Figure 9. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Gibson Corridor
- Figure 10. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Gibson Corridor
- Figure 11. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Sunport Corridor
- Figure 12. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Sunport Corridor

Based on the employee shift time, peak employee day shift traffic is to occur outside of the higher volume peak of the roadway. In the morning arrival period, eastbound Gibson Blvd is to accommodate 600 new site trips while westbound Gibson is to accommodate about 280. In contrast, the site is estimated to only generate 50 new eastbound and 40 new westbound vehicles during the current peak of the roadway. Similar

benefit is noted for the PM peak condition with the 1450 day-shift employees ending at 3:00 PM, an hour prior to the roadway peak.

Other interesting notes regarding the site-related trips during the AM and PM peak hour include:

- Employee Day-Shift Arrivals: 192 vehicles directed southbound on Yale, 408 eastbound right-turn and 432 westbound left-turn vehicles onto Girard, 24 vehicles directed through the airport.
- Employee Day-Shift Departures: 476 northbound left-turns and 337 northbound right-turns from Girard Blvd onto Gibson Blvd, 304 left-turn vehicles at the northbound Yale Blvd approach to Gibson Blvd, and 52 vehicles using the local roadway network to access the Sunport/I-25 intersections.



Study Area Intersections

- | | |
|--|---|
| 1. Gibson Blvd. and I-25 SB On/Off Ramps | 10. Gibson Blvd. and San Mateo Blvd. / Ridgecrest Dr. |
| 2. Gibson Blvd. and I-25 NB On/Off Ramps | 11. Sunport Extension and 2nd St. |
| 3. Gibson Blvd. and University Blvd. | 12. Sunport Extension and Broadway Blvd. |
| 4. Gibson Blvd. and Yale St. | 13. Sunport Extension and I-25 SB On/Off Ramps |
| 5. Gibson Blvd. and Girard Blvd. | 14. Sunport Extension and I-25 NB On/Off Ramps |
| 6. Gibson Blvd. and Carlisle Blvd. | 50. Girard Blvd and Miles Rd. |
| 7. Gibson Blvd. and Maxwell St. | 51. Gibson Blvd and Site Driveway to East Bldgs. |
| 8. Gibson Blvd. and Quincy St. | 52. Girard Blvd and Site Driveway to East Bldgs. |
| 9. Gibson Blvd. and Truman St. | 53. Girard Blvd and N Site Driveway to Parking |
| | 54. Girard Blvd and S Site Driveway to Parking |

Legend

- # Intersection #
- # Intersection # / Site Driveway
- XX% To/From AM/PM Distribution Percentage
- X% Routing Percentage
- To Site Routing
- ← From Site Routing

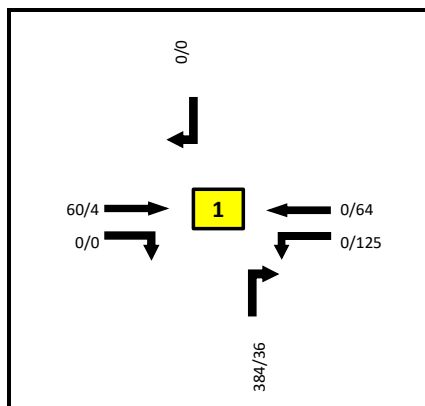
Enlargement

Project Orion - TIA

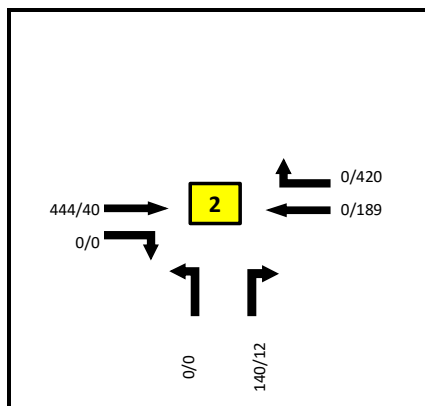
Site Traffic Distribution and Routing Map

Figure 8

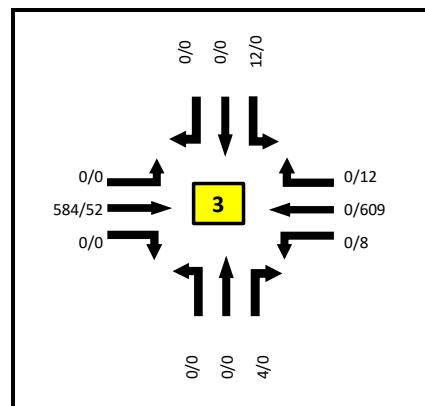




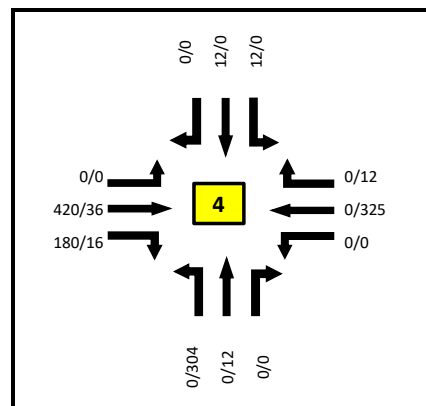
Gibson and I-25 SB Ramps



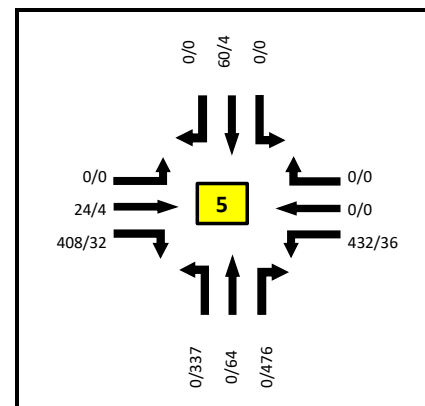
Gibson and I-25 NB Ramps



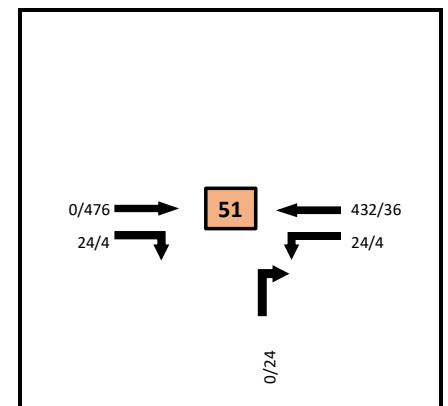
Gibson and University



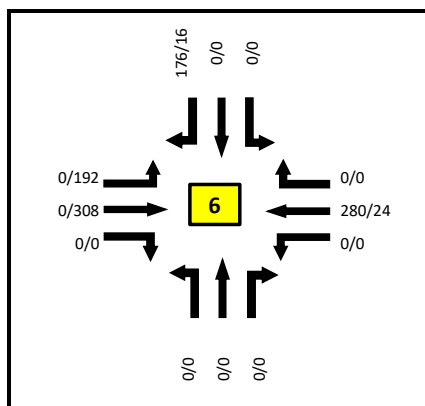
Gibson and Yale



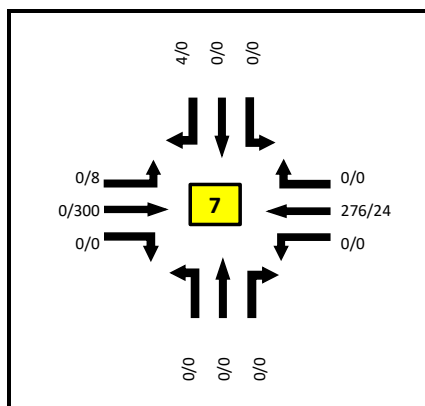
Gibson and Girard



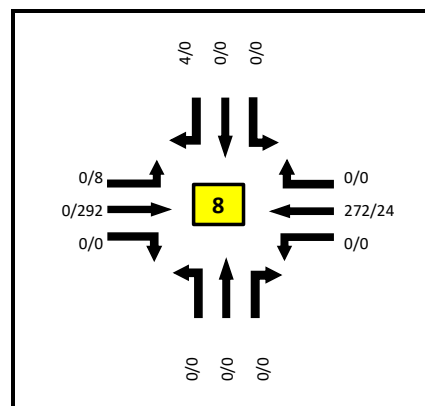
Gibson and Site Driveway



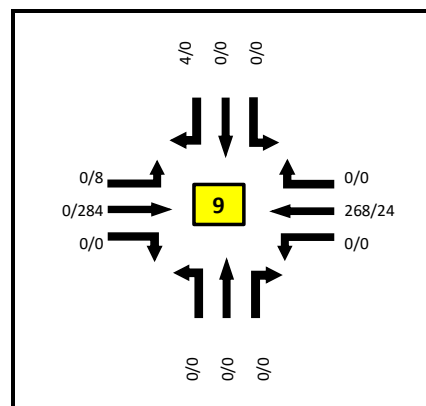
Gibson and Carlisle



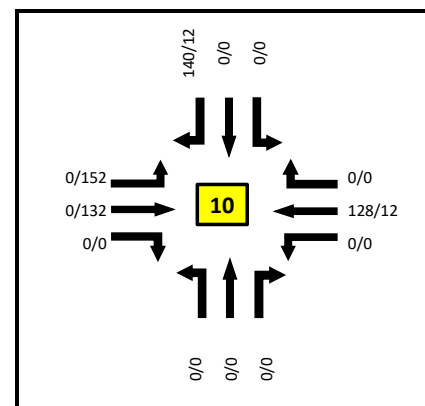
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



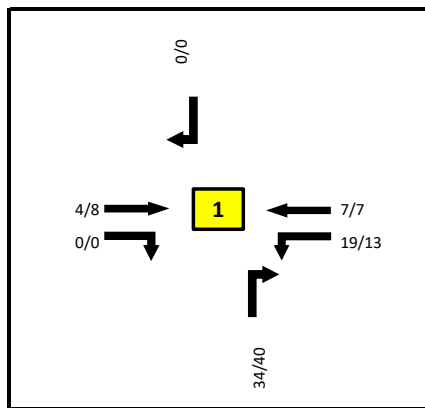
Gibson and San Mateo



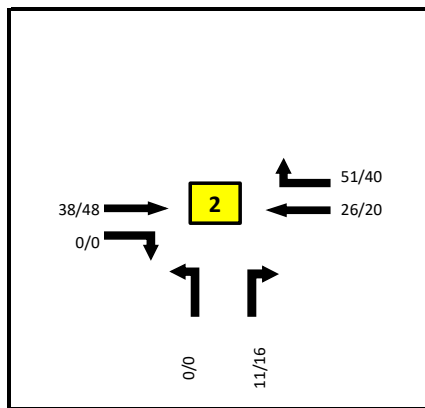
PHASE 1 SITE TRIPS
5:00AM to 6:00AM & 3:00PM to 4:00PM
GIBSON BOULEVARD CORRIDOR

Legend
 AM / PM Volumes

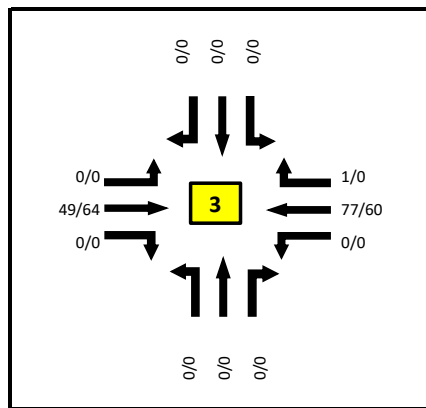
FIGURE 9



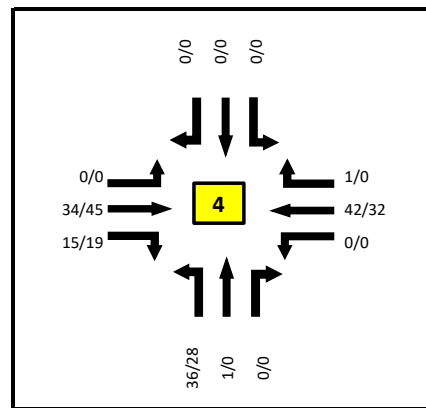
Gibson and I-25 SB Ramps



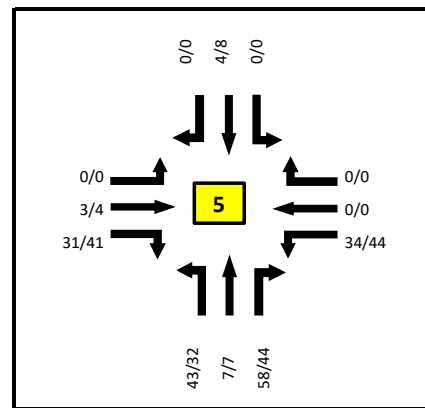
Gibson and I-25 NB Ramps



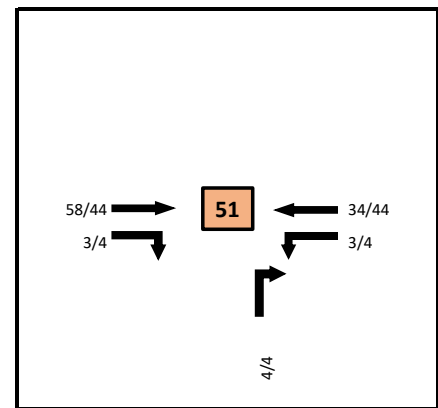
Gibson and University



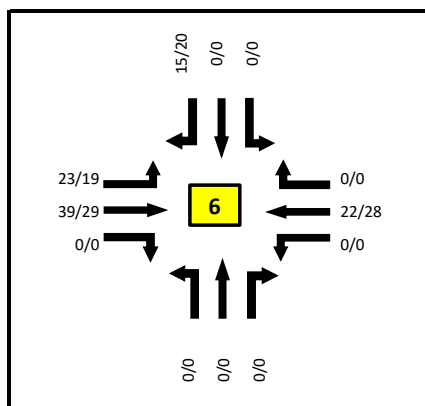
Gibson and Yale



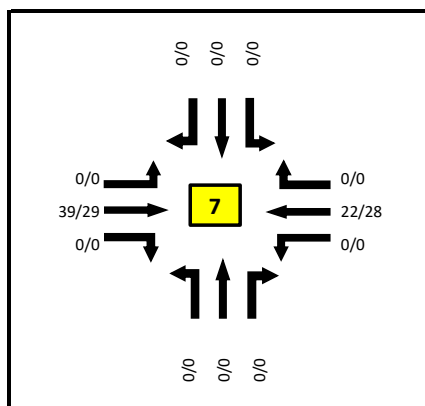
Gibson and Girard



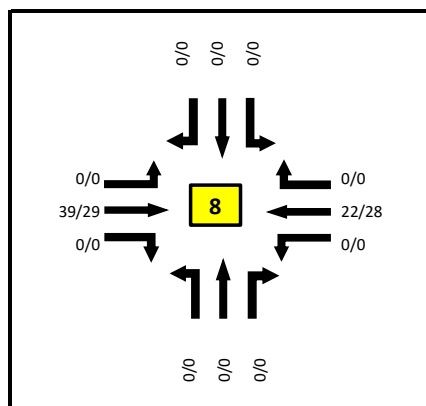
Gibson and Site Driveway



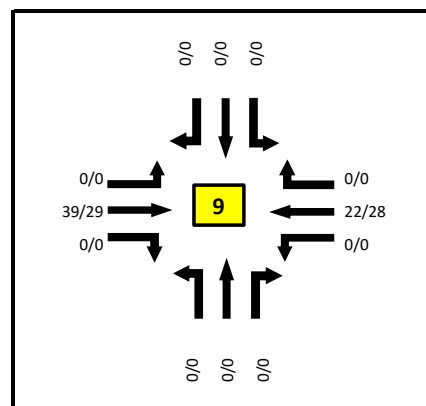
Gibson and Carlisle



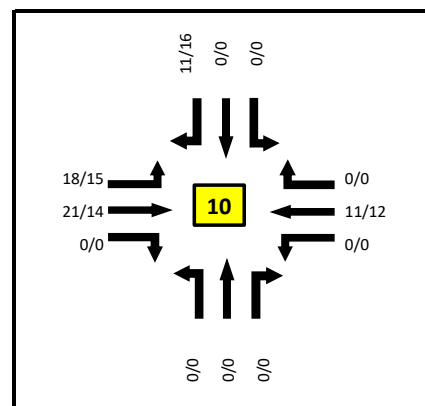
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



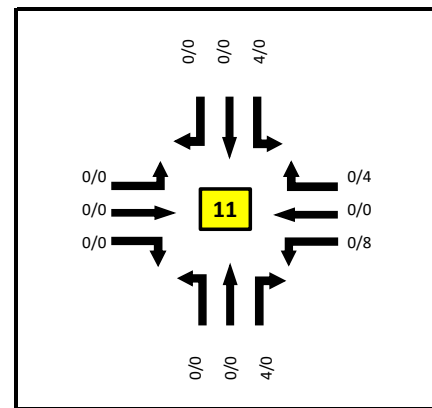
Gibson and San Mateo



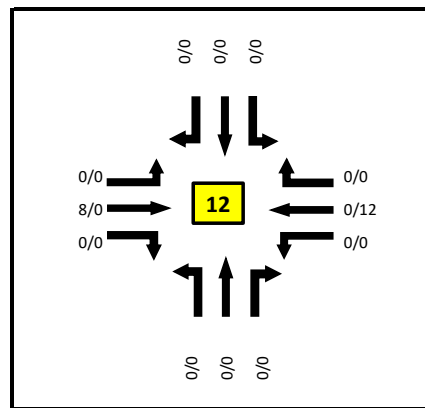
PHASE 1 SITE TRIPS
6:45AM to 7:45AM & 4:00PM to 5:00PM
GIBSON BOULEVARD CORRIDOR

