

# PROJECT ORION TRAFFIC IMPACT STUDY

Draft Report, Phase 1 + 2

November 2020

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# Project Orion

## Traffic Impact Study

DRAFT Report

November 2020

Prepared for:  
Bohannon Huston, Inc.

Prepared By:



## EXECUTIVE SUMMARY

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.

The following, reproduced from the end of this report, provides a summary of conclusions and recommendations:

## SUMMARY OF CONCLUSIONS

### SITE

- Two phases of development are planned. Phase 1 is to consist of an assembly facility, laboratory building, and ancillary developments accommodating about 2,575 employees. Phase 1 is planned for construction starting in 2021 and be complete and operating at full capacity in 2025. Phase 2 has no specific development timeline, but is anticipated for construction once an understanding of Phase 1 operations are known. Phase 2 is to possibly consist of a 1M SF office building to be fully occupied by 2030. Based on approximately 2.7 employees per 1,000 SF of office space, a total of 2,700 employees are anticipated or a grand total of 5,275 employees for both site phases.
- The owners have identified the site to be operating 24-hour a day during the weekdays in three work shifts beginning at 6AM, 3PM, and 10PM. The owners have stated the work shifts are flexible to a certain extent, however, the shifts identified place the majority of employee traffic outside of the traditional peak-hours of the roadway.
- The site is to have multiple access points, either gated with a security check point to the main (visitor) parking area and truck access or via gate mechanism or other type system at the garage/parking facility areas.
- A single site access is planned off of Gibson Blvd east of Girard Blvd (and one off of Girard Blvd) to a parking facility of approximately 220 spaces. Only a limited number of vehicles are planned to enter at this location.
- The majority of site-generated trips will be to and from the parking facilities located on the west side of Girard, south of Miles Road. A total of 5 access points to the parking area are planned.
- A secured truck access is planned off of Girard and a gated emergency access on the east side of the property to/from Gibson is also proposed.

### TRIP GENERATION

- Phase 1 is anticipated to generate a total of 7,493 trips of which 1,030 trips are anticipated to occur via alternative travel mode and/or via TDM strategies that have not been determined at this time. Peak-hour of trips entering the site are anticipated to occur prior to the 6AM day shift start time, equal to 1,160 trips. About 108 trips are estimated during the typical peak-hour of the roadway. In the evening the 680 employee-based trips are to arrive in the 2PM hour while 1,160 employee-based trips are to exit during the 3PM hour. During the identified 4PM peak-hour of the roadway, only 239 total trip ends are anticipated to be generated by the site and placed onto the adjacent road network

- Phase 2 is to generate an estimated 6,544 vehicle trip ends following the same shift schedule as Phase 1. Being an office building, additional employee trips are anticipated during the traditional peak periods.
- Overall, the entire site when full developed and operational is projected to generate a total of 13,010 vehicle trip ends per day. Due to the shift times planned, the peak-hour of the facility is to begin at 5AM and 3PM, outside of the traditional roadway peak hours. During the site's 5AM peak, 1,821 trip ends (1,728 entering, 93 exiting) are anticipated and during the site's 3PM peak, 2,396 trips are estimated (386 in, 2,010 out). During the peak-hours of the roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), about 600 morning trips (203 entering, 388 exiting) and 725 evening trips (249 entering, 476 exiting) are estimated.
- As analyzed, a 20% reduction to employee trips was applied to account for alternative travel modes (transit, bike, pedestrian, and travel demand management options) that are in-place or could be enhanced. At this time, TDM strategies are being considered by the site owners.

#### TRIP DISTRIBUTION AND ASSIGNMENT

- Site trips were distributed onto the adjacent roadway network based on standard gravity model methodology using socio-economic data originally obtained from MRCOG. The distribution was estimated from population estimates within the 25 subarea Albuquerque Metropolitan Planning Area.
- Vehicles were assigned to site driveways and routes based on logical travel routes, site driveways, engineering judgement, and limited travel between the site and I-25 south using the local roadway network and the Sunport corridor through the AIS.

#### TRAFFIC VOLUMES

- Intersection turning movement counts and freeway volumes were not collected for this study, but relied upon previously collected counts, count data obtained from other traffic studies, and data provided by MRCOG.
- Count data was adjusted to a 2019 base-year condition and increased by 1% to account for 1 year of ambient traffic growth.
- Count data available for only peak hour time periods were adjusted/expanded to 15-minute intervals outside of the peak hour based on 24-hour count data on Gibson Blvd provided by MRCOG.
- To estimate background traffic conditions for the analysis years, existing traffic volumes were increased by 1% per year (based on MRCOG model forecast volumes between 2014 and 2040) and added to the planned EUL development traffic volumes. Along the Sunport corridor, volumes were estimated based on 2020 forecast volumes with the extension of Sunport Blvd to the west and increased by 1% per year.
- 2025 Total traffic added Phase 1 site trips to the 2025 Background volumes
- 2030 Background traffic included Phase 1 site trips.
- 2040 Horizon Year estimates included Phase 1 and Phase 2 site trips.

#### INTERSECTION CAPACITY ANALYSIS

All intersection analyses were performed using the Vistro software package. Analyses were conducted in 15-minute intervals from 5:00 to 8:00AM and from 3:00 to 6:00PM. Mitigation analyses were performed allowing the software to adjust the green splits and offsets, no attempt to modify the cycle lengths or hand-adjust the green splits to better accommodate the left-turn or side street movements were made. Results of the analyses indicated (excluding site driveways):



Analysis Scenario	Time Period	Number of Intersection Movements Operating at:			Total Movements
		LOS E	LOS F	Total LOS E/F	
2020 Existing	AM Period	152	5	157	1320
	PM Period	127	41	168	
2025 Background	AM Period	216	32	248	1548
	PM Period	185	63	248	
2025 Total	AM Period	217	27	244	1548
	PM Period	182	73	255	
2025 Mitigation	AM Period	213	27	240	1548
	PM Period	173	73	246	
2030 Background	AM Period	228	52	280	1681
	PM Period	182	111	293	
2030 Total	AM Period	240	48	288	1681
	PM Period	188	120	308	
2040 Horizon	AM Period	234	74	308	1681
	PM Period	185	141	326	

Note: Total number of movements analyzed in the 3 AM and 3 PM periods vary per analysis scenario based on intersection/traffic control changes. Movements exclude site driveway locations

#### GIBSON BOULEVARD ROADWAY CAPACITY ANALYSIS

Analysis of Gibson Boulevard and other roadway segments is typically based on the intersections ability to accommodate the traffic movements at the signalized intersections, typically the capacity constraint along a corridor. To estimate the capacity of Gibson Boulevard, a simplified method was utilized, based on an FHWA article using the speed limit of a roadway, percent green time afforded to the through traffic, and the number of lanes. The analysis was conducted for the eastbound Gibson Blvd roadway segment between University and Yale (highest volume condition) assuming peak-hour traffic is 8% of daily trips. Results indicate the following:

- Analysis indicates eastbound Gibson through traffic is provided 56% of the effective green time within its 120 second cycle length.
- Gibson currently accommodates about 970 vphpl during the AM peak hour. Based on the FHWA table, this is slightly below the LOS E threshold of 982 vphpl. The performance of Gibson Blvd (intersection LOS shows LOS C) shows operational conditions better than the FHWA table indicates. This may be due, in part, to good signal progression along the corridor, minimizing the number of stops vehicles would typically be exposed to.
- The following table highlights the roadway conditions in the other traffic volume scenarios using the FHWA table. Results indicate an 8-lane Gibson Blvd facility could operate at LOS:

Roadway Segment (Eastbound)	Analysis Scenario	AM Peak-Hour Traffic Volume	Vehicles per Hour per Lane	FHWA Estimate of LOS E Upper Threshold Value, 6-lanes (vphpl)	Percent Exceeding LOS E as a 6-Lane Facility	FHWA LOS Estimate Under an 8-Lane Gibson Blvd cross-section
Gibson Bet. University and Yale	2020 Existing	2908	969	982	-1.3%	B
	2025 No Build	3451	1150	982	17.1%	B
	2025 Build	3500	1167	982	18.8%	B
	2030 No Build	3655	1218	982	24.0%	B
	2030 Build	3703	1234	982	25.7%	B
	2040 Horizon	4039	1346	982	37.1%	B

Note: Under an 8-lane facility, vphpl increases as compared to a 6-lane facility

## I-25 FREEWAY ANALYSIS

Freeway volumes were analyzed assuming 2020 Existing volume conditions, grown at 1% per year plus the addition of the EUL site trips and the Project Orion trips. No attempt to adjust the volumes to match 2040 forecast volumes were attempted. Overall, 2020 volumes exceed 2040 forecast volumes at the Gibson Blvd locations. Therefore, the analysis conducted may overestimate capacity concerns on the freeway. The 2020 and 2025 analyses assume the existing freeway condition while the 2030 and 2040 scenarios assume the programmed facility. Results indicate the following:

- Under 2020 Existing Conditions, all freeway segments operate at LOS D or better conditions. However, notes identified within the HCS software for the AM peak period in the southbound direction states that the diverge capacity is less than the diverge demand at the off-ramp to eastbound Gibson Blvd and may result in off-ramp queue that affects mainline flow.
- In the 2025 Build scenario, segment operations obviously show deterioration, with more southbound segments and time periods showing LOS D conditions in the morning period while LOS D and E sections are noted in the AM and PM peak period in the northbound direction.
- Under the I-25 improved freeway design, the 2040 Horizon year analysis indicates only 1 time period and 1 segment operating at LOS D (northbound on-ramp from Gibson Blvd) in the PM period while all other sections in the northbound and all segments in the southbound direction show LOS C or better conditions.
- Noting volume estimates used in the analysis may over-estimate volumes conditions on the mainline and exiting/entering the on/off ramps, the freeway design as analyzed is anticipated to operate in an acceptable manner through 2040.

## 2025 MITIGATION OPTIONS

Under Existing 2020 traffic volume conditions, some side-street approach movements and Gibson Blvd eastbound/westbound left-turn movements show LOS E/F conditions. Most of the locations have low V/C ratios indicating the elevated delays associated with these movements are due to the longer cycle lengths and the movement demand volumes. The only signalized movements showing poor operation and high traffic volumes are at the northbound approach from Truman and Carlisle, the two approaches serving the Kirtland Airforce Base.

By 2025 with the addition of the EUL site traffic, additional movements begin to along Gibson and at San Mateo. With Phase 1 site traffic added, more movements show LOS E/F operation. To help mitigation conditions, the following improvements were identified that could simply be conducted:

- Utilize the unused left-turn pavement on the northbound Girard Blvd approach to Gibson Blvd to accommodate dual left-turn lanes. A signal phasing change to protected only is recommended.
- Perform corridor signal timing optimization to better accommodate traffic demand in the AM and PM peak hours.

Outside of the above changes, the ability to add capacity to the Gibson Blvd corridor is not possible due to ROW or physical constraints. Repeat motorists that perceive excessive and/or repetitive travel delays may look to alternative travel routes. Site-related vehicles originating or destined to/from I-25 south may choose to travel the Sunport Blvd corridor to by-pass the conditions along Gibson. No simple mitigation options are offered to alleviate the poor conditions along Gibson. It is recommended that a comprehensive analysis of the Gibson Blvd corridor be conducted to determine the best design options to accommodate vehicle demand.

## 2030 MITIGATION OPTIONS

Without improvement to the Gibson Blvd corridor, site and non-site traffic may use the Sunport Blvd/Girard Blvd corridor to by-pass bottleneck locations along Gibson Blvd. Additional concerns east of Girard Blvd, including the intersections with the EUL site and eastbound left-turn movements at Sam Mateo Blvd in the afternoon peak period exist.

To mitigate conditions associated with the site, potential considerations to utilize parking facilities outside of the study area or to improve access to/from the Sunport Blvd corridor are being considered. A potential ingress improvement considers adding a roadway from Sunport Blvd, prior to the exiting toward the AIS parking garage, following the westbound/southbound AIS Loop roadway, and connecting to Girard Blvd or straight into the site's parking garage. Significant study will be required to determine the feasibility and the ability to add and construct to design standards. As an alternative option, it may be more beneficial and cost effective to improve the existing local street network to accommodate increased site traffic.

## **RECOMMENDATIONS**

The following recommendations are made based on the analysis and conclusions of this report:

### Review Agencies

- It is recommended that a comprehensive Gibson Boulevard corridor study be developed to identify potential alternatives that could be implemented to improve the operations of the corridor. At this time, AM and PM peak period conditions appear to be operating near acceptable threshold levels. Future year conditions that include ambient traffic growth and new site development along Gibson Blvd could place demand volumes above capacity levels by 2025. Improvements to alleviate one issue by one developer (say westbound left-turn movements into the Orion site at Girard Blvd) via widening or signal phasing changes, could have significant impacts to other intersections along corridor. The ability to provide options that can be vetted by stakeholders or cost-shared through some type of mechanism would be beneficial. As part of the corridor study, analysis of Sunport Blvd options to accommodate additional traffic or to act as a Gibson Blvd reliever, should be included.

### Other Agency Stakeholders

- To help reduce the number of vehicle trips on Gibson Blvd, a review of bike, pedestrian, transit or other ride-share options is recommended.
- ABQ Ride is currently evaluating options and costs of adding additional service to the site as current transit schedules do not provide service to allow arrival for the 6 AM shift.

### Site Owners

- It is recommended that the site consider staffing and work shift changes that would benefit site operations as well as roadway conditions.
- It is recommended that the site consider TDM strategies that could be implemented to reduce the number of employees that travel to and from the site in single-occupancy vehicles, such as cash incentives for carpooling, subsidized transit passes, and guaranteed rides home.
- It is recommended that site access be reviewed for potential restrictions that would benefit site traffic in selection of their travel route to and from the site.
- It is recommended that the security check point at the Gibson entrance be considered for relocation further to the south, eliminating potential weaving/blockage conditions that may arise due to the limited distance between the check point and the merging of traffic streams south of the Gibson curb line.

- It is recommended that the northbound Girard Blvd left-turn lane pavement markings be removed and a second left-turn lane be incorporated to mitigate long delays associated with this movement in Phase 1. Modifications may require signal equipment improvements.
- It is recommended that the site participate in the Gibson Blvd corridor study as the site is anticipated to generate a significant amount of vehicles trips onto a roadway that is near capacity.

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Appendix B:	Volume Development Methodologies & Forecast Data
Appendix C:	Signal Timing Data
Appendix D:	Vistro Analysis Output

Draft

## 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, 6<sup>th</sup> 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. Phase 2 of the development is being considered for scale by the client, dependent upon future considerations, consisting of 1 to 3 new office buildings of 1M SF each. For the purposes of this report, Phase 2 is to consist of a single office building for completion in 2030.

## SITE ACCESS

Access to the site is planned from multiple driveway locations located on Gibson Blvd (1), 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 and west via Gibson Blvd and from the west via southbound travel from the Yale/Gibson Blvd intersection to access Alamo Avenue. 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. 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. It is understood that entering traffic utilizing the airport circulation roadway is undesirable and will be discouraged. A gated emergency access is planned to/from Gibson located near the east property line.



Site Location



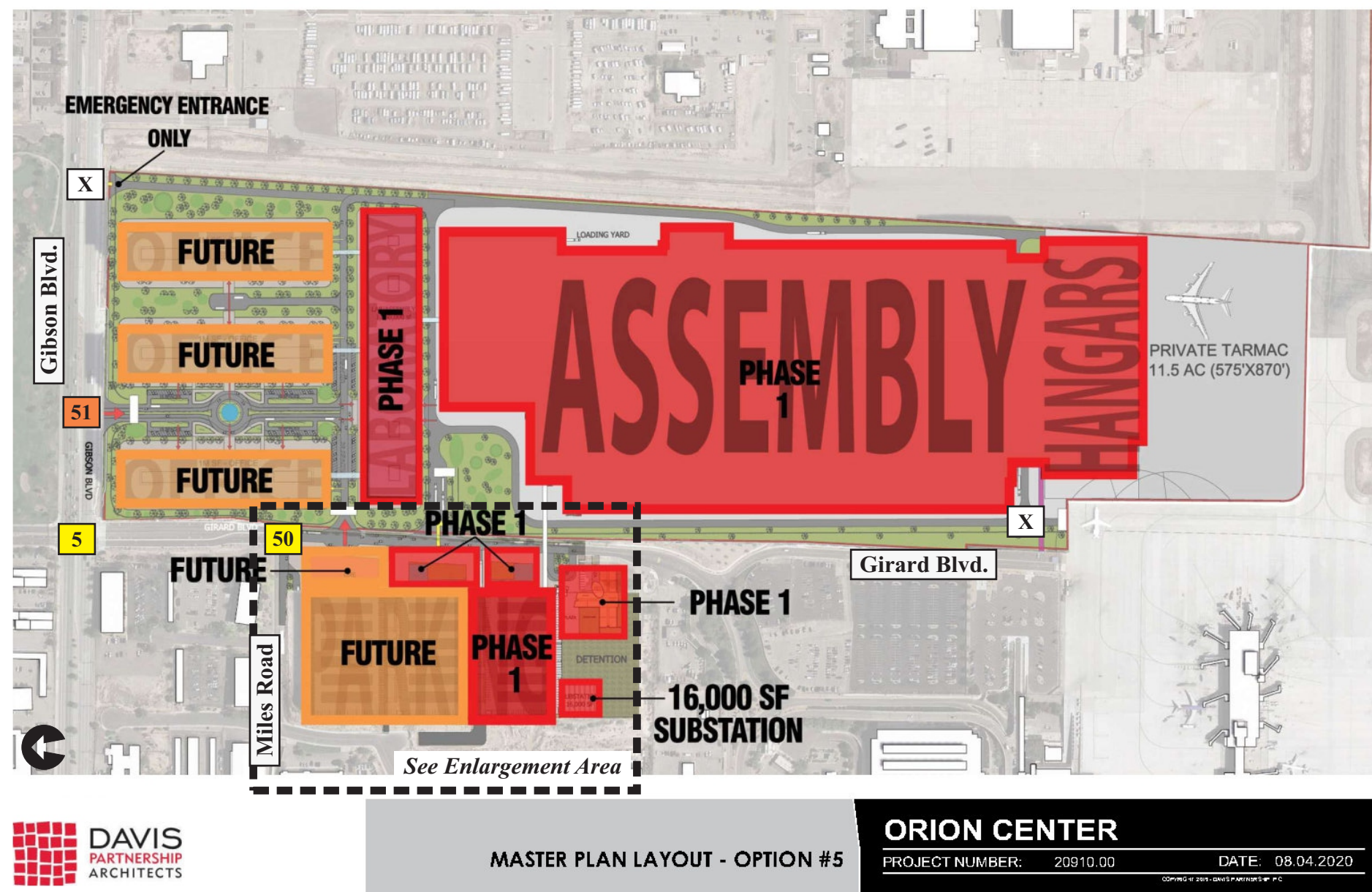
Enlargement



Not to scale

*Project Orion - TIA*



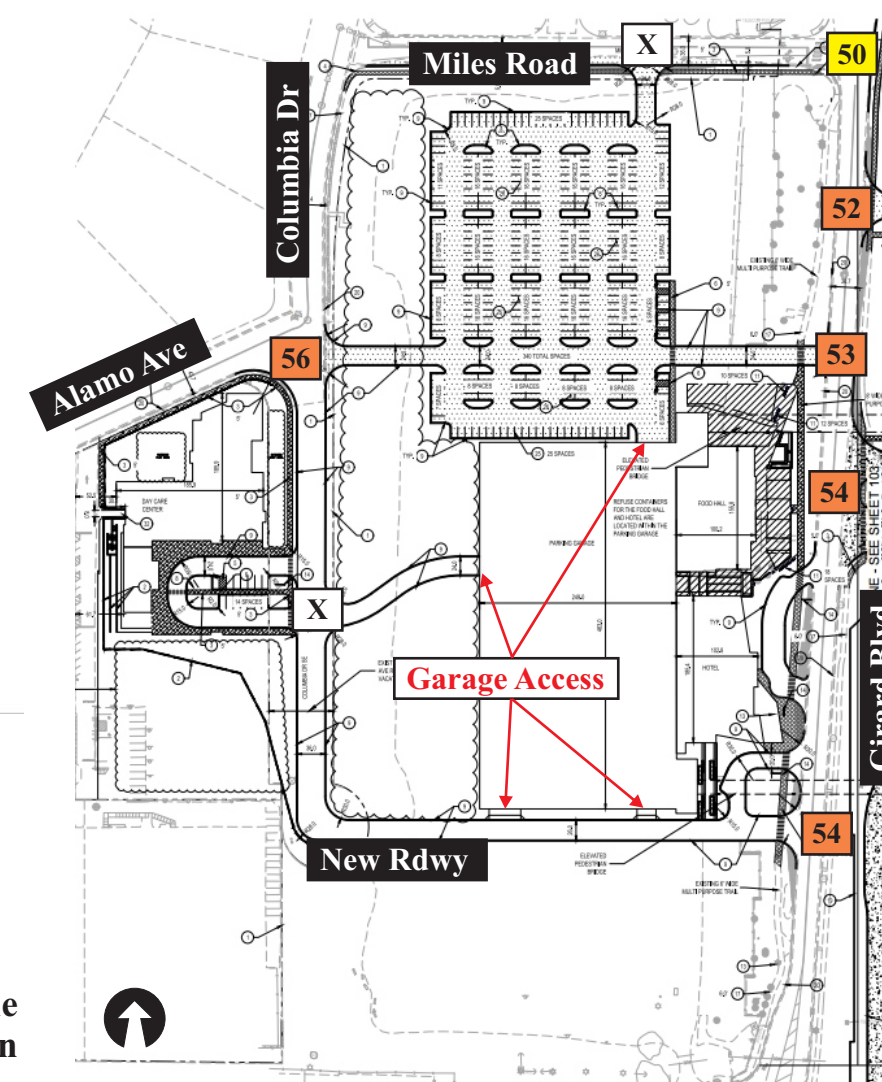


Conceptual Site Layout Plan

Notes:

- X Existing Intersection Designation Number
- X Site Driveway Designation Number (analyzed in report)
- X Site Driveway (not analyzed in report)

Enlargement of the  
Garage Access Plan



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 & 2<sup>nd</sup> 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 limited access 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. The Albuquerque/Bernalillo County (ABC) Comprehensive Plan designates this roadway as a commuter roadway. The ABC *Development Process Manual*, Section 7-3 (C) (3) states: "Commuter corridors are intended for long-distance trips across town by automobile, including limited-access streets, and development along



Commuter Corridors should be more auto-orientated". A goal of this corridor is to maintain a level of service (LOS) that provides progression and serves traffic with minimal delay.

**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. The City has indicated improvements through AIS will require access control improvements reducing the pedestrian conflict points and increasing the speed limit. The road alignment should be improved to provide efficient operation with minimal access points.

**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. The south leg of Carlisle's intersection with Gibson Blvd (as well as the Truman Street/Gibson Blvd intersection) currently services the Kirtland Air Force Base (AFB) gates only.

**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.

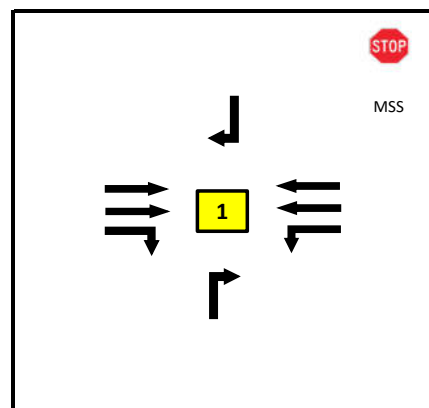
## INTERSECTIONS

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

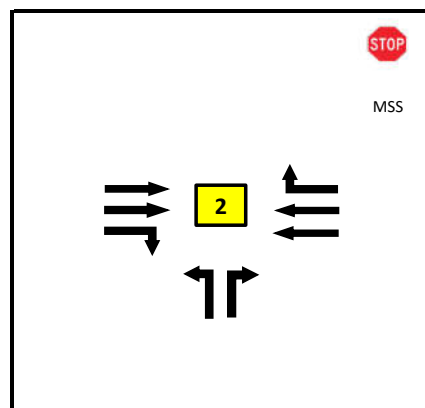
(2:00 to 6:30 PM). Most intersections consist of protected/permitted left turns with a few exceptions. Right turn overlaps are also hardwired at several of the intersections.

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

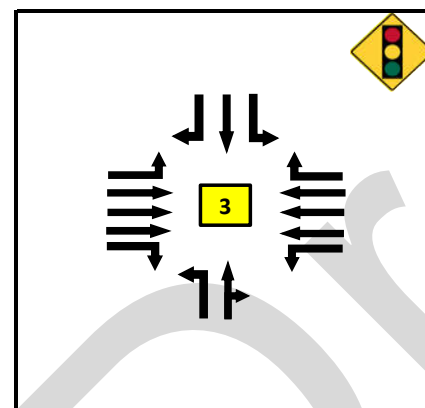
Location	Existing Traffic		EB/WB Lefts	NB/SB Lefts	Location	Existing Traffic		EB/WB Lefts	NB/SB Lefts
	Control	Detection				Control	Detection		
Gibson & Interchange (SB)	MSS	None	--	--	Gibson & Truman	Signal	Loops	P/P, Perm	Perm
Gibson & Interchange (NB)	MSS	None	--	--	Gibson & San Mateo	Signal	Loops	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	--	--					



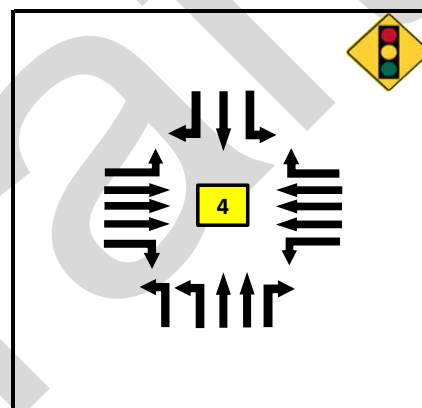
Gibson and I-25 SB Ramps



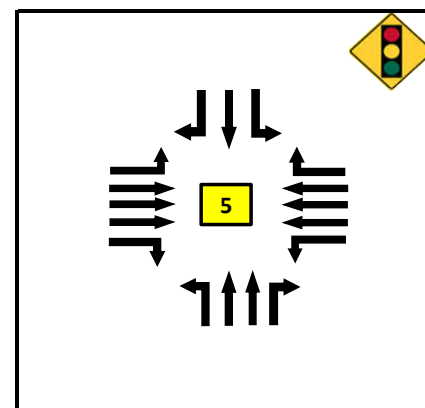
Gibson and I-25 NB Ramps



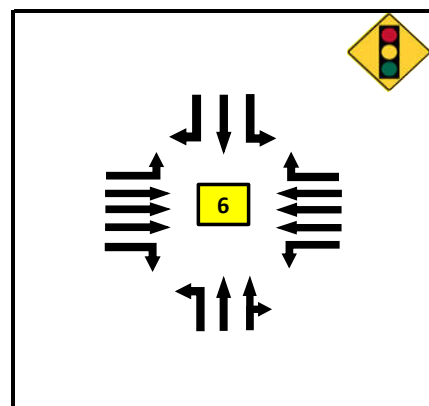
Gibson and University



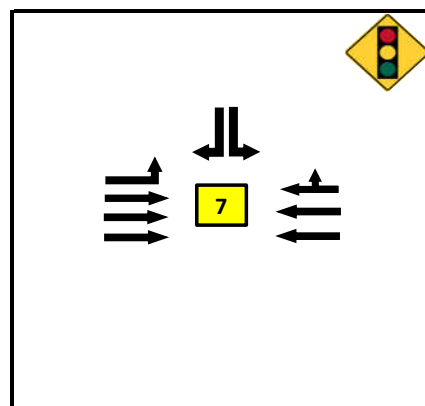
Gibson and Yale



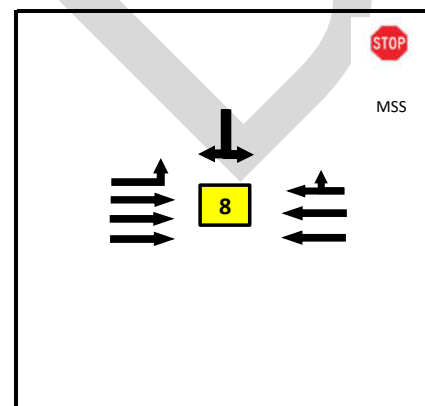
Gibson and Girard



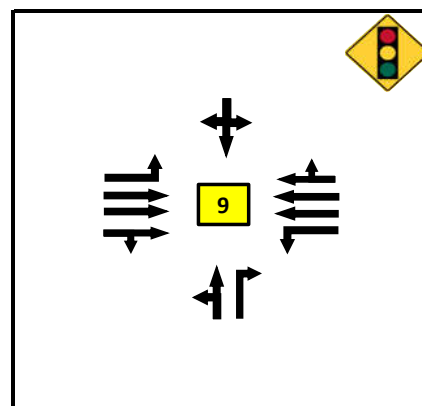
Gibson and Carlisle\*



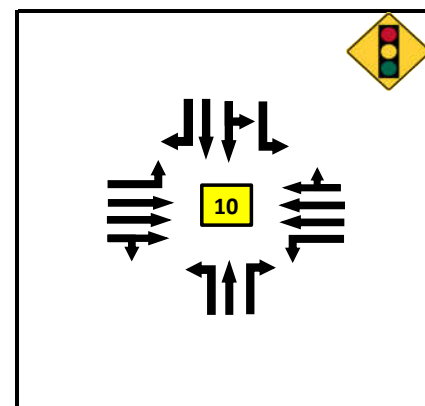
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman\*



Gibson and San Mateo

**LEGEND:**  
 Minor Street STOP Control  
 MSS

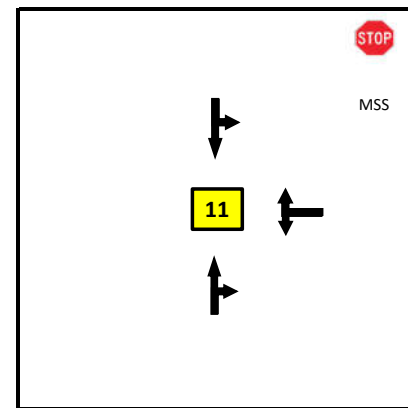
Note: " \* " the south leg of the intersection currently serves the AFB gates only.

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

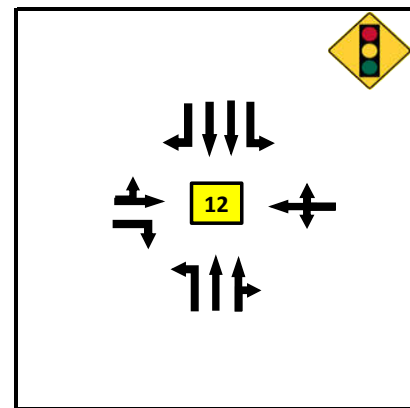
FIGURE 3



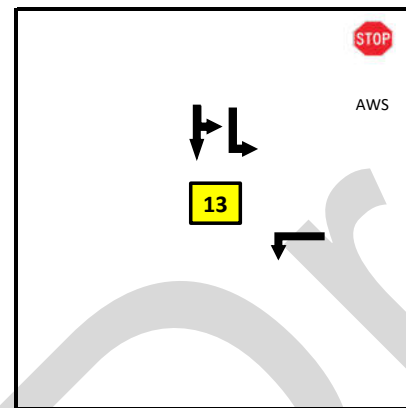




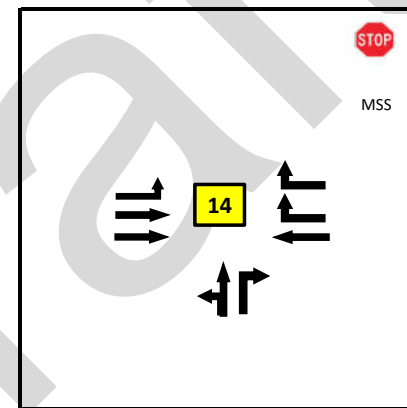
Woodward (Fut. Sunport Ext.) and 2nd Street



Woodward (Fut. Sunport Ext.) and Broadway



Sunport and I-25 SB Ramps



Sunport and I-25 NB Ramps

**LEGEND:**



(MMS) Minor Street STOP Control  
(AWS) All-Way STOP Control

MSS / AWS

## 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 path 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).

## ADJACENT DEVELOPMENT 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 for a conservative estimate of network operations.

## PROGRAMMED IMPROVEMENTS

Two major corridor projects are programmed for the study area that will impact traffic conditions within the study area. First, the Sunport Blvd Extension is a multi-agency project to be constructed prior to the 2025 horizon year. This 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 and will be assumed to be in-place for the 2025 horizon year.

The second project is the South I-25 Corridor project that will result in significant freeway changes between Broadway Blvd to I-40 as well as ramp intersections at Gibson. Because of the scale of this improvement project, multiple phases/projects are proposed that are listed as funded or programmed prior to 2025. For the purposes of this report, all improvements are assumed to be constructed and in-place for the 2030 horizon year. Graphics of the corridor improvements were obtained from the South I-25 Corridor Study Highway Improvement Plan Report. Improvement plans for both projects can be found in Appendix A.

## 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**

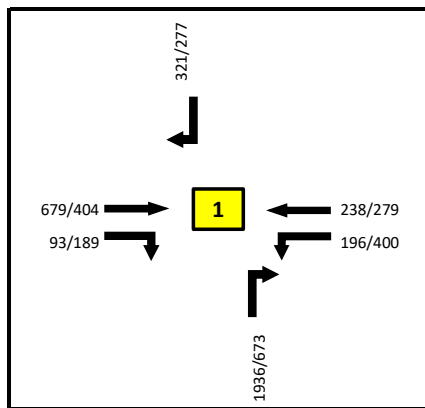
From historical count data provided by MRCOG (Gibson/Carlisle intersection, 5/29/2019), automobiles account for 98.7% of vehicle traffic along the Gibson corridor while trucks/buses account for approximately 1.3% of total vehicles in both the AM and PM peak hours. For the purposes of this study, heavy vehicle percentages along Gibson Blvd (also used for Sunport) were analyzed to be 2% in both AM and PM peak hours.

MRCOG also provided vehicle classification counts on the freeway. Data indicated 10% heavy trucks on the mainline and 3% on freeway on-off ramps. These percentages were used throughout the analysis process when analyzing the freeway operations.

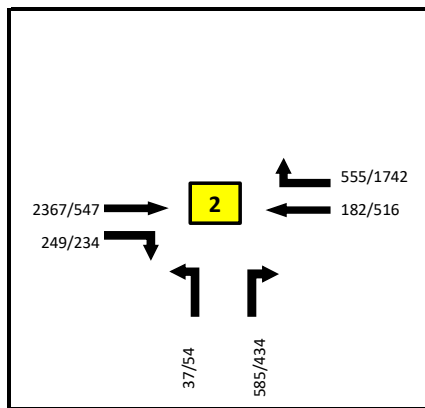
### **RIGHT TURN ON RED**

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).

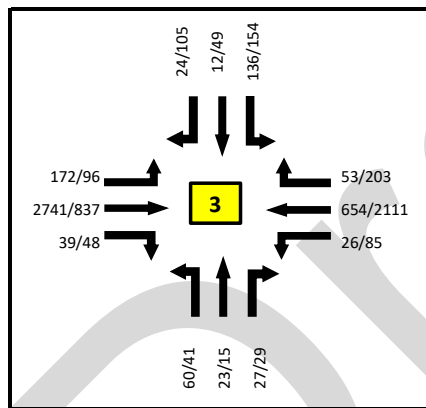




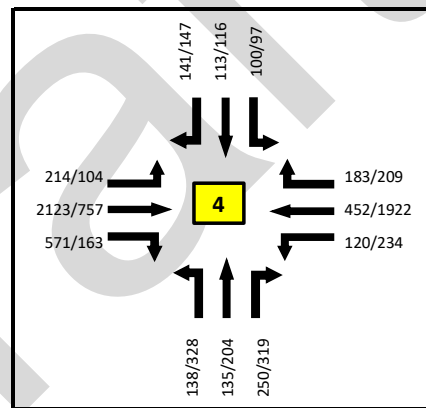
Gibson and I-25 SB Ramps



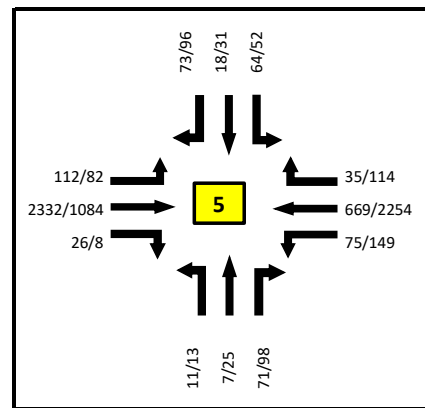
Gibson and I-25 NB Ramps



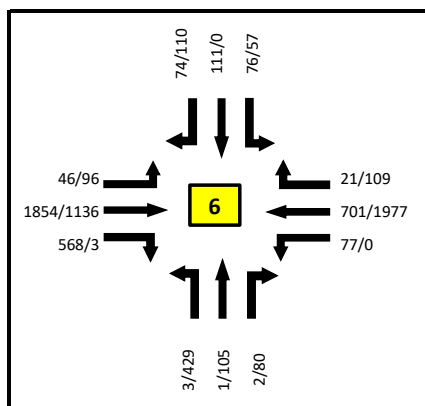
Gibson and University



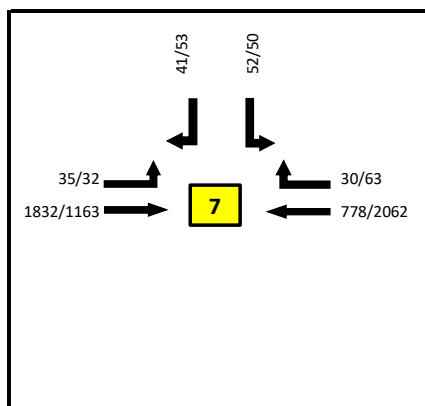
Gibson and Yale



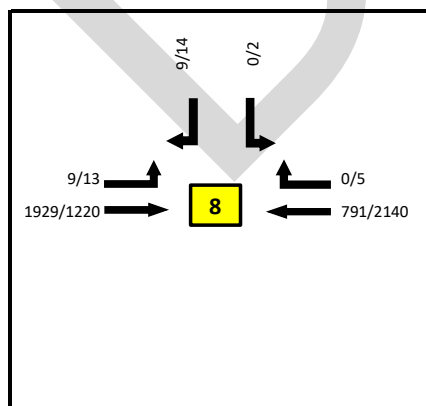
Gibson and Girard



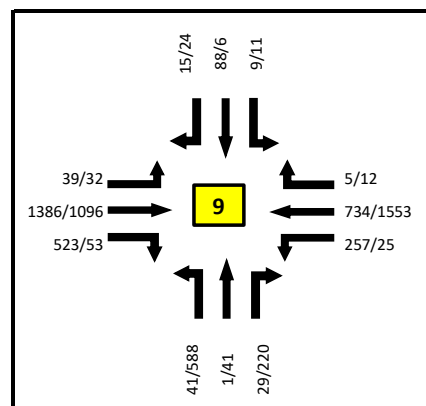
Gibson and Carlisle (see note 1)



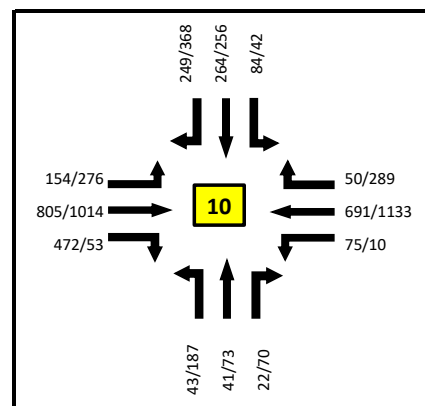
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman (see note 1)



Gibson and San Mateo

NOTES:  
1. The south leg currently serves the AFB gates only.

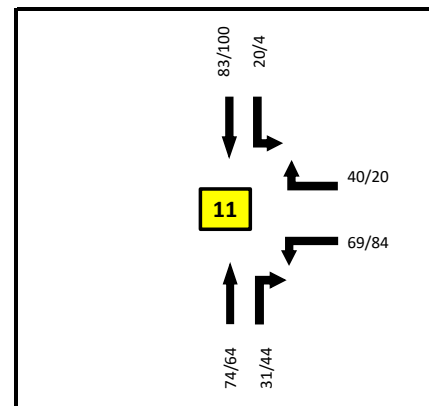


**2020 EXISTING PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

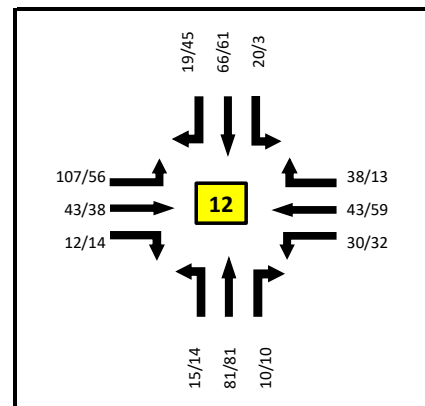
Legend  
AM / PM Volumes

**FIGURE 5**

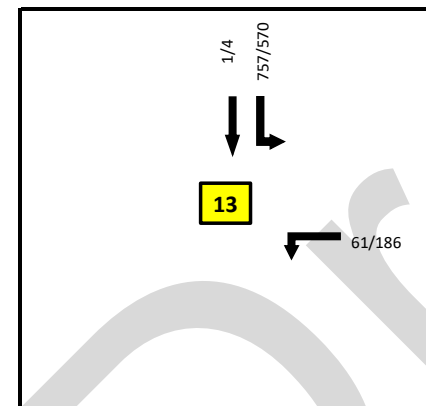




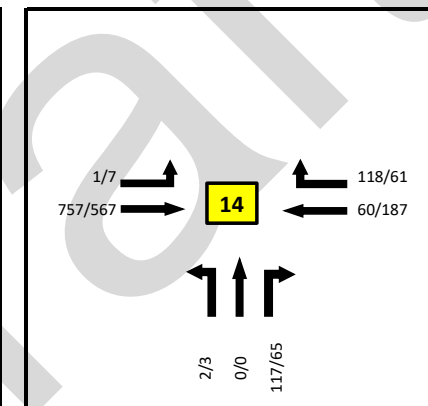
Woodward (Fut. Sunport Ext.) and 2nd Street



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*, 6<sup>th</sup> 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 95<sup>th</sup> 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, 6<sup>th</sup> 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 summarizes the intersection LOS conditions for the 2020 AM Peak-Hour Existing Conditions. Individual movements and the overall intersection operation, if applicable, are 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. For the purposes of analysis, off-peak periods (5:00AM to 6:30AM) were analyzed assuming the time of day traffic signal timing pattern for the morning peak.

## 2020 EXISTING INTERSECTION ANALYSIS RESULTS

Results indicate all signalized intersections in the AM peak-hour operate with overall LOS C or better condition. Although a handful of minor-street approach movements operate at LOS E, no movements operate at LOS F. When reviewing the higher delay side-street movements, most of the poor performing movements can be attributed to a long cycle length where side street vehicles must wait for the majority of the cycle length prior to receiving a green indication (low volume to capacity ratio) as opposed to high-volume conditions. At the STOP-controlled intersections, only the northbound to westbound left-turn movement at the Gibson/I-25 northbound off-ramp operates at LOS F. All other unsignalized movements operate in an acceptable manner. In the PM peak hour, all intersections operate with an overall LOS C or better condition except for the intersection of Gibson and Truman which operates at an overall LOS E/F during all four 15-minute periods. This is due to high northbound approach volumes (nearly 600 left-turn vehicles) leaving the AFB during this time period. The only other signalized movement showing LOS F operation is at the Gibson/Carlisle intersection, the other AFB exit to Gibson Blvd, where left-turn demand of 430 vehicles result in poor service. The only unsignalized approach movement operating at LOS F is at the Gibson/Quincy intersection where 2 vehicles at the southbound Quincy Street approach to Gibson and the 13 left-turn vehicles for the eastbound to northbound left-turn movement ( $V/C = 0.25$ ) operate poorly. 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	-	-	-	-	-	-	-	-	-
	7:00	-	-	-	B	-	-	-	-	-	-	-	-	-
	7:15	-	-	-	A	-	-	-	-	-	-	-	-	-
	7:30	-	-	-	A	-	-	-	-	-	-	-	-	-
Int 2 Gibson & Interchange (NB)	6:45	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:00	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:15	-	-	-	-	-	-	F	-	-	-	-	-	-
	7:30	-	-	-	-	-	-	F	-	-	-	-	-	-
Int 3 Gibson & University	6:45	A	C	A	C	B	B	D	D	-	D	D	-	C
	7:00	A	B	A	C	A	A	D	D	-	E	D	-	B
	7:15	A	B	A	B	A	A	D	D	-	D	D	-	B
	7:30	A	B	A	B	A	A	D	D	-	D	D	-	B
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	A	C	B	A	D	D	C	D	D	D	C
Int 5 Gibson & Girard	6:45	A	B	A	C	A	A	D	D	D	D	D	D	B
	7:00	A	B	A	B	A	A	D	D	D	D	D	D	B
	7:15	A	B	A	B	A	A	D	D	D	D	D	D	B
	7:30	A	B	A	B	A	A	D	D	D	D	D	D	B
Int 6 Gibson & Carlisle	6:45	A	A	A	A	A	A	D	D	D	D	E	D	B
	7:00	B	A	A	A	A	A	A	C	D	D	E	D	B
	7:15	A	B	A	B	A	A	D	D	D	D	E	D	B
	7:30	A	B	A	B	A	A	D	D	D	D	E	D	B
Int 7 Gibson & Maxwell	6:45	A	A	-	-	A	A	-	-	-	E	-	E	A
	7:00	A	A	-	-	A	A	-	-	-	E	-	E	A
	7:15	A	A	-	-	A	A	-	-	-	E	-	E	A
	7:30	A	A	-	-	A	A	-	-	-	E	-	E	A
Int 8 Gibson & Quincy	6:45	B	-	-	-	-	A	-	-	-	D	-	B	-
	7:00	B	-	-	-	-	A	-	-	-	C	-	B	-
	7:15	B	-	-	-	-	A	-	-	-	D	-	B	-
	7:30	B	-	-	-	-	A	-	-	-	D	-	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	B	B	B	C	A	A	D	D	C	D	D	D	B
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	C	C	C	C	C	C	E	E	E	E	E	C	C
Int 11 Sunport & 2nd St	6:45	-	-	-	B	-	A	-	A	A	A	A	-	-
	7:00	-	-	-	B	-	A	-	A	A	A	A	-	-
	7:15	-	-	-	B	-	A	-	A	A	A	A	-	-
	7:30	-	-	-	B	-	A	-	A	A	A	A	-	-
Int 12 Sunport & Broadway	6:45	C	C	C	C	C	C	A	A	A	A	A	A	B
	7:00	C	C	C	C	C	C	A	A	A	A	A	A	B
	7:15	C	C	C	C	C	C	A	A	A	A	A	A	B
	7:30	C	C	C	C	C	C	A	A	A	A	A	A	B
Int 13 Sunport & Interchange (SB)	6:45	A	0	0	A	0	0	A	0	0	B	0	0	-
	7:00	A	0	0	A	0	0	A	0	0	B	0	0	-
	7:15	A	0	0	A	0	0	A	0	0	B	0	0	-
	7:30	A	0	0	A	0	0	A	0	0	B	0	0	-
Int 14 Sunport & Interchange (NB)	6:45	A	A	-	-	A	A	C	C	B	-	-	-	-
	7:00	A	A	-	-	A	A	C	C	B	-	-	-	-
	7:15	A	A	-	-	A	A	C	C	B	-	-	-	-
	7:30	A	A	-	-	A	A	C	C	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	-	-	-	-	-	-	-	-	-
		16:15	-	-	-	A	-	-	-	-	-	-	-	-	-
		16:30	-	-	-	A	-	-	-	-	-	-	-	-	-
		16:45	-	-	-	A	-	-	-	-	-	-	-	-	-
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	B	A	A	A	B	B	D	0	-	E	D	-	B
		16:15	B	A	A	A	B	A	D	0	-	E	D	-	B
		16:30	C	A	A	A	B	B	D	0	-	E	D	-	B
		16:45	C	B	A	A	B	B	D	0	-	E	D	-	B
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	B	A	A	A	B	A	D	E	D	D	D	D	B
		16:30	B	B	A	A	B	A	D	E	D	D	D	D	B
		16:45	B	A	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	A	D	C
		16:15	B	A	A	A	B	A	F	D	D	D	A	D	C
		16:30	B	A	A	A	B	A	F	D	D	D	A	D	C
		16:45	C	A	A	A	B	A	E	D	D	D	A	D	B
Int 7	Gibson & Maxwell	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	A	A	-	-	A	A	-	-	-	E	-	E	A
		16:15	A	A	-	-	A	A	-	-	-	E	-	E	A
		16:30	A	A	-	-	A	A	-	-	-	E	-	E	A
		16:45	A	A	-	-	A	A	-	-	-	E	-	E	A
Int 8	Gibson & Quincy	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		16:00	E	--	-	-	--	A	-	-	-	F	-	C	-
		16:15	E	--	-	-	--	A	-	-	-	F	-	D	-
		16:30	F	--	-	-	--	A	-	-	-	F	-	E	-
		16:45	E	--	-	-	--	A	-	-	-	F	-	D	-
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	E	E	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	E	E	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	-	-	-	B	-	A	-	A	A	A	A	-	-
		16:15	-	-	-	B	-	A	-	A	A	A	A	-	-
		16:30	-	-	-	B	-	A	-	A	A	A	A	-	-
		16:45	-	-	-	B	-	A	-	A	A	A	A	-	-
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	A	A	A	A	A	A	B
		16:15	C	C	C	C	C	C	A	A	A	A	A	A	B
		16:30	C	C	C	C	C	C	A	A	A	A	A	A	B
		16:45	C	C	C	C	C	C	A	A	A	A	A	A	B
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	-
		16:15	A	0	0	A	0	0	A	0	0	B	0	0	-
		16:30	A	0	0	A	0	0	A	0	0	B	0	0	-
		16:45	A	0	0	A	0	0	A	0	0	B	0	0	-
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	-	-	-	-
		16:15	A	A	-	-	A	A	C	C	B	-	-	-	-
		16:30	A	A	-	-	A	A	C	C	B	-	-	-	-
		16:45	A	A	-	-	A	A	C	C	B	-	-	-	-



## ROADWAY ANALYSIS

A review of the Gibson Blvd corridor was conducted to estimate the operational capacity of the roadway, although the signalized intersection operations typically control capacity. The FHWA published a report titled *Simplified Highway Capacity Calculation Method for the Highway Performance Monitoring System* (October 2017). In that report, Table 15 provides a generalized service volume table based on the number of lanes, percent green time, and speed limit of a corridor. Table 15 of that report has been condensed and provided at right based on the Gibson Blvd roadway characteristics. Currently, 6-lane Gibson Blvd has an AM peak-hour K-factor of 8% (actual K factor for the AM is around 7.6% and the PM about 8.5%) and an existing AM peak-hour corridor signal timing that provides approximately 56% of the cycle length to the Gibson Blvd through movement (67 seconds of effective green time out of the 120 second cycle length). Converting the table into a vehicles per hour per lane value (vphpl), the Gibson corridor can accommodate up to 757 vphpl at LOS B, 824 vphpl at LOS C, 884 vphpl at LOS D, 982 vphpl at LOS E during the AM peak hour.