Legend
 AM / PM Volumes

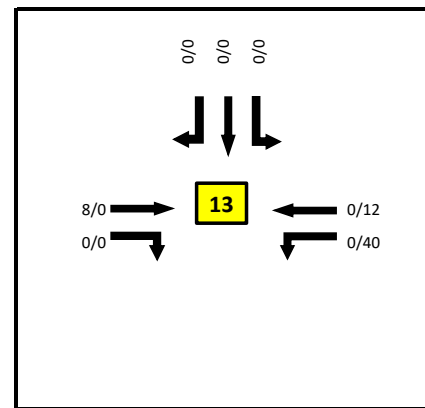
FIGURE 10



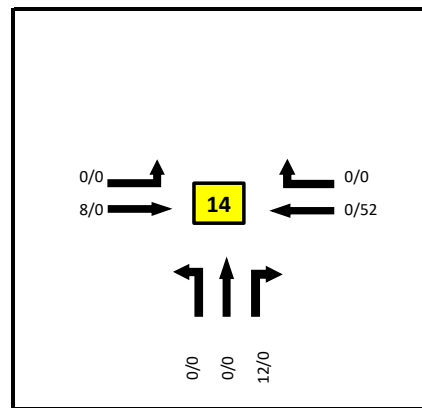
Woodward / Sunport Ext. and 2nd Street



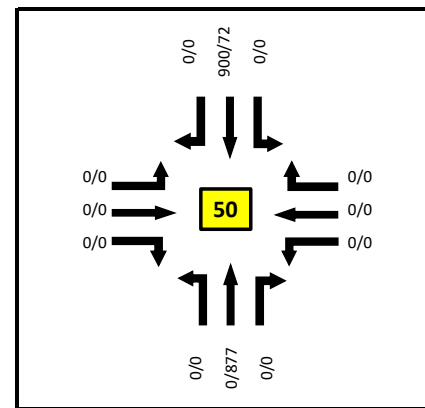
Woodward / Sunport Ext. and Broadway



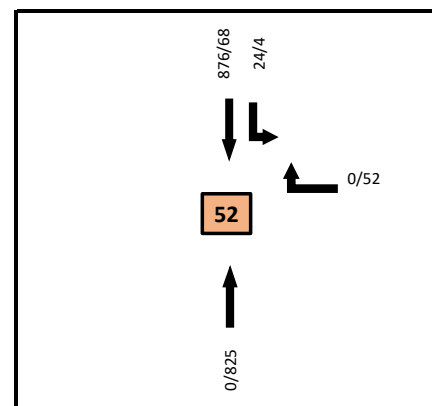
Sunport and I-25 SB Ramps



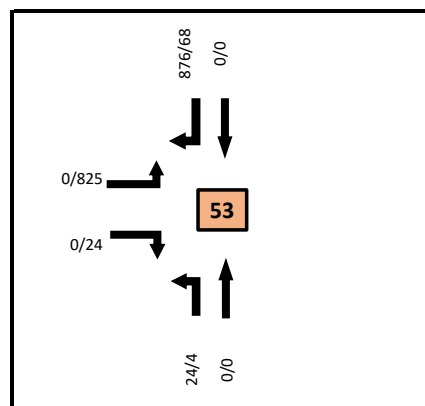
Sunport and I-25 NB Ramps



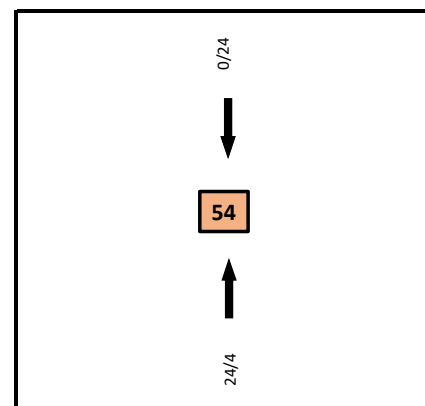
Girard and Miles



Girard Site Driveway to East



Girard Driveway to Pkg Lot N



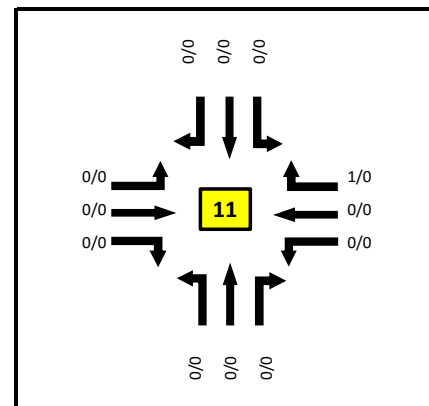
Girard Driveway to Pkg Lot S

PHASE 1 SITE TRIPS
5:00AM to 6:00AM & 3:00PM to 4:00PM
SUNPORT BOULEVARD CORRIDOR

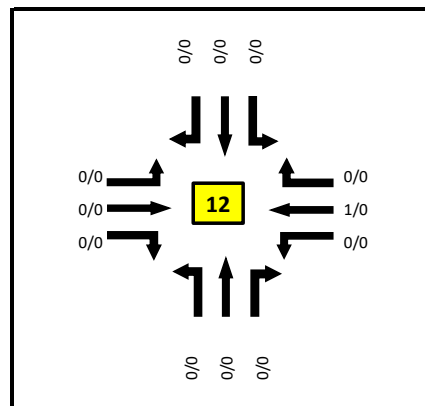
LEGEND
 AM / PM Volumes

FIGURE 11

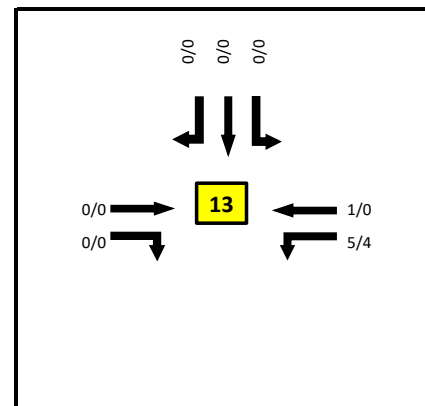




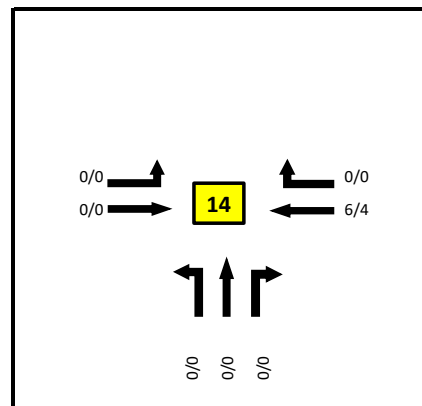
Woodward / Sunport Ext. and 2nd Street



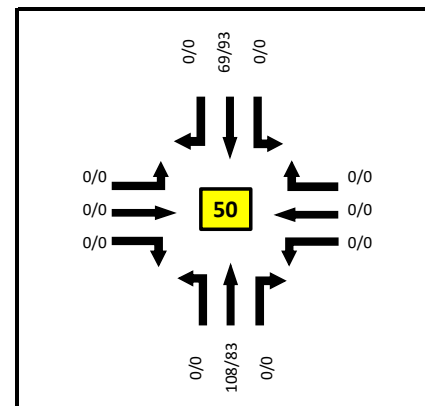
Woodward / Sunport Ext. and Broadway



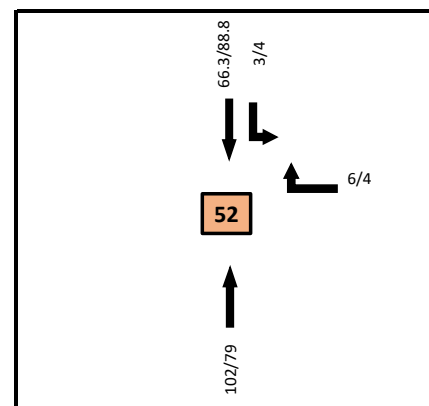
Sunport and I-25 SB Ramps



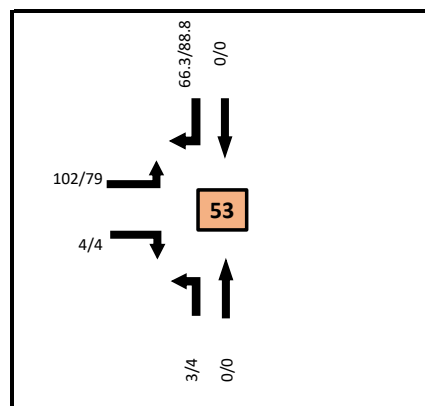
Sunport and I-25 NB Ramps



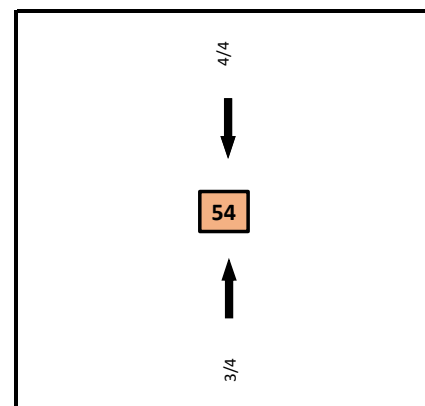
Girard and Miles



Girard Site Driveway to East



Girard Driveway to Pkg Lot N



Girard Driveway to Pkg Lot S

PHASE 1 SITE TRIPS
6:45AM to 7:45AM & 4:00PM to 5:00PM
SUNPORT BOULEVARD CORRIDOR

LEGEND
 AM / PM Volumes

FIGURE 12



FUTURE YEAR NO-BUILD AND BUILD INTERSECTION TRAFFIC VOLUMES

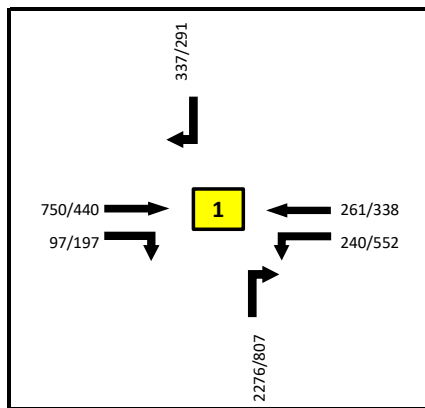
2025 No-Build Traffic Volumes. When adding a 1% per year growth factor to the 2020 Existing condition for 5 years (growth factor = 1.01^5) plus the EUL trips, the 2025 No-Build traffic volumes for the study area can be determined. Figures 13 and 14 show the 2025 No-Build AM and PM peak-hour volumes for the Gibson and Sunport corridors, respectively. It is noted that the EUL project will add signalization at the Gibson/Quincy intersection as well as adding a south leg to the Maxwell and Quincy intersections.

2025 Build Traffic Volumes. When adding the Phase 1 site-generated trips to the 2025 No-Build traffic volumes, the 2025 Build scenario volumes can be estimated. Figures 15 through 18 show the 2025 Build volume conditions for AM and PM peak-hours of the generator and roadway respectively for the Gibson and Sunport/Girard corridors.

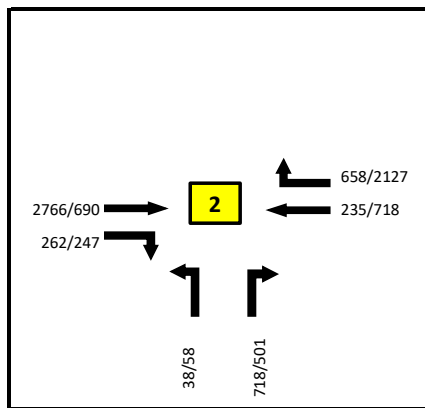
2030 No-Build Traffic Volumes. To be determined.

2030 Build Traffic Volumes. To be determined.

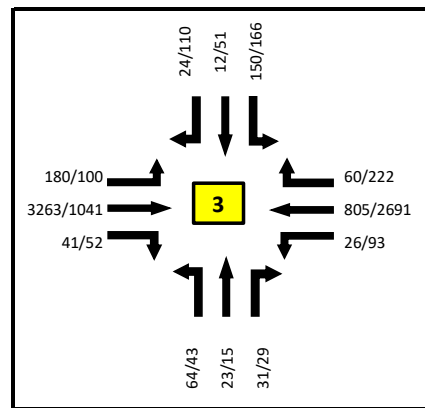
2040 Build Traffic Volumes. To be determined.



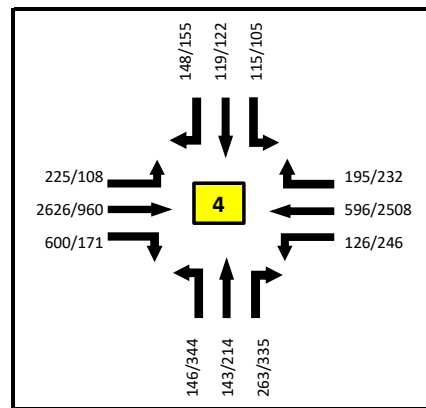
Gibson and I-25 SB Ramps



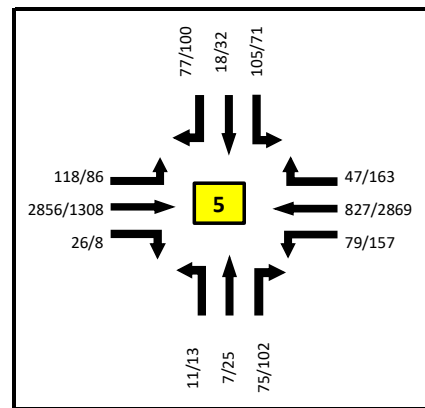
Gibson and I-25 NB Ramps



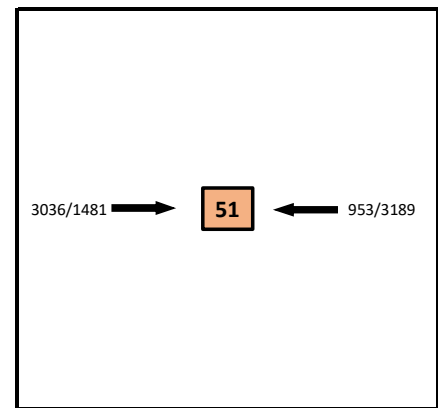
Gibson and University



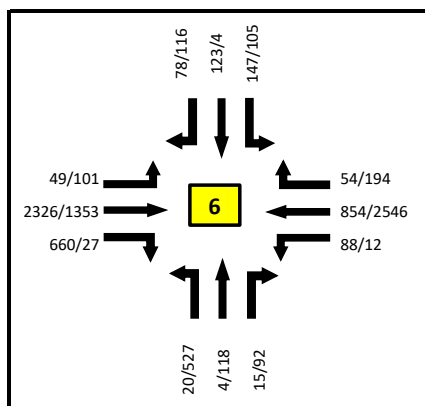
Gibson and Yale



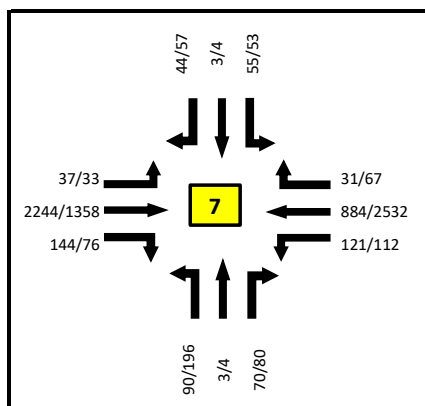
Gibson and Girard



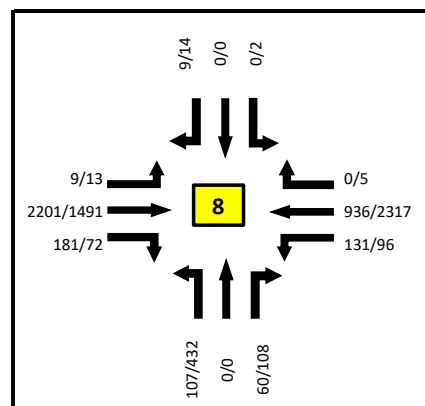
Gibson and Future Site Driveway



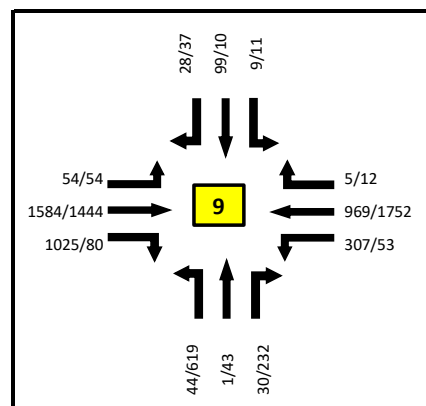
Gibson and Carlisle



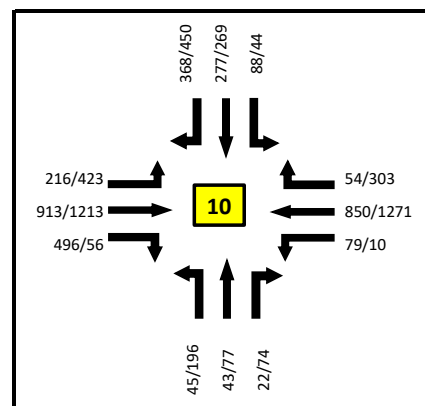
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



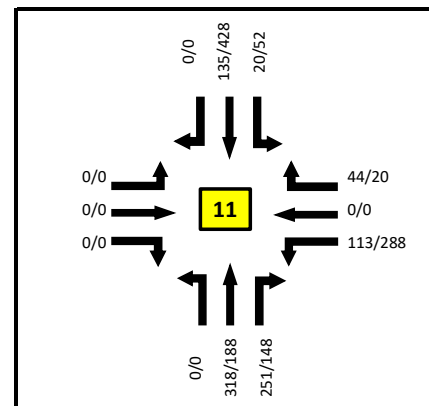
Gibson and San Mateo

NOTES:
Includes 1% growth for 5 years plus EUL Site Traffic

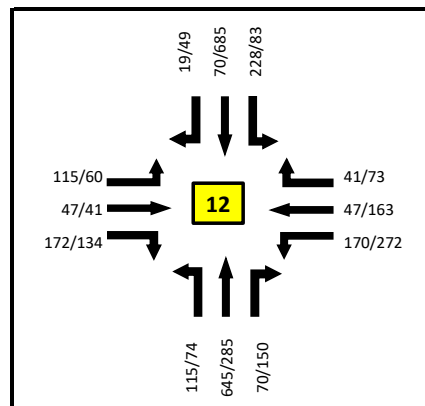


2025 NO-BUILD PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
GIBSON BOULEVARD CORRIDOR

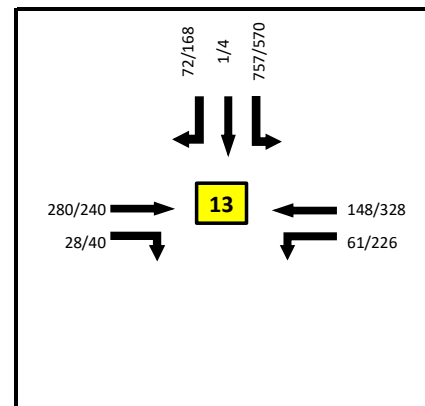
FIGURE 13



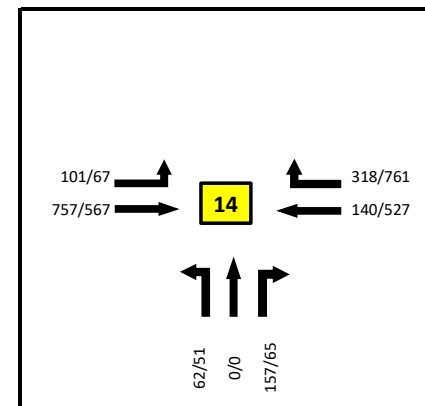
Woodward / Sunport Ext. and 2nd Street



Woodward / Sunport Ext. and Broadway



Sunport and I-25 SB Ramps



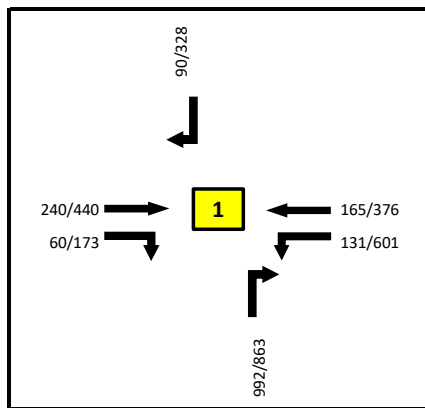
Sunport and I-25 NB Ramps



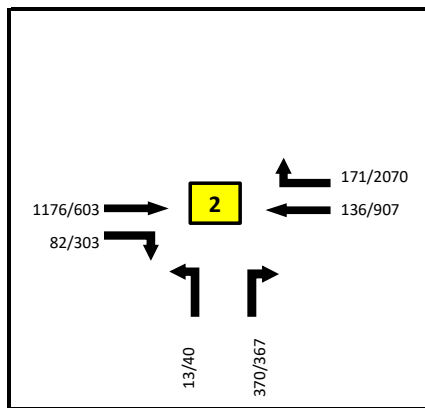
2025 NO-BUILD PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
SUNPORT BOULEVARD CORRIDOR

NOTES:
 Includes 1% growth for 5 years plus EUL Site Traffic

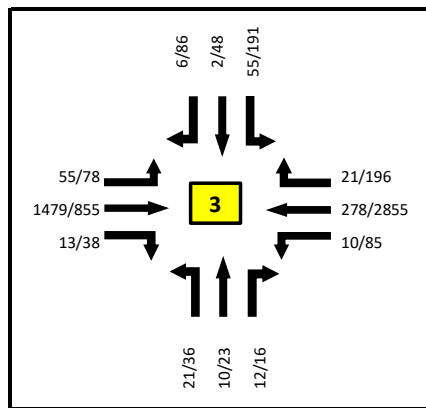
FIGURE 14



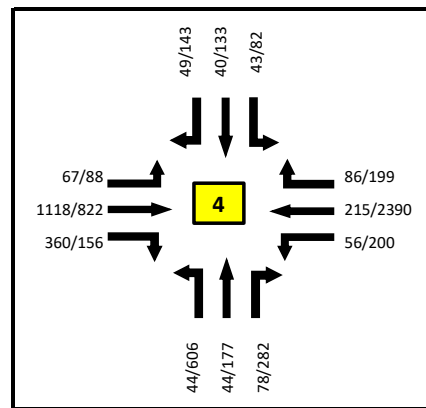
Gibson and I-25 SB Ramps



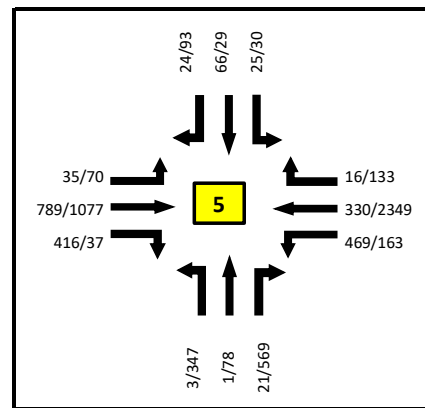
Gibson and I-25 NB Ramps



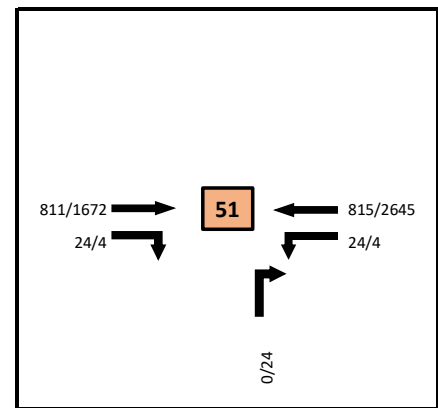
Gibson and University



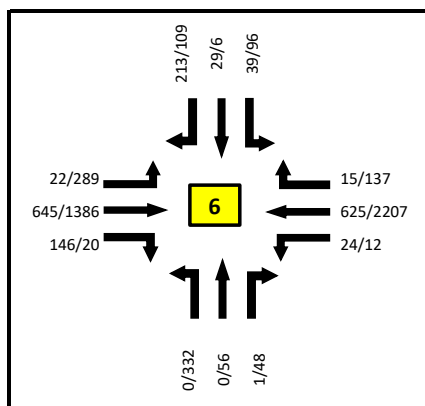
Gibson and Yale



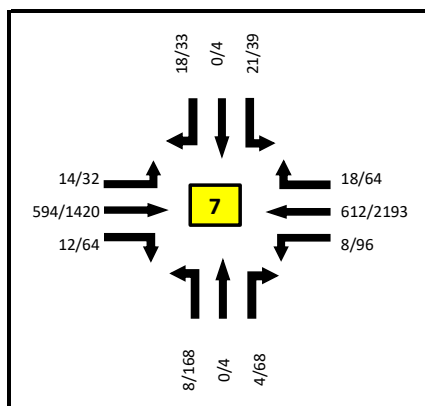
Gibson and Girard



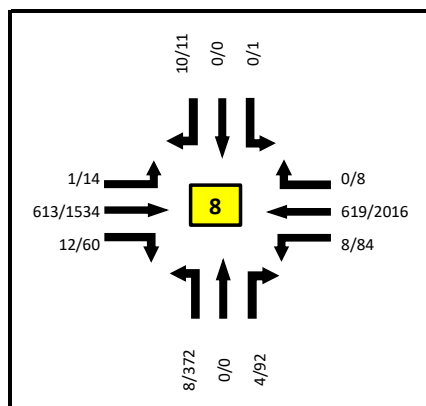
Gibson and Site Driveway



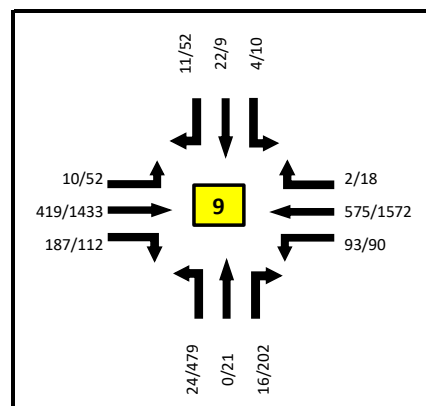
Gibson and Carlisle



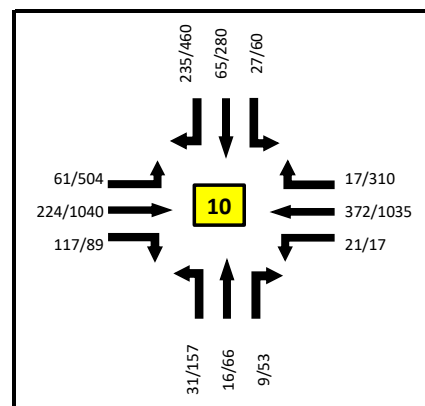
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