Number of Lanes	Percent Green Time	Speed Limit	Level of Service			
			B	C	D	E
Service Volume	Service Volume	Service Volume	Service Volume	Service Volume	Service Volume	Service Volume
6	50	45	51100	55000	59000	64400
6	55	45	56800	61800	66300	73700
6	60	45	62300	67700	72500	80600
6	65	45	67800	73600	78800	87500
6	70	45	72900	78100	83600	91100
8	50	45	68900	74800	80200	89100
8	55	45	76100	82600	88500	98300
8	60	45	83300	90400	96800	107500
8	65	45	90700	98200	105200	116800
8	70	45	98000	106100	113600	126100

*Example: Threshold value at LOS D for 55% of green time = 66,300 \* 0.08 \*(1/6) = 884 vphpl*

Noting the existing 2020 eastbound Gibson Blvd approach to Yale Blvd accommodates about 970 vphpl, the roadway is estimated to operate near the upper LOS E threshold. For comparison, the intersection capacity results displayed in Table 2 indicate the eastbound through movement operating at LOS C during this time period. The discrepancy in LOS values may be due to good vehicle progression currently provided along the Gibson corridor not reflected in the above service volume table.

Although the above values indicate some traffic volume growth along the Gibson Blvd corridor is possible, an increase to major street left-turn movements, additional minor-street approach volumes, or increased pedestrian crossings of Gibson Blvd will reduce the percent of green time available to the through movement, reducing the amount of unused capacity available. With or without favorable progression, Gibson Blvd is likely approaching its capacity level.

## 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 HCM6. The McTrans Highway Capacity Software (HCS), 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.

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

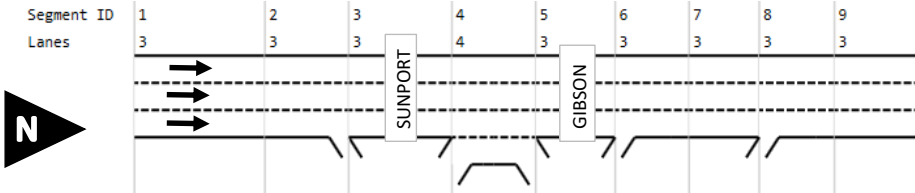
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	A	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	A	B	A	A	A	B	A	B	A
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	B	C	B	B	B	B	B	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	B	C	B	B	B	B	B	C	C
	7:00	C	C	C	C	C	C	C	C	D
	7:15	D	D	D	C	C	C	D	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
PM Time Period	14:00	A	B	A	B	B	B	B	B	B
	14:15	B	B	A	B	B	B	B	B	B
	14:30	B	B	A	B	B	B	B	B	B
	14:45	B	B	A	B	B	B	B	C	C
	15:00	B	B	B	B	B	B	B	C	C
	15:15	B	B	A	B	B	B	B	C	C
	15:30	B	B	B	B	B	B	B	C	C
	15:45	B	B	B	B	B	B	B	C	C
	16:00	B	B	B	B	B	B	B	D	D
	16:15	B	B	B	B	B	B	B	D	D
	16:30	B	B	B	B	B	B	B	C	C
	16:45	B	B	B	B	B	B	B	C	C
	17:00	B	B	A	B	B	B	B	D	D
	17:15	A	B	A	B	B	B	B	C	C
	17:30	A	B	A	B	A	B	A	B	B
	17:45	A	B	A	B	A	A	A	B	B
	18:00	A	B	A	B	A	B	A	B	B
	18:15	A	B	A	A	A	B	A	B	B
	18:30	A	B	A	A	A	B	A	B	B
	18:45	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 Ramp	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 5: 2020 Freeway LOS Analysis Summary, Southbound I-25

	Segment	Level of Service								
		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
Time Period	8:45	C	C	B	B	B	B	A	B	A
	14:00	B	C	B	B	B	B	B	B	B
	14:15	B	C	B	B	B	B	B	B	B
	14:30	C	C	B	B	B	B	B	B	B
	14:45	C	D	C	B	B	B	B	B	B
	15:00	C	D	C	B	B	B	B	B	B
	15:15	C	C	C	B	B	B	B	B	B
	15:30	C	C	C	B	B	B	B	B	B
	15:45	C	C	C	B	B	B	B	B	B
	16:00	C	C	C	B	B	B	B	B	B
	16:15	C	D	C	B	B	B	B	B	B
	16:30	C	C	B	B	B	B	B	B	B
	16:45	C	C	C	B	B	B	B	B	B
	17:00	C	C	C	B	B	B	B	B	B
	17:15	C	C	C	B	B	B	B	B	B
	17:30	C	C	C	B	B	B	B	B	B
	17:45	C	C	C	B	B	B	B	B	B
	18:00	C	C	C	B	B	B	B	B	B
	18:15	C	C	B	B	B	B	B	B	B
	18:30	B	C	B	B	B	B	B	B	B
	18:45	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
<p>The diagram illustrates the layout of Southbound I-25. It shows a series of segments from 1 to 9. Segment 1 is 3 lanes wide, segment 2 is 3 lanes, segment 3 is 3 lanes, segment 4 is 4 lanes, segment 5 is 3 lanes, segment 6 is 4 lanes, segment 7 is 3 lanes, segment 8 is 3 lanes, and segment 9 is 3 lanes. Key locations marked include 'GIBSON' between segments 3 and 4, and 'SUNPORT' between segments 7 and 8. Arrows indicate the southbound direction of travel.</p>										

## 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 with operational capacity anticipated for year 2025. Future construction phases, if favorable market conditions exist, assume a Phase 2 build-out for year 2030. Therefore, the following analysis periods have been analyzed. All horizon years assume the Sunport Boulevard Extension project constructed.

- 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)
- 2030 Build (2030 No-Build conditions plus Phase 1 and 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 2020 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 with an assumption no to very few site-generated trips utilize the Sunport corridor.

**Other Considerations.** Traffic volumes along the Sunport corridor were developed based on the 2020 forecast traffic volumes provided in Figures 3 and 4 of the *Sunport Boulevard Extension and Woodward Road Improvements Project* (Appendix A). Volumes were increased by 1% per year to account for future year scenarios.

When reviewing the peak-hour volumes associated with the background growth and comparing them to the 2020 Existing conditions, the following item is 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 600 vehicles. The high increase in volumes is associated with the current volumes travelling the Gibson corridor (over 2,600 vehicles at the

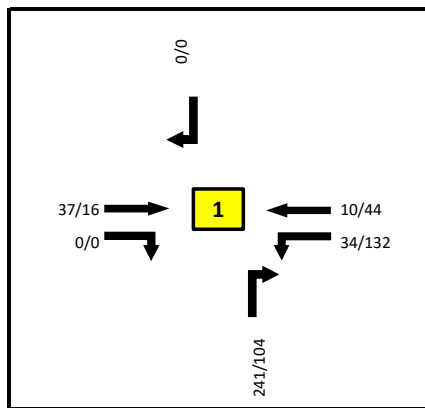


eastbound Yale approach) while the EUL development contributes nearly 400 eastbound vehicles in the AM peak-hour and nearly 500 westbound vehicles in the PM peak-hour. Background traffic on eastbound Gibson is calculated to be about 3,450 vehicles or 1,150 vphpl during the morning peak, 17% above the LOS E threshold level of 982 vphpl calculated earlier using the *Simplified Highway Capacity Calculation Method* data.

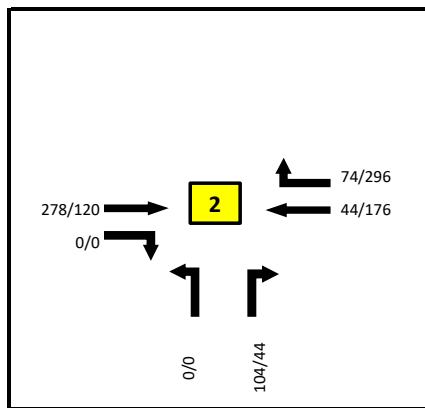
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Table 6: Study Area Background Traffic Growth

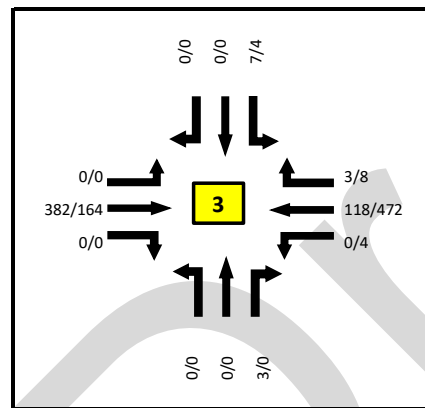
Roadway			MRCOG 2016 Model "Peak Hour Load"	MRCOG 2040 Model "Peak Hour Load"	Yearly Growth Rate	Average Yearly Growth	Growth Rate for Analysis
GIBSON CORRIDOR							
San Mateo North of Gibson Blvd	AM	PH	954	963	0.04%	0.77%	1.00%
	PM	PH	473	685	1.55%		
San Mateo South of Gibson Blvd	AM	PH	345	383	0.44%		
	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%		



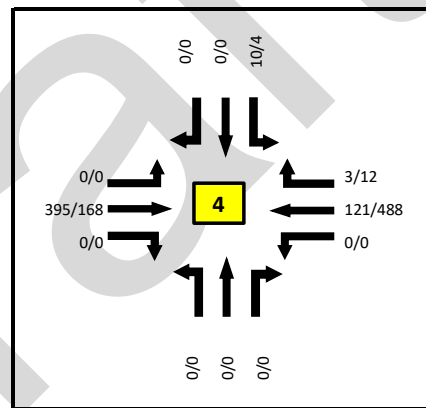
Gibson and I-25 SB Ramps



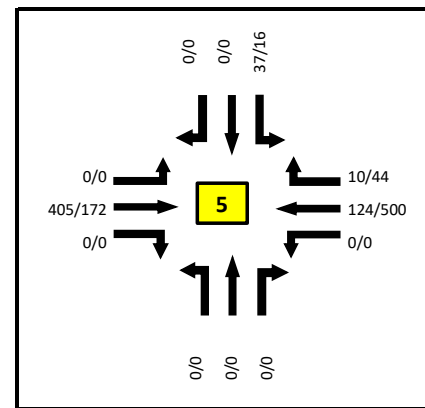
Gibson and I-25 NB Ramps



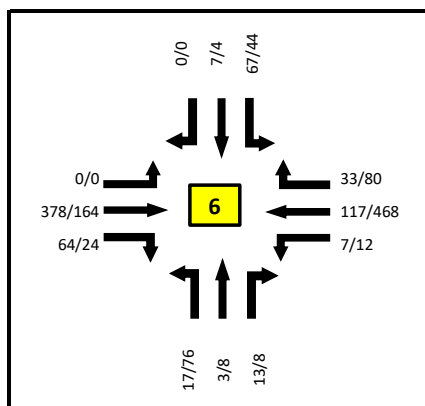
Gibson and University



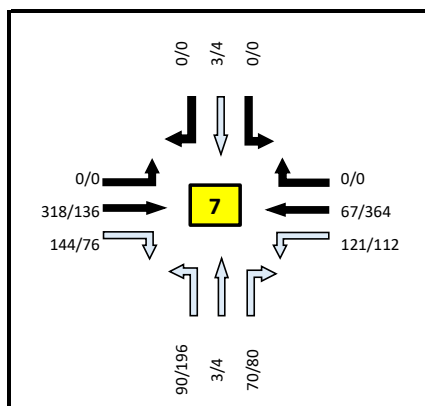
Gibson and Yale



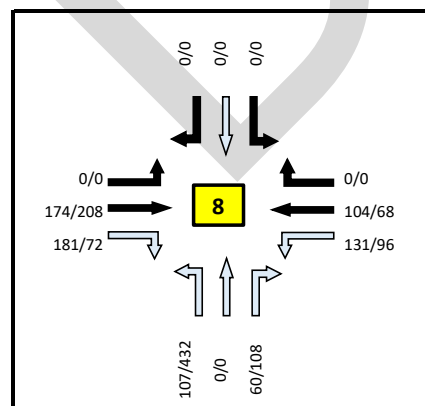
Gibson and Girard



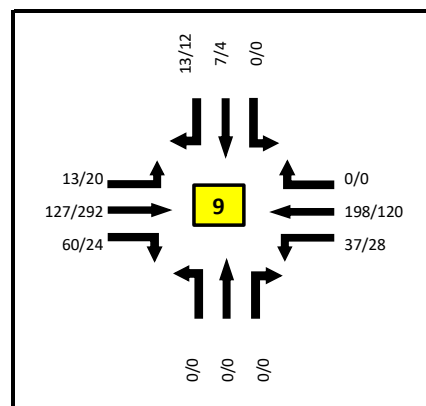
Gibson and Carlisle



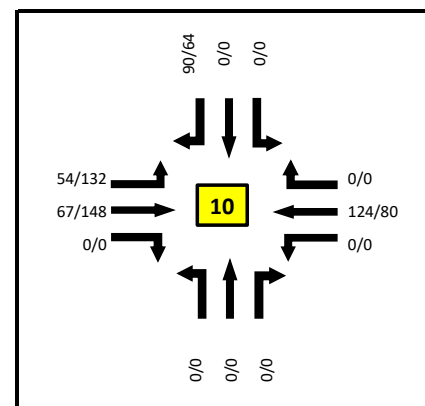
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

NOTES:  
1. The EUL site has access to Gibson from Carlisle, Maxwell, Quincy, Truman, and other driveways. Therefore, trips may not flow between intersections.

2. Site traffic was flowed west of Carlisle based on existing distribution assumptions.

Legend  
AM / PM Volumes  
→ New EUL Intersection movements.



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

**FIGURE 7**

## SITE-GENERATED TRAFFIC FORECASTING

### PHASE 1

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, work from home, other travel demand management considerations, on-site interactions, and options available in the future, it was assumed employee vehicular trips could be reduced by 20 percent. Opportunities to achieve these levels of reductions are possible with a mix of employer sponsored options such as carpool incentives, subsidized bus passes, and guaranteed rides home. Employee trips were assumed to occur evenly within the four 15-minute periods prior to and after their shifts since no information is available to indicate different peaking characteristics exist. 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.

Truck traffic to and from the site is assumed to only be associated with Phase 1 of the development. No identification as to truck activity was provided by the client, therefore, total truck trips were estimated assuming 5% of the Phase 1 non-employee trips. Consequently, the total number of daily truck trip ends is estimated to be 118, 58 entering and 60 exiting per day, or 2% of total Phase 1 trips. The time period for trucks entering and exiting is based on the ITE LUC 140, 24-hour truck trip percentages. Table 10 shows the site's estimated hourly truck activity. A review of the table indicates a maximum 13 trip ends (7 in, 6 out) occurring in any one 60-minute period.

### PHASE 2

Phase 2 of the subject site was also discussed during the August 18 meeting. Construction timing and development scale are currently being discussed internally by the client. Ultimately, plans to construct up to three additional office buildings of 1M SF each, located between the Phase 1 laboratory building and Gibson Blvd have been under consideration. However, noting this may be aggressive in the near-term, in addition to traffic operations concerns, only 1 office building is being considered constructed and operational for the 2030 horizon year. The need for the other 2 buildings will be considered once operations can be better assessed. The following information is to be used for Phase 2 analysis of the site:

- The office building operation will be similar to Phase 1, where three work shifts are anticipated with similar start and end times.
- The land use associated with the office building is ITE Land Use Code 710, General Office Building.



- Trip estimates are based on the ITE *Trip Generation* average trip rates, the higher of the fitted curve equation or average rates.
- Trip ends have been estimated for employee and non-employee trips. Because many office employees may not have a “hard” start/end time as compared to the Phase 1 assembly worker and may have other requirements outside of the office environment, employee-related entering and exiting trips were permitted.
- Other employee-based trips associated with the office building will be difficult to control to “hard start and end times” and have been assumed as part of the non-employee trips. Typically, about 3 employees per 1,000 SF of office space is considered about an average rate.

For the purposes of the Phase 2 trip development, the client has indicated 70% of the building to be occupied by day shift employees, 20% by the evening shift, and 10% by over-night shift employees. Daily trips associated with Phase 2 were calculated based on the maximum occupancy of the building at any one time, or 700,000 SF (during the day shift). To estimate employee trips, the values associated with the percent of building occupied were used. Employee-related vehicles 60-minutes prior to their shift utilized the ITE rates and in/out percentages associated with the AM peak-hour of the roadway. Post-shift, trips were based on the rates and percentages associated with the PM peak-hour of the roadway occurring in the 60-minute period after the shift. Similar to Phase 1, employee-based trips also considered a 20% trip reduction based on alternative travel modes and/or travel demand management practices they may be in place. The difference between the daily trips and the employee trips were assumed to be non-employee trips, occurring over a 24-hour time period based on percentages presented by ITE.

Table 8 provides the Phase 2 trip generation estimate for the site.

Table 9 provides a summary of the total Project Orion trip estimate for Phase 1 plus Phase 2.

Table 7: Trip Generation, Phase 1

Shift Time	Shift	Employees	ITE Daily Trips*	Estimated Employee Trips			
				Pre Shift		Post Shift	
				In	Out	In	Out
6A-3P	Day Shift	1450	--	1160	0	0	1160
3P-10P	Evening Shift	850	--	680	0	0	680
10P-6A	Night Shift	275	--	220	0	0	220
Total Phase 1		2575	7493	2060	0	0	2060

\* ITE Trip Generation 10th Edition, ITE LUC 130, Total Employees, Average Rate. Trip Values Prior to Travel Mode Adjustments.

Employee Alt. Travel Mode % =	20%
Total Trip Ends	
Employee Veh. Trips =	4120
Employee Alt. Travel Mode Trips =	1030
Non-Employee Veh. Trips =	2343
Total Trip Ends (all modes) =	7493
Total Vehicle Trip Ends =	6463

EMPLOYEE TRIPS (EMPLOYEE MINUS CAR POOL & TRANSIT TRIPS)								NON-EMPLOYEE TRIPS		SITE TOTAL Veh. Trips		
Time	Day Shift Trip Ends		Evening Shift Trip Ends		Night Shift Trip Ends		Total Employee Based Veh. Trips		Daily Trip Ends Minus Employee Trips & Employee Alt. Mode Trips	Total		
	In	Out	In	Out	In	Out	In	Out		In	Out	Total
12-1 AM							0	0	0	0	0	0
1-2 AM							0	0	0	0	0	0
2-3 AM							0	0	0	0	0	0
3-4 AM							0	0	0	0	0	0
4-5 AM							0	0	0	0	0	0
5-6 AM	1160						1160	0	0	1160	0	1160
6-7 AM					220		0	220	80	79	80	379
7-8 AM							0	0	108	107	108	215
8-9 AM							0	0	97	97	97	194
9-10 AM							0	0	72	71	72	143
10-11 AM							0	0	72	72	72	144
11-12 PM							0	0	81	80	81	161
12-1 PM							0	0	87	87	87	174
1-2 PM							0	0	81	80	81	161
2-3 PM			680				680	0	88	87	768	855
3-4 PM		1160					0	1160	109	109	109	1378
4-5 PM							0	0	120	119	120	239
5-6 PM							0	0	107	106	107	213
6-7 PM							0	0	74	73	74	147
7-8 PM							0	0	0	0	0	0
8-9 PM							0	0	0	0	0	0
9-10 PM					220		220	0	0	0	220	220
10-11 PM				680			0	680	0	0	0	680
11-12 AM							0	0	0	0	0	0
Total	1160	1160	680	680	220	220	2060	2060	1176	1167	3236	6463
	2320		1360		440		4120		2343		6463	

Employee vehicle trip ends = Employees \* (1 - % using alternative travel modes, TDM Strategies)

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.

Time period to distribute non-employee traffic

Start Time = 6  
End Time = 18

Table 8: Trip Generation, Phase 2

Shift Time	Shift	Bldg Area Used, SF	ITE Daily Trips*	Estimated Employee Trips			
				Pre Shift**		Post Shift**	
				In**	Out	In	Out**
6A-3P	Day Shift	700	7006	559	91	103	541
3P-10P	Evening Shift	200	--	160	26	29	155
10P-6A	Night Shift	100	--	80	13	15	77
Total Phase 2			7006	--	--	--	--

\* ITE Trip Generation 10th Edition, ITE LUC 710, Building Area, Higher of Equation or Average Rate

\*\* Pre-shift is AM Peak Hour values, Post-Shift is PM Peak Hour values

Employee Carpool and Transit % = 20%

Shift Employee Veh. Trips =	1849
Employee Alt. Travel Mode Trips =	462
Non-Shift Employee Veh. Trips =	4695
Total Trip Ends (all modes) =	7006
Total Vehicle Trip Ends =	6544

Time	EMPLOYEE TRIPS (EMPLOYEE TRIPS MINUS EMPLOYEE ALT. MODE TRIPS)				OTHER TRIPS		SITE TOTAL Veh. Trips		
	Day Shift Trip Ends		Evening Shift Trip Ends		Night Shift Trip Ends		Total Employee Based Veh. Trips		Total
	In	Out	In	Out	In	Out	In	Out	
12-1 AM							0	0	5
1-2 AM							0	0	2
2-3 AM							0	0	5
3-4 AM							0	0	2
4-5 AM							0	0	2
5-6 AM	559	91			15	77	559	91	568
6-7 AM							15	77	123
7-8 AM							0	0	123
8-9 AM							0	0	308
9-10 AM							0	0	308
10-11 AM							0	0	338
11-12 PM							0	0	82
12-1 PM							0	0	150
1-2 PM							0	0	127
2-3 PM			160	26			160	26	139
3-4 PM	103	541					103	541	242
4-5 PM							0	0	239
5-6 PM							0	0	244
6-7 PM							0	0	211
7-8 PM							0	0	157
8-9 PM							0	0	192
9-10 PM							0	0	153
10-11 PM							0	0	174
11-12 AM							0	0	200
Total	662	632	189	181	95	90	946	903	2347
	1294		370		185		1849		4696

Employee vehicle trip ends & daily trips = Employees \* (1 - % using alternative travel modes, TDM Strategies)

Time Period	ITE % of 24-Hour Vehicles Inbound LUC 710*	ITE % of 24-Hour Vehicles Outbound LUC 710*	Trip distribution of Non-Employee Trips		
			TOTAL	IN	OUT
12-1 AM	0.2%	0.1%	9	5	2
1-2 AM	0.0%	0.1%	0	0	2
2-3 AM	0.2%	0.0%	9	5	0
3-4 AM	0.0%	0.1%	0	0	2
4-5 AM	0.1%	0.2%	5	2	5
5-6 AM	0.4%	0.1%	19	9	2
6-7 AM	4.6%	0.5%	216	108	12
7-8 AM	13.1%	1.9%	615	308	45
8-9 AM	14.4%	3.5%	676	338	82
9-10 AM	6.4%	4.3%	300	150	101
10-11 AM	5.4%	5.9%	254	127	139
11-12 PM	6.2%	10.3%	291	146	242
12-1 PM	10.2%	10.4%	479	239	244
1-2 PM	9.0%	6.7%	423	211	157
2-3 PM	8.2%	6.5%	385	192	153
3-4 PM	7.4%	8.5%	347	174	200
4-5 PM	5.5%	15.2%	258	129	357
5-6 PM	4.2%	15.6%	197	99	366
6-7 PM	1.7%	2.9%	80	40	68
7-8 PM	0.9%	2.2%	42	21	52
8-9 PM	0.7%	1.3%	33	16	31
9-10 PM	0.5%	1.5%	23	12	35
10-11 PM	0.3%	2.0%	14	7	47
11-12 AM	0.4%	0.2%	19	9	5
Total	1.000	1.000	4694	2347	2349

\* From ITE Trip Generation Appendix

Table 9: Trip Generation, Total Site

Time	TOTAL SITE TRIPS (PHASE 1 PLUS PHASE 2 TRIP ESTIMATES)								
	Total Employee Based Veh. Trips		Total Non-Employee Based Veh. Trips		Total Truck Trips (Phase 1 only)		Total Trip Ends		
	In	Out	In	Out	In	Out	In	Out	Total
12-1 AM	0	0	4	2	1	0	5	2	7
1-2 AM	0	0	0	1	0	1	0	2	2
2-3 AM	0	0	5	0	0	1	5	1	6
3-4 AM	0	0	0	1	1	1	1	2	3
4-5 AM	0	0	1	5	1	0	2	5	7
5-6 AM	1719	91	9	2	0	0	1728	93	1821
6-7 AM	15	297	186	89	2	2	203	388	591
7-8 AM	0	0	413	150	3	2	416	152	568
8-9 AM	0	0	431	174	4	5	435	179	614
9-10 AM	0	0	216	166	6	6	222	172	394
10-11 AM	0	0	192	205	7	6	199	211	410
11-12 PM	0	0	221	317	6	5	227	322	549
12-1 PM	0	0	322	325	4	6	326	331	657
1-2 PM	0	0	287	233	5	4	292	237	529
2-3 PM	840	26	277	235	3	5	1120	266	1386
3-4 PM	103	1701	278	303	5	6	386	2010	2396
4-5 PM	0	0	246	473	3	3	249	476	725
5-6 PM	0	0	204	470	2	2	206	472	678
6-7 PM	0	0	112	140	2	1	114	141	255
7-8 PM	0	0	20	51	1	1	21	52	73
8-9 PM	0	0	15	30	1	1	16	31	47
9-10 PM	300	13	11	35	1	0	312	48	360
10-11 PM	29	835	7	46	0	1	36	882	918
11-12 AM	0	0	9	4	0	1	9	5	14
Total	3006	2963	3466	3457	58	60	6530	6480	13010
	5969		6923		118		13010		

Note: Truck Trips were calculated based on different methodology, therefore hourly volumes may not add up exactly to Phase 1 and Phase 2 results.

## TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution for all 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.

All site trips generated by the development were assigned to site driveways and the adjacent street network as indicated in Figure 8 based on garage/parking lot access, the amount and location of available parking spaces, and assumption that repeat drivers (both employee and non-employee) have an understanding of the local street network and may chose an Alamo/Yale routing if originating from or destined to the west. As currently assumed, 2% of entering and 4% of exiting traffic are estimated to use Sunport Boulevard through the AIS road network if originating or departing to the south. Although undesirable, travel through the AIS would become more attractive (to both northbound and southbound I-25 motorists) if delays along the Gibson corridor and/or the I-25/Gibson intersections become excessive and predictable. Options to reduce capacity constraints along Gibson include TDM strategies, increasing transit service frequency, improving bicycle/pedestrian corridors, signal timing strategies, physical roadway improvements or other such measures. Ultimately, consideration to minimize site trips using the AIS roadway network through a new direct connection or alternative roadway scheme may be an alternative considered in Phase 2 or if additional site development beyond Phase 2 construction is anticipated.

Figures 8A and 8B have been developed to provide an intersection level of detail on how site vehicles are anticipated to arrive and depart the site. In conjunction with Figure 2 and the Garage Access Plan detail in the bottom right of that figure, the peak-hour percentage and volume estimates to and from each of the driveways serving the site parking areas is presented below in tabular format for Phase 1 of the site.

Phase 1 Employee Site Arrival/Departure Percentages to/from Site Parking Areas  
(Peak-Hour of Employee Traffic)

Access Point	Description	Arrival		Departure	
		Percent	Volume	Percent	Volume
Int 50	Northwest Surface Lot (Miles Rd)	5%	58	5%	58
Int 51	Northeast Surface Lot (Gibson Blvd)	4%	46	2%	23
Int 52	Northeast Surface Lot (Girard Blvd)	2%	23	4%	46
Int 53	Northwest Surface Lot/Garage (Girard Blvd)	58.5%	679	37%	429
Int 54	Truck Access (Girard Blvd)	2%	23	2%	23
Int 55	South Garage Access (South Access Roadway)	12%	139	25%	290
Int 56	North Surface Lot (Alamo Ave)	5%	58	5%	58
Int 56	West Garage Access (Columbia Dr)	11.5%	134	20%	233
Phase 1 Total =		100%	1160	100%	1160

For presentation purposes, site trips generated for two AM and two PM peak-hour time periods (peak of the generator and peak of the roadway) have been developed and are shown in the figures listed below. It is noted that all site trips were assigned in 15-minute intervals such that any 15-minute period could be analyzed from 5:00 to 9:00 AM and from 2:00 to 7:00 PM).

### Phase 1 Site Trips

- 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

#### Phase 2 Site Trips

- Figure 13. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Gibson Corridor
- Figure 14. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Gibson Corridor
- Figure 15. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Sunport Corridor
- Figure 16. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Sunport Corridor

#### Phase 1+2 Site Trips

- Figure 17. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Gibson Corridor
- Figure 18. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Gibson Corridor
- Figure 19. Peak Hour of the Generator (5:00 to 6:00 AM and 3:00 to 4:00 PM), Sunport Corridor
- Figure 20. Peak Hour of the Roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), Sunport Corridor

Overall, peak employee day shift traffic is to occur outside of the higher volume peak of the roadway. At full build-out in the morning arrival period, eastbound Gibson Blvd is to accommodate 680 new site trips (Phase 1+2 trips, eastbound approach at University Blvd) while westbound Gibson is to accommodate no new vehicles. In contrast, the site is estimated to generate only 94 new eastbound and 91 new westbound vehicles during the current peak of the roadway. Similar benefit is noted for the PM peak condition with the day-shift ending at 3:00 PM, an hour prior to the roadway peak.

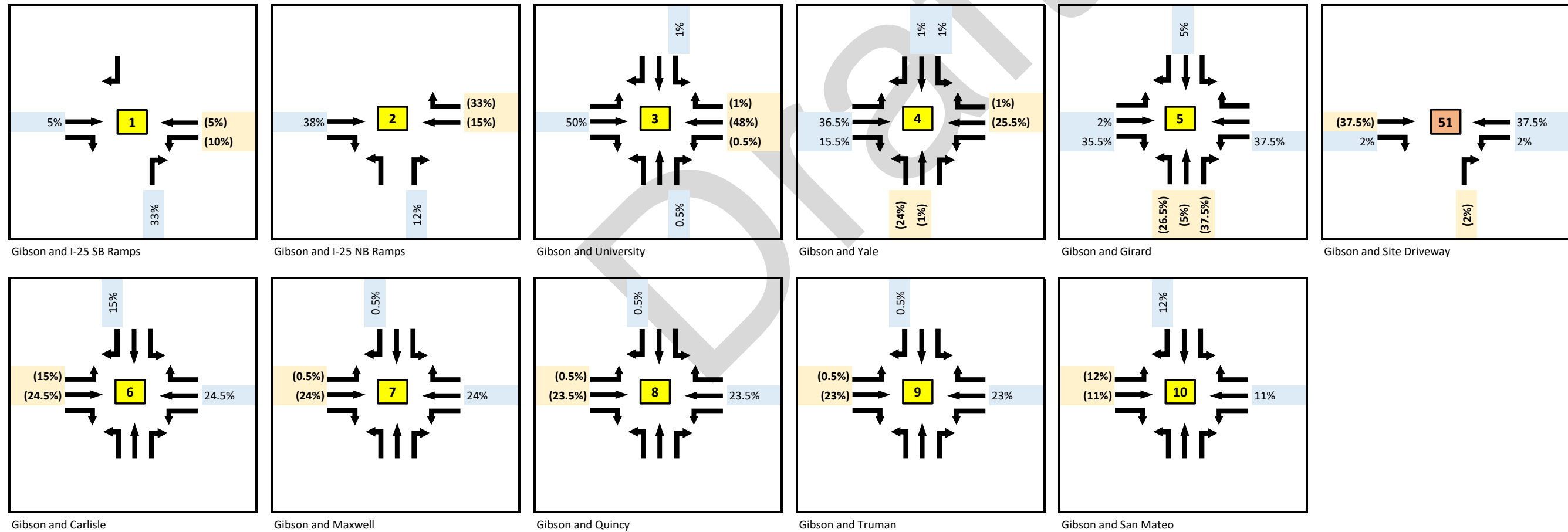
Other interesting notes regarding the site-related trips during the AM and PM peak hour include the following:

- Employee Day-Shift Arrivals: 228 vehicles directed southbound on Yale, 472 eastbound right-turn and 648 westbound left-turn vehicles onto Girard from Gibson, and a total of just 36 vehicles directed through the airport.
- Employee Day-Shift Departures: 380 northbound left-turns and 552 northbound right-turns from Girard Blvd onto Gibson Blvd, 352 left-turn vehicles at the northbound Yale Blvd approach to Gibson Blvd, and 60 vehicles using the local roadway network to access the Sunport/I-25 intersections.

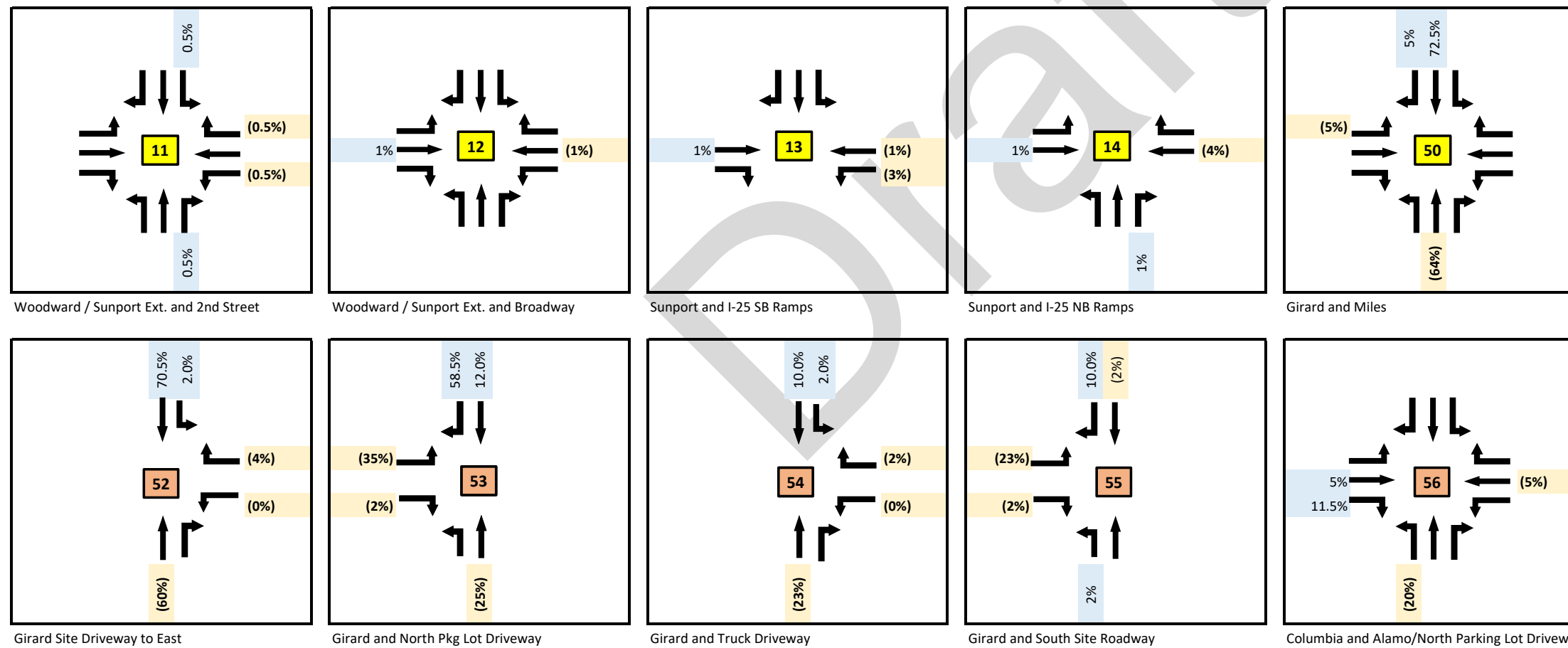










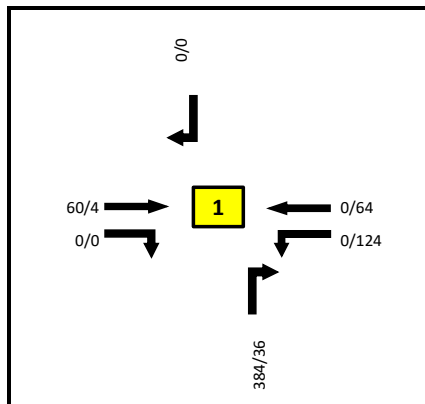


- Notes:
- 1 Vehicles to/from Int 50 West (5%) to north surface lot access off of Miles Rd.
  - 2 Vehicles to/from Int 55 West to Garage access off of South Site Roadway.
  - 3 Vehicles to/from Int 56 South to Garage access off of Columbia Rd.

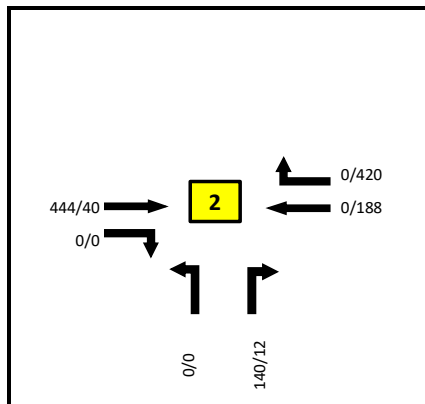
**LEGEND**  
 XX% ARRIVALS  
 (XX%) DEPARTURES

**FIGURE 8B**

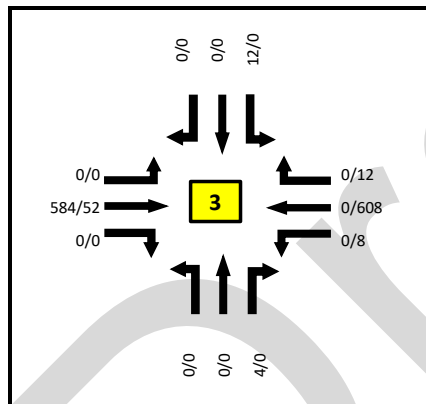




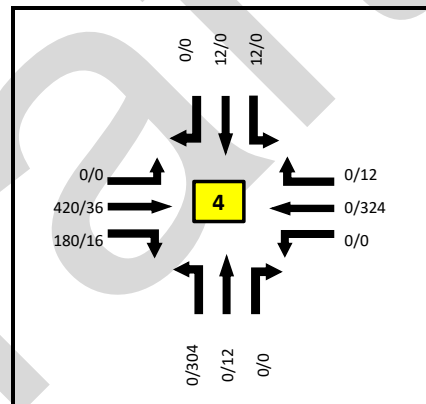
Gibson and I-25 SB Ramps



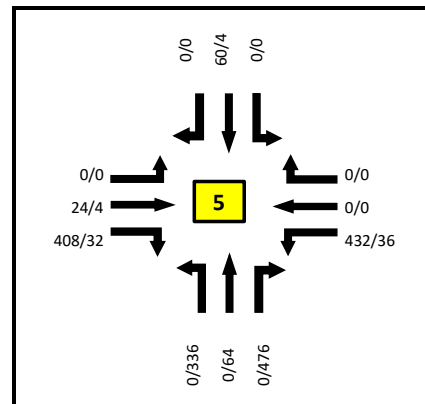
Gibson and I-25 NB Ramps



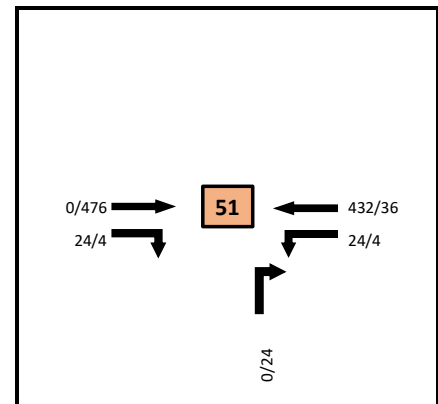
Gibson and University



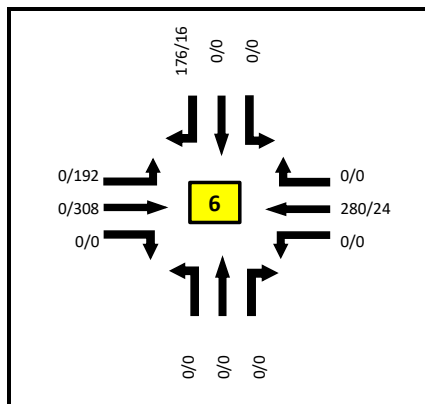
Gibson and Yale



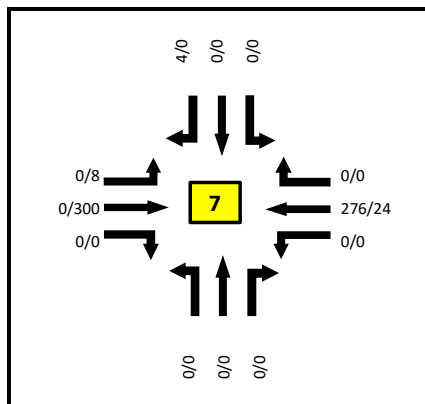
Gibson and Girard



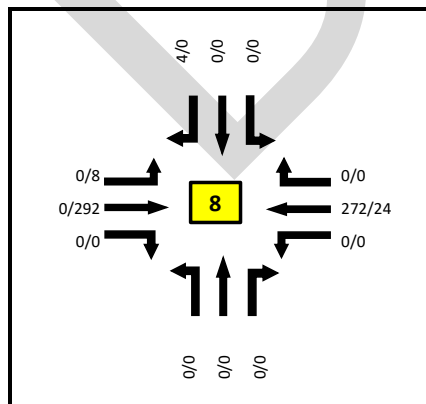
Gibson and Site Driveway



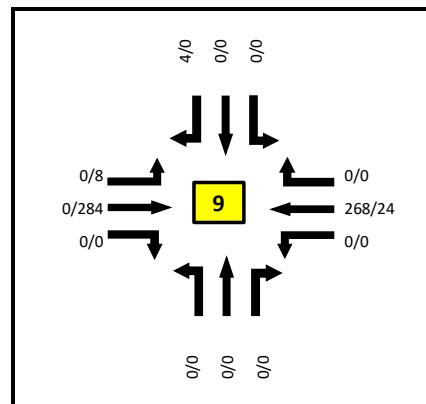
Gibson and Carlisle



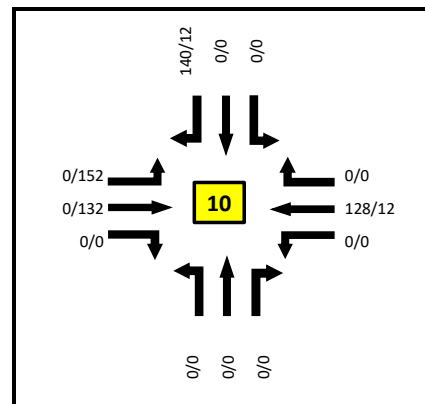
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

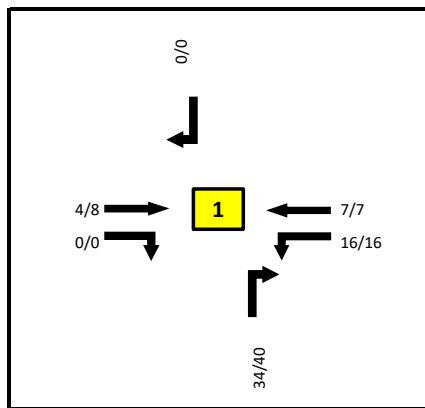


**PHASE 1 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

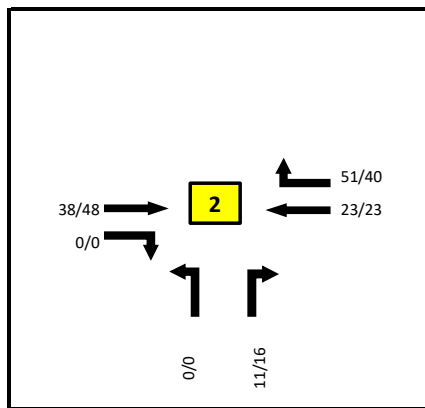
Legend  
 AM / PM Volumes

**FIGURE 9**

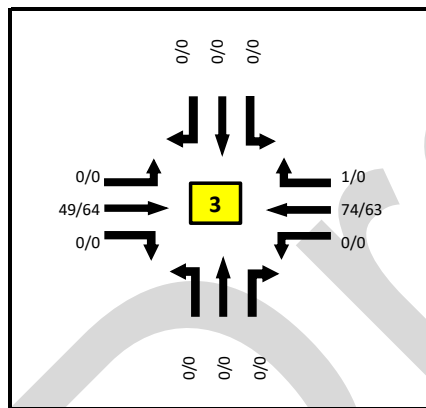




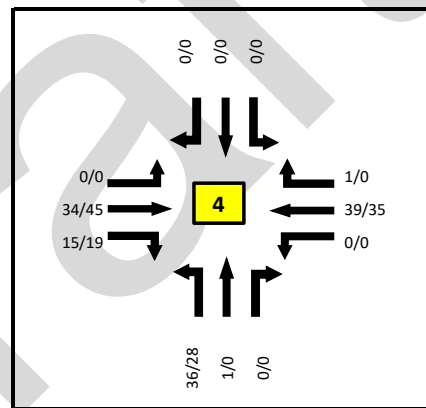
Gibson and I-25 SB Ramps



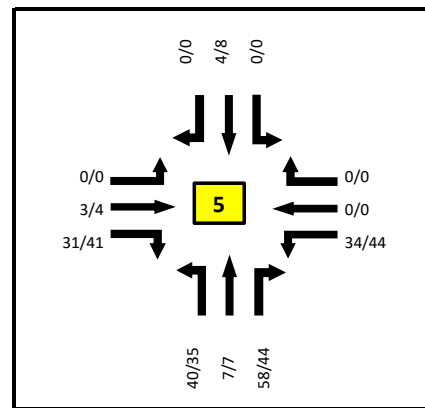
Gibson and I-25 NB Ramps



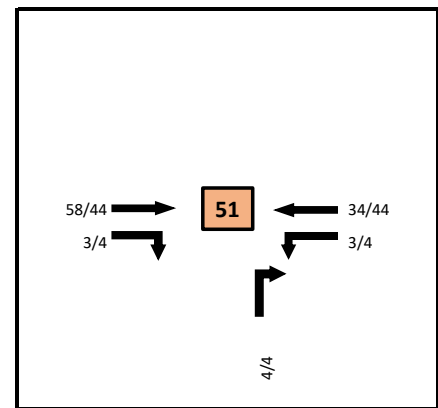
Gibson and University



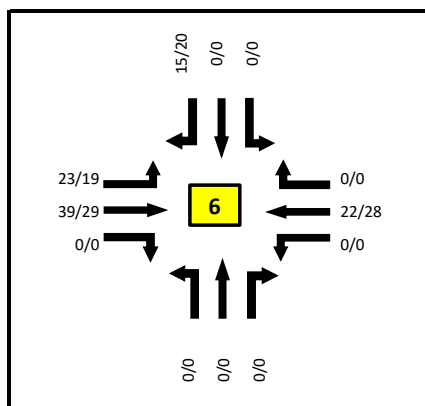
Gibson and Yale



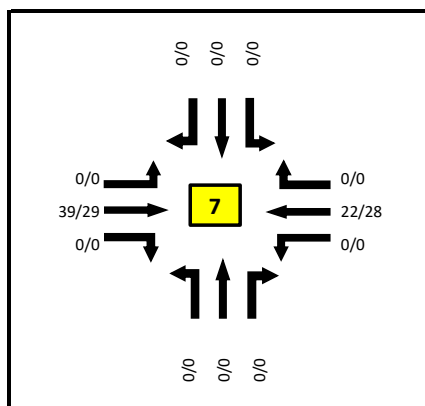
Gibson and Girard



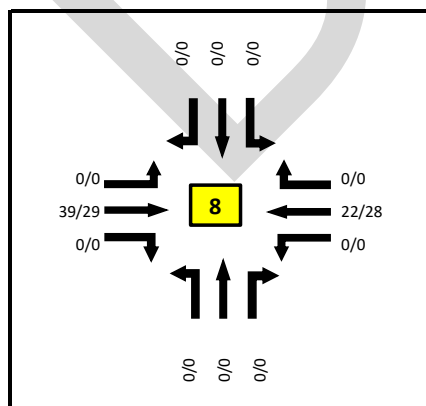
Gibson and Site Driveway



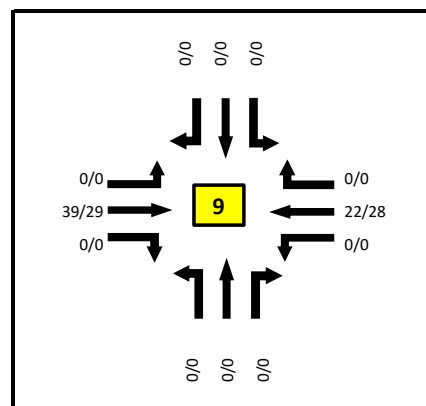
Gibson and Carlisle



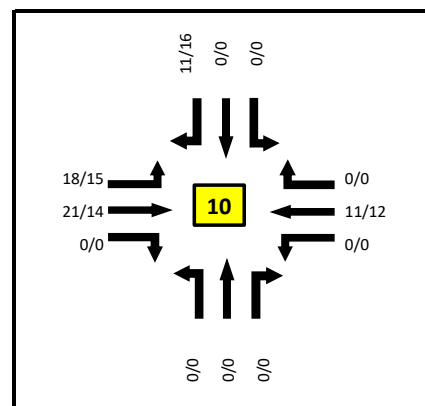
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