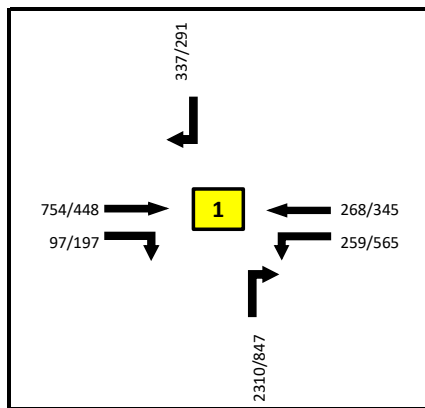
Gibson and San Mateo



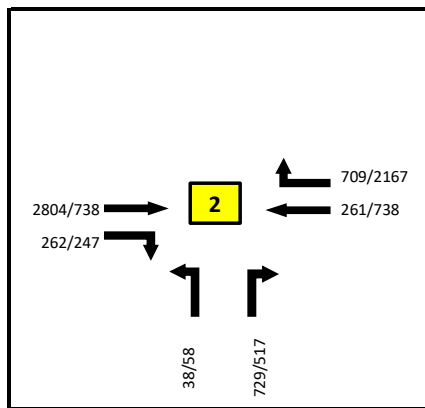
2025 BUILD PEAK-HOUR VOLUMES
5:00AM to 6:00AM & 3:00PM to 4:00PM
GIBSON BOULEVARD CORRIDOR

Legend
 AM / PM Volumes

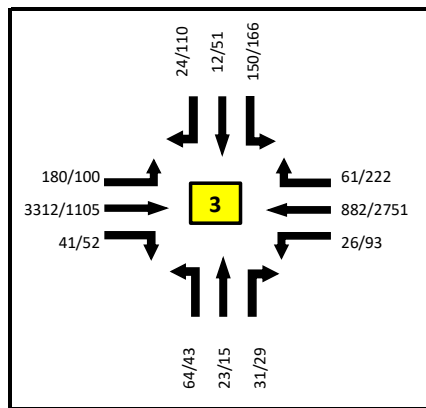
FIGURE 15



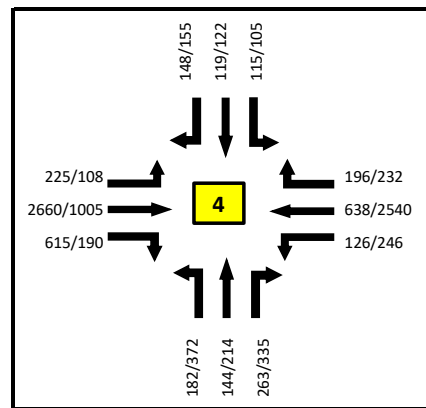
Gibson and I-25 SB Ramps



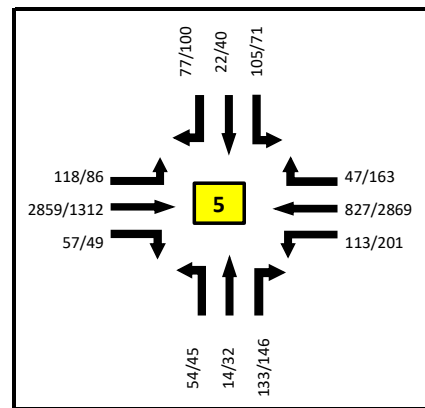
Gibson and I-25 NB Ramps



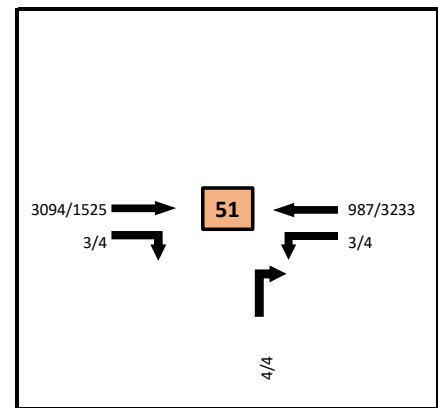
Gibson and University



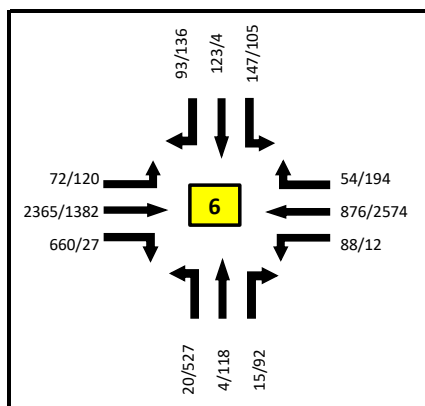
Gibson and Yale



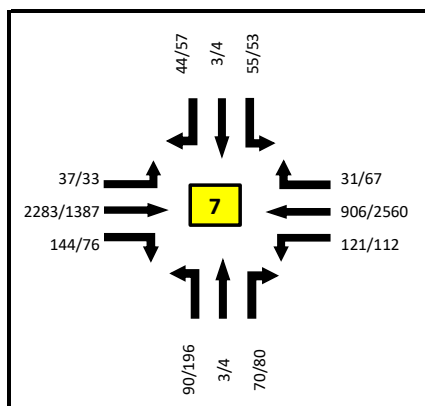
Gibson and Girard



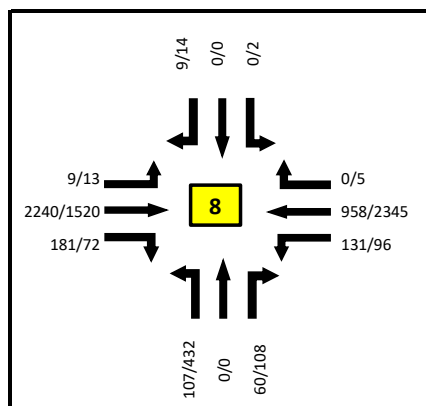
Gibson and Site Driveway



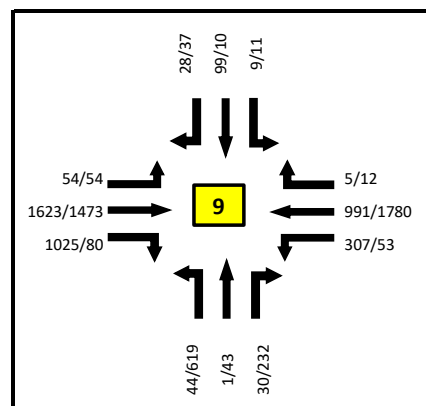
Gibson and Carlisle



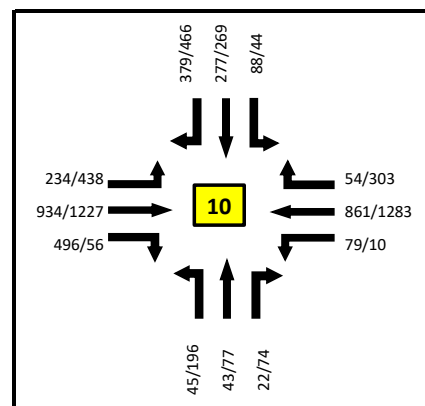
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



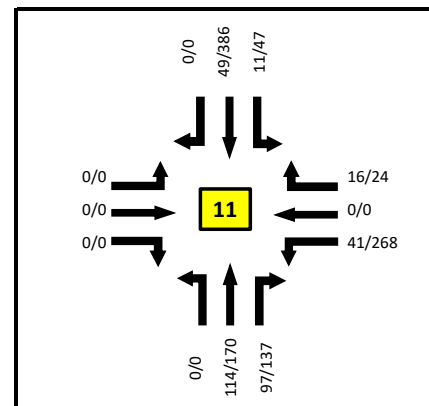
Gibson and San Mateo



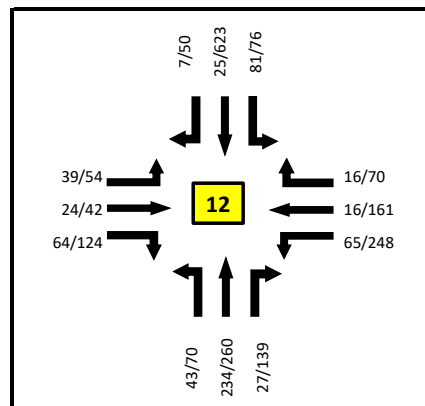
2025 BUILD PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
GIBSON BOULEVARD CORRIDOR

Legend
 AM / PM Volumes

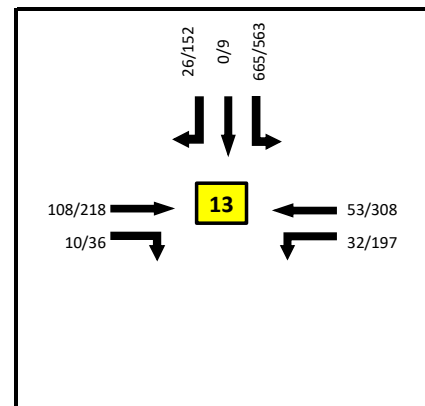
FIGURE 16



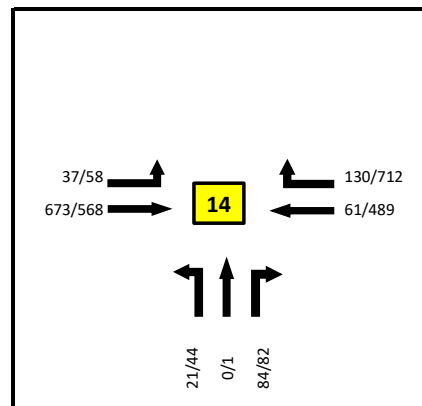
Woodward / Sunport Ext. and 2nd Street



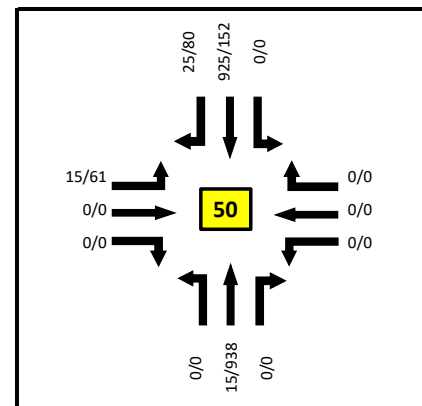
Woodward / Sunport Ext. and Broadway



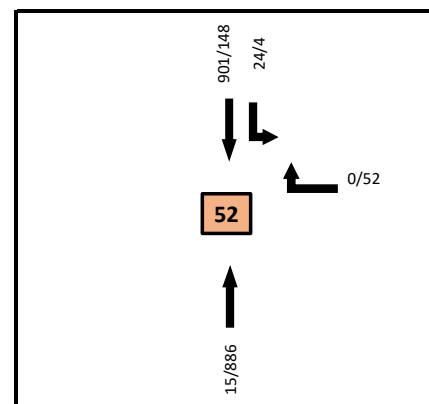
Sunport and I-25 SB Ramps



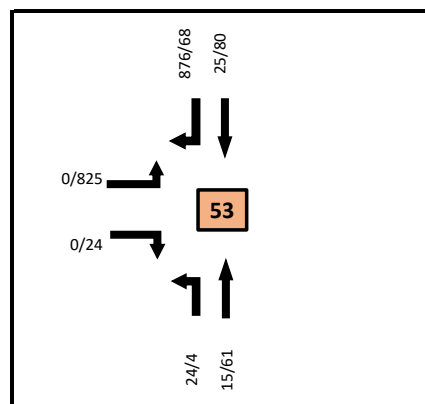
Sunport and I-25 NB Ramps



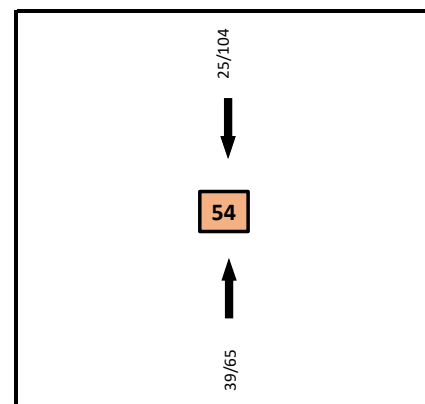
Girard and Miles



Girard Site Driveway to East



Girard Driveway to Pkg Lot N



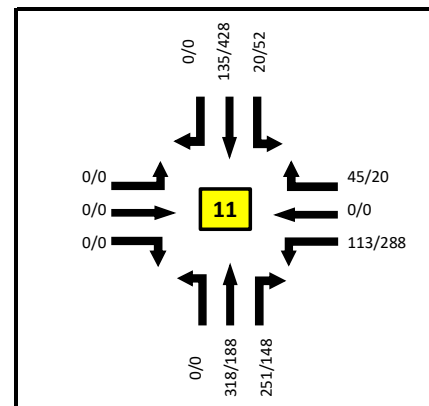
Girard Driveway to Pkg Lot S



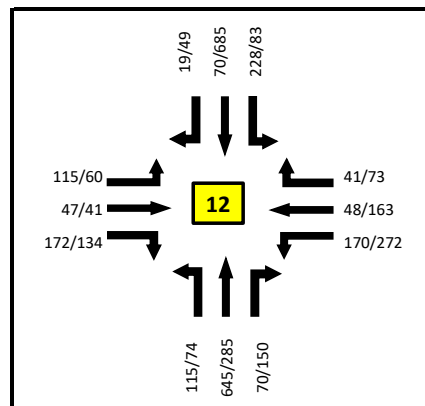
2025 BUILD PEAK-HOUR VOLUMES
5:00AM to 6:00AM & 3:00PM to 4:00PM
SUNPORT BOULEVARD CORRIDOR

LEGEND
 AM / PM Volumes

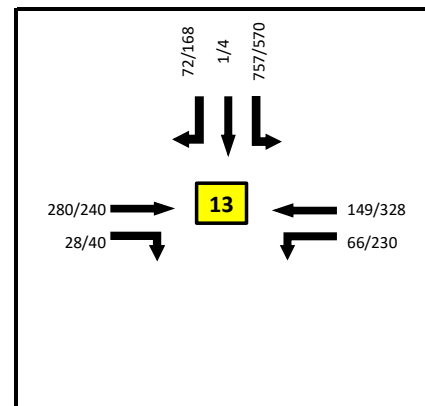
FIGURE 17



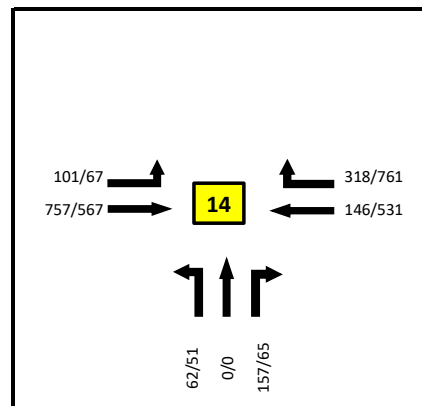
Woodward / Sunport Ext. and 2nd Street



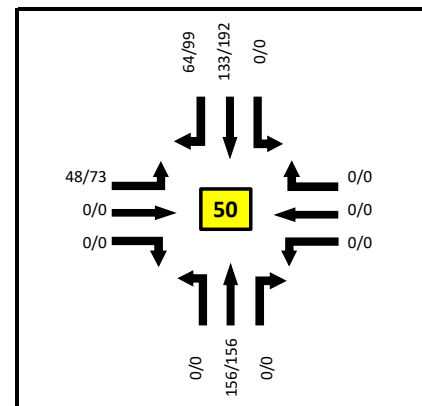
Woodward / Sunport Ext. and Broadway



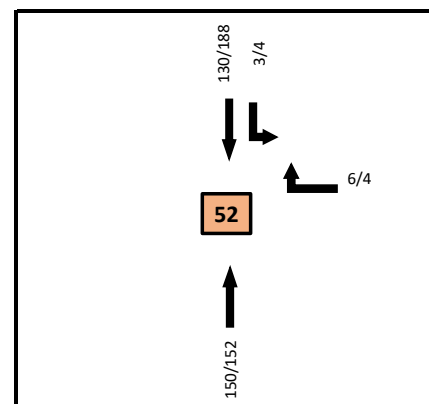
Sunport and I-25 SB Ramps



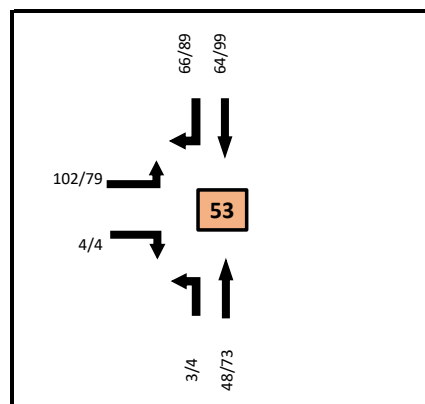
Sunport and I-25 NB Ramps



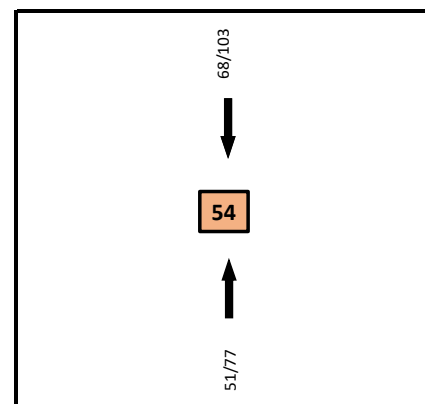
Girard and Miles



Girard Site Driveway to East



Girard Driveway to Pkg Lot N



Girard Driveway to Pkg Lot S



2025 BUILD PEAK-HOUR VOLUMES
6:45AM to 7:45AM & 4:00PM to 5:00PM
SUNPORT BOULEVARD CORRIDOR

LEGEND
 AM / PM Volumes

FIGURE 18

LEVEL OF SERVICE ANALYSIS

As performed for existing conditions, a LOS analysis was performed for all No-Build and Build scenarios using the same procedures and assumptions. Signal timings used in the existing conditions analysis were retained and used for all scenarios except where new traffic control or the EUL project required modification. In these circumstances, the Vistro software was used to optimize the signal phasing times and offsets within the time of day coordination pattern.

- Tables 8 and 9 show the 15-minute LOS results for the 2025 No-Build scenario under the peak hours of the roadway network (6:45 to 7:45AM and 4:00 to 5:00PM), respectively.
- Tables 10 and 11 show the 15-minute LOS results for the 2025 Build scenario under the peak hours of the roadway network (6:45 to 7:45AM and 4:00 to 5:00PM), respectively.
- Tables 12 and 13 show the 15-minute LOS results for the 2025 Build scenario under the peak hours of the site generator (6:00 to 7:00AM and 3:00 to 4:00PM), respectively.

Additional information pertaining to the LOS results as well as delay, v/c ratios, and 95th percentile queue can be found in Appendix D.