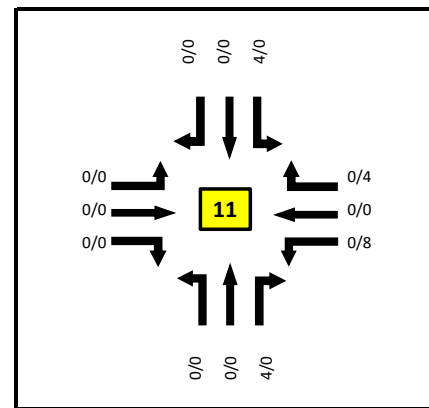


**PHASE 1 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

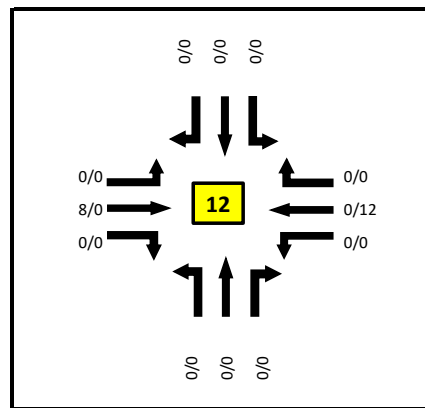
Legend  
 AM / PM Volumes

**FIGURE 10**

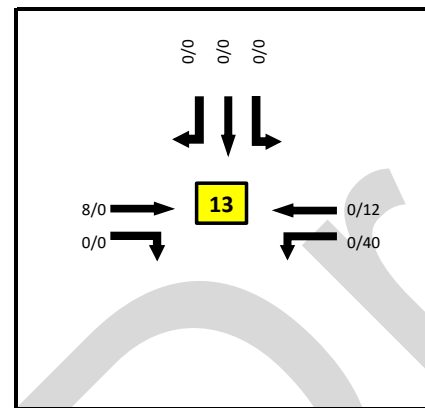




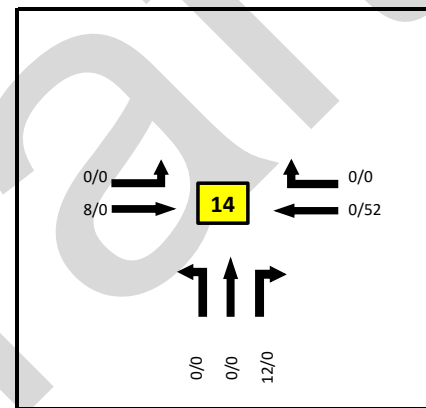
Woodward / Sunport Ext. and 2nd Street



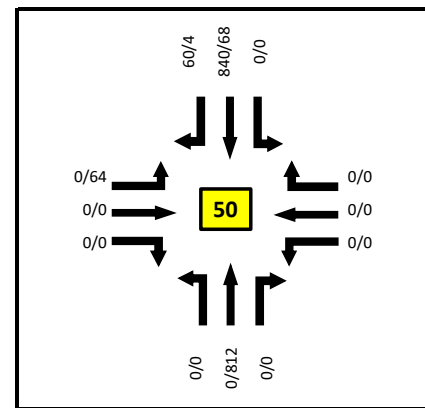
Woodward / Sunport Ext. and Broadway



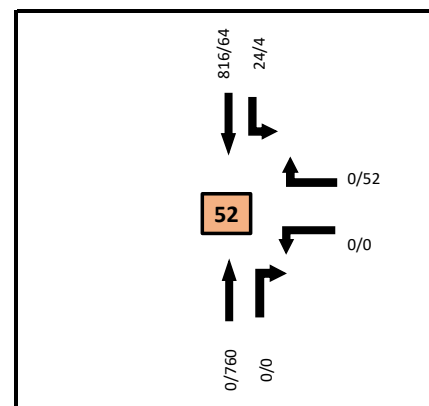
Sunport and I-25 SB Ramps



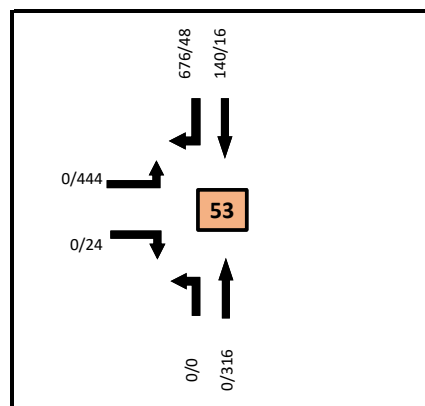
Sunport and I-25 NB Ramps



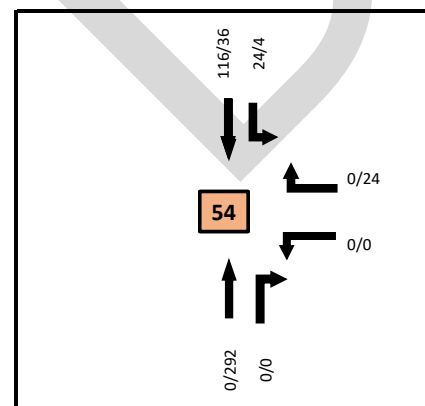
Girard and Miles



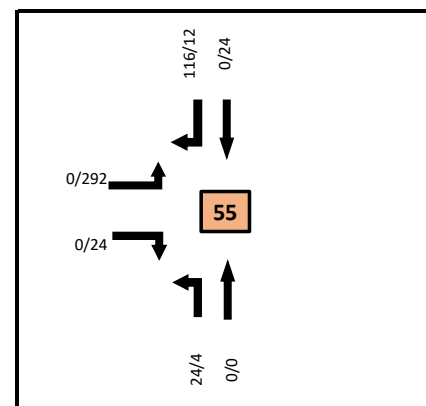
Girard Site Driveway to East



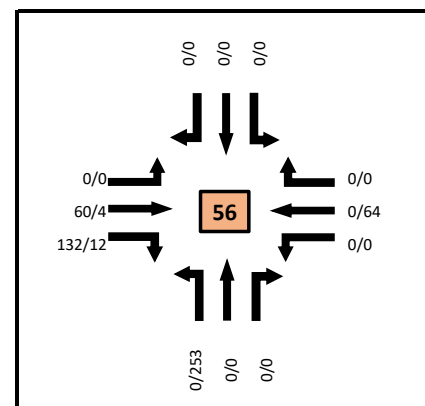
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



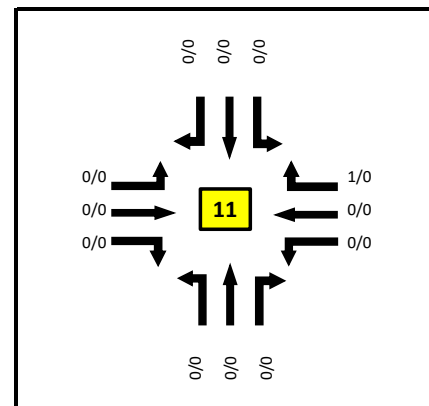
Columbia and Alamo/North Parking Lot Driveway



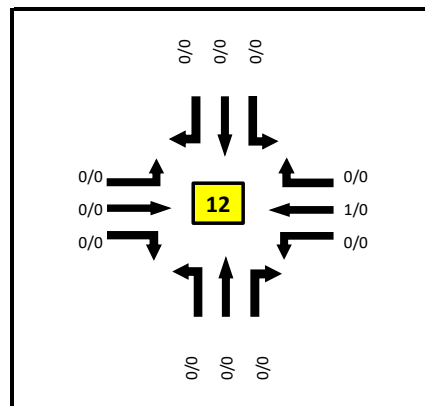
**PHASE 1 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

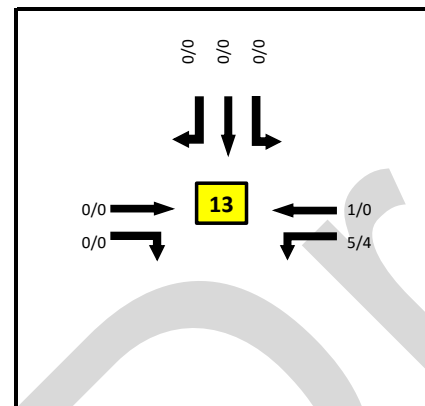
**FIGURE 11**



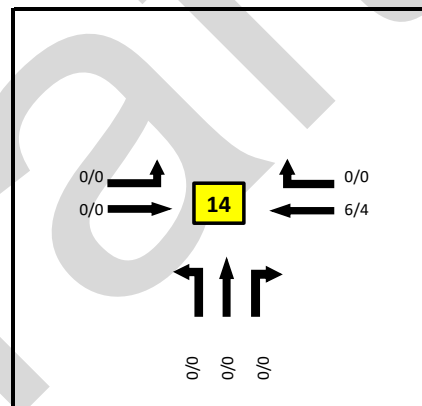
Woodward / Sunport Ext. and 2nd Street



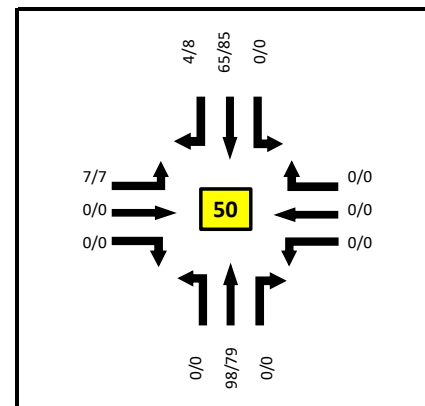
Woodward / Sunport Ext. and Broadway



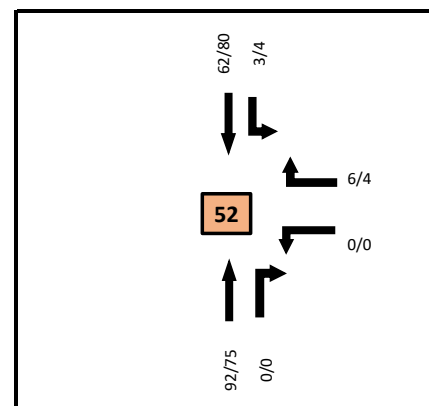
Sunport and I-25 SB Ramps



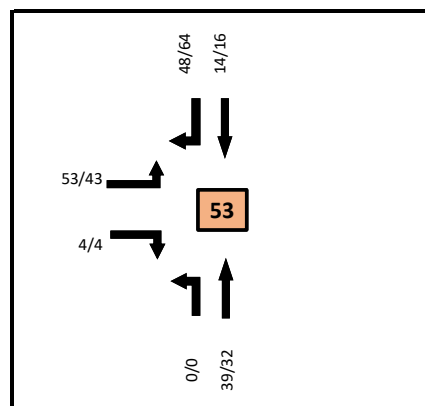
Sunport and I-25 NB Ramps



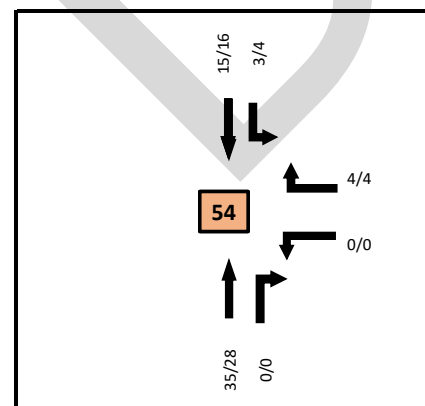
Girard and Miles



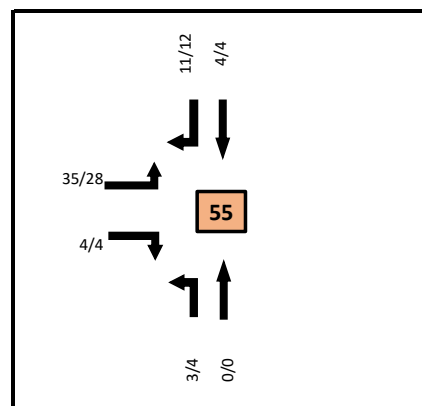
Girard and Site Driveway to East



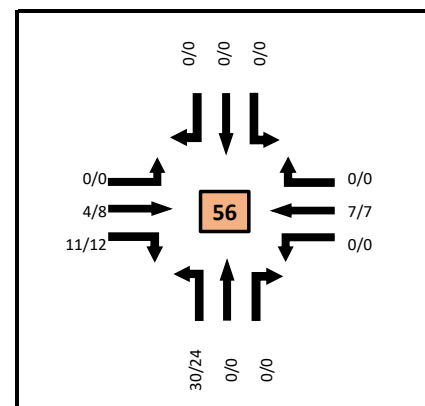
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway

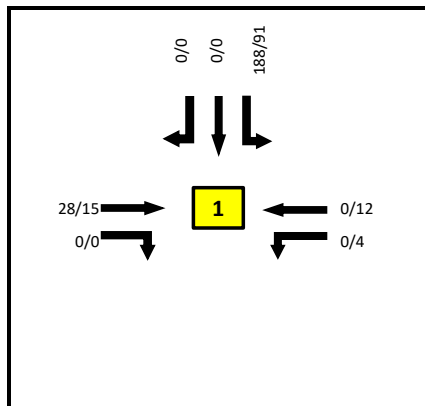


**PHASE 1 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

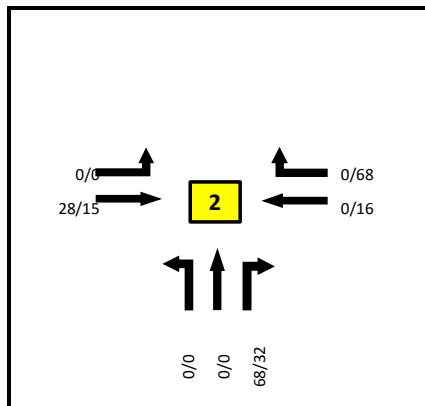
**LEGEND**  
 AM / PM Volumes

**FIGURE 12**

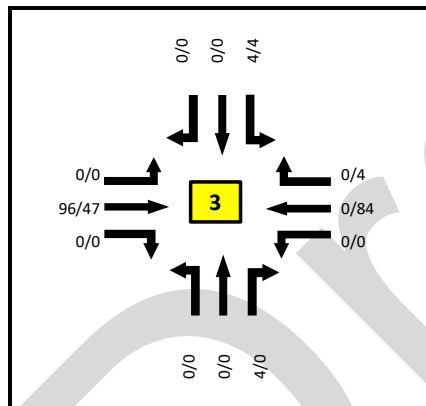




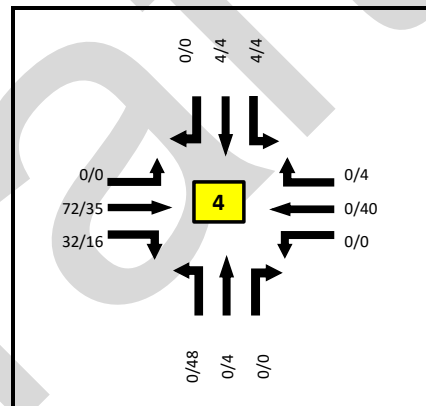
Gibson and I-25 SB Ramps



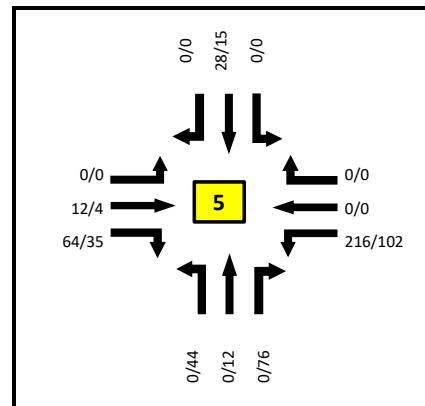
Gibson and I-25 NB Ramps



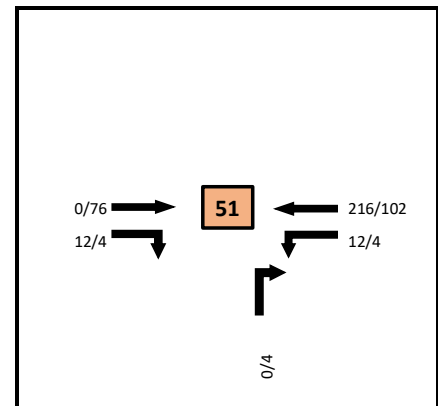
Gibson and University



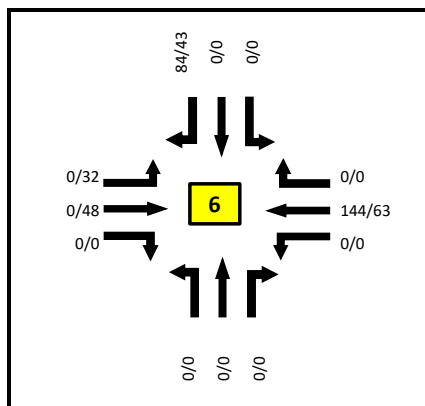
Gibson and Yale



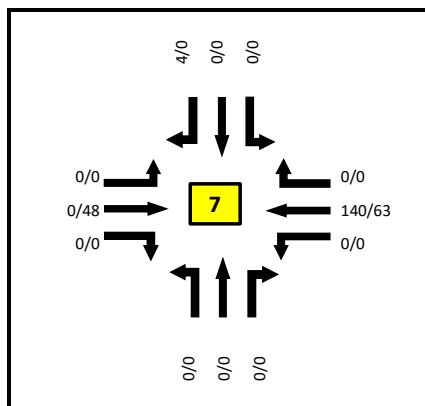
Gibson and Girard



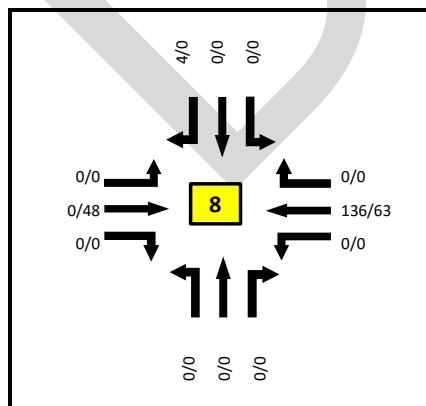
Gibson and Site Driveway



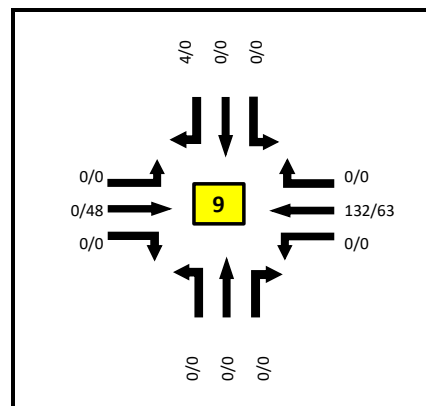
Gibson and Carlisle



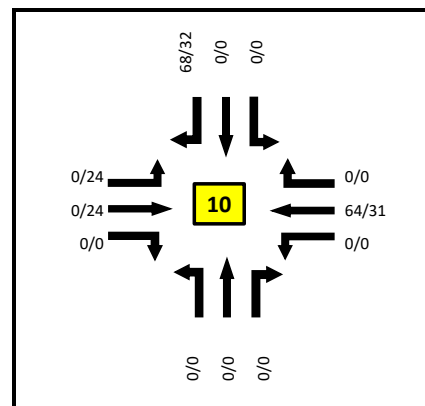
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

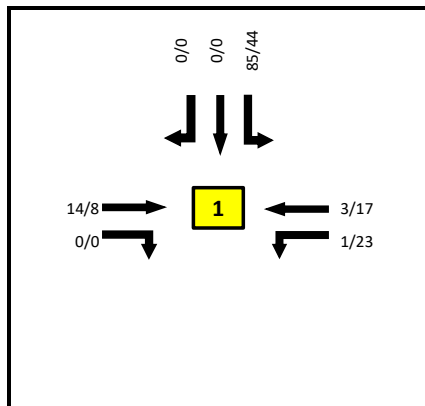


**PHASE 2 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

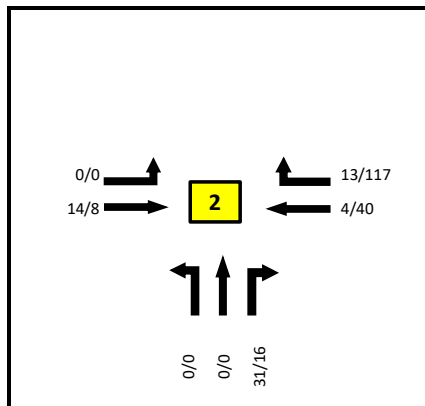
Legend  
 AM / PM    Volumes

**FIGURE 13**

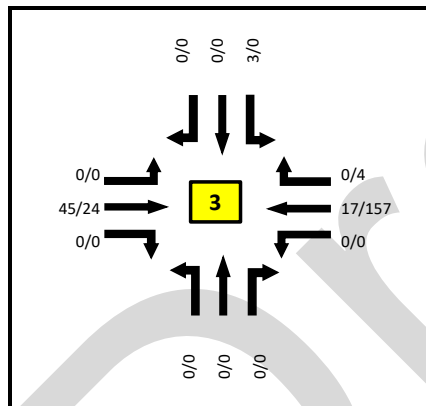




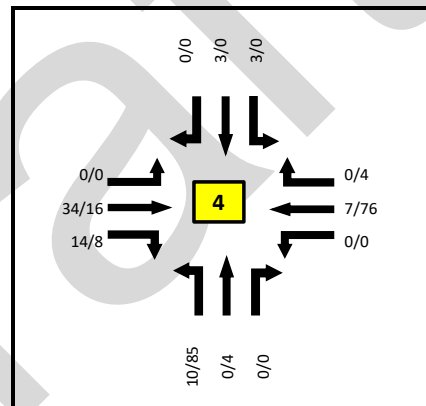
Gibson and I-25 SB Ramps



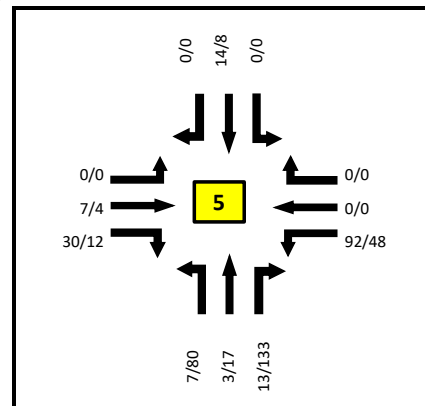
Gibson and I-25 NB Ramps



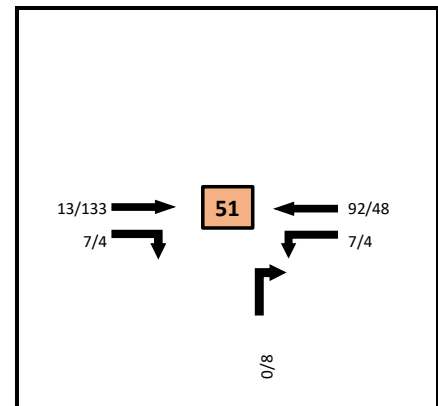
Gibson and University



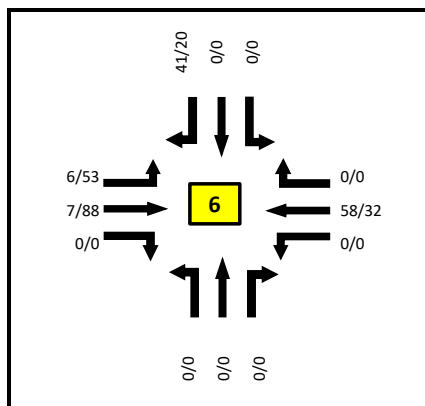
Gibson and Yale



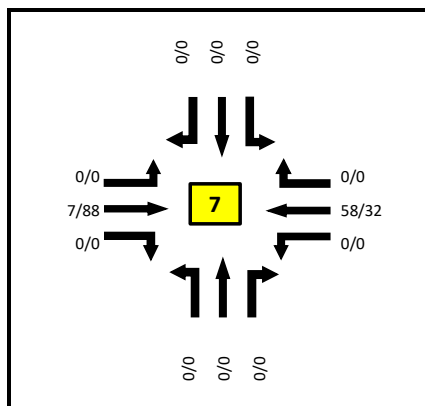
Gibson and Girard



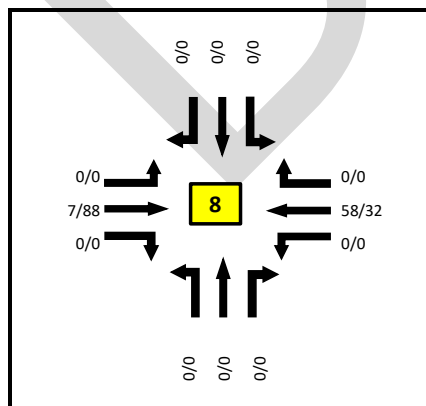
Gibson and Site Driveway



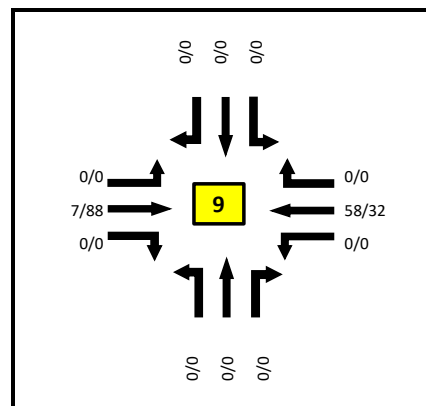
Gibson and Carlisle



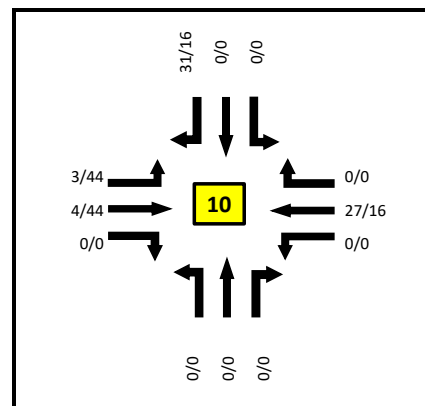
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