Table 8: 2025 No-Build Intersection LOS Analysis Summary, AM Peak Hour

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 1	Gibson & Interchange (SB)	5:00	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:15	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:30	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:45	-	-	-	A	-	-	-	-	-	-	-	A	A
		6:00	-	-	-	A	-	-	-	-	-	-	-	A	A
		6:15	-	-	-	A	-	-	-	-	-	-	-	B	B
		6:30	-	-	-	A	-	-	-	-	-	-	-	A	A
		6:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:15	-	-	-	A	-	-	-	-	-	-	-	B	B
		7:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:45	-	-	-	A	-	-	-	-	-	-	-	B	B
Int 2	Gibson & Interchange (NB)	5:00	-	-	-	-	-	-	B	-	-	-	-	-	-
		5:15	-	-	-	-	-	-	B	-	-	-	-	-	-
		5:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		5:45	-	-	-	-	-	-	C	-	-	-	-	-	-
		6:00	-	-	-	-	-	-	D	-	-	-	-	-	-
		6:15	-	-	-	-	-	-	E	-	-	-	-	-	-
		6:30	-	-	-	-	-	-	F	-	-	-	-	-	-
		6:45	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:00	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:15	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:30	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:45	-	-	-	-	-	-	E	-	-	-	-	-	-
Int 3	Gibson & University	5:00	A	A	A	A	A	A	D	D	-	E	A	-	A
		5:15	A	A	A	A	A	A	D	D	-	E	A	-	A
		5:30	A	A	A	A	A	A	D	D	-	E	D	-	A
		5:45	A	A	A	A	A	A	D	D	-	E	D	-	A
		6:00	A	A	A	A	A	A	D	D	-	E	D	-	A
		6:15	A	B	A	A	A	A	D	D	-	E	D	-	B
		6:30	A	D	A	C	B	B	D	D	-	D	D	-	C
		6:45	B	F	A	C	B	B	D	C	-	D	D	-	F
		7:00	A	F	A	D	B	A	D	D	-	D	D	-	F
		7:15	A	F	A	D	B	B	D	D	-	D	D	-	D
		7:30	B	F	A	C	B	B	C	C	-	D	D	-	D
		7:45	B	D	B	C	B	B	C	C	-	D	C	-	C
Int 4	Gibson & Yale	5:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:15	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:30	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:45	A	B	A	A	A	A	D	D	D	D	D	D	B
		6:00	A	B	A	A	A	A	D	D	D	D	D	D	B
		6:15	A	B	A	B	B	A	D	D	C	D	D	D	B
		6:30	A	C	A	C	B	A	D	D	C	D	D	D	C
		6:45	A	D	B	C	B	A	D	D	C	D	D	D	C
		7:00	A	F	B	C	B	A	D	D	C	D	D	D	D
		7:15	A	C	B	C	B	A	D	D	C	D	D	D	C
		7:30	A	C	B	C	B	A	D	D	C	D	D	D	C
		7:45	A	C	A	C	B	A	D	D	C	D	D	D	C
Int 5	Gibson & Girard	5:00	A	A	A	A	A	A	A	A	D	E	E	D	A
		5:15	A	A	A	A	A	A	D	A	D	D	E	D	A
		5:30	A	A	A	A	A	A	D	A	D	D	E	D	A
		5:45	A	A	A	A	A	A	D	E	D	D	D	D	A
		6:00	A	A	A	A	A	A	D	E	D	D	D	D	A
		6:15	A	B	A	A	A	A	D	D	D	D	D	D	B
		6:30	A	B	A	C	A	A	D	D	D	D	D	D	B
		6:45	A	D	A	D	B	A	D	D	D	D	D	D	C
		7:00	A	F	A	D	B	A	D	D	D	D	D	C	D
		7:15	A	C	A	D	B	A	D	D	D	D	D	C	C
		7:30	A	D	A	D	B	A	D	D	D	D	D	C	C
		7:45	A	C	A	D	B	A	D	D	D	D	D	C	C
Int 6	Gibson & Carlisle	5:00	B	A	A	A	A	A	A	A	A	D	D	D	A
		5:15	B	A	A	A	A	A	A	A	A	D	D	D	A
		5:30	A	A	A	A	A	A	A	A	A	D	D	D	A
		5:45	B	A	A	A	A	A	A	C	D	D	D	D	A
		6:00	A	A	A	A	A	A	D	C	D	D	D	D	A
		6:15	B	A	A	A	A	A	D	C	D	D	D	D	B
		6:30	A	B	A	B	A	A	D	B	D	D	E	D	B
		6:45	B	B	A	B	A	A	D	D	D	D	E	D	B
		7:00	B	B	A	C	A	A	D	E	D	D	D	D	B
		7:15	B	B	A	C	B	A	D	D	D	D	E	D	B
		7:30	B	B	A	C	B	A	D	E	D	D	E	D	B
		7:45	B	B	A	B	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	5:00	A	A	A	B	B	B	D	E	E	D	E	E	A
		5:15	A	A	A	B	B	B	D	E	E	D	E	E	A
		5:30	A	A	A	B	B	B	D	E	E	D	E	E	A
		5:45	A	A	A	B	B	B	D	F	F	D	E	E	A
		6:00	A	A	A	B	B	B	D	E	E	D	E	E	A
		6:15	A	A	A	B	B	B	D	F	F	D	E	E	A
		6:30	A	A	A	B	B	B	D	F	F	D	E	E	A
		6:45	A	A	A	C	B	B	D	F	F	D	E	E	A
		7:00	A	A	A	B	B	B	D	E	E	D	D	D	A
		7:15	A	A	A	B	B	B	D	E	E	D	D	D	A
		7:30	A	A	A	B	B	B	D	E	E	D	D	D	A
		7:45	A	A	A	B	C	C	D	E	E	D	D	D	B

Table 8. 2025 No-Build Intersection LOS Analysis Summary, AM Peak Hour (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 8	Gibson & Quincy	5:00	A	E	D	D	D	D	E	E	E	F	F	F	D
		5:15	A	D	D	D	D	D	E	E	E	F	F	F	D
		5:30	A	D	D	D	D	D	E	E	E	F	F	F	D
		5:45	C	D	D	C	D	D	E	E	E	F	F	F	D
		6:00	C	D	D	C	D	D	E	E	E	F	F	F	D
		6:15	C	F	D	C	D	D	E	E	E	E	E	E	E
		6:30	A	F	D	C	D	D	E	E	E	F	F	F	F
		6:45	A	A	A	A	A	A	E	E	E	A	A	A	A
		7:00	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:15	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:30	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:45	A	F	D	D	D	E	E	E	E	E	E	E	F
Int 9	Gibson & Truman	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:15	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:30	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:45	A	A	A	A	A	A	E	E	D	E	E	E	A
		6:00	A	A	A	A	A	A	E	E	D	E	E	E	A
		6:15	A	A	A	A	A	A	D	D	D	D	D	D	A
		6:30	A	A	A	C	A	A	D	D	D	E	E	E	A
		6:45	A	B	B	D	A	A	D	D	C	E	E	E	B
		7:00	B	B	C	D	A	A	D	D	C	D	D	D	B
		7:15	D	D	F	D	A	A	D	D	C	D	D	D	D
		7:30	B	B	C	D	A	A	D	D	C	D	D	D	B
		7:45	C	D	D	D	B	B	E	E	B	D	D	D	C
Int 10	Gibson & San Mateo	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	B	B	B	B	B	B	E	E	E	E	E	D	C
		5:15	B	B	B	B	B	B	E	E	E	E	E	D	C
		5:30	B	B	B	B	B	B	E	E	E	E	E	C	C
		5:45	B	B	B	B	C	C	E	E	E	E	E	C	C
		6:00	B	B	B	B	C	C	E	E	E	E	E	C	C
		6:15	B	C	C	B	C	C	E	E	E	E	E	C	C
		6:30	B	C	C	B	C	C	E	E	E	E	E	C	C
		6:45	C	C	C	C	C	C	E	E	E	E	E	C	C
		7:00	C	C	C	C	C	C	E	E	E	E	E	C	D
		7:15	C	C	D	C	D	D	E	E	E	E	E	C	D
		7:30	C	C	C	C	D	D	E	E	E	E	E	C	D
		7:45	E	D	D	C	D	E	E	E	E	E	E	C	D
Int 11	Sunport & 2nd St	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	C	-	A	-	A	-	C	-	C	-	C	-	C
		5:15	C	-	A	-	A	-	C	-	C	-	C	-	B
		5:30	C	-	A	-	A	-	C	-	C	-	C	-	B
		5:45	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:00	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:15	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:30	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:45	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:00	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:15	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:30	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:45	B	-	A	-	A	-	C	-	C	-	B	-	B
Int 12	Sunport & Broadway	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	B	C	C	B	B	B	C	C	C	B	C	C	C
		5:15	B	C	C	B	C	C	B	C	C	B	C	C	C
		5:30	B	C	C	B	C	C	B	C	C	B	C	C	C
		5:45	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:00	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:15	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:30	B	C	C	C	C	C	B	C	C	C	C	C	C
		6:45	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:00	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:15	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:30	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:45	B	C	C	C	C	C	B	C	C	C	C	C	C
Int 13	Sunport & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:15	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:45	-	B	B	A	A	-	-	-	-	C	C	C	C
		6:00	-	B	B	A	A	-	-	-	-	C	C	C	B
		6:15	-	B	B	A	A	-	-	-	-	C	C	C	C
		6:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		6:45	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:00	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:15	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:45	-	B	B	A	A	-	-	-	-	C	C	C	C
Int 14	Sunport & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:30	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:45	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:30	A	A	-	-	A	A	C	C	C	-	-	-	B
		6:45	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		7:15	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:30	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:45	A	A	-	-	A	A	C	C	C	-	-	-	B

Table 9: 2025 No-Build Intersection LOS Analysis Summary, PM Peak Hour

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 1	Gibson & Interchange (SB)	15:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:15	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:15	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:15	-	-	-	B	-	-	-	-	-	-	-	C	C
		17:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:45	-	-	-	B	-	-	-	-	-	-	-	B	B
Int 2	Gibson & Interchange (NB)	15:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		15:15	-	-	-	-	-	-	B	-	-	-	-	-	-
		15:30	-	-	-	-	-	-	B	-	-	-	-	-	-
		15:45	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:15	-	-	-	-	-	-	B	-	-	-	-	-	-
		16:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:45	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:15	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:30	-	-	-	-	-	-	B	-	-	-	-	-	-
		17:45	-	-	-	-	-	-	C	-	-	-	-	-	-
Int 3	Gibson & University	15:00	C	B	B	A	C	B	D	0	-	E	D	-	C
		15:15	C	B	B	A	B	B	D	0	-	E	D	-	C
		15:30	D	B	B	A	C	B	D	0	-	E	D	-	C
		15:45	D	B	A	A	C	B	D	0	-	E	D	-	C
		16:00	D	B	A	A	C	B	D	0	-	E	D	-	C
		16:15	D	B	A	A	C	B	D	0	-	E	D	-	C
		16:30	D	B	A	A	C	A	D	0	-	E	D	-	C
		16:45	D	B	B	B	D	B	D	0	-	E	D	-	C
		17:00	D	B	B	B	F	B	C	0	-	E	D	-	D
		17:15	D	B	B	B	F	B	D	0	-	E	D	-	D
		17:30	C	B	A	A	B	A	D	0	-	E	D	-	B
		17:45	B	B	A	A	B	B	D	0	-	E	D	-	B
Int 4	Gibson & Yale	15:00	B	B	A	B	B	A	D	D	C	D	E	E	C
		15:15	B	B	A	A	B	A	D	D	C	D	E	E	C
		15:30	C	B	A	B	B	A	D	D	C	D	E	E	C
		15:45	C	B	A	B	C	A	D	D	C	D	E	E	C
		16:00	C	B	A	B	C	A	D	D	C	D	E	E	C
		16:15	D	B	A	B	C	A	D	D	D	D	E	E	C
		16:30	D	C	A	B	C	A	D	D	D	D	E	E	C
		16:45	D	C	A	B	C	A	D	D	D	D	E	E	C
		17:00	C	B	A	B	C	A	D	D	D	D	E	E	C
		17:15	D	C	B	B	C	A	D	D	C	D	E	E	C
		17:30	B	B	A	A	B	A	D	D	D	D	E	E	C
		17:45	B	B	A	A	B	A	D	D	C	D	E	E	C
Int 5	Gibson & Girard	15:00	B	A	A	A	B	A	D	E	D	D	E	D	B
		15:15	B	A	A	A	B	A	D	E	D	D	E	D	B
		15:30	C	A	A	A	B	A	D	E	D	D	E	D	B
		15:45	C	A	A	A	B	A	D	E	D	D	E	D	B
		16:00	D	A	A	A	C	A	D	E	D	D	E	D	B
		16:15	D	B	A	A	D	A	D	E	D	D	E	D	C
		16:30	D	B	A	B	C	A	D	E	D	D	E	D	C
		16:45	D	B	A	B	C	A	D	E	D	D	E	D	C
		17:00	D	B	A	A	C	A	D	E	D	D	E	D	C
		17:15	D	B	A	B	C	A	D	E	D	D	E	D	C
		17:30	C	B	A	A	B	A	D	E	D	D	E	D	B
		17:45	B	A	A	A	B	A	A	E	D	D	E	D	B
Int 6	Gibson & Carlisle	15:00	B	B	A	A	B	A	E	D	D	D	E	D	C
		15:15	B	B	A	A	B	A	D	D	D	D	E	D	B
		15:30	A	B	A	A	C	A	F	D	D	D	E	D	C
		15:45	A	B	A	B	C	A	D	D	D	D	E	D	C
		16:00	A	B	A	B	B	A	F	D	D	D	E	D	D
		16:15	A	B	A	B	C	A	F	D	D	D	E	D	D
		16:30	D	B	A	A	B	A	F	D	D	D	E	D	D
		16:45	E	B	A	A	C	A	F	D	D	D	E	D	D
		17:00	D	B	A	A	C	A	D	D	D	D	E	D	C
		17:15	F	B	A	A	C	A	F	D	D	D	E	D	C
		17:30	A	A	A	A	B	A	D	E	D	D	E	D	B
		17:45	B	A	A	A	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	15:00	A	A	A	E	C	D	E	E	D	D	E	E	C
		15:15	A	A	A	E	D	D	D	D	D	D	E	E	C
		15:30	A	A	A	E	D	E	D	E	E	D	E	E	D
		15:45	A	A	A	E	F	E	D	D	D	D	E	E	D
		16:00	A	A	A	E	D	D	D	E	E	D	E	E	C
		16:15	A	A	A	E	F	E	D	E	E	D	E	E	D
		16:30	A	A	A	E	F	E	D	E	E	D	E	E	D
		16:45	A	A	A	E	F	F	D	E	E	D	E	E	D
		17:00	A	A	A	E	D	E	D	E	E	D	E	E	D
		17:15	A	A	A	E	E	E	D	D	D	D	E	E	D
		17:30	A	A	A	E	F	E	D	D	D	D	E	E	D
		17:45	A	A	A	E	C	D	D	E	E	D	E	E	C

Table 9. 2025 No-Build Intersection LOS Analysis Summary, PM Peak Hour (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
			EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Int 8	Gibson & Quincy	15:00	A	A	A	A	A	A	E	D	D	F	F	F	B
		15:15	A	A	A	A	A	B	E	D	D	F	F	F	B
		15:30	A	A	A	A	B	B	E	D	D	F	F	F	B
		15:45	A	A	A	A	B	B	E	D	D	F	F	F	B
		16:00	A	A	A	A	B	B	E	D	D	F	F	F	B
		16:15	B	B	A	A	B	B	E	D	D	E	E	E	B
		16:30	B	B	A	B	B	B	E	D	D	E	E	E	B
		16:45	B	B	A	B	B	B	E	D	D	F	F	F	B
		17:00	A	B	A	A	B	B	E	D	D	F	F	F	B
		17:15	A	B	A	A	B	B	E	D	D	F	F	F	B
		17:30	A	A	A	A	B	B	E	D	D	F	F	F	B
		17:45	A	A	A	A	A	B	E	D	D	A	A	A	B
Int 9	Gibson & Truman	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	C	C	C	B	B	B	F	F	C	C	C	C	F
		15:15	D	C	C	B	B	B	F	F	C	C	C	C	F
		15:30	D	C	C	B	C	C	F	F	C	C	C	C	F
		15:45	E	C	C	B	C	C	F	F	C	E	E	E	E
		16:00	D	C	C	B	C	C	F	F	C	D	D	D	F
		16:15	E	C	C	B	C	C	F	F	C	D	D	D	F
		16:30	E	C	C	B	C	C	F	F	C	C	C	C	F
		16:45	E	C	C	B	C	C	F	F	C	D	D	D	F
		17:00	D	C	C	B	C	C	F	F	C	C	C	C	F
		17:15	E	C	C	B	C	C	F	F	C	E	E	E	E
		17:30	D	C	C	B	C	C	F	F	C	C	C	C	F
		17:45	C	C	C	B	B	B	F	F	C	D	D	D	D
Int 10	Gibson & San Mateo	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	C	B	B	B	B	C	E	D	D	D	D	D	C
		15:15	C	B	B	B	C	C	E	D	D	D	D	D	C
		15:30	D	B	B	B	C	C	E	D	D	D	D	D	C
		15:45	D	B	B	B	C	D	E	D	D	D	D	D	C
		16:00	F	B	B	B	C	C	E	D	D	D	D	D	D
		16:15	F	B	B	B	C	C	E	D	D	D	D	D	D
		16:30	F	C	C	A	D	D	E	D	D	D	D	D	D
		16:45	F	C	C	B	D	D	E	D	D	D	D	C	D
		17:00	E	B	B	B	C	C	E	E	E	D	D	C	C
		17:15	F	B	B	B	C	C	E	E	E	D	D	C	D
		17:30	E	B	B	B	C	C	E	E	E	D	D	C	C
		17:45	C	B	B	B	C	C	E	E	E	D	D	C	C
Int 11	Sunport & 2nd St	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	B	-	B	-	B	-	C	-	C	-	B	-	B
		15:15	B	-	B	-	B	-	C	-	C	-	B	-	B
		15:30	B	-	B	-	B	-	C	-	C	-	B	-	B
		15:45	B	-	B	-	B	-	C	-	C	-	B	-	B
		16:00	B	-	C	-	C	-	C	-	C	-	B	-	C
		16:15	B	-	C	-	C	-	C	-	C	-	B	-	C
		16:30	B	-	C	-	C	-	C	-	C	-	B	-	C
		16:45	B	-	C	-	C	-	C	-	C	-	B	-	C
		17:00	B	-	B	-	B	-	C	-	C	-	B	-	B
		17:15	B	-	B	-	B	-	C	-	C	-	B	-	B
		17:30	B	-	B	-	B	-	C	-	C	-	B	-	B
		17:45	B	-	B	-	B	-	C	-	C	-	B	-	B
Int 12	Sunport & Broadway	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	B	C	C	C	C	C	B	C	C	B	C	C	C
		15:15	B	C	C	C	C	C	B	C	C	B	C	C	C
		15:30	B	C	C	C	C	C	B	C	C	B	C	C	C
		15:45	B	C	C	C	C	C	B	C	C	B	C	C	C
		16:00	B	C	C	C	C	C	B	C	C	B	C	C	C
		16:15	B	C	C	C	C	C	B	C	C	B	C	C	C
		16:30	B	C	C	C	C	C	B	C	C	B	C	C	C
		16:45	B	C	C	C	C	C	B	C	C	B	C	C	C
		17:00	B	C	C	C	C	C	B	C	C	B	C	C	C
		17:15	B	C	C	C	C	C	B	C	C	B	C	C	C
		17:30	B	C	C	C	C	C	B	C	C	B	C	C	C
		17:45	B	C	C	C	C	C	B	C	C	B	C	C	C
Int 13	Sunport & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	-	B	B	A	A	-	-	-	-	C	C	C	B
		15:15	-	B	B	A	A	-	-	-	-	C	C	C	B
		15:30	-	B	B	A	A	-	-	-	-	C	C	C	B
		15:45	-	B	B	A	A	-	-	-	-	C	C	C	B
		16:00	-	C	C	B	B	-	-	-	-	C	C	C	C
		16:15	-	C	C	B	B	-	-	-	-	C	C	C	C
		16:30	-	C	C	B	B	-	-	-	-	C	C	C	C
		16:45	-	C	C	B	B	-	-	-	-	C	C	C	C
		17:00	-	B	B	A	A	-	-	-	-	C	C	C	B
		17:15	-	B	B	A	A	-	-	-	-	C	C	C	B
		17:30	-	B	B	A	A	-	-	-	-	C	C	C	B
		17:45	-	B	B	A	A	-	-	-	-	C	C	C	B
Int 14	Sunport & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		15:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		15:30	A	A	-	-	A	A	C	C	C	-	-	-	A
		15:45	A	A	-	-	A	A	C	C	C	-	-	-	A
		16:00	C	C	-	-	C	C	C	C	C	-	-	-	C
		16:15	C	C	-	-	C	C	C	C	C	-	-	-	C
		16:30	C	C	-	-	C	C	C	C	C	-	-	-	C
		16:45	C	C	-	-	B	C	C	C	C	-	-	-	C
		17:00	B	A	-	-	A	A	C	C	C	-	-	-	A
		17:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		17:30	A	A	-	-	A	A	C	C	C	-	-	-	A
		17:45	A	A	-	-	A	A	C	C	C	-	-	-	A

Table 10: 2025 Build Intersection LOS Analysis Summary, AM Peak Hour

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 1	Gibson & Interchange (SB)	5:00	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:15	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:30	-	-	-	A	-	-	-	-	-	-	-	A	A
		5:45	-	-	-	A	-	-	-	-	-	-	-	A	A
		6:00	-	-	-	A	-	-	-	-	-	-	-	A	A
		6:15	-	-	-	A	-	-	-	-	-	-	-	B	B
		6:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		6:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:15	-	-	-	A	-	-	-	-	-	-	-	B	B
		7:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		7:45	-	-	-	A	-	-	-	-	-	-	-	B	B
Int 2	Gibson & Interchange (NB)	5:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		5:15	-	-	-	-	-	-	C	-	-	-	-	-	-
		5:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		5:45	-	-	-	-	-	-	E	-	-	-	-	-	-
		6:00	-	-	-	-	-	-	D	-	-	-	-	-	-
		6:15	-	-	-	-	-	-	E	-	-	-	-	-	-
		6:30	-	-	-	-	-	-	F	-	-	-	-	-	-
		6:45	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:00	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:15	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:30	-	-	-	-	-	-	F	-	-	-	-	-	-
		7:45	-	-	-	-	-	-	F	-	-	-	-	-	-
Int 3	Gibson & University	5:00	A	A	A	A	A	A	D	-	-	E	A	-	A
		5:15	A	A	A	A	A	A	D	D	-	E	A	-	A
		5:30	A	A	A	A	A	A	D	D	-	E	D	-	A
		5:45	A	A	A	A	A	A	D	D	-	E	D	-	B
		6:00	A	A	A	A	A	A	D	D	-	E	D	-	A
		6:15	A	B	A	A	A	A	D	D	-	E	D	-	B
		6:30	A	F	A	C	B	B	D	D	-	D	D	-	C
		6:45	B	F	A	C	B	B	D	C	-	D	D	-	F
		7:00	A	F	A	D	B	A	D	D	-	E	D	-	F
		7:15	A	F	A	D	B	B	D	D	-	D	D	-	E
		7:30	B	F	A	C	B	B	C	C	-	D	D	-	D
		7:45	B	D	B	C	B	B	C	C	-	D	C	-	C
Int 4	Gibson & Yale	5:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:15	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:30	A	B	A	A	A	A	D	D	D	D	D	D	B
		5:45	A	B	A	A	A	A	D	D	C	D	D	D	B
		6:00	A	B	A	A	A	A	D	D	D	D	D	D	B
		6:15	A	B	A	B	B	A	D	D	C	D	D	D	B
		6:30	A	C	A	C	B	A	D	D	C	D	D	D	C
		6:45	A	D	B	C	B	A	D	D	C	D	D	D	C
		7:00	A	F	B	C	B	A	D	D	C	D	D	D	C
		7:15	A	C	B	C	B	A	D	D	C	D	D	D	C
		7:30	A	C	B	C	B	A	D	D	C	D	D	D	C
		7:45	A	C	A	C	B	A	D	D	C	D	D	D	C
Int 5	Gibson & Girard	5:00	A	A	A	A	A	A	A	D	D	E	D	D	B
		5:15	A	B	A	B	A	A	D	A	C	D	E	D	B
		5:30	A	B	A	C	A	A	D	A	D	E	D	D	B
		5:45	A	B	A	F	A	A	D	D	D	E	D	D	C
		6:00	A	B	A	A	A	A	D	D	D	E	D	D	B
		6:15	A	B	A	B	A	A	D	D	D	D	D	D	B
		6:30	A	C	A	C	B	A	D	D	D	D	D	D	C
		6:45	A	F	A	D	B	A	D	D	D	D	D	D	D
		7:00	A	F	A	D	B	A	D	D	D	D	D	D	E
		7:15	A	F	A	D	B	A	D	D	D	D	D	D	D
		7:30	A	F	A	D	B	A	D	D	D	D	D	C	D
		7:45	B	C	A	D	B	A	D	D	D	D	D	C	C
Int 6	Gibson & Carlisle	5:00	A	A	A	A	A	A	A	A	A	D	D	D	B
		5:15	A	A	A	A	A	A	A	A	A	D	D	D	B
		5:30	A	A	A	A	A	A	A	A	A	D	D	D	B
		5:45	A	A	A	A	A	A	A	C	D	D	E	D	B
		6:00	B	A	A	A	A	A	D	C	D	D	E	D	B
		6:15	C	A	A	A	A	A	D	C	D	D	E	D	B
		6:30	C	B	A	B	A	A	D	B	D	D	E	D	B
		6:45	B	B	A	B	A	A	D	D	D	D	D	D	B
		7:00	B	B	A	C	B	A	D	E	D	D	D	D	B
		7:15	B	B	A	D	B	A	D	D	D	D	E	D	B
		7:30	B	B	A	C	B	A	D	D	D	D	E	D	B
		7:45	C	B	A	C	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	5:00	A	A	A	B	B	B	D	E	E	D	E	E	B
		5:15	A	A	A	B	B	B	D	E	E	D	E	E	A
		5:30	A	A	A	B	B	B	D	E	E	D	E	E	A
		5:45	A	A	A	B	B	B	D	E	E	D	E	E	A
		6:00	A	A	A	B	B	B	D	E	E	D	E	E	A
		6:15	A	A	A	B	B	B	D	E	E	D	E	E	A
		6:30	A	A	A	B	B	B	D	F	F	D	E	E	A
		6:45	A	A	A	C	B	B	D	F	F	D	E	E	A
		7:00	A	A	A	B	B	B	D	E	E	D	E	E	A
		7:15	A	A	A	B	B	B	D	E	E	D	E	E	A
		7:30	A	A	A	B	B	B	D	E	E	D	D	D	A
		7:45	A	A	A	B	C	C	D	E	E	D	D	D	B

Table 10. 2025 Build Intersection LOS Analysis Summary, AM Peak Hour (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 8	Gibson & Quincy	5:00	A	D	D	D	E	E	E	E	E	E	E	E	E
		5:15	A	D	D	D	D	E	E	E	E	E	E	E	D
		5:30	A	D	D	D	D	D	E	E	E	E	E	E	D
		5:45	C	D	D	C	D	D	E	E	E	E	E	E	D
		6:00	C	D	D	C	D	D	E	E	E	E	E	E	D
		6:15	B	F	D	C	C	C	E	E	E	F	F	F	F
		6:30	A	F	D	C	C	C	E	E	E	F	F	F	F
		6:45	A	A	A	A	A	A	E	E	E	A	A	A	A
		7:00	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:15	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:30	A	A	A	C	A	A	E	E	E	F	F	F	B
		7:45	A	F	D	C	C	C	E	E	E	F	F	F	F
Int 9	Gibson & Truman	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:15	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:30	A	A	A	A	A	A	E	E	D	E	E	E	A
		5:45	A	A	A	A	A	A	E	E	D	E	E	E	A
		6:00	A	A	A	A	A	A	E	E	D	E	E	E	A
		6:15	A	A	A	A	A	A	D	D	D	D	D	D	A
		6:30	A	A	A	C	A	A	D	D	D	E	E	E	A
		6:45	A	B	B	D	A	A	D	D	C	E	E	E	B
		7:00	B	B	C	D	A	A	D	D	C	D	D	D	B
		7:15	D	D	F	D	A	A	D	D	B	D	D	D	D
		7:30	B	C	C	D	A	A	D	D	C	D	D	D	C
		7:45	C	D	D	D	B	B	E	E	B	D	D	D	C
Int 10	Gibson & San Mateo	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	B	B	B	B	B	B	E	E	E	E	E	C	C
		5:15	B	B	B	B	C	C	E	E	E	E	E	C	C
		5:30	B	B	B	B	C	C	E	E	E	E	E	C	C
		5:45	B	C	C	B	C	C	E	E	E	E	E	C	C
		6:00	B	B	B	B	C	C	E	E	E	E	E	C	C
		6:15	B	C	C	B	C	C	E	E	E	E	E	C	C
		6:30	C	C	C	B	C	C	E	E	E	E	E	C	C
		6:45	C	C	C	C	C	C	E	E	E	E	E	C	C
		7:00	C	C	C	C	C	C	E	E	E	E	E	C	D
		7:15	C	C	D	C	D	D	E	E	E	D	E	C	D
		7:30	C	C	C	C	D	D	E	E	E	E	E	C	D
		7:45	E	D	D	C	D	E	E	E	E	E	E	C	D
Int 11	Sunport & 2nd St	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	C	-	A	-	A	-	C	-	C	-	C	-	C
		5:15	C	-	A	-	A	-	C	-	C	-	C	-	B
		5:30	C	-	A	-	A	-	C	-	C	-	C	-	B
		5:45	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:00	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:15	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:30	B	-	A	-	A	-	C	-	C	-	B	-	B
		6:45	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:00	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:15	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:30	B	-	B	-	B	-	C	-	C	-	B	-	C
		7:45	B	-	A	-	A	-	C	-	C	-	B	-	B
Int 12	Sunport & Broadway	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	B	C	C	B	B	B	B	C	C	B	C	C	C
		5:15	B	C	C	B	C	C	B	C	C	B	C	C	C
		5:30	B	C	C	B	C	C	B	C	C	B	C	C	C
		5:45	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:00	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:15	B	C	C	B	C	C	B	C	C	B	C	C	C
		6:30	B	C	C	C	C	C	B	C	C	C	C	C	C
		6:45	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:00	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:15	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:30	B	C	C	C	C	C	B	C	C	C	C	C	C
		7:45	B	C	C	C	C	C	B	C	C	C	C	C	C
Int 13	Sunport & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		4:45	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:15	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		5:45	-	B	B	A	A	-	-	-	-	C	C	C	C
		6:00	-	B	B	A	A	-	-	-	-	C	C	C	B
		6:15	-	B	B	A	A	-	-	-	-	C	C	C	B
		6:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		6:45	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:00	-	B	B	A	A	-	-	-	-	C	C	C	B
		7:15	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:30	-	B	B	A	A	-	-	-	-	C	C	C	C
		7:45	-	B	B	A	A	-	-	-	-	C	C	C	C
Int 14	Sunport & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:30	A	A	-	-	A	A	C	C	C	-	-	-	A
		5:45	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:15	A	A	-	-	A	A	C	C	C	-	-	-	A
		6:30	A	A	-	-	A	A	C	C	C	-	-	-	B
		6:45	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:00	A	A	-	-	A	A	C	C	C	-	-	-	A
		7:15	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:30	A	A	-	-	A	A	C	C	C	-	-	-	B
		7:45	A	A	-	-	A	A	C	C	C	-	-	-	B

Table 10. 2025 Build Intersection LOS Analysis Summary, AM Peak Hour (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
			EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	5:00	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:15	C	-	B	-	-	-	A	A	-	-	A	A	C
		5:30	C	-	B	-	-	-	A	A	-	-	A	A	C
		5:45	C	-	B	-	-	-	B	A	-	-	A	A	C
		6:00	C	-	B	-	-	-	B	A	-	-	A	A	C
		6:15	B	-	A	-	-	-	A	A	-	-	A	A	B
		6:30	B	-	A	-	-	-	A	A	-	-	A	A	B
		6:45	B	-	A	-	-	-	A	A	-	-	A	A	B
		7:00	B	-	A	-	-	-	A	A	-	-	A	A	B
		7:15	B	-	A	-	-	-	A	A	-	-	A	A	B
		7:30	B	-	A	-	-	-	A	A	-	-	A	A	B
		7:45	B	-	A	-	-	-	A	A	-	-	A	A	B
		7:45	B	-	A	-	-	-	A	A	-	-	A	A	B
Int 51	Gibson & Site Driveway 1	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	-	A	A	B	A	-	0	-	B	-	-	-	B
		5:15	-	A	A	B	A	-	0	-	B	-	-	-	B
		5:30	-	A	A	B	A	-	0	-	B	-	-	-	B
		5:45	-	A	A	C	A	-	0	-	B	-	-	-	C
		6:00	-	A	A	C	A	-	0	-	C	-	-	-	C
		6:15	-	A	A	D	A	-	0	-	C	-	-	-	C
		6:30	-	A	A	F	A	-	0	-	E	-	-	-	E
		6:45	-	A	A	F	A	-	0	-	E	-	-	-	E
		7:00	-	A	A	F	A	-	0	-	F	-	-	-	F
		7:15	-	A	A	F	A	-	0	-	E	-	-	-	F
		7:30	-	A	A	F	A	-	0	-	E	-	-	-	F
		7:45	-	A	A	F	A	-	0	-	D	-	-	-	F
		7:45	-	A	A	F	A	-	0	-	D	-	-	-	F
Int 52	Girard & Site Driveway 2	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	C	C	B	B	-	A	A	A	A	A	A	A	A
		5:15	C	C	B	B	-	A	A	A	A	A	A	A	A
		5:30	C	C	B	B	-	A	A	A	A	A	A	A	A
		5:45	C	C	B	B	-	A	A	A	A	A	A	A	A
		6:00	A	B	A	B	-	A	A	A	A	A	A	A	A
		6:15	B	B	A	B	-	A	A	A	A	A	A	A	A
		6:30	B	B	A	B	-	A	A	A	A	A	A	A	A
		6:45	B	B	A	B	-	A	A	A	A	A	A	A	A
		7:00	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:15	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:30	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:45	B	B	A	A	-	A	A	A	A	A	A	A	A
		7:45	B	B	A	A	-	A	A	A	A	A	A	A	A
Int 53	Girard & Site Driveway 3	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	B	B	B	A	-	A	A	A	A	A	A	A	A
		5:15	B	B	B	A	-	A	A	A	A	A	A	A	A
		5:30	B	B	B	A	-	A	A	A	A	A	A	A	A
		5:45	B	B	B	A	-	A	B	A	A	A	A	A	B
		6:00	B	B	A	A	-	A	A	A	A	A	A	A	B
		6:15	B	B	A	A	-	A	A	A	A	A	A	A	B
		6:30	B	B	A	A	-	A	A	A	A	A	A	A	B
		6:45	B	B	A	A	-	A	A	A	A	A	A	A	B
		7:00	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:15	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:30	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:45	A	B	A	A	-	A	A	A	A	A	A	A	A
		7:45	A	B	A	A	-	A	A	A	A	A	A	A	A
Int 54	Girard & Site Driveway 4	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		5:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		5:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		5:45	A	-	A	-	-	-	A	A	-	-	A	A	A
		6:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		6:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		6:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		6:45	A	-	A	-	-	-	A	A	-	-	A	A	A
		7:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		7:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		7:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		7:45	A	-	A	-	-	-	A	A	-	-	A	A	A
		7:45	A	-	A	-	-	-	A	A	-	-	A	A	A

Table 11: 2025 Build Intersection LOS Analysis Summary, PM Peak Hour

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 1	Gibson & Interchange (SB)	15:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:15	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		15:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:15	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		16:45	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:00	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:15	-	-	-	B	-	-	-	-	-	-	-	C	C
		17:30	-	-	-	B	-	-	-	-	-	-	-	B	B
		17:45	-	-	-	B	-	-	-	-	-	-	-	B	B
Int 2	Gibson & Interchange (NB)	15:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		15:15	-	-	-	-	-	-	B	-	-	-	-	-	-
		15:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		15:45	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:15	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		16:45	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:00	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:15	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:30	-	-	-	-	-	-	C	-	-	-	-	-	-
		17:45	-	-	-	-	-	-	C	-	-	-	-	-	-
Int 3	Gibson & University	15:00	D	B	B	A	D	B	D	D	-	E	D	-	C
		15:15	D	B	B	A	C	B	D	D	-	E	D	-	C
		15:30	D	B	B	A	F	B	D	D	-	E	D	-	E
		15:45	D	B	A	A	F	B	D	D	-	E	D	-	D
		16:00	D	B	A	A	C	B	D	D	-	E	D	-	C
		16:15	D	B	A	A	D	B	D	D	-	E	D	-	C
		16:30	D	B	A	A	C	B	D	D	-	E	D	-	C
		16:45	D	B	B	B	F	B	D	D	-	E	D	-	D
		17:00	D	B	B	B	F	B	C	C	-	E	D	-	D
		17:15	D	B	B	B	F	B	D	C	-	E	D	-	D
		17:30	C	B	A	A	C	A	D	D	-	E	D	-	C
		17:45	C	B	A	A	B	B	D	D	-	E	D	-	B
Int 4	Gibson & Yale	15:00	C	C	A	B	C	A	D	D	C	D	D	D	C
		15:15	C	B	A	B	C	A	D	D	C	D	D	D	C
		15:30	D	C	B	B	D	B	D	D	C	C	D	D	D
		15:45	D	C	B	B	F	B	D	D	C	C	D	D	D
		16:00	D	B	A	B	C	A	D	D	C	C	D	E	C
		16:15	D	B	A	B	C	A	D	D	D	D	D	E	C
		16:30	D	C	A	B	C	A	D	D	D	D	D	E	C
		16:45	D	C	A	B	C	A	D	D	D	D	D	E	C
		17:00	C	B	A	B	C	A	D	D	D	D	D	E	C
		17:15	D	C	B	B	C	A	D	D	C	D	D	D	C
		17:30	C	B	A	B	B	A	D	D	D	D	D	E	C
		17:45	B	B	A	A	B	A	D	D	C	D	D	E	C
Int 5	Gibson & Girard	15:00	C	B	A	B	B	A	F	D	E	D	E	D	C
		15:15	C	B	A	A	B	A	F	D	E	D	E	D	C
		15:30	D	B	A	B	C	A	F	D	E	D	E	D	C
		15:45	D	B	A	B	C	A	F	D	E	D	E	D	C
		16:00	D	B	A	B	C	A	D	D	D	D	E	D	C
		16:15	D	B	A	B	D	A	D	D	D	D	D	D	C
		16:30	D	B	A	B	D	A	D	E	D	D	D	D	C
		16:45	D	B	A	B	C	A	D	E	D	D	D	D	C
		17:00	D	B	A	B	C	A	D	E	D	D	D	D	C
		17:15	D	B	A	B	C	A	D	E	D	D	D	E	C
		17:30	C	B	A	A	B	A	D	E	D	D	D	D	B
		17:45	B	B	A	A	B	A	D	E	D	D	D	D	B
Int 6	Gibson & Carlisle	15:00	F	B	A	A	B	A	E	D	D	D	E	D	C
		15:15	F	B	A	A	B	A	D	D	D	D	E	D	C
		15:30	A	B	A	B	C	A	F	D	D	D	E	D	C
		15:45	F	B	A	A	C	A	D	D	D	D	E	D	C
		16:00	A	B	A	B	C	A	F	D	D	D	E	D	E
		16:15	B	B	A	B	C	A	F	D	D	D	D	D	D
		16:30	D	B	A	A	C	A	F	D	D	D	D	D	D
		16:45	F	B	A	A	C	A	F	D	D	D	E	D	D
		17:00	E	B	A	A	C	A	D	D	D	D	E	D	C
		17:15	F	B	A	A	C	A	F	D	D	D	E	D	C
		17:30	A	A	A	A	B	A	D	E	D	D	E	D	B
		17:45	A	A	A	A	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	15:00	A	A	A	E	C	C	D	E	E	D	E	E	C
		15:15	A	A	A	E	C	C	E	E	E	D	E	E	C
		15:30	B	A	A	E	D	D	E	E	E	D	E	E	C
		15:45	A	A	A	E	E	E	D	E	E	D	E	E	C
		16:00	A	A	A	E	D	D	D	E	E	D	E	E	C
		16:15	A	A	A	E	F	F	D	E	E	D	E	E	D
		16:30	A	A	A	E	F	E	D	E	E	D	E	E	D
		16:45	A	A	A	E	F	F	E	E	E	D	E	E	D
		17:00	A	A	A	E	D	D	D	E	E	D	E	E	C
		17:15	A	A	A	E	D	E	D	E	E	D	E	E	D
		17:30	A	A	A	E	E	E	D	E	E	D	E	E	D
		17:45	A	A	A	E	C	C	D	E	E	D	E	E	C

Table 11. 2025 Build Intersection LOS Analysis Summary, PM Peak Hour (Continued)