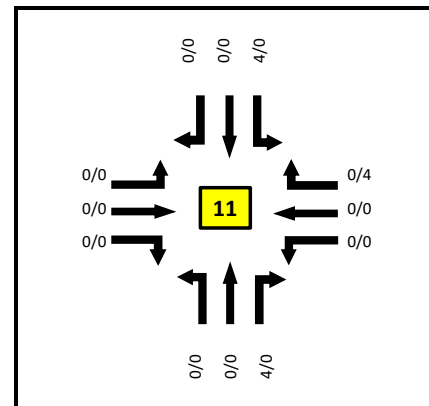


**PHASE 2 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

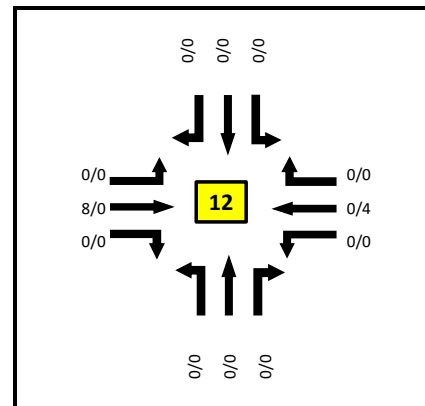
Legend  
 AM / PM Volumes

**FIGURE 14**

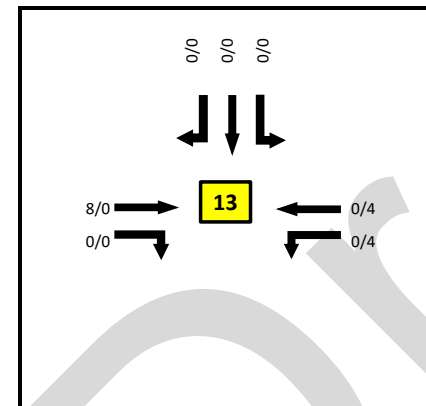




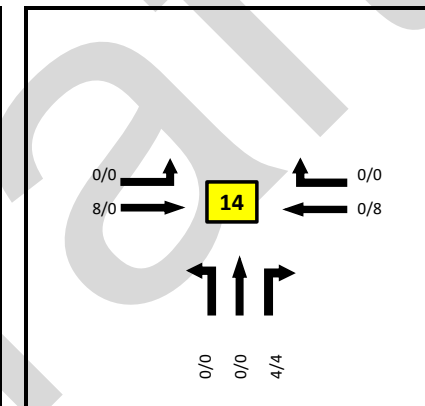
Woodward / Sunport Ext. and 2nd Street



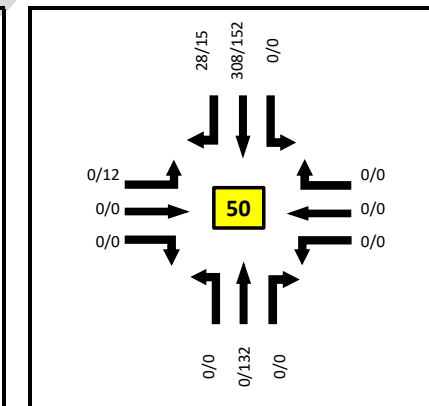
Woodward / Sunport Ext. and Broadway



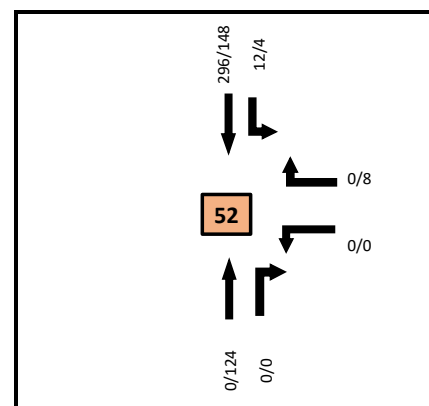
Sunport and I-25 SB Ramps



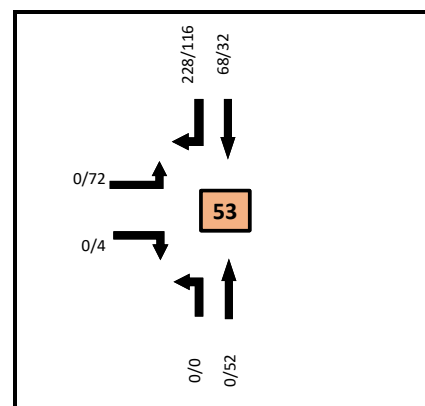
Sunport and I-25 NB Ramps



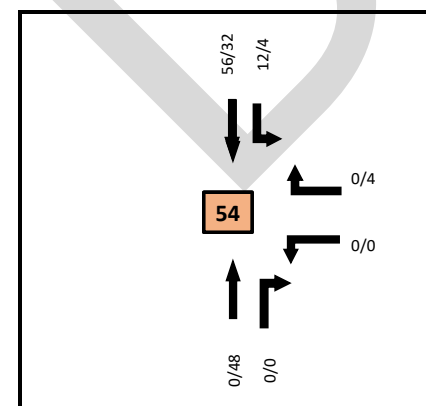
Girard and Miles



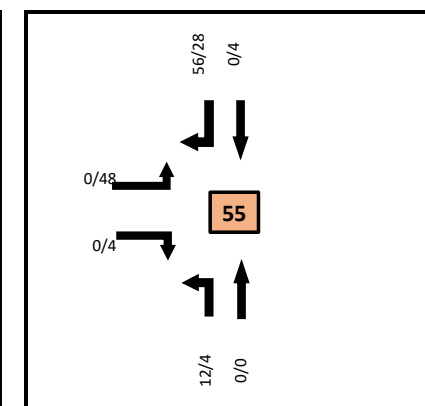
Girard Site Driveway to East



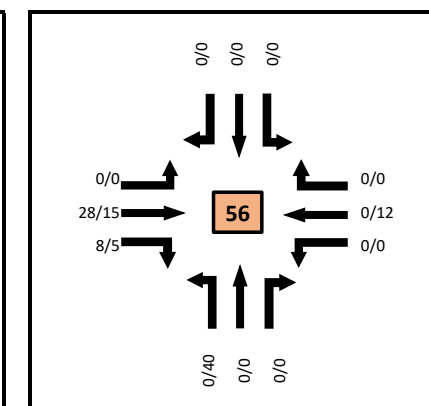
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



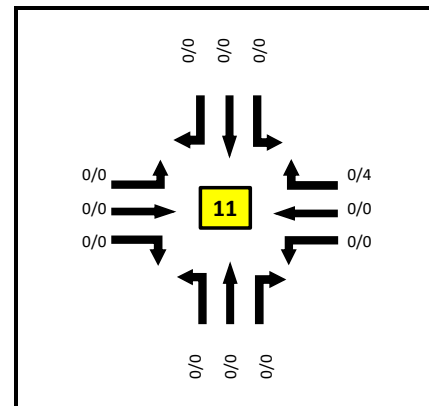
Columbia and Alamo/North Parking Lot Driveway



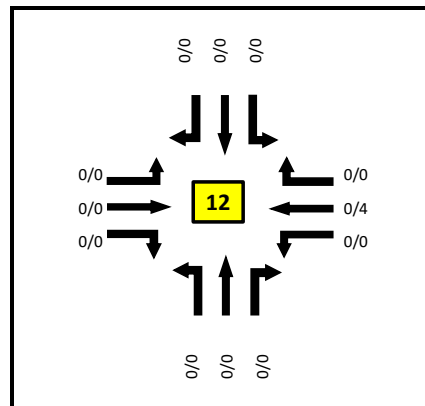
**PHASE 2 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

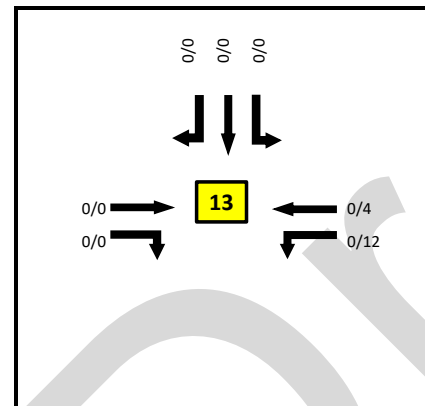
**FIGURE 15**



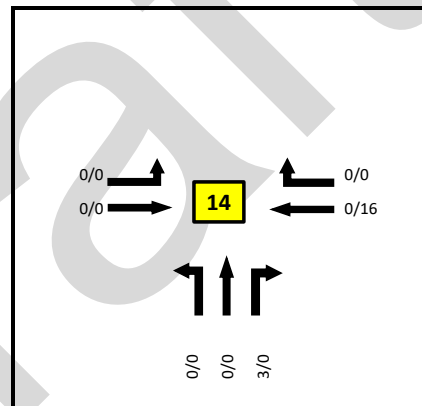
Woodward / Sunport Ext. and 2nd Street



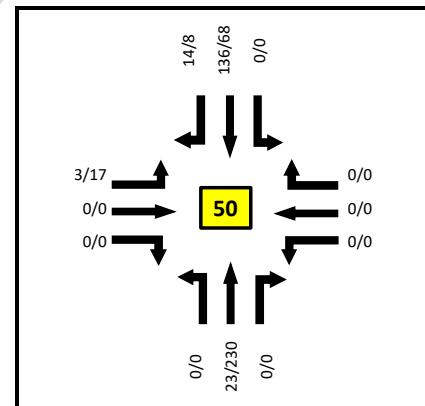
Woodward / Sunport Ext. and Broadway



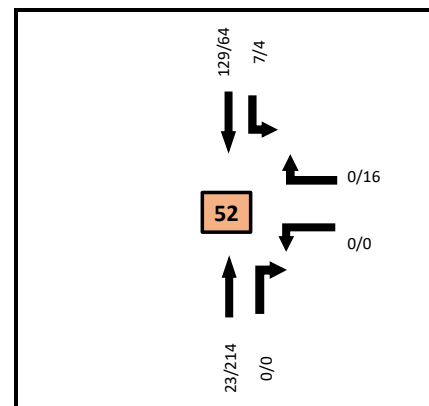
Sunport and I-25 SB Ramps



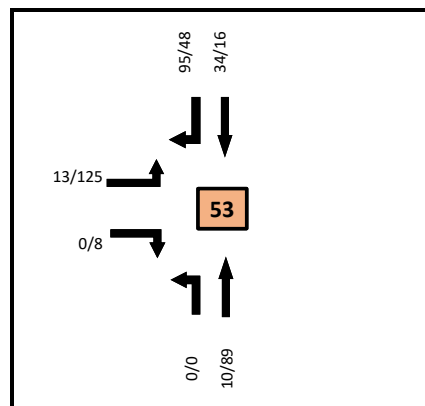
Sunport and I-25 NB Ramps



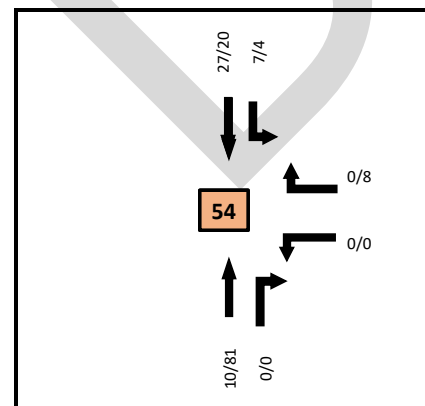
Girard and Miles



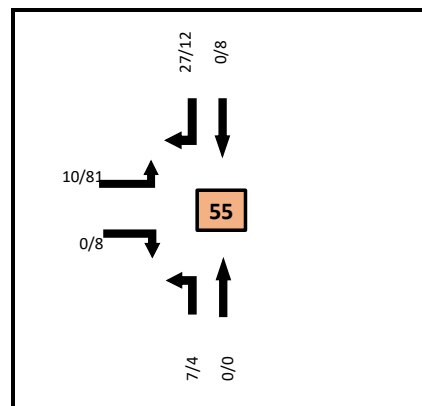
Girard Site Driveway to East



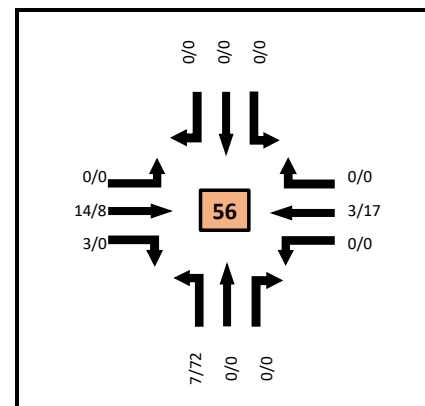
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway

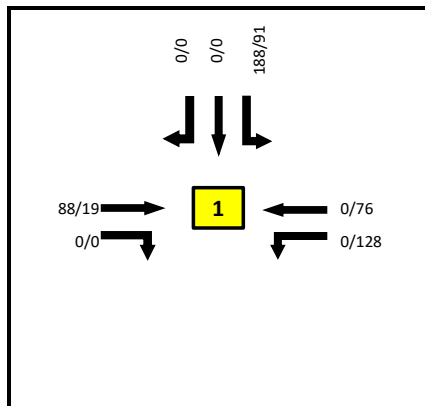


**PHASE 2 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

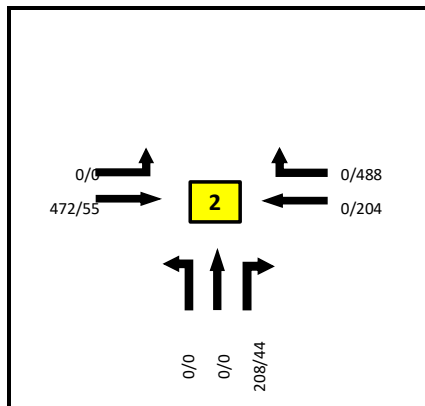
**LEGEND**  
 AM / PM Volumes

**FIGURE 16**

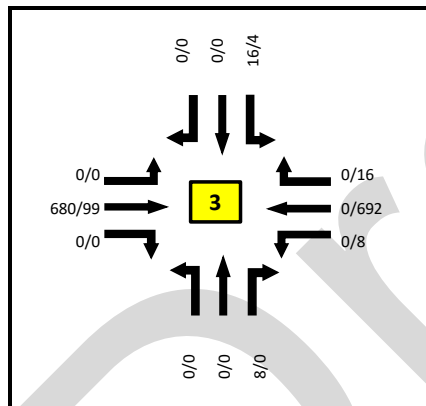




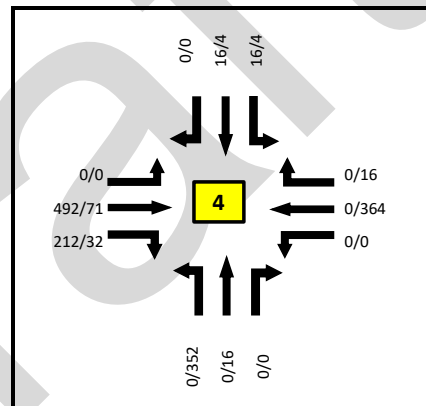
Gibson and I-25 SB Ramps



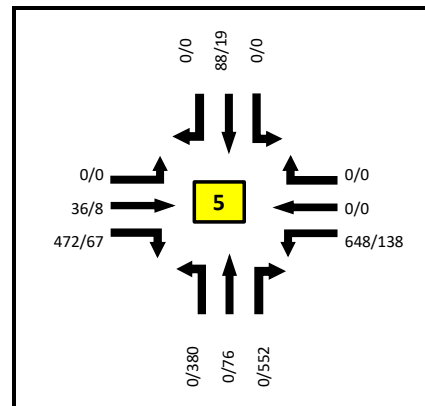
Gibson and I-25 NB Ramps



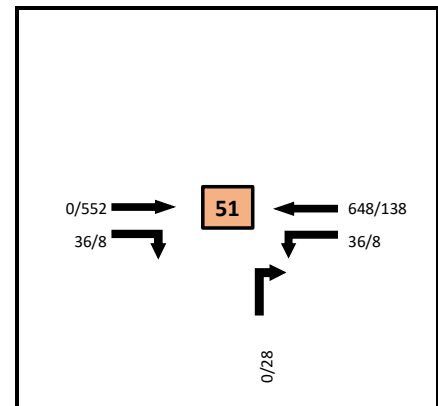
Gibson and University



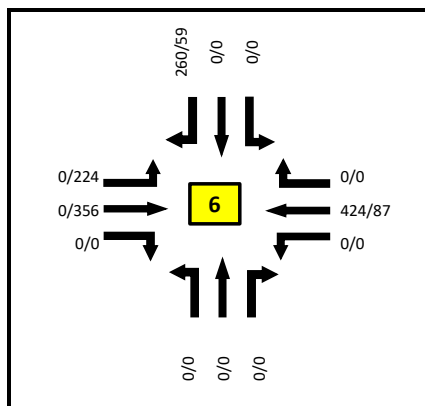
Gibson and Yale



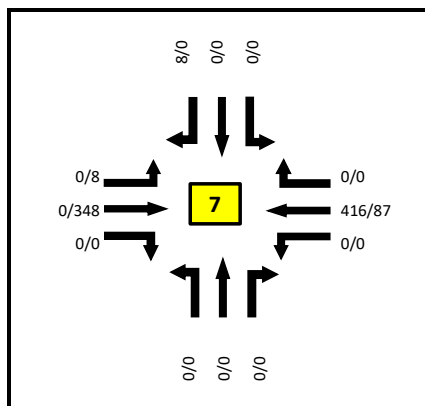
Gibson and Girard



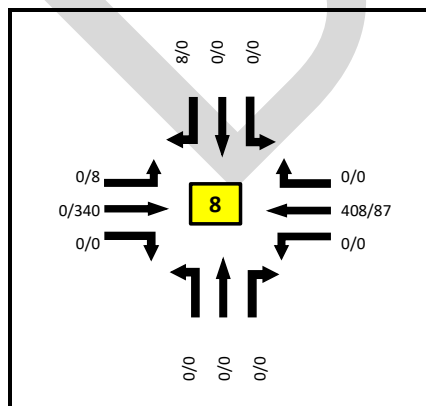
Gibson and Site Driveway



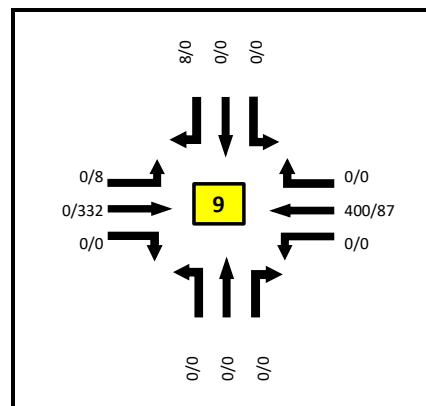
Gibson and Carlisle



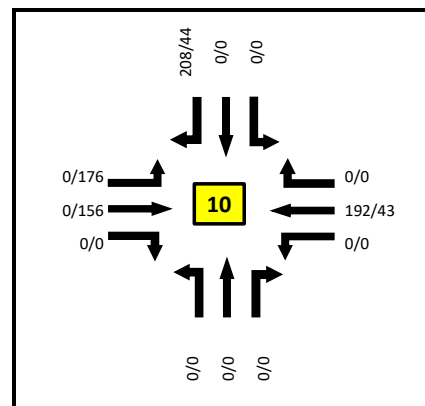
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

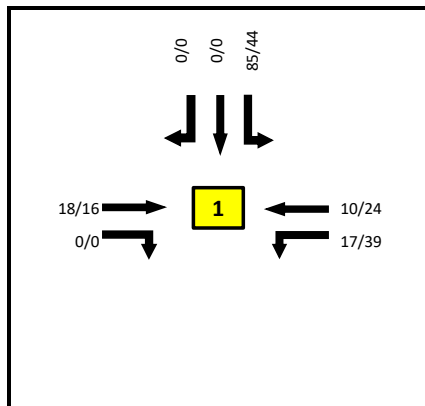


**PHASE 1 + PHASE 2 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

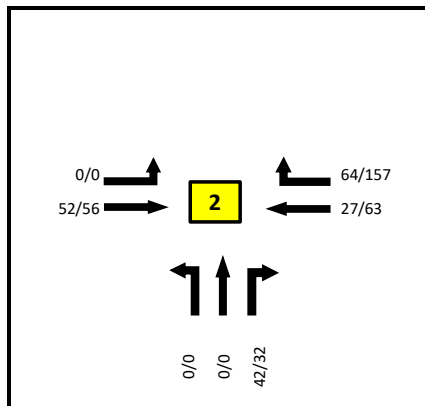
Legend  
 AM / PM Volumes

**FIGURE 17**

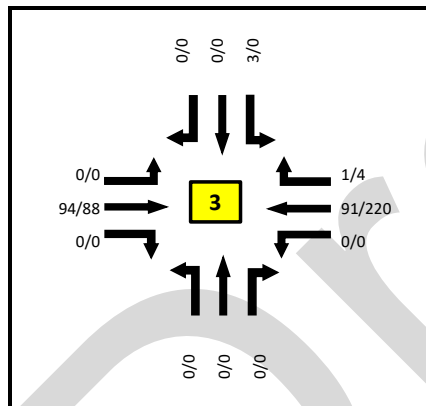




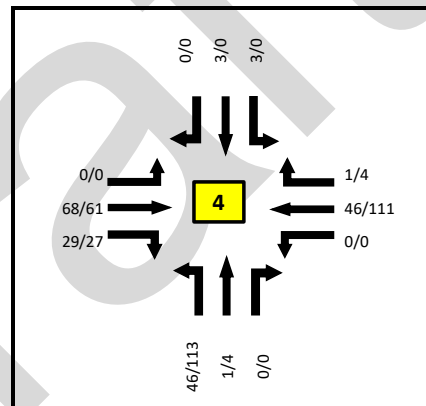
Gibson and I-25 SB Ramps



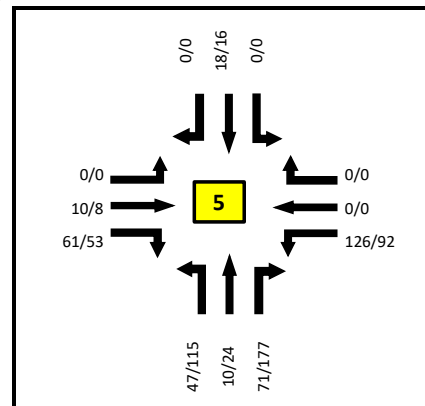
Gibson and I-25 NB Ramps



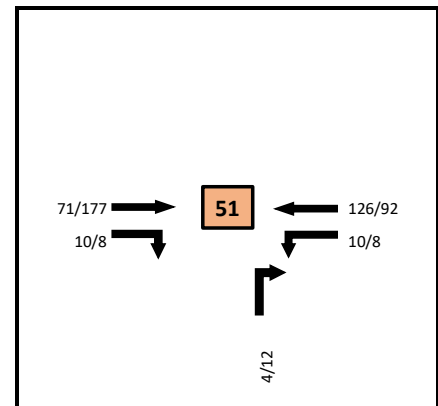
Gibson and University



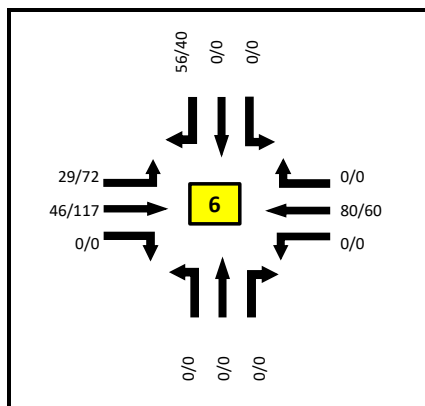
Gibson and Yale



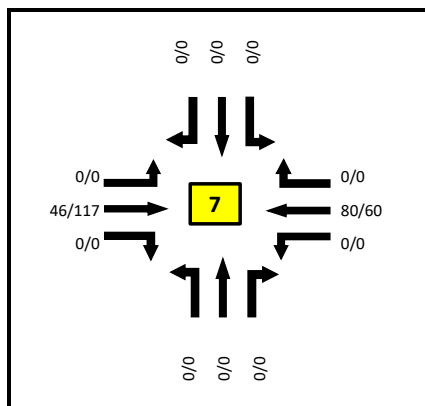
Gibson and Girard



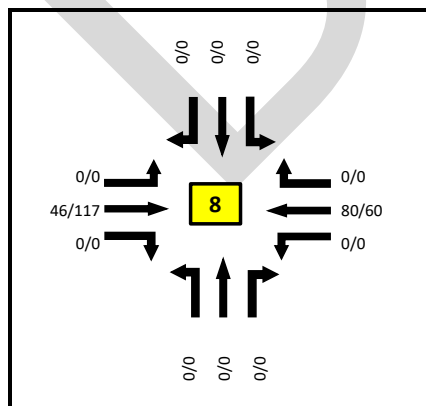
Gibson and Site Driveway



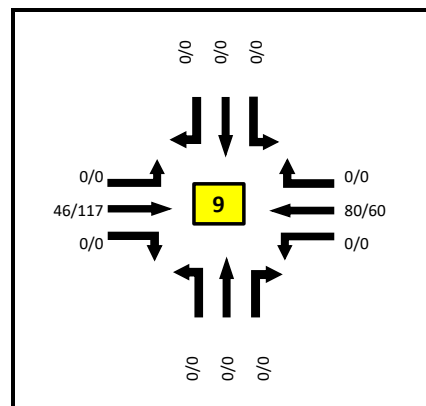
Gibson and Carlisle



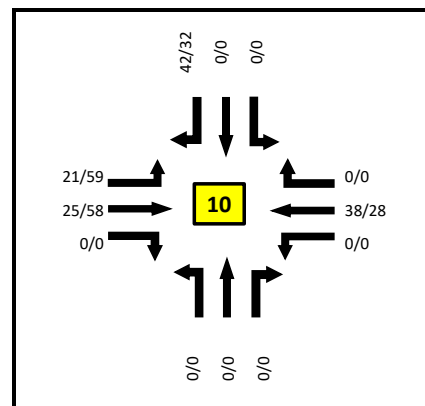
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