Intersection	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 8 Gibson & Quincy	15:00	A	B	A	A	A	A	E	D	D	F	F	F	B
	15:15	A	B	A	A	B	B	E	D	D	F	F	F	B
	15:30	A	A	A	A	B	B	E	D	D	F	F	F	B
	15:45	A	A	A	A	B	B	E	E	E	F	F	F	B
	16:00	A	A	A	A	B	B	E	D	D	F	F	F	B
	16:15	B	B	A	A	B	B	E	D	D	E	E	E	B
	16:30	B	B	A	B	B	B	E	D	D	E	E	E	B
	16:45	B	B	A	B	B	B	E	D	D	F	F	F	B
	17:00	A	A	A	A	B	B	E	D	D	F	F	F	B
	17:15	A	B	A	B	B	B	E	D	D	F	F	F	B
	17:30	A	A	A	A	B	B	E	D	D	F	F	F	B
	17:45	A	A	A	A	B	B	E	D	D	A	A	A	B
Int 9 Gibson & Truman	15:00	D	C	C	C	B	B	F	F	C	C	C	C	F
	15:15	D	C	C	C	B	B	F	F	C	C	C	C	F
	15:30	E	C	C	C	C	C	F	F	C	C	C	C	F
	15:45	E	C	C	C	C	C	F	F	C	E	E	E	F
	16:00	D	C	C	B	C	C	F	F	C	D	D	D	F
	16:15	F	C	C	B	C	C	F	F	C	D	D	D	F
	16:30	E	C	C	B	C	C	F	F	C	C	C	C	F
	16:45	E	C	C	B	C	C	F	F	C	D	D	D	F
	17:00	D	C	C	B	C	C	F	F	C	C	C	C	F
	17:15	E	C	C	B	C	C	F	F	C	E	E	E	F
	17:30	D	C	C	B	C	C	F	F	C	C	C	C	F
	17:45	D	C	C	B	B	B	F	F	C	D	D	D	D
Int 10 Gibson & San Mateo	15:00	F	B	B	B	C	C	E	D	D	D	D	D	D
	15:15	F	B	B	B	C	C	E	D	D	D	D	D	D
	15:30	F	B	B	B	C	C	E	D	D	D	D	D	D
	15:45	F	C	C	B	C	D	E	D	D	D	D	C	D
	16:00	F	B	B	B	C	C	E	D	D	D	D	D	D
	16:15	F	B	B	B	C	C	E	D	D	D	D	D	D
	16:30	F	C	C	A	D	D	E	D	D	D	D	D	D
	16:45	F	C	C	B	D	D	E	D	D	D	D	C	D
	17:00	F	B	B	B	C	C	E	E	E	D	D	C	C
	17:15	F	B	B	B	C	C	E	E	E	D	D	C	D
	17:30	F	B	B	B	C	C	E	E	E	D	D	C	C
	17:45	C	B	B	B	C	C	E	E	E	D	D	C	C
Int 11 Sunport & 2nd St	15:00	B	-	B	-	B	-	C	-	C	-	B	-	B
	15:15	B	-	B	-	B	-	C	-	C	-	B	-	B
	15:30	B	-	B	-	B	-	C	-	C	-	B	-	B
	15:45	B	-	B	-	B	-	C	-	C	-	B	-	B
	16:00	B	-	C	-	C	-	C	-	C	-	B	-	C
	16:15	B	-	C	-	C	-	C	-	C	-	B	-	C
	16:30	B	-	C	-	C	-	C	-	C	-	B	-	C
	16:45	B	-	C	-	C	-	C	-	C	-	B	-	C
	17:00	B	-	B	-	B	-	C	-	C	-	B	-	B
	17:15	B	-	B	-	B	-	C	-	C	-	B	-	B
	17:30	B	-	B	-	B	-	C	-	C	-	B	-	B
	17:45	B	-	B	-	B	-	C	-	C	-	B	-	B
Int 12 Sunport & Broadway	15:00	B	C	C	C	C	C	B	C	C	B	C	C	C
	15:15	B	C	C	C	C	C	B	C	C	B	C	C	C
	15:30	B	C	C	C	C	C	B	C	C	B	C	C	C
	15:45	B	C	C	C	C	C	B	C	C	B	C	C	C
	16:00	B	C	C	C	C	C	B	C	C	B	C	C	C
	16:15	B	C	C	C	C	C	B	C	C	B	C	C	C
	16:30	B	C	C	C	C	C	B	C	C	B	C	C	C
	16:45	B	C	C	C	C	C	B	C	C	B	C	C	C
	17:00	B	C	C	C	C	C	B	C	C	B	C	C	C
	17:15	B	C	C	C	C	C	B	C	C	B	C	C	C
	17:30	B	C	C	C	C	C	B	C	C	B	C	C	C
	17:45	B	C	C	C	C	C	B	C	C	B	C	C	C
Int 13 Sunport & Interchange (SB)	15:00	-	B	B	A	A	-	-	-	-	C	C	C	B
	15:15	-	B	B	A	A	-	-	-	-	C	C	C	B
	15:30	-	B	B	A	A	-	-	-	-	C	C	C	B
	15:45	-	B	B	A	A	-	-	-	-	C	C	C	B
	16:00	-	C	C	B	B	-	-	-	-	C	C	C	C
	16:15	-	C	C	B	B	-	-	-	-	C	C	C	C
	16:30	-	C	C	B	B	-	-	-	-	C	C	C	C
	16:45	-	C	C	B	B	-	-	-	-	C	C	C	C
	17:00	-	B	B	A	A	-	-	-	-	C	C	C	B
	17:15	-	B	B	A	A	-	-	-	-	C	C	C	B
	17:30	-	B	B	A	A	-	-	-	-	C	C	C	B
	17:45	-	B	B	A	A	-	-	-	-	C	C	C	B
Int 14 Sunport & Interchange (NB)	15:00	A	A	-	-	A	A	C	C	C	-	-	-	A
	15:15	B	A	-	-	A	A	C	C	C	-	-	-	A
	15:30	A	A	-	-	A	A	C	C	C	-	-	-	A
	15:45	A	A	-	-	A	A	C	C	C	-	-	-	A
	16:00	C	C	-	-	C	C	C	C	C	-	-	-	C
	16:15	C	C	-	-	C	C	C	C	C	-	-	-	C
	16:30	C	C	-	-	C	C	C	C	C	-	-	-	C
	16:45	C	C	-	-	B	C	C	C	C	-	-	-	C
	17:00	B	A	-	-	A	A	C	C	C	-	-	-	A
	17:15	A	A	-	-	A	A	C	C	C	-	-	-	A
	17:30	A	A	-	-	A	A	C	C	C	-	-	-	A
	17:45	A	A	-	-	A	A	C	C	C	-	-	-	A

Table 11. 2025 Build Intersection LOS Analysis Summary, PM Peak Hour (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	15:15	C	-	B	-	-	-	A	A	-	-	A	A	C
		15:30	C	-	B	-	-	-	A	A	-	-	A	A	C
		15:45	C	-	B	-	-	-	A	A	-	-	A	A	C
		16:00	C	-	B	-	-	-	A	A	-	-	A	A	C
		16:15	B	-	A	-	-	-	A	A	-	-	A	A	B
		16:30	B	-	A	-	-	-	A	A	-	-	A	A	B
		16:45	B	-	A	-	-	-	A	A	-	-	A	A	B
		17:00	B	-	A	-	-	-	A	A	-	-	A	A	B
		17:15	B	-	A	-	-	-	A	A	-	-	A	A	B
		17:30	B	-	A	-	-	-	A	A	-	-	A	A	B
		17:45	B	-	A	-	-	-	A	A	-	-	A	A	B
Int 51	Gibson & Site Driveway 1	15:00	-	A	A	D	A	-	0	-	C	-	-	-	D
		15:15	-	A	A	C	A	-	0	-	C	-	-	-	C
		15:30	-	A	A	C	A	-	0	-	C	-	-	-	C
		15:45	-	A	A	D	A	-	0	-	C	-	-	-	D
		16:00	-	A	A	C	A	-	0	-	C	-	-	-	C
		16:15	-	A	A	C	A	-	0	-	C	-	-	-	C
		16:30	-	A	A	C	A	-	0	-	C	-	-	-	C
		16:45	-	A	A	C	A	-	0	-	C	-	-	-	C
		17:00	-	A	A	C	A	-	0	-	C	-	-	-	C
		17:15	-	A	A	D	A	-	0	-	C	-	-	-	D
		17:30	-	A	A	C	A	-	0	-	C	-	-	-	C
		17:45	-	A	A	C	A	-	0	-	B	-	-	-	C
Int 52	Girard & Site Driveway 2	15:00	C	C	A	C	-	B	A	A	A	A	A	A	B
		15:15	C	C	A	C	-	B	A	A	A	A	A	A	B
		15:30	C	C	A	C	-	B	A	A	A	A	A	A	B
		15:45	C	C	A	C	-	B	A	A	A	A	A	A	B
		16:00	B	B	A	B	-	A	A	A	A	A	A	A	A
		16:15	B	B	A	B	-	A	A	A	A	A	A	A	A
		16:30	B	B	A	B	-	A	A	A	A	A	A	A	A
		16:45	B	B	A	B	-	A	A	A	A	A	A	A	A
		17:00	B	B	A	B	-	A	A	A	A	A	A	A	A
		17:15	B	B	A	B	-	A	A	A	A	A	A	A	A
		17:30	B	B	A	B	-	A	A	A	A	A	A	A	A
		17:45	A	B	A	A	-	A	A	A	A	A	A	A	A
Int 53	Girard & Site Driveway 3	15:00	F	F	F	A	-	A	A	A	A	A	A	A	F
		15:15	F	F	F	A	-	A	A	A	A	A	A	A	F
		15:30	F	F	F	A	-	A	A	A	A	A	A	A	F
		15:45	F	F	F	A	-	A	A	A	A	A	A	A	F
		16:00	B	B	A	A	-	A	A	A	A	A	A	A	B
		16:15	B	B	A	A	-	A	A	A	A	A	A	A	B
		16:30	B	B	A	A	-	A	A	A	A	A	A	A	B
		16:45	B	B	A	A	-	A	A	A	A	A	A	A	B
		17:00	B	B	A	A	-	A	A	A	A	A	A	A	B
		17:15	B	B	A	A	-	A	A	A	A	A	A	A	B
		17:30	A	B	A	A	-	A	A	A	A	A	A	A	A
		17:45	A	B	A	A	-	A	A	A	A	A	A	A	A
Int 54	Girard & Site Driveway 4	15:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		15:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		15:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		15:45	A	-	A	-	-	-	A	A	-	-	A	A	A
		16:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		16:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		16:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		16:45	A	-	A	-	-	-	A	A	-	-	A	A	A
		17:00	A	-	A	-	-	-	A	A	-	-	A	A	A
		17:15	A	-	A	-	-	-	A	A	-	-	A	A	A
		17:30	A	-	A	-	-	-	A	A	-	-	A	A	A
		17:45	A	-	A	-	-	-	A	A	-	-	A	A	A

Results of the 2025 No-Build and Build scenarios are described below:

2025 No-Build Results

AM Peak Period (5:00 to 8:00AM)

Table 8 shows two intersections along the Gibson corridor operating with an overall LOS F during at least one 15-minute period, Gibson/University and Gibson/Quincy. All other intersections operate with an overall LOS D or better condition throughout the AM peak period.

When reviewing the individual intersection movements during the AM peak period, five additional intersections at Gibson/I-25 NB off-ramp, Gibson/Yale, Gibson/Girard, Gibson/Maxwell, and Gibson/Truman show LOS F operation in one or more 15-minute periods. All Sunport corridor movements are shown to operate with LOS D or better conditions in all 15-minute periods. In total, 50 movements show LOS F operation and 193 movements show LOS E operation within the twelve 15-minute analysis periods analyzed. These numbers reflect multiple movements that may operate from a single, shared approach lane.

When compared to 2020 Existing AM peak-hour conditions, only six movements operated at LOS F while 146 movements operated at LOS E.

PM Peak Period (3:00 to 6:00PM)

In a similar review of operations during the PM peak period conditions, only the Gibson/Truman intersection operates with an overall LOS F condition, occurring in nine of the 12 periods analyzed due to poor northbound operations. All other intersections operate with LOS D or better conditions throughout the three-hour time period.

A total of 71 individual movements operate at LOS F while another 171 movements operate at LOS E along the Gibson corridor. All Sunport corridor movements are identified to operate at LOS C or better. When compared to 2020 Existing conditions, 41 individual movements operated at LOS F and 119 at LOS E.

A review of signal conditions and lane configurations to improve overall operations should be conducted along the Gibson corridor by 2025 for both the AM and PM peak periods to help alleviate high side-street delays.

2025 Build Results

AM Peak Hour (5:00 to 8:00AM)

Overall, the AM peak-hour of the corridor in the 2025 Build condition is similar to the No-Build scenario. No additional intersections show an overall LOS F operation as compared to No-Build conditions although more individual LOS F operations are identified. The Gibson/University and Gibson/Girard are the two more impacted intersections with eastbound through movements showing LOS F conditions. In addition, the site driveway from Gibson shows LOS F operation from 6:30 to 7:45AM, although peak entering time for the site is before 6AM. The University, Girard, and Quincy intersections show deterioration from acceptable operation to LOS E during one 15-minute time period each. All other intersections show LOS D or better conditions throughout the morning peak period.

When comparing LOS E/F movement operations to No-Build conditions, the same amount of movement LOS F conditions (50) are noted while 18 more movements change to LOS E operation with the site added traffic (exclusive of the new site driveways).

PM Peak Hour (4:00 to 5:00PM)

Similar to the AM peak hour, only a slight deterioration in intersection LOS categories are noted with the additional site trips during this time period. Only two intersections deteriorate from acceptable to LOS E operation during a 15-minute period, the Gibson/University from 3:30 to 3:45 and the Gibson/Carlisle intersection during the 4 to 4:15PM time period. All other Gibson and Sunport intersections operate with an overall LOS D or better during all other time periods.

When comparing LOS E/F movement operations to No-Build conditions, 18 more movements deteriorate to LOS F operation while 5 movements change to LOS E operation with the site added traffic (exclusive of the new site driveways).

CAPACITY MITIGATIONS AND STREET IMPROVEMENTS

Capacity Mitigation and Street Improvement measures will be considered in the next report submittal. Future mitigation efforts will follow the ensuing methodology:

1. Review Intersection green splits and coordination offsets
2. Review signal phasing for potential changes
3. Make use of existing hatched pavement area at intersection approaches
4. Add turn lanes
5. Consider new corridor cycle lengths
6. Add additional through lanes

FUTURE YEAR NO-BUILD AND BUILD FREEWAY TRAFFIC VOLUMES

Freeway and ramp volumes were calculated in a similar manner as the intersection volumes were calculated. The 2025 No-Build volumes included a 1% per year growth rate over 2020 conditions and estimated EUL project volumes added. For the 2025 Build scenario, the Project Orion Phase 1 site trips were included. The volumes, in 15-minute intervals, were substituted into the existing 2020 freeway network and analyzed.

LOS summary results for the I-25 northbound direction for the 2025 No-Build scenario are provided in Table 12 and the I-25 southbound direction results in Table 13.

2025 Build LOS summary results for the I-25 northbound direction are provided in Table 14 and the I-25 southbound direction in Table 15.

2025 No-Build

Overall, the northbound I-25 freeway corridor continues to show LOS D or better operation on all freeway segments from 5:00 to 9:00 AM. When compared to the 2020 Existing condition, three additional segment time periods change from LOS C to LOS D. During the peak PM period, Segments 8 and 9 (Merge segment with Gibson WB On-Ramp and Basic segment north of Gibson WB On-Ramp), show LOS E operation during the 4:15 PM time period with LOS D operation from 3:30 PM to 5:00 PM. All other segments show LOS B or better operation throughout the PM peak period.

In the southbound direction, there are increased time periods on segments 1, 2, and 3 that show LOS D conditions during the AM Peak period. In total, LOS D operations increase on these three segments from eight periods in the 2020 Existing conditions to 17 periods in the 2025 No-Build. The highest number of LOS D conditions occur at Segment 2 (Diverge segment to WB Gibson). The PM peak period operations remain similar to 2020 Existing conditions in the southbound direction with Segment 2 operating at LOS D in three time periods, all other segments operate at LOS C or better.

2025 Build

The site added traffic to the I-25 corridor northbound direction in the AM peak period results in Segment 9 projected to operate at LOS E conditions during the 7:15 time period. All other segments continue to operate at LOS D or better conditions. When compared to 2025 No-Build, only two time periods change from LOS C to LOS D. In the PM peak period, Segments 8 and 9 continue to operate at LOS E only during the 4:15 time period, similar to 2025 No-Build conditions. LOS D operation on these two segments begin at 3:00 PM with the added traffic opposed to 3:30 under the No-Build scenario. All other segments operate at LOS C or better during all time periods.

In the southbound direction, all segments continue to operate at LOS D or better conditions during the AM peak period. Only one segment (Segment 2, 6:15AM) changes from LOS C to LOS D. In the PM peak period, similar conditions exist with all segments operating at LOS D or better with only Segment 2 displaying LOS D operations. Site-related trips increase the number of LOS time periods for this segment from 3 in the No-Build to 11 in the Build condition.

Similar to the 2020 Existing Conditions analysis, the following software warnings were noted for the 2025 Build scenarios:

- Southbound I-25 AM Peak Period: Diverge capacity is less than diverge demand on Segment 4 (SB Off-ramp to EB Gibson)
- Northbound I-25 PM Peak Period: Merge capacity is less than merge demand on Segment 8 (Gibson WB On-Ramp).

Table 12: 2025 No-Build Freeway LOS Analysis Summary, Northbound I-25

		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	A	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	A	B	A	A	A	B	A	B	B
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	C	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	C	C	C	B	B	B	B	C	C
	7:00	C	D	C	C	C	C	C	C	D
	7:15	D	D	D	C	C	C	D	D	D
	7:30	C	D	C	C	C	C	C	D	D
	7:45	B	C	B	B	B	B	B	C	C
	8:00	B	C	B	B	B	B	B	C	C
	8:15	B	C	B	B	B	B	B	C	C
	8:30	B	C	B	B	B	B	B	C	C
	8:45	B	B	B	B	A	B	B	B	B
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	2:00	B	B	A	B	B	B	B	C	C
	2:15	B	B	B	B	B	B	B	C	C
	2:30	B	B	B	B	B	B	B	C	C
	2:45	B	B	B	B	B	B	B	C	C
	3:00	B	B	B	B	B	B	B	C	C
	3:15	B	B	B	B	B	B	B	C	C
	3:30	B	B	B	B	B	B	B	D	D
	3:45	B	B	B	B	B	B	B	D	D
	4:00	B	B	B	B	B	B	B	D	D
	4:15	B	B	B	B	B	B	B	E	E
	4:30	B	B	B	B	B	B	B	D	D
	4:45	B	B	B	B	B	B	B	D	D
	5:00	B	B	B	B	B	B	B	D	D
	5:15	B	B	A	B	B	B	B	C	C
	5:30	A	B	A	B	A	B	A	C	B
	5:45	A	B	A	B	A	B	A	B	B
	6:00	A	B	A	B	A	B	A	B	B
	6:15	A	B	A	B	A	B	A	B	B
	6:30	A	B	A	A	A	B	A	B	B
	6:45	A	B	A	A	A	B	A	B	B
Type		Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Merge	Basic
Length, ft		5280	1500	3070	1750	1155	700	400	800	1500
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport Off and On Ramps	Btw Sunport On and Gibson Off Ramp	Btw Gibson Off and EB On Ramps	Gibson EB On-Ramp	Btw Gibson On Ramps	Gibson WB On-Ramp	North of Gibson
<div> <div>Segment ID</div> <div>Lanes</div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> </div> </div>		1	2	3	4	5	6	7	8	9
		3	3	3	4	3	3	3	3	3

Table 13: 2025 No-Build Freeway LOS Analysis Summary, Southbound I-25

	Segment	Level of Service								
		1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	A	A	A	A
	5:30	B	B	B	A	A	A	A	A	A
	5:45	B	C	B	B	A	A	A	A	A
	6:00	B	C	B	B	A	A	A	A	A
	6:15	C	C	C	B	B	B	A	B	A
	6:30	D	D	C	B	B	B	A	B	A
	6:45	D	D	D	C	B	B	A	B	A
	7:00	D	D	C	B	B	B	A	B	A
	7:15	D	D	D	C	B	B	B	B	B
	7:30	D	D	C	B	B	B	A	B	B
	7:45	D	D	C	B	B	B	A	B	B
	8:00	C	D	C	B	B	B	A	B	A
	8:15	C	D	C	B	B	B	B	B	B
	8:30	C	D	C	B	B	B	A	B	A
	8:45	C	C	C	B	B	B	A	B	B
PM Time Period	2:00	C	C	B	B	B	B	B	B	B
	2:15	B	C	B	B	B	B	B	B	B
	2:30	C	C	B	B	B	B	B	B	B
	2:45	C	D	C	B	B	B	B	B	B
	3:00	C	D	C	B	B	B	B	B	B
	3:15	C	C	C	B	B	B	B	B	B
	3:30	C	C	C	B	B	B	B	B	B
	3:45	C	C	C	B	B	B	B	B	B
	4:00	C	C	C	B	B	B	B	B	B
	4:15	C	D	C	B	B	B	B	B	B
	4:30	C	C	B	B	B	B	B	B	B
	4:45	C	C	C	B	B	B	B	B	B
	5:00	C	C	C	B	B	B	B	B	B
	5:15	C	C	C	B	B	B	B	B	B
	5:30	C	C	C	B	B	B	B	B	B
	5:45	C	C	C	B	B	B	B	B	B
	6:00	C	C	C	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	B	B	B
	6:30	B	C	B	B	B	B	B	B	B
	6:45	B	C	B	A	B	B	B	B	B
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		2640	1500	200	750	620	2250	2950	875	2640
Segment ID		1	2	3	4	5	6	7	8	9
Southbound Locations		North of Gibson	Off-Ramp to WB Gibson	Btw Gibson Off-Ramps	Off-Ramp to EB Gibson	Btw Gibson Off and On Ramps	Btw Gibson and Sunport	Btw Sunport Off and On Ramps	On-Ramp from Sunport	South of Sunport
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	3	3	3	4	3	4	3	3	3	