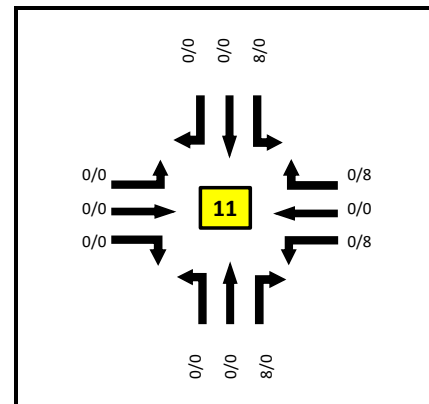


**PHASE 1 + PHASE 2 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

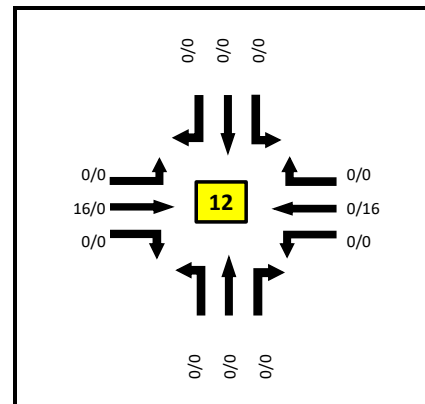
Legend  
 AM / PM Volumes

**FIGURE 18**

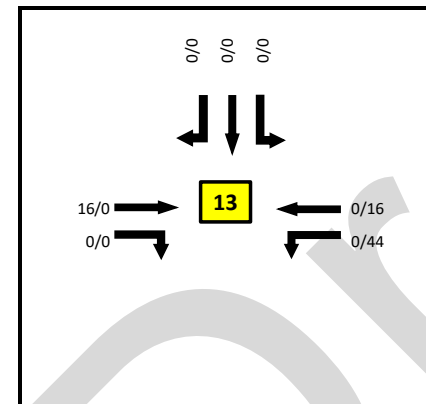




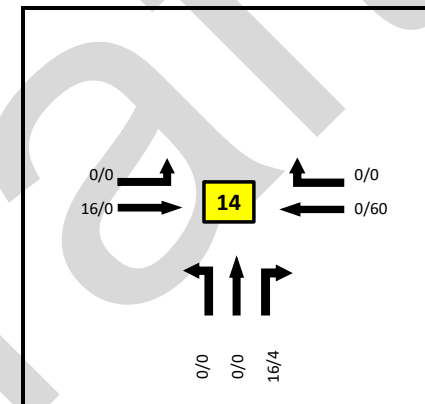
Woodward / Sunport Ext. and 2nd Street



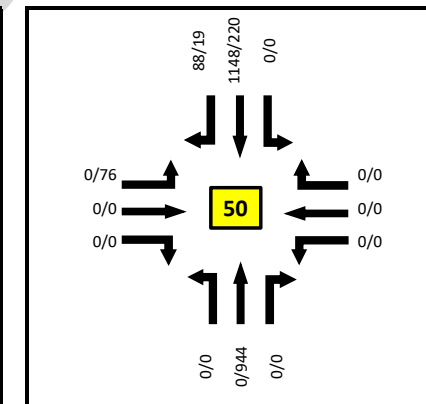
Woodward / Sunport Ext. and Broadway



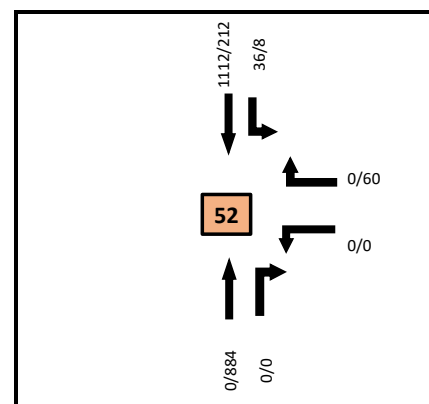
Sunport and I-25 SB Ramps



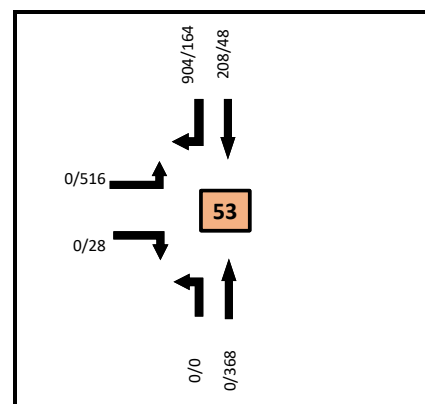
Sunport and I-25 NB Ramps



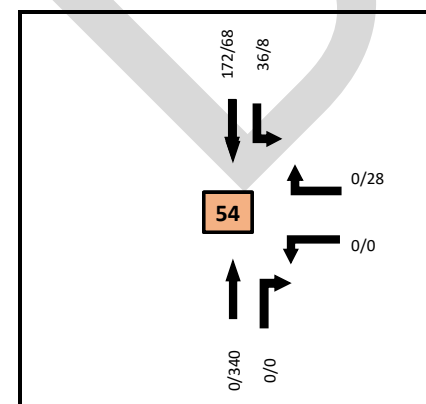
Girard and Miles



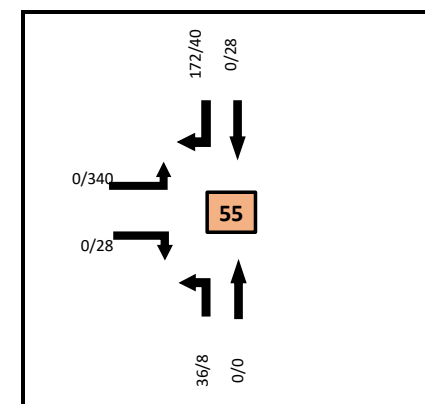
Girard Site Driveway to East



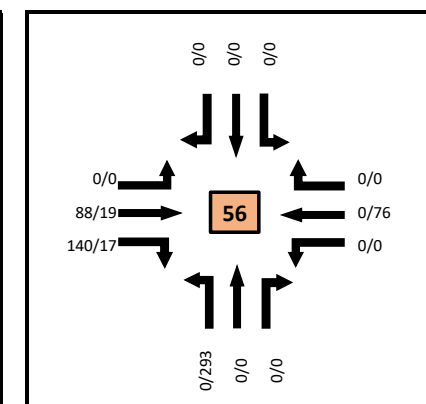
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



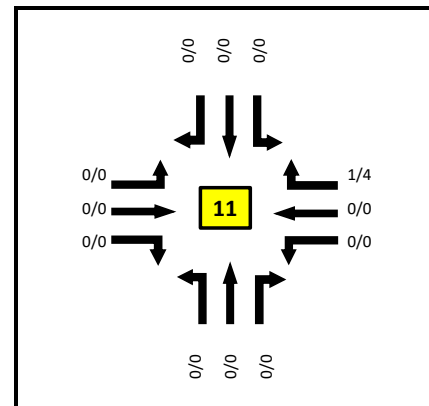
Columbia and Alamo/North Parking Lot Driveway



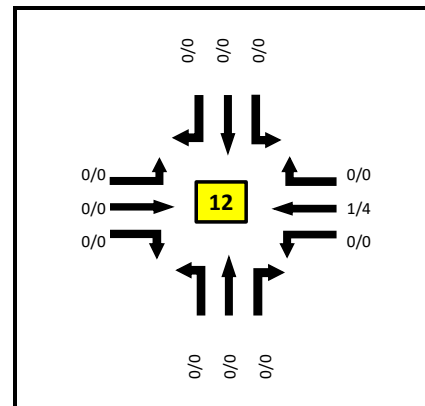
**PHASE 1 + PHASE 2 SITE TRIPS**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

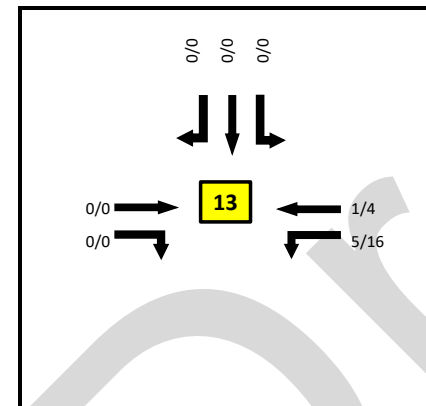
**FIGURE 19**



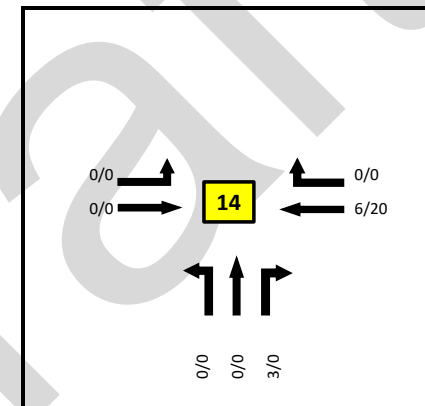
Woodward / Sunport Ext. and 2nd Street



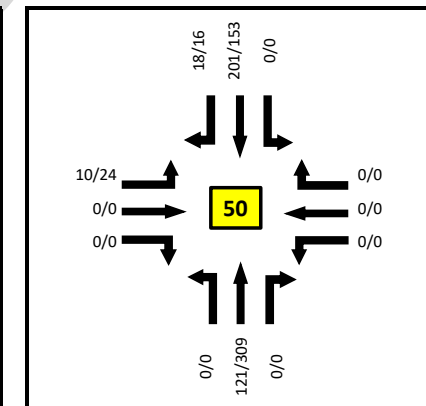
Woodward / Sunport Ext. and Broadway



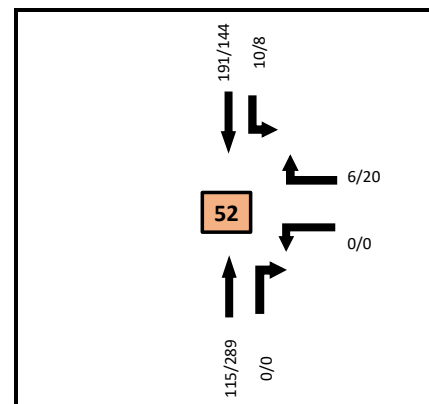
Sunport and I-25 SB Ramps



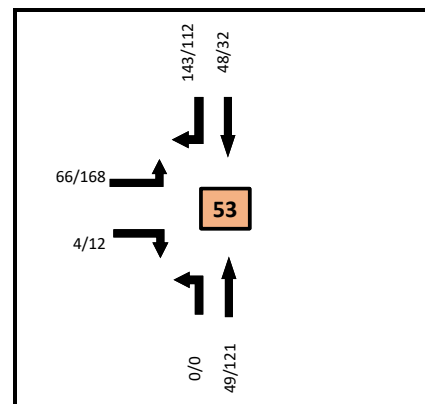
Sunport and I-25 NB Ramps



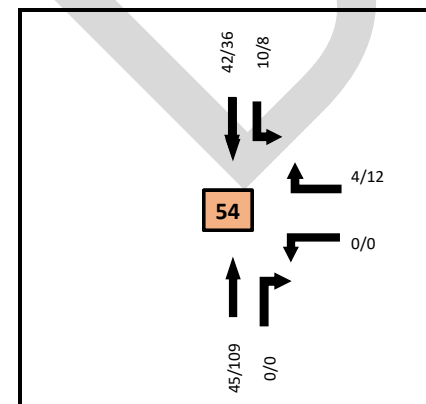
Girard and Miles



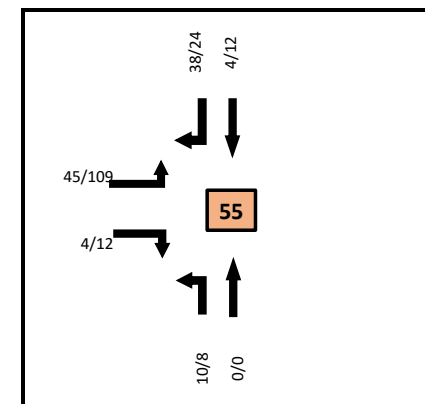
Girard Site Driveway to East



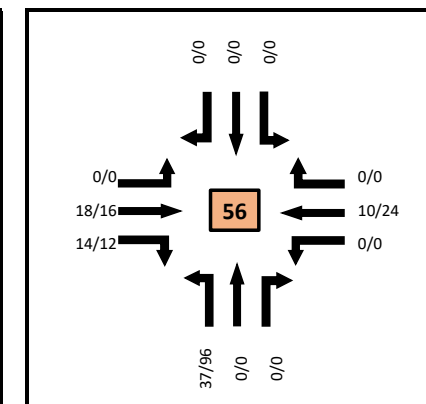
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway



**PHASE 1 + PHASE 2 SITE TRIPS**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

**FIGURE 20**



## 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 21 and 22 show the 2025 No-Build AM and PM peak-hour volumes for the Gibson and Sunport corridors, respectively, during the typical roadway peak hour. It is noted that the EUL project will add signalization at the Gibson/Quincy intersection, add south legs to the Maxwell and Quincy intersections, and have access to Gibson Blvd via driveways on Carlisle Blvd and Truman St.

In addition to the EUL site, the Sunport Blvd Extension west of the I-25 interchange is assumed to be completed by 2025. Traffic volumes are anticipated to change with the roadway opening. Volume estimates along the 4-intersection corridor are based on the 2020 build volumes identified in the Sunport Boulevard Extension *Technical Memorandum* (Figures 3 and 4 of that report) and increased at a rate of 1% per year for 5 years to estimate 2025 conditions. A copy of the 2020 AM and PM peak-hour forecasted volumes are provided in Appendix B.

**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 23 through 26 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.

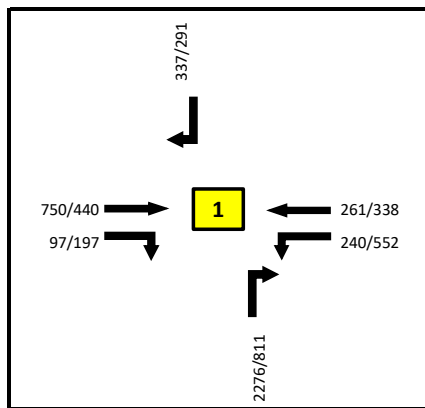
**2030 No-Build Traffic Volumes.** Like the 2025 No-Build condition, the 2030 No-Build volumes were determined by increasing the 2025 traffic volumes (minus EUL trips) by 1% per year for 5 years (growth factor =  $1.051$ ) and added the EUL traffic and Phase 1 site traffic. The only base roadway network changes to the 2030 horizon year are the improvements associated with the I-25 corridor, which modify the ramp configurations at Gibson Blvd while also adding signal control at the ramp intersections. Figures 27 through 30 show the AM and PM peak-hour volumes for the generator and roadway along the Gibson and Sunport corridors, respectively.

**2030 Build Traffic Volumes.** Phase 2 trips were added to the 2030 No-Build scenario to develop the traffic volumes for the 2030 Build condition. Figures 31 through 34 show the peak-hour volumes associated with full site build-out in the 2030 horizon year.

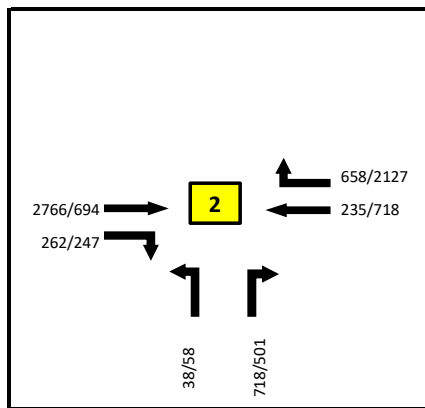
**2040 Horizon Year, Build-out Plus 10 Years.** Peak-hour volumes were estimated by adding 10 years of 1% traffic growth to the 2030 year background traffic volumes and adding the volume increase to the 2030 Build traffic volumes. Figures 35 through 38 show the estimated peak-hour volumes for this scenario.

## VOLUME DEVELOPMENT COMMENTARY.

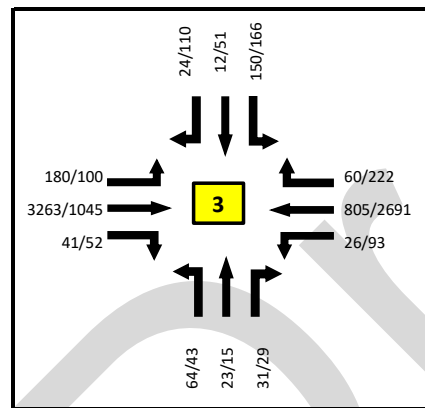
The methodology used in this report to develop future year volumes applied a flat growth rate to 2020 base volumes. No attempt has been made to adjust volumes based on 2040 traffic forecasts identified in the South I-25 Corridor Study for the Gibson or Sunport Ramp locations. For example, as shown in the 2040 forecasts, AM peak-hour volume at the Gibson Blvd and I-25 Southbound Ramp shows a southbound to eastbound left-turn volume of 1,340 vehicles. In 2020, AM peak-hour volume for this movement per data provided by MRCOG (2017 data assumed for 2020 existing conditions) is over 1,900 vehicles. It is therefore noted that the results in this report may overestimate background traffic volumes (especially along the Gibson corridor) by growing existing volumes by 1% per year.



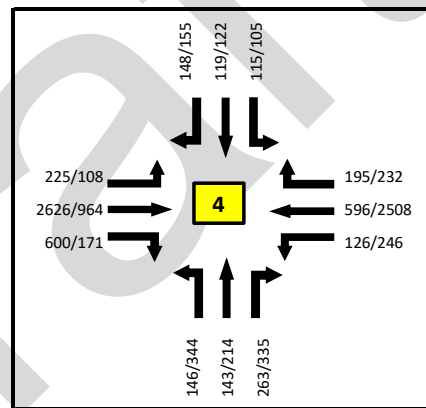
Gibson and I-25 SB Ramps



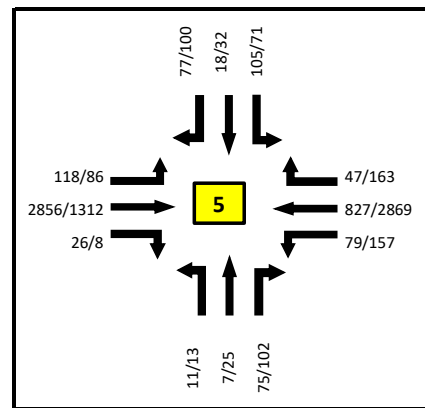
Gibson and I-25 NB Ramps



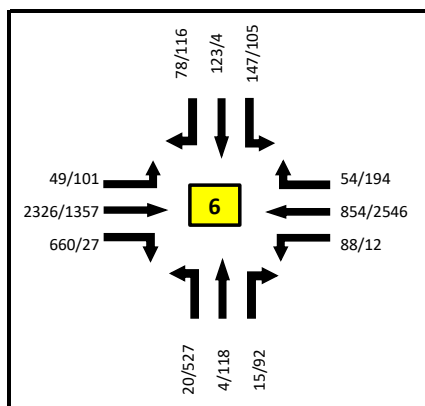
Gibson and University



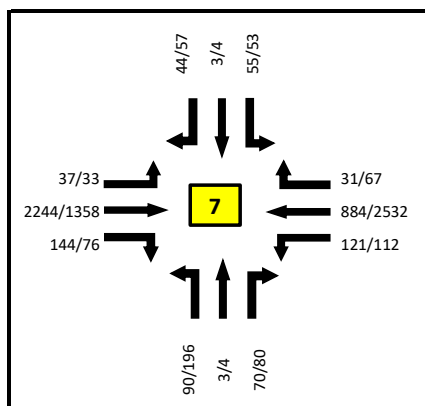
Gibson and Yale



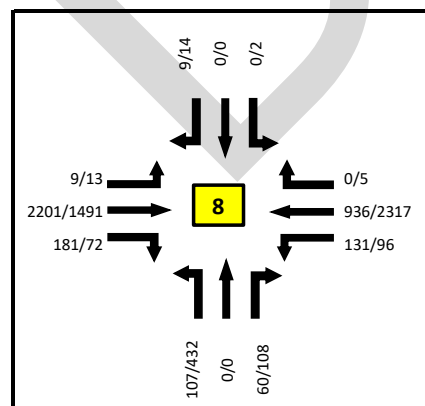
Gibson and Girard



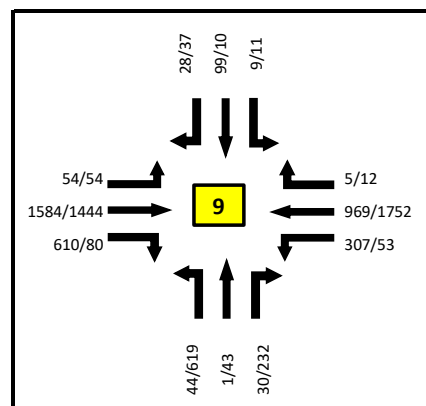
Gibson and Carlisle



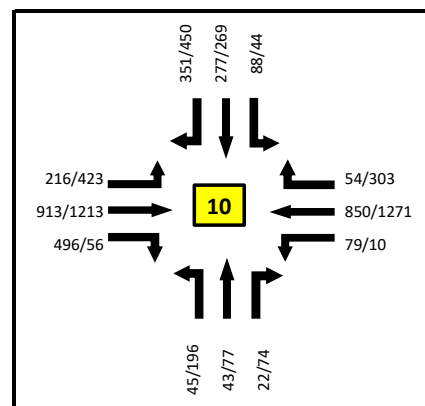
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

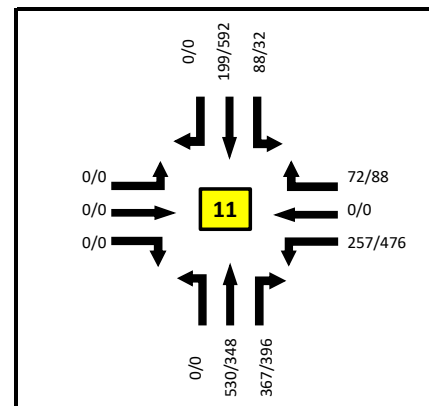
**2025 NO-BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

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

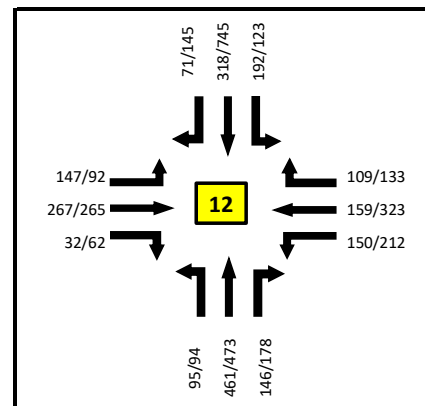


**FIGURE 21**

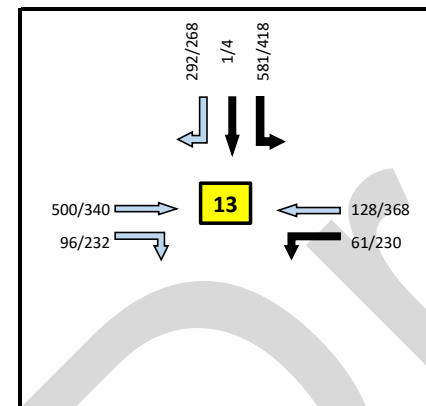




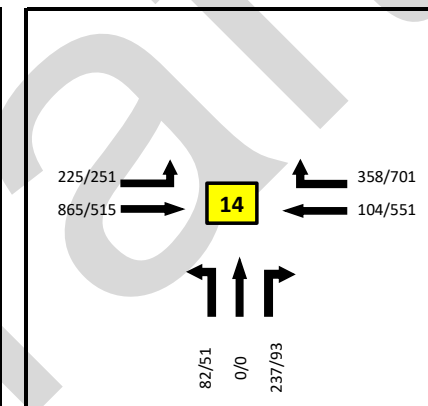
Woodward / Sunport Ext. and 2nd Street



Woodward / Sunport Ext. and Broadway



Sunport and I-25 SB Ramps



Sunport and I-25 NB Ramps

**Legend**

AM / PM

Volumes

New Intersection movements from Sunport Extension Project

NOTES:

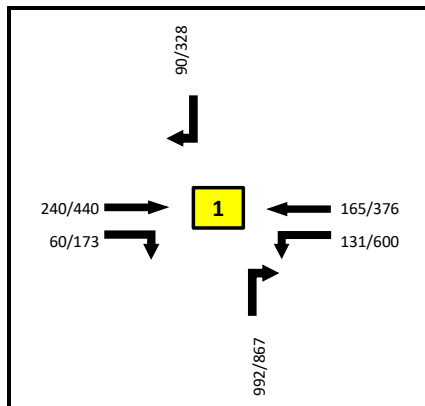
Includes 1% growth for 5 years plus EUL Site Traffic



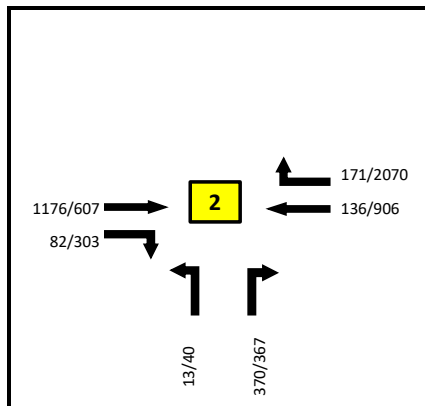
**2025 NO-BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**FIGURE 22**