Table 14: 2025 Build Freeway LOS Analysis Summary, Northbound I-25

		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	B	B	A	A	A	B	A	B	B
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	C	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	C	C	C	B	B	B	B	C	C
	7:00	C	D	C	C	C	C	C	D	D
	7:15	D	D	D	C	D	C	D	D	E
	7:30	C	D	C	C	C	C	C	D	D
	7:45	B	C	B	B	B	B	B	C	C
	8:00	B	C	B	B	B	B	B	C	C
	8:15	B	C	B	B	B	B	B	C	C
	8:30	B	C	B	B	B	B	B	C	C
	8:45	B	B	B	B	A	B	B	B	B
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	2:00	B	B	B	B	B	B	B	C	C
	2:15	B	B	B	B	B	B	B	C	C
	2:30	B	B	B	B	B	B	B	C	C
	2:45	B	B	B	B	B	B	B	C	C
	3:00	B	B	B	B	B	B	B	D	D
	3:15	B	B	B	B	B	B	B	D	D
	3:30	B	B	B	B	B	B	B	D	D
	3:45	B	B	B	B	B	B	B	D	D
	4:00	B	B	B	B	B	B	B	D	D
	4:15	B	B	B	B	B	B	B	E	E
	4:30	B	B	B	B	B	B	B	D	D
	4:45	B	B	B	B	B	B	B	D	D
	5:00	B	B	B	B	B	B	B	D	D
	5:15	B	B	A	B	B	B	B	C	C
	5:30	A	B	A	B	A	B	A	C	C
	5:45	A	B	A	B	A	B	A	B	B
	6:00	A	B	A	B	A	B	A	B	B
	6:15	A	B	A	B	A	B	A	B	B
	6:30	A	B	A	A	A	B	A	B	B
	6:45	A	B	A	A	A	B	A	B	B
Type		Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Merge	Basic
Length, ft		5280	1500	3070	1750	1155	700	400	800	1500
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport Off and On Ramps	Btw Sunport On and Gibson Off and On Ramps	Btw Gibson Off and EB On Ramps	Gibson EB On-Ramp	Btw Gibson On Ramps	Gibson WB On-Ramp	North of Gibson
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	3	3	3	4	3	3	3	3	3	

Table 15: 2025 Build Freeway LOS Analysis Summary, Southbound I-25

		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	A	A	A	A
	5:30	B	C	B	A	A	A	A	A	A
	5:45	B	C	B	B	A	A	A	A	A
	6:00	B	C	B	B	A	A	A	A	A
	6:15	C	D	C	B	B	B	A	B	A
	6:30	D	D	C	B	B	B	A	B	B
	6:45	D	D	D	C	B	B	A	B	A
	7:00	D	D	C	B	B	B	A	B	A
	7:15	D	D	D	C	B	B	B	B	B
	7:30	D	D	C	B	B	B	A	B	B
	7:45	D	D	C	B	B	B	A	B	B
	8:00	C	D	C	B	B	B	A	B	A
	8:15	C	D	C	B	B	B	B	B	B
	8:30	C	D	C	B	B	B	A	B	A
	8:45	C	C	C	B	B	B	A	B	B
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	2:00	C	C	C	B	B	B	B	B	B
	2:15	C	C	C	B	B	B	B	B	B
	2:30	C	D	C	B	B	B	B	B	B
	2:45	C	D	C	B	B	B	B	B	B
	3:00	C	D	C	B	B	B	B	B	B
	3:15	C	D	C	B	B	B	B	B	C
	3:30	C	D	C	B	B	B	B	B	C
	3:45	C	D	C	B	B	B	B	B	B
	4:00	C	D	C	B	B	B	B	B	B
	4:15	C	D	C	B	B	B	B	B	C
	4:30	C	C	C	B	B	B	B	B	B
	4:45	C	D	C	B	B	B	B	B	C
	5:00	C	C	C	B	B	B	B	B	C
	5:15	C	D	C	B	B	B	B	B	C
	5:30	C	D	C	B	B	B	B	B	B
	5:45	C	C	C	B	B	B	B	B	B
	6:00	C	C	C	B	B	B	B	B	B
	6:15	C	C	C	B	B	B	B	B	B
	6:30	B	C	B	B	B	B	B	B	B
	6:45	B	C	B	B	B	B	B	B	B
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		2640	1500	200	750	620	2250	2950	875	2640
Segment ID		1	2	3	4	5	6	7	8	9
Southbound Locations		North of Gibson	Off-Ramp to WB Gibson	Btw Gibson Off-Ramps	Off-Ramp to EB Gibson	Btw Gibson Off and On Ramps	Btw Gibson and Sunport	Btw Sunport Off and On Ramps	On-Ramp from Sunport	South of Sunport
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	3	3	3	4	3	4	3	3	3	

SAFETY ANALYSIS

The following presents a safety analysis of the site divided into four facets: Internal Queueing, Sight Access Sight Distance, Crash Data Summary, and Highway Safety Manual (HSM) Predictive Crash Analysis.

SITE ACCESS SIGHT DISTANCE

AASHTO RECOMMENDED SIGHT DISTANCE

To be conducted.

The following presents recommended intersection sight distance requirements for the development. Intersection sight distance requirements were calculated based on the 2011 AASHTO "Green Book" chapter 9.5. Two sight distance cases were used for this analysis:

- Case B1 – A stopped vehicle turning left from a minor street approach onto a major road.
- Case B2 – A stopped vehicle turning right from a minor street approach onto a major road.

Intersection sight distances were calculated based on the following assumptions:

- Required intersection sight distance for Case B1 for site driveways accessing Girard Blvd.
- Required intersection sight distance for Case B2 for the site driveway access Gibson Blvd.

INTERNAL SITE QUEUEING

SITE OPERATIONS & QUEUE MANAGEMENT

Staffing and Scheduling

To be determined.

Signage

To be determined.

ON-SITE QUEUEING

To be determined.

CRASH DATA SUMMARY

A detailed crash summary has been completed to summarize existing crash trends and to determine possible safety impacts to the study area. The crash summary and safety analysis are divided into the following sections:

- Crash Summary, detailing 5 years of available crash trends for Gibson Blvd, I-25 and I-25 On/Off Ramps.
- Intersection crash rates.

Aggregate crash data was obtained for the study area for the most recently available five years. This included the years 2014 to 2018. Crashes were then summarized by year, type, lighting conditions, severity, and cause. Figure 19 below represents the frequency of crashes within a given area throughout the project. Figure 20 shows the severity of the crashes. To compare and summarize trends, crashes were grouped by facility type and divided into the following:

- Gibson Blvd
 - Broadway Blvd
 - Between Broadway Blvd & I-25
 - I-25
 - Between I-25 & University Blvd
 - University Blvd
 - Between University Blvd & Yale Blvd
 - Yale Blvd
 - Girard Blvd
 - Between Girard Blvd & Carlisle Blvd
 - Carlisle Blvd
 - Between Carlisle Blvd & Maxwell St
 - Maxwell St
 - Between Maxwell St & Quincy St
 - Quincy St
 - Between Quincy St & Truman St
 - Truman St
 - San Mateo Blvd
 - Between San Mateo Blvd & Louisiana Blvd
- I-25 Corridor
 - Between Avenida Cesar Chavez Blvd & Gibson Blvd Alameda Blvd
 - Gibson Blvd
 - Between Gibson Blvd & Sunport Blvd
 - Sunport Blvd
 - Between Sunport Blvd & Rio Bravo Blvd
- I-25 On/Off Ramps
 - I-25 SB Off-Ramp at Gibson Blvd Alameda Blvd
 - I-25 NB Off-Ramp at Gibson Blvd
 - I-25 NB On-Ramp at Gibson Blvd
 - I-25 SB Off-Ramp at Sunport Blvd
 - I-25 NB Off-Ramp at Sunport Blvd
- Sunport Blvd & Girard Blvd
 - Woodward Rd Between 2nd St & Broadway Blvd
 - Woodward Rd Between 2nd St & Broadway Blvd
 - Woodward Rd & Broadway Blvd
 - Sunport Blvd & I-25
 - Girard Blvd & Mile Rd

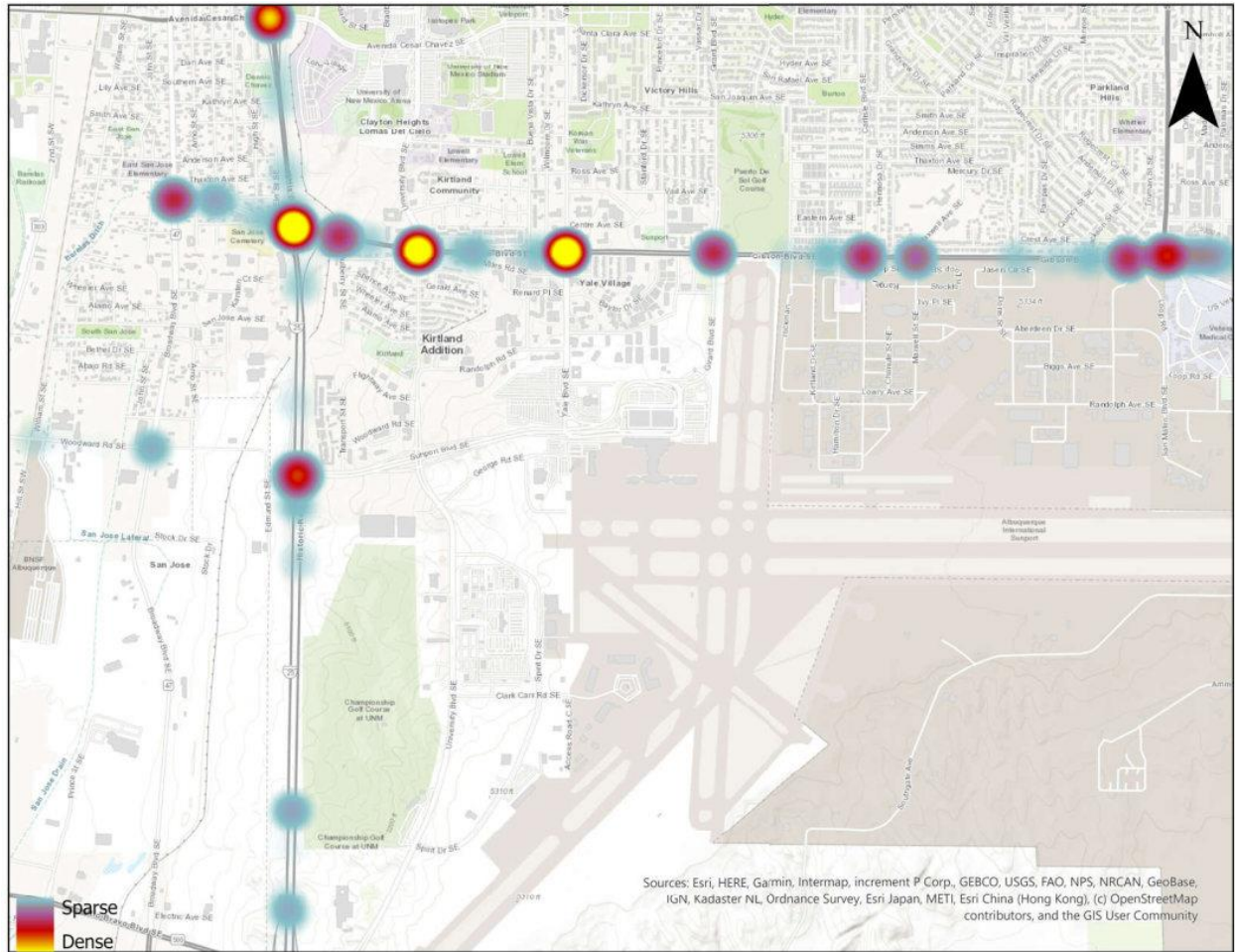


Figure 19: Crash Data Heat Map



Figure 20: Crash Severity Map

GIBSON BLVD SE CORRIDOR

Table 16, Table 17 & Table 18 below summarize crashes occurring along Gibson Blvd for the project area.

Table 16: Gibson Blvd Crash Summary 1 of 3

Crash Summary		Gibson Blvd					
		Broadway Blvd	Between Broadway Blvd & I-25	I-25	Between I-25 & University Blvd	University Blvd	Between University Blvd & Yale Blvd
Total Crashes		67	28	2	68	190	35
By Year	2014	12	6	0	11	30	13
	2015	9	5	0	10	39	5
	2016	15	3	1	20	36	5
	2017	14	8	0	11	43	6
	2018	17	6	1	16	42	6
By Type	Fixed Object	5	2	0	6	3	5
	Unknown/Non-Collision	0	1	0	0	0	0
	Other Vehicle - All Others/Entering At Angle	0	1	0	0	2	0
	Other Vehicle - Both Going Straight/Entering At Angle	1	2	0	1	4	1
	Other Vehicle - Both Turn Left/Entering At Angle	1	0	0	0	0	0
	Other Vehicle - From Opposite Direction/All Others	41	11	2	34	97	15
	Other Vehicle - From Same Direction/All Others	3	5	0	9	37	4
	Other Vehicle - From Same Direction/Rear End Collision	5	3	0	9	30	7
	Other Vehicle - One Left Turn/Entering At Angle	4	2	0	2	8	0
	Other Vehicle - One Right Turn/Entering At Angle	2	0	0	4	0	0
	Other Vehicle - One Stopped/Entering At Angle	0	0	0	0	1	0
	Other Vehicle - One Vehicle/Backing From Other Than Driveway	0	0	0	0	0	0
	Other Vehicle - One Vehicle/Making A U-Turn	0	0	0	1	2	1
	Other Vehicle - One Vehicle/Parked Improper Location	1	0	0	0	0	0
	Other Vehicle - One Vehicle/Stopped Traffic	0	0	0	0	2	0
	Other Vehicle - One Vehicle/Forward From Parked Position	0	0	0	0	0	0
	Overturn/Rollover	0	0	0	0	0	1
	Parked Vehicle	1	1	0	1	0	1
	Pedalcyclist	0	0	0	0	0	0
	Pedestrian	2	0	0	1	3	0
	Vehicle on Other Road	1	0	0	0	0	0
	% Other Vehicle - From Same Direction	61%	39%	100%	50%	51%	43%
	% Other Vehicle - From Opposite Direction	7%	11%	0%	13%	16%	20%
	% Other Vehicle - One Left Turn/Entering At Angle	4%	18%	0%	13%	19%	11%
By Lighting Conditions	Day	46	21	1	48	131	30
	Dawn/Dusk	2	2	0	6	10	2
	Dark	15	3	0	8	34	3
	Invalid Code/Not Specified	4	2	1	6	15	0
	% Day	69%	75%	50%	71%	69%	86%
By Severity	PDO	49	16	2	48	140	26
	Injury	18	12	0	20	50	8
	Fatality	0	0	0	0	0	1
	% Property Damage Only	73%	57%	100%	71%	74%	74%
	% Injury	27%	43%	0%	29%	26%	23%
By Cause	Alcohol/Drug Involved	3	1	0	0	4	1
	Avoid No Contact - Other	0	1	0	4	6	2
	Defective Steering	0	0	0	0	0	0
	Defective Tires	0	0	0	0	0	1
	Disregarded Traffic Signal	4	0	0	2	13	0
	Driver Inattention	18	4	0	21	49	8
	Driverless Moving Vehicle	0	0	0	0	0	0
	Drove Left Of Center	2	1	0	0	1	0
	Excessive Speed	2	2	0	8	8	1
	Failed to Yield Right of Way	12	9	0	15	13	6
	Following Too Closely	1	1	0	4	35	8
	Improper Backing	8	3	1	4	19	4
	Inadequate Brakes	0	1	0	0	2	1
	Missing Data	7	1	1	8	15	1
	None	4	3	0	0	6	0
	Other - No Driver Error	4	1	0	1	4	1
	Passed Stop Sign	0	0	0	0	1	0
	Pedestrian Error	1	0	0	0	2	0
	Road Defect	0	0	0	0	1	0
	Speed Too Fast for Conditions	1	0	0	0	8	1
	Traffic Control Not Functioning	0	0	0	0	0	0
	Vehicle Skidded Before Brake	0	0	0	1	3	0
	% Driver Inattention	27%	14%	0%	31%	26%	23%
	% Following Too Closely	18%	32%	0%	22%	7%	17%
	% Failed to Yield Right of Way	1%	4%	0%	6%	18%	23%
	% Excessive Speed	12%	11%	50%	6%	10%	11%

Table 17: Gibson Blvd Crash Summary 2 of 3

Crash Summary		Gibson Blvd					
		Yale Blvd	Girard Blvd	Between Girard Blvd & Carlisle Blvd	Carlisle Blvd	Between Carlisle Blvd & Maxwell St	Maxwell St
Total Crashes		200	64	18	60	1	41
By Year	2014	32	10	2	12	0	4
	2015	44	13	3	14	0	8
	2016	37	13	4	14	0	8
	2017	35	12	8	7	1	12
	2018	52	16	1	13	0	9
	2019	32	10	2	12	0	4
By Type	Fixed Object	8	2	3	4	0	5
	Unknown/Non-Collision	0	0	0	0	0	0
	Other Vehicle - All Others/Entering At Angle	0	1	0	1	0	0
	Other Vehicle - Both Going Straight/Entering At Angle	5	2	0	2	0	0
	Other Vehicle - Both Turn Left/Entering At Angle	0	0	0	0	0	0
	Other Vehicle - From Opposite Direction/All Others	117	29	5	24	1	12
	Other Vehicle - From Same Direction/All Others	20	6	3	8	0	10
	Other Vehicle - From Same Direction/Rear End Collision	26	7	2	13	0	5
	Other Vehicle - One Left Turn/Entering At Angle	17	10	2	4	0	5
	Other Vehicle - One Right Turn/Entering At Angle	1	1	1	2	0	0
	Other Vehicle - One Stopped/Entering At Angle	1	0	0	0	0	0
	Other Vehicle - One Vehicle/Backing From Other Than Driveway	0	0	0	0	0	0
	Other Vehicle - One Vehicle/Making A U-Turn	0	0	0	0	0	1
	Other Vehicle - One Vehicle/Parked Improper Location	0	0	0	0	0	0
	Other Vehicle - One Vehicle/Stopped Traffic	0	0	0	0	0	0
	Other Vehicle - One Vehicle/Forward From Parked Position	0	0	0	0	0	0
	Overturn/Rollover	0	1	0	0	0	1
	Parked Vehicle	1	0	0	1	0	2
	Pedalcyclist	3	1	0	0	0	0
	Pedestrian	0	4	2	1	0	0
	Vehicle on Other Road	0	0	0	0	0	0
	% Other Vehicle - From Same Direction	59%	45%	28%	40%	100%	29%
	% Other Vehicle - From Opposite Direction	13%	11%	11%	22%	0%	12%
	% Other Vehicle - One Left Turn/Entering At Angle	10%	9%	17%	13%	0%	24%
By Lighting Conditions	Day	137	40	11	34	1	27
	Dawn/Dusk	9	4	0	4	0	0
	Dark	43	15	6	18	0	12
	Invalid Code/Not Specified	11	5	1	4	0	2
	% Day	69%	63%	61%	57%	100%	66%
By Severity	PDO	145	35	8	39	1	25
	Injury	55	27	8	21	0	16
	Fatality	0	2	2	0	0	0
	% Property Damage Only	73%	55%	44%	65%	100%	61%
	% Injury	28%	42%	44%	35%	0%	39%
By Cause	Alcohol/Drug Involved	7	4	5	3	0	2
	Avoid No Contact - Other	2	2	0	2	0	1
	Defective Steering	0	0	0	0	0	0
	Defective Tires	0	0	1	0	0	0
	Disregarded Traffic Signal	22	7	0	6	0	4
	Driver Inattention	53	11	2	19	0	14
	Driverless Moving Vehicle	1	0	0	0	0	0
	Drove Left Of Center	2	0	0	0	0	0
	Excessive Speed	15	3	1	4	1	7
	Failed to Yield Right of Way	24	11	2	4	0	2
	Following Too Closely	20	8	4	6	0	5
	Improper Backing	15	3	0	7	0	1
	Inadequate Brakes	3	0	0	0	0	0
	Missing Data	22	5	1	4	0	1
	None	6	5	2	0	0	1
	Other - No Driver Error	4	2	0	4	0	1
	Passed Stop Sign	1	0	0	0	0	0
	Pedestrian Error	0	2	0	1	0	0
	Road Defect	0	0	0	0	0	0
	Speed Too Fast for Conditions	1	0	0	0	0	2
	Traffic Control Not Functioning	1	0	0	0	0	0
	Vehicle Skidded Before Brake	1	1	0	0	0	0
	% Driver Inattention	27%	17%	11%	32%	0%	34%
	% Following Too Closely	12%	17%	11%	7%	0%	5%
	% Failed to Yield Right of Way	10%	13%	22%	10%	0%	12%
	% Excessive Speed	8%	5%	0%	12%	0%	2%

Table 18: Gibson Blvd Crash Summary 3 of 3

Crash Summary		Gibson Blvd					
		Between Maxwell St & Quincy St	Quincy St	Between Quincy St & Truman St	Truman St	San Mateo Blvd	Between San Mateo Blvd & Louisiana Blvd
Total Crashes		8	5	13	62	78	289
By Year	2014	0	1	1	8	13	54
	2015	3	0	3	13	19	47
	2016	1	1	2	15	20	68
	2017	3	0	2	18	9	64
	2018	1	3	5	8	17	56
	Fixed Object	1	1	3	1	5	14
By Type	Unknown/Non-Collision	0	0	0	0	0	0
	Other Vehicle - All Others/Entering At Angle	0	0	0	0	0	1
	Other Vehicle - Both Going Straight/Entering At Angle	0	0	0	0	1	7
	Other Vehicle - Both Turn Left/Entering At Angle	0	0	0	0	0	0
	Other Vehicle - From Opposite Direction/All Others	4	1	5	34	39	155
	Other Vehicle - From Same Direction/All Others	2	1	1	9	6	17
	Other Vehicle - From Same Direction/Rear End Collision	1	2	3	5	11	15
	Other Vehicle - One Left Turn/Entering At Angle	0	0	1	7	4	45
	Other Vehicle - One Right Turn/Entering At Angle	0	0	0	2	3	9
	Other Vehicle - One Stopped/Entering At Angle	0	0	0	0	2	1
	Other Vehicle - One Vehicle/Backing From Other Than Driveway	0	0	0	0	0	1
	Other Vehicle - One Vehicle/Making A U-Turn	0	0	0	0	0	3
	Other Vehicle - One Vehicle/Parked Improper Location	0	0	0	0	0	0
	Other Vehicle - One Vehicle/Stopped Traffic	0	0	0	1	1	1
	Other Vehicle - One Vehicle/Forward From Parked Position	0	0	0	0	0	1
	Overturn/Rollover	0	0	0	0	0	2
	Parked Vehicle	0	0	0	0	0	4
	Pedalcyclist	0	0	0	2	4	1
	Pedestrian	0	0	0	1	2	11
	Vehicle on Other Road	0	0	0	0	0	1
	% Other Vehicle - From Same Direction	50%	20%	38%	55%	50%	54%
	% Other Vehicle - From Opposite Direction	13%	40%	23%	8%	14%	5%
	% Other Vehicle - One Left Turn/Entering At Angle	25%	20%	8%	15%	8%	6%
By Lighting Conditions	Day	2	4	7	46	60	212
	Dawn/Dusk	1	0	0	3	3	12
	Dark	5	1	5	7	6	47
	Invalid Code/Not Specified	0	0	1	6	9	18
	% Day	25%	80%	54%	74%	77%	73%
By Severity	PDO	5	3	7	42	50	177
	Injury	3	2	5	20	28	108
	Fatality	0	0	1	0	0	4
	% Property Damage Only	63%	60%	54%	68%	64%	61%
	% Injury	38%	40%	38%	32%	36%	37%
By Cause	Alcohol/Drug Involved	0	0	4	1	4	11
	Avoid No Contact - Other	0	0	0	2	2	8
	Defective Steering	0	0	1	0	0	0
	Defective Tires	0	0	0	0	0	0
	Disregarded Traffic Signal	0	1	0	7	8	29
	Driver Inattention	3	4	0	14	18	61
	Driverless Moving Vehicle	0	0	0	0	0	0
	Drove Left Of Center	0	0	0	0	0	1
	Excessive Speed	1	0	1	4	5	13
	Failed to Yield Right of Way	0	0	1	10	12	71
	Following Too Closely	1	0	3	7	6	13
	Improper Backing	1	0	1	9	7	32
	Inadequate Brakes	0	0	0	0	1	0
	Missing Data	1	0	1	5	5	22
	None	1	0	0	1	5	12
	Other - No Driver Error	0	0	0	1	2	3
	Passed Stop Sign	0	0	0	0	0	2
	Pedestrian Error	0	0	0	0	1	3
	Road Defect	0	0	0	0	0	0
	Speed Too Fast for Conditions	0	0	1	1	2	7
	Traffic Control Not Functioning	0	0	0	0	0	0
	Vehicle Skidded Before Brake	0	0	0	0	0	1
	% Driver Inattention	38%	80%	0%	23%	23%	21%
	% Following Too Closely	0%	0%	8%	16%	15%	25%
	% Failed to Yield Right of Way	13%	0%	23%	11%	8%	4%
	% Excessive Speed	13%	0%	8%	15%	9%	11%

From the tables shown above, the following observations are made:

- Gibson Blvd Corridor:
 - The three most common classifications of vehicle crashes are observed to be Other Vehicle - From Same Direction, Other Vehicle - From Same Direction/Rear End Collision, and Other Vehicle - From Same Direction/All Others
 - For the years 2014 to 2018, 1,229 crashes were reported.
 - A majority of crashes for the corridor occurred during the daylight hours totaling 61% of crashes.
 - Ten fatal crashes were reported from 2014 to 2018, and about 31% remaining crashes involved injuries.
 - A fatal crash was reported on 10/2/2015 at approximately 2:49 PM as a Pedestrian crash with a top contributing factor of Alcohol/Drug Involved in Day - Lighted conditions.
 - A fatal crash was reported on 2/3/2016 at approximately 2:30 PM as a Pedestrian crash with a top contributing factor of Alcohol/ Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 2/14/2016 at approximately 6:45 AM as a Pedestrian crash with a top contributing factor of Alcohol/ Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 4/20/2016 at approximately 7:50 AM as an Other Vehicle – One Left Turn/Entering At Angle crash with no top contributing factor listed in Day – Lighted conditions.
 - A fatal crash was reported on 1/10/2017 at approximately 10:07 PM as a Pedestrian crash with a top contributing factor of Alcohol/ Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 8/26/2017 at approximately 9:38 AM as a Pedestrian crash with a top contributing factor of a Disregarded Traffic Signal in Day – Lighted conditions.
 - A fatal crash was reported on 9/3/2017 at approximately 8:19 PM with a Fixed Object and a top contributing factor of Alcohol/ Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 10/21/2017 at approximately 2:11 AM as a Pedestrian crash with a top contributing factor of Pedestrian Error in Dark – Not Lighted conditions.
 - A fatal crash was reported on 11/13/2017 at approximately 1:55 AM as an Other Vehicle - From Same Direction/Rear End Collision with a top contributing factor of Alcohol/ Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 12/7/2018 at approximately 8:13 PM as a Pedestrian crash with a top contributing factor of Pedestrian Error in Dark – Lighted conditions.
 - The most common causes of crashes are observed to be Driver Inattention, Failed to Yield Right of Way, Following Too Closely, and Improper Backing/Lane Change/Overtaking/Turn/Driving.
 - It is observed that Gibson Blvd between San Mateo Blvd & Louisiana Blvd had the most occurrences of crashes totaling 24%.



I-25 CORRIDOR

Table 19 below summarizes crashes occurring along Gibson Blvd for the project area.

Table 19: I-25 Corridor Crash Summary

Crash Summary		Interstate-25				
		Between Avenida Cesar Chavez Blvd & Gibson Blvd	Gibson Blvd	Between Gibson Blvd & Sunport Blvd	Sunport Blvd	Between Sunport Blvd & Rio Bravo Blvd
Total Crashes		140	215	4	89	45
By Year	2014	12	34	0	11	5
	2015	29	43	0	14	4
	2016	20	44	1	17	8
	2017	47	49	2	17	12
	2018	32	45	1	30	16
By Type	Fixed Object	42	36	0	11	5
	Other Vehicle - All Others/Entering At Angle	1	2	0	0	0
	Other Vehicle - Both Going Straight/Entering At Angle	1	5	0	0	2
	Other Vehicle - From Opposite Direction/All Others	49	93	4	29	11
	Other Vehicle - From Same Direction/All Others	21	38	0	30	15
	Other Vehicle - From Same Direction/Rear End Collision	19	28	0	13	11
	Other Vehicle - One Left Turn/Entering At Angle	2	4	0	0	0
	Other Vehicle - One Right Turn/Entering At Angle	0	1	0	0	0
	Other Vehicle - One Stopped/Entering At Angle	1	0	0	0	0
	Other Vehicle - One Vehicle/Making A U-Turn	0	2	0	0	0
	Other Vehicle - One Vehicle/Stopped Traffic	0	0	0	0	1
	Overturn/Rollover	3	5	0	5	0
	Parked Vehicle	0	1	0	0	0
	Pedestrian	1	0	0	1	0
	% Other Vehicle - From Same Direction	35%	43%	100%	33%	24%
By Lighting Conditions	% Other Vehicle - From Opposite Direction	15%	18%	0%	34%	33%
	% Other Vehicle - One Left Turn/Entering At Angle	30%	17%	0%	12%	11%
	Day	81	145	0	56	31
	Dawn/Dusk	2	15	2	1	3
	Dark	48	41	2	28	9
By Severity	Invalid Code/Not Specified	9	14	0	4	2
	% Day	58%	67%	0%	63%	69%
	PDO	86	144	4	50	27
	Injury	53	71	0	38	18
	Fatality	1	0	0	1	0
By Cause	% Property Damage Only	61%	67%	100%	56%	60%
	% Injury	38%	33%	0%	43%	40%
	Alcohol/Drug Involved	7	5	0	7	2
	Avoid No Contact - Other	8	15	0	3	3
	Defective Steering	1	0	0	2	0
	Defective Tires	2	2	0	1	0
	Disregarded Traffic Signal	0	1	0	0	0
	Driver Inattention	29	36	0	20	14
	Driverless Moving Vehicle	1	0	0	0	0
	Drove Left Of Center	0	3	0	0	1
	Excessive Speed	13	19	1	7	0
	Failed to Yield Right of Way	5	22	1	1	2
	Following Too Closely	13	35	0	21	13
	Improper Backing	17	21	1	10	4
	Inadequate Brakes	1	0	0	0	0
	Missing Data	13	16	1	2	1
	None	6	13	0	4	1
	Other - No Driver Error	6	12	0	6	1
	Passed Stop Sign	0	1	0	0	0
	Pedestrian Error	2	0	0	0	0
	Road Defect	1	1	0	0	0
	Vehicle Skidded Before Brake	1	1	0	0	0
	% Driver Inattention	21%	17%	0%	22%	31%
	% Following Too Closely	9%	16%	0%	24%	29%
	% Failed to Yield Right of Way	12%	10%	25%	11%	9%
	% Excessive Speed	9%	9%	25%	8%	0%

From the table shown above, the following observations are made:

- I-25 Corridor:
 - The three most common classifications of vehicle crashes are observed to be Other Vehicle - From Same Direction, Other Vehicle – From Opposite Direction, and Other Vehicle – One Left Turn/Entering At Angle.
 - For the years 2014 to 2018, 493 crashes were reported.
 - A majority of crashes for the intersections occurred during the daylight hours totaling 51% of crashes.
 - Two fatal crashes were reported from 2014 to 2018, and 31% remaining crashes reported involved injuries.
 - A fatal crash was reported on 9/20/2015 at approximately 3:47 AM as an Other Vehicle - From Opposite Direction/All Others crash with a top contributing factor of Alcohol/Drug Involved in Dark – Lighted conditions.
 - A fatal crash was reported on 7/7/2018 at approximately 3:13 AM as a Pedestrian crash with a top contributing factor of Alcohol/Drug Involved in Dark – Lighted conditions.
 - The most common causes of crashes are observed to be Driver Inattention, Following Too Closely, Failed to Yield Right of Way, and Excessive Speed.
 - It is observed that I-25 at Gibson Blvd had the most occurrences of crashes totaling 44%.

I-25 ON/OFF RAMP S

Table 20 below summarizes crashes occurring at the I-25 On/Off Ramps throughout the project area.

Table 20: I-25 On/ Off Ramp Crash Summary

Crash Summary		Interstate-25 On/Off Ramps				
		I-25 SB Off Ramp at Gibson Blvd	I-25 NB Off Ramp at Gibson Blvd	I-25 NB On Ramp at Gibson Blvd	I-25 SB Off Ramp at Sunport Blvd	I-25 NB Off Ramp at Sunport Blvd
Total Crashes		14	13	6	1	5
By Year	2014	0	1	0	0	0
	2015	5	2	2	0	1
	2016	2	3	1	0	1
	2017	4	4	2	0	1
	2018	3	3	1	1	2
By Type	Fixed Object	1	3	2	0	0
	Other Vehicle - From Opposite Direction/All Others	8	6	3	0	3
	Other Vehicle - From Same Direction/All Others	3	1	1	0	1
	Other Vehicle - From Same Direction/Rear End Collision	2	3	0	1	1
	% Other Vehicle - From Same Direction	57%	46%	50%	0%	60%
	% Other Vehicle - From Opposite Direction	14%	23%	0%	100%	20%
By Lighting Conditions	% Other Vehicle - One Left Turn/Entering At Angle	7%	23%	33%	0%	0%
	Day	10	8	5	1	3
	Dark	3	5	1	0	1
	Invalid Code/Not Specified	1	0	0	0	1
	% Day	71%	62%	83%	100%	60%
By Severity	PDO	1200%	11	6	1	3
	Injury	2	2	0	0	2
	% Property Damage Only	86%	85%	100%	100%	60%
	% Injury	14%	15%	0%	0%	40%
By Cause	Alcohol/Drug Involved	0	1	0	1	0
	Avoid No Contact - Other	2	1	0	0	0
	Defective Steering	0	0	1	0	0
	Disregarded Traffic Signal	1	0	0	0	0
	Driver Inattention	4	2	2	0	0
	Excessive Speed	2	2	0	0	0
	Following Too Closely	2	2	1	0	1
	Improper Backing	0	1	0	0	1
	Missing Data	1	0	1	0	2
	Other - No Driver Error	0	0	1	0	1
	Road Defect	0	1	0	0	0
	Speed Too Fast for Conditions	2	2	0	0	0
	Vehicle Skidded Before Brake	0	1	0	0	0
	% Driver Inattention	29%	15%	33%	0%	0%
	% Following Too Closely	14%	15%	17%	0%	20%
	% Failed to Yield Right of Way	14%	15%	0%	0%	0%
	% Excessive Speed	14%	15%	0%	0%	0%

From the table shown above, the following observations are made:

- I-25 On/ Off Ramps:
 - The three most common classifications of vehicle crashes are observed to be Other Vehicle - From Same Direction, Other Vehicle – From Opposite Direction, and Other Vehicle – Both Going Straight/Entering At Angle.
 - For the years 2014 to 2018, 186 crashes were reported.
 - A majority of crashes for the intersections occurred during the daylight hours with 68% of crashes.
 - No fatal crashes were reported from 2014 to 2018, however, 23% remaining crashes reported involved injuries.
 - The most common causes of crashes are observed to be Driver Inattention, Following Too Closely, Failed to Yield Right of Way, and Excessive Speed.
 - It is observed that I-25 SB off-ramp at Gibson Blvd had the most occurrences of crashes totaling 56%.

SUNPORT BLVD & GIRARD BLVD

Table 21 below summarizes crashes occurring along Gibson Blvd for the project area.

Table 21: Sunport Blvd & Girard Blvd Crash Summary

Crash Summary		Sunport Blvd & Girard Blvd				
		Woodward Rd Sw & 2nd St	Woodward Rd Between 2nd St & Broadway Blvd	Woodward Rd & Broadway Blvd	Sunport Blvd & I-25	Girard Blvd & Mile Rd
Total Crashes		25	8	16	26	1
By Year	2014	6	1	0	2	1
	2015	3	1	2	5	0
	2016	7	1	7	8	0
	2017	4	3	5	5	0
	2018	5	2	2	6	0
By Type	Fixed Object	6	2	2	12	0
	Other Vehicle - All Others/Entering At Angle	2	0	0	0	0
	Other Vehicle - From Opposite Direction/All Others	9	4	4	10	1
	Other Vehicle - From Same Direction/All Others	2	1	2	1	0
	Other Vehicle - From Same Direction/Rear End Collision	2	1	3	0	0
	Other Vehicle - One Left Turn/Entering At Angle	3	0	2	1	0
	Other Vehicle - One Stopped/Entering At Angle	0	0	1	0	0
	Other Vehicle - One Vehicle/Making A U-Turn	1	0	0	0	0
	Overturn/Rollover	0	0	2	2	0
	% Other Vehicle - From Same Direction	36%	50%	25%	38%	100%
	% Other Vehicle - From Opposite Direction	24%	25%	13%	46%	0%
	% Other Vehicle - One Left Turn/Entering At Angle	8%	13%	13%	4%	0%
By Lighting Conditions	Day	15	5	12	11	0
	Dawn/Dusk	1	0	0	3	0
	Dark	8	1	4	11	0
	Invalid Code/Not Specified	1	2	0	1	1
	% Day	60%	63%	75%	42%	0%
By Severity	PDO	20	5	10	21	1
	Injury	5	3	6	5	0
	% Property Damage Only	80%	63%	63%	81%	100%
	% Injury	20%	38%	38%	19%	0%
By Cause	Avoid No Contact - Other	0	0	2	0	0
	Disregarded Traffic Signal	0	0	1	0	0
	Driver Inattention	6	3	6	2	0
	Driverless Moving Vehicle	1	0	0	0	0
	Excessive Speed	3	0	1	6	0
	Failed to Yield Right of Way	4	0	0	2	0
	Following Too Closely	4	2	2	0	0
	Improper Backing	2	1	2	7	0
	Inadequate Brakes	2	0	0	1	0
	Missing Data	0	2	0	2	1
	Other - No Driver Error	1	0	1	1	0
	Passed Stop Sign	1	0	0	2	0
	Speed Too Fast for Conditions	1	0	1	3	0
	% Driver Inattention	24%	38%	38%	8%	0%
	% Following Too Closely	8%	13%	13%	27%	0%
	% Failed to Yield Right of Way	12%	0%	6%	23%	0%
	% Excessive Speed	16%	25%	13%	0%	0%

From the table shown above, the following observations are made:

- Sunport Blvd & Girard Blvd:
 - The three most common classifications of vehicle crashes are observed to be Other Vehicle - From Opposite Direction/All Others, Fixed Object, and Other Vehicle - From Same Direction/All Others.
 - For the years 2014 to 2018, 76 crashes were reported.
 - A majority of crashes for the intersections occurred during the daylight hours with 48% of crashes.
 - No fatal crashes were reported from 2014 to 2018, however, 23% remaining crashes reported involved injuries.
 - The most common causes of crashes are observed to be Driver Inattention, Following Too Closely, Failed to Yield Right of Way, and Excessive Speed.
 - It is observed that Sunport Blvd & I-25 had the most occurrences of crashes totaling 34%.

INTERSECTION CRASH RATES

Crash Rates were calculated using methods recommended by the FHWA. The scaling factor for Million Entering Vehicles (MEV) was calculated by dividing the sum of vehicles per day per year by 1,000,000. Using the MEV, the intersection crash rates were calculated by taking the number of crashes and dividing it by the MEV. Table 22 below summarizes the intersection crash rates using the 2018 MEV. Table 23 shows the intersection crash rates calculated using the yearly MEV for each intersection.

Table 22: 2018 Intersection Crash Rates

	Million Entering Vehilces (MEV)	Intersection Crash Rate (Crashes/MEV)
Gibson Blvd & Broadway Blvd	37.45265	1.789
Gibson Blvd at I-25	58.109825	0.034
Gibson Blvd & University Blvd	72.658725	2.615
Gibson Blvd & Yale Blvd	66.96655	2.987
Gibson Blvd & Girard Blvd	49.685625	1.288
Gibson Blvd & Carlisle Blvd	60.91485	0.985
Gibson & Maxwell St	60.91485	0.673
Gibson Blvd & Quincy St	60.91485	0.082
Gibson Blvd & Truman St	60.91485	1.018
Gibson Blvd & San Mateo Blvd	60.91485	1.280
Woodward Rd & 2nd St	18.386875	1.360
Woodward Rd & Broadway Blvd	43.736125	0.366
Sunport Blvd & I-25	20.737475	1.254
Girard Blvd & Mile Rd	8.630425	0.116



Table 23: Yearly Intersection Crash Rates

	Million Entering Vehicles (MEV)					Intersection Crash Rate (Crashes/MEV)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	Average
Gibson Blvd & Broadway Blvd	6.247	6.753	6.800	6.738	7.491	1.921	1.333	2.206	2.078	2.270	1.961
Gibson Blvd at I-25	11.068	10.141	10.178	10.002	11.622	0.000	0.000	0.098	0.000	0.086	0.037
Gibson Blvd & University Blvd	13.977	14.077	13.341	13.121	14.532	2.146	2.771	2.698	3.277	2.890	2.757
Gibson Blvd & Yale Blvd	13.977	14.077	13.341	13.084	13.393	2.290	3.126	2.773	2.675	3.883	2.949
Gibson Blvd & Girard Blvd	11.551	13.113	13.153	12.935	9.937	0.866	0.991	0.988	0.928	1.610	1.077
Gibson Blvd & Carlisle Blvd	11.218	13.113	13.801	12.935	12.183	1.070	1.068	1.014	0.541	1.067	0.952
Gibson & Maxwell St	10.720	10.797	10.829	11.935	12.183	0.373	0.741	0.739	1.005	0.739	0.719
Gibson Blvd & Quincy St	10.720	10.797	10.829	11.935	12.183	0.093	0.000	0.092	0.000	0.246	0.086
Gibson Blvd & Truman St	10.720	10.797	10.829	11.935	12.183	0.746	1.204	1.385	1.508	0.657	1.100
Gibson Blvd & San Mateo Blvd	10.720	10.797	10.829	8.419	12.183	1.213	1.760	1.847	1.069	1.395	1.457
Woodward Rd & 2nd St	2.666	2.716	3.136	3.149	3.677	2.250	1.105	0.957	0.953	0.816	1.216
Woodward Rd & Broadway Blvd	4.011	4.008	4.036	3.999	8.747	0.000	0.499	0.496	0.500	0.229	0.345
Sunport Blvd & I-25	3.780	3.807	3.917	4.031	4.147	0.529	1.313	1.276	1.240	1.206	1.113
Girard Blvd & Mile Rd	1.187	1.178	1.182	1.879	1.726	0.842	0.000	0.000	0.000	0.000	0.168

SUMMARY OF RECOMMENDATIONS

To be determined.