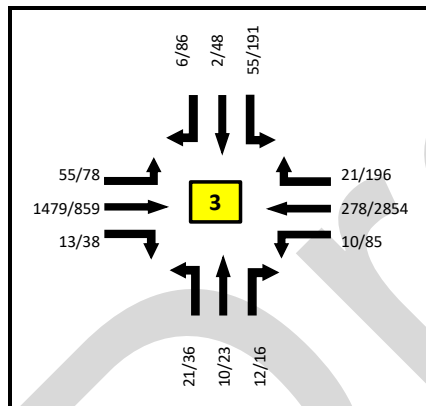




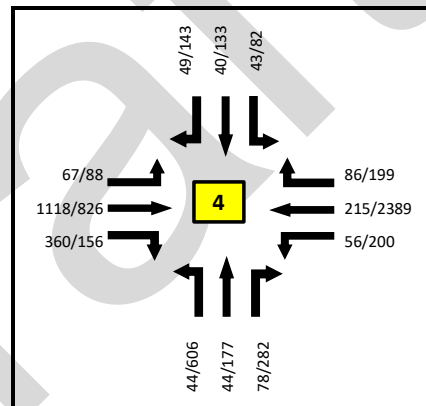
Gibson and I-25 SB Ramps



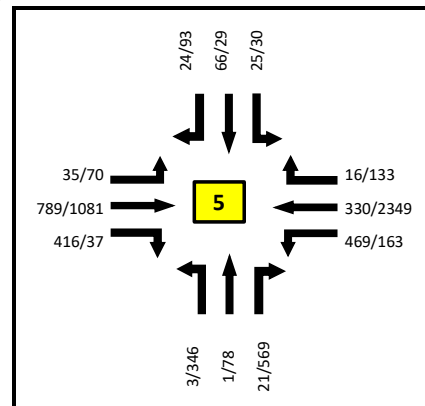
Gibson and I-25 NB Ramps



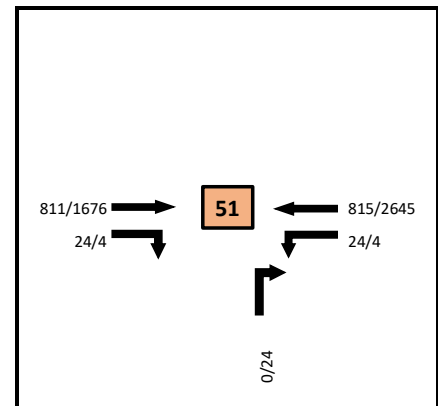
Gibson and University



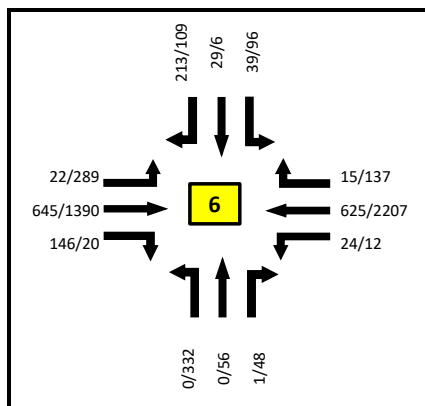
Gibson and Yale



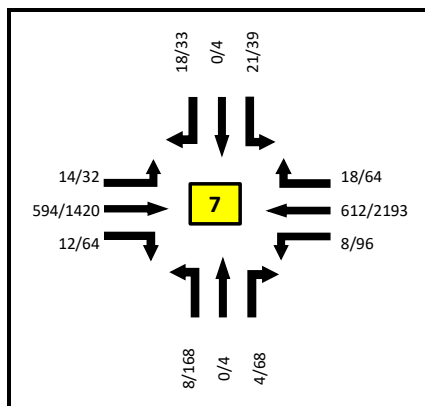
Gibson and Girard



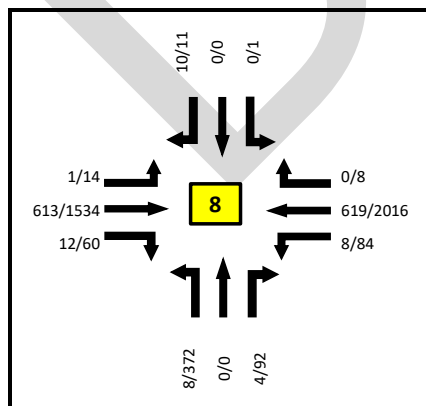
Gibson and Site Driveway



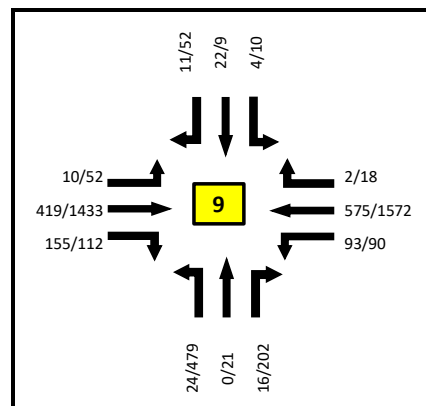
Gibson and Carlisle



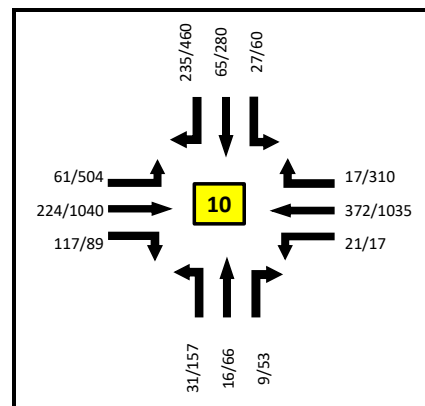
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

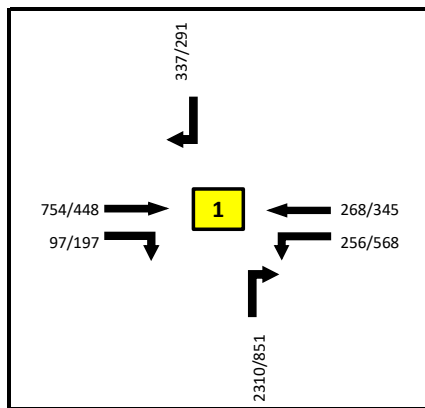


**2025 BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

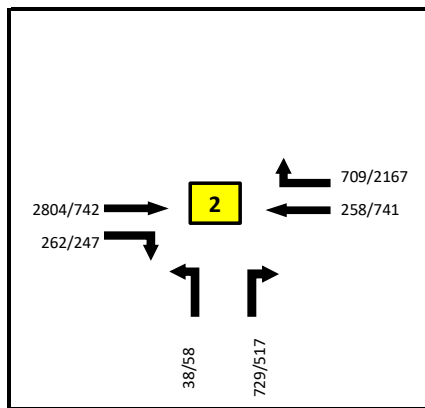
Legend  
 AM / PM Volumes

**FIGURE 23**

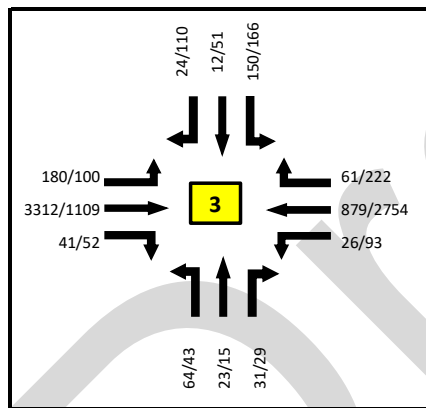




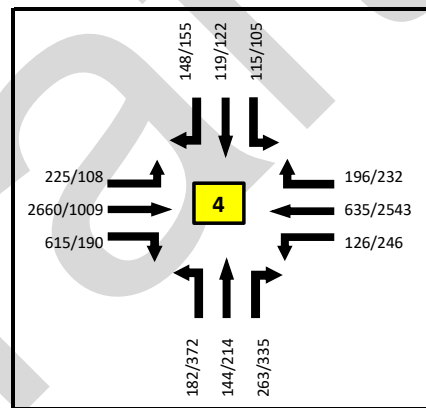
Gibson and I-25 SB Ramps



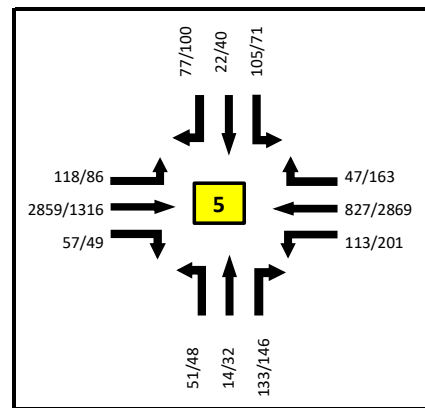
Gibson and I-25 NB Ramps



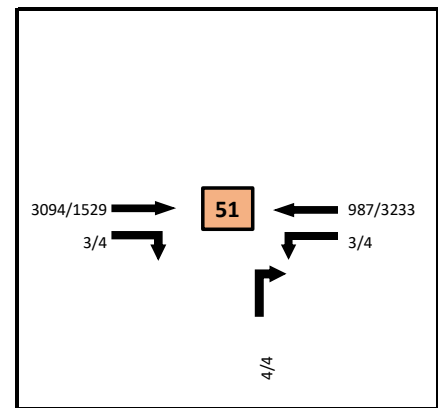
Gibson and University



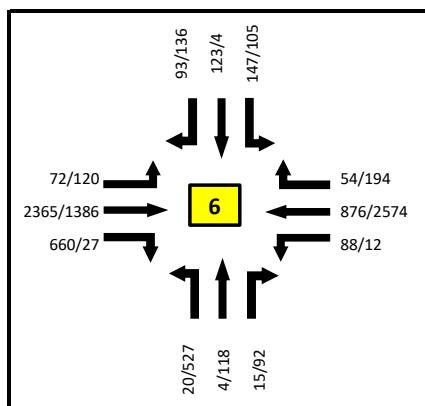
Gibson and Yale



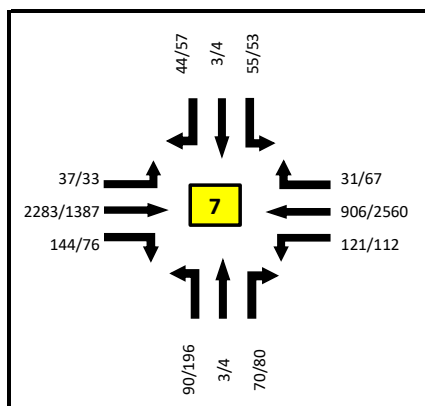
Gibson and Girard



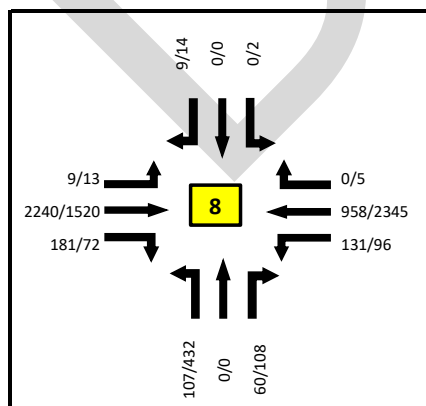
Gibson and Site Driveway



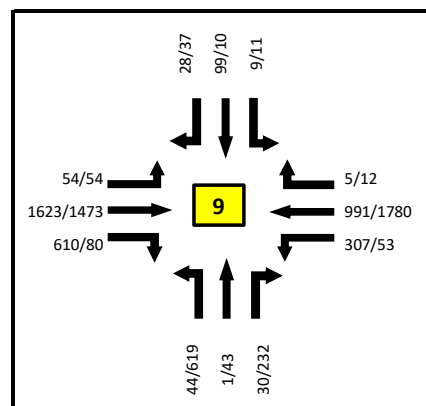
Gibson and Carlisle



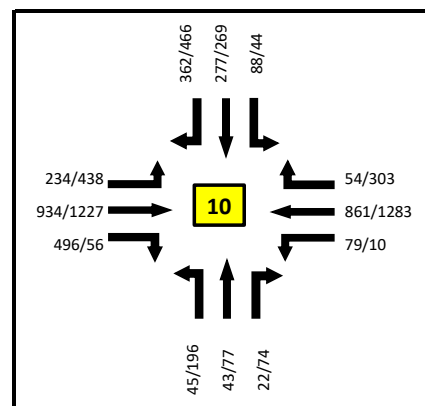
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

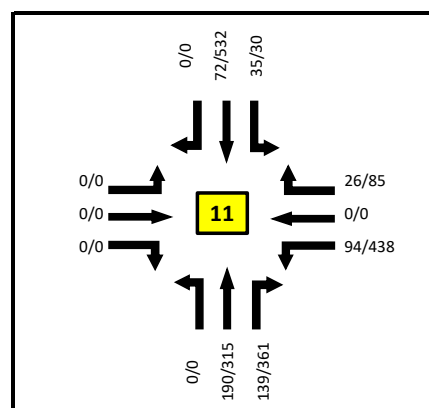


**2025 BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

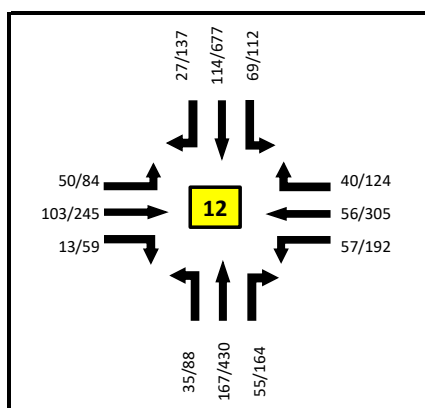
Legend  
 AM / PM Volumes

**FIGURE 24**

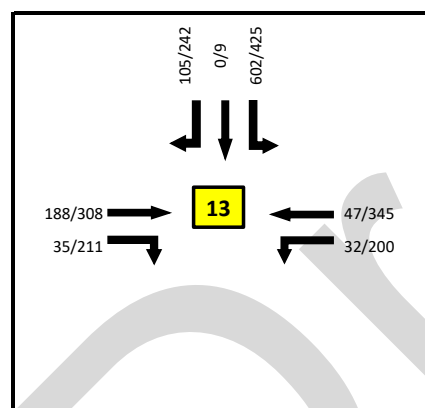




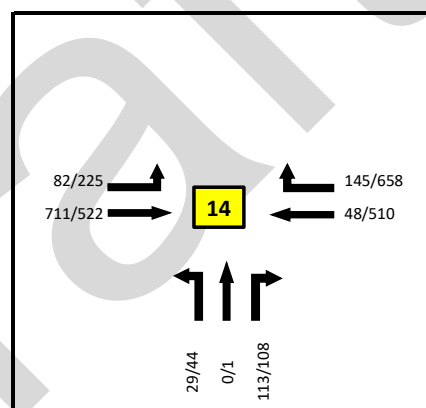
Woodward / Sunport Ext. and 2nd Street



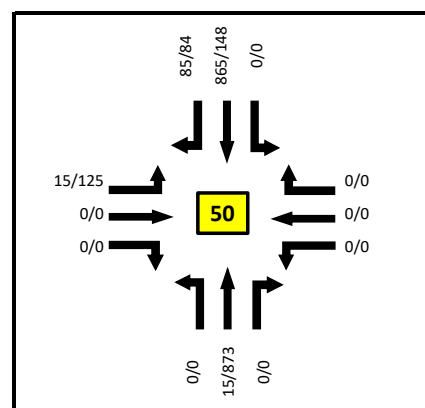
Woodward / Sunport Ext. and Broadway



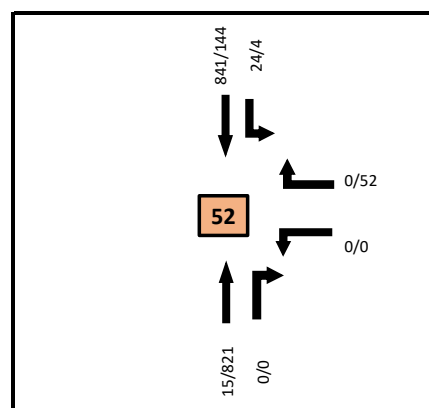
Sunport and I-25 SB Ramps



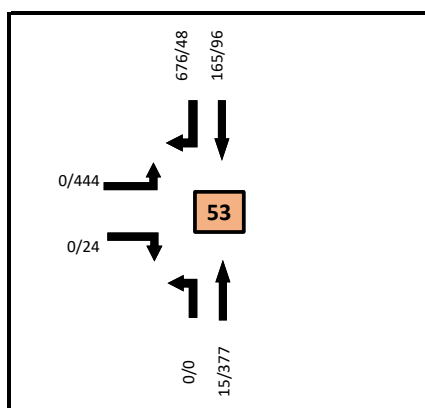
Sunport and I-25 NB Ramps



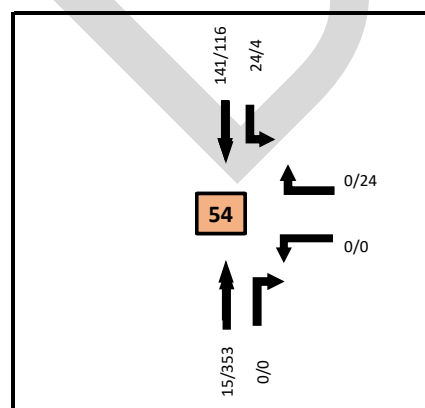
Girard and Miles



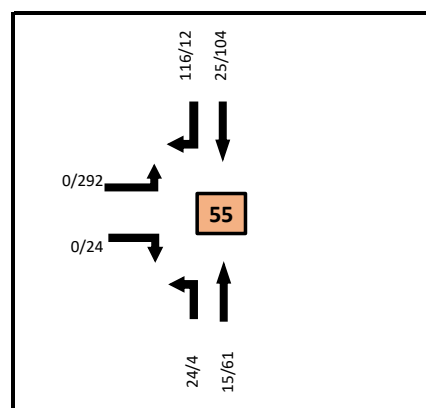
Girard Site Driveway to East



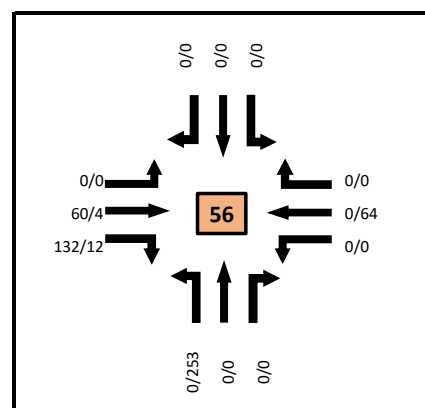
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



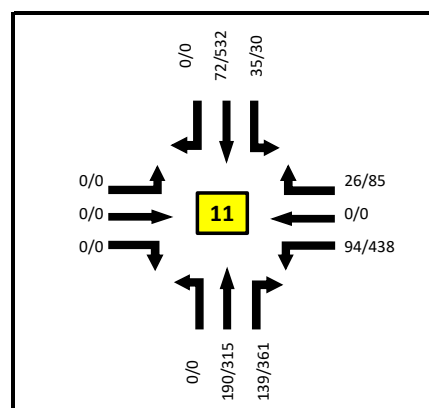
Columbia and Alamo/North Parking Lot Driveway



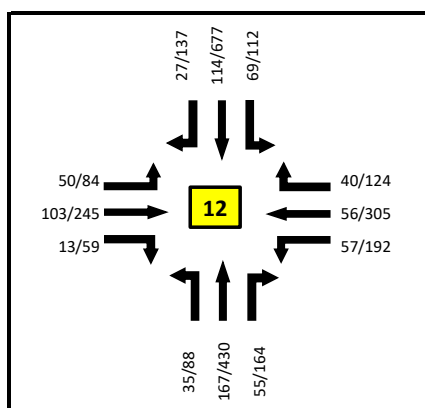
**2025 BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

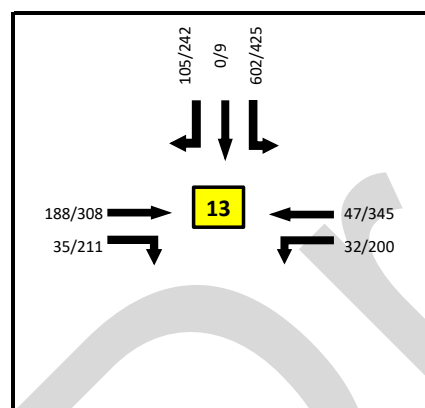
**FIGURE 25**



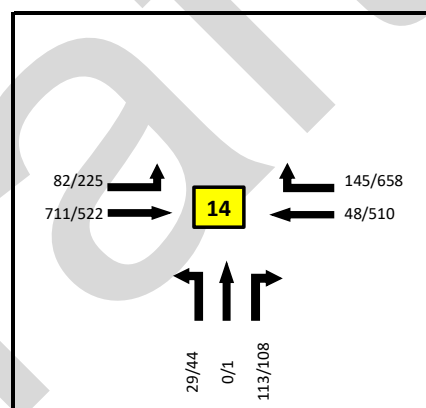
Woodward / Sunport Ext. and 2nd Street



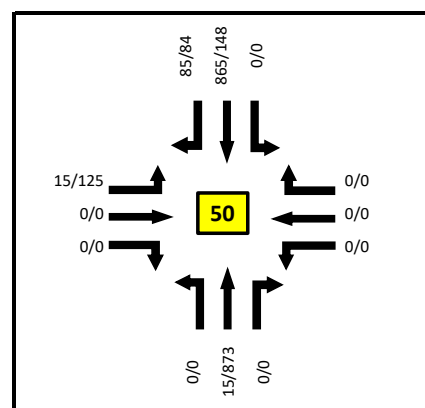
Woodward / Sunport Ext. and Broadway



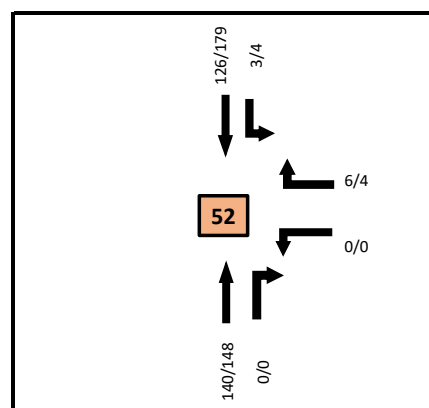
Sunport and I-25 SB Ramps



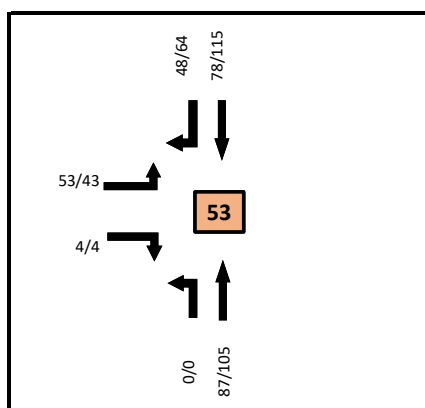
Sunport and I-25 NB Ramps



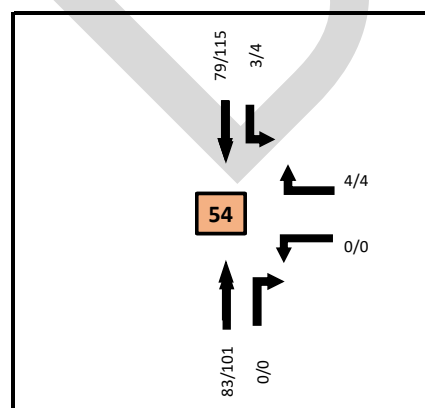
Girard and Miles



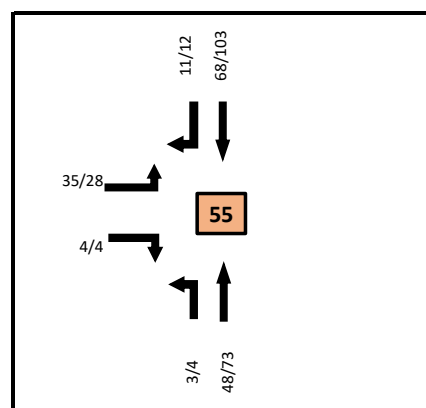
Girard Site Driveway to East



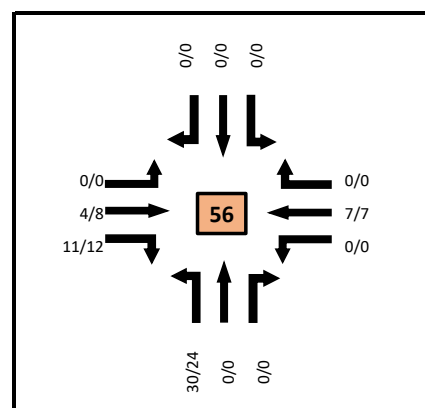
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway



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

**LEGEND**  
 AM / PM Volumes

**FIGURE 26**



## LEVEL OF SERVICE ANALYSIS

As performed for existing conditions, an intersection LOS analysis was performed for all No-Build and Build scenarios using the same basic procedures and assumptions. Signal timings used in the existing conditions analysis were retained and used for the next subsequent scenario, except where new traffic control or the EUL project required modification. In these circumstances, Vistro software was used to optimize the signal phasing times and offsets within the time of day coordination pattern for the entire corridor. Additional information pertaining to the LOS results as well as delay, v/c ratios, and 95<sup>th</sup> percentile queue can be found in Appendix D. The Build scenario includes the new site driveways planned for use/construction by the site.

### 2025 YEAR SCENARIOS

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

### 2025 NO-BUILD RESULTS

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

All signalized intersections operate at an overall LOS D or better condition for the entire morning peak period. At the unsignalized intersections, the only movement showing LOS F operation is the northbound to westbound left-turn movement at the Gibson/I-25 northbound off-ramp from 6:30 AM to 7:45 AM due to continuous, high southbound to eastbound off-ramp volume.

When reviewing the individual intersection movements during the AM peak period, three signalized intersections have movements operating at LOS F during at least one 15-minute time period, including movements at Gibson/University (EB thru), Gibson/Yale (EB thru), and Gibson/Quincy (SB approach).

Overall in the 3-hour morning period, a total of 32 movements show LOS F operation and 216 movements show LOS E operation. It is noted that some LOS E/F movements may be created by low side-street volumes having to wait an extended period of time for a green indication (low v/c ratio). Additionally, the numbers also reflect multiple movements that may operate from a single, shared approach lane, although results are provided for each movement.

When compared to 2020 Existing AM peak-hour conditions, only five movements operated at LOS F while 152 movements operated at LOS E.

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

Only the Gibson/Truman signalized intersection operates with an overall LOS F condition, occurring in nine of the 12 periods analyzed due to high northbound approach demand. All other study area intersections operate with LOS D or better conditions throughout the three-hour evening time period. Individual movements at Carlisle, Quincy, Truman, and San Mateo show 1 or more movements operating at LOS F.

Overall, a total of 63 individual movements operate at LOS F while another 185 movements operate at LOS E (every signalized intersection along the Gibson corridor has at least one movement operating at LOS E/F for one or more periods). 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 127 at LOS E.

## 2025 BUILD RESULTS

Utilizing the same field conditions as the No-Build scenario, the 2025 Build volumes were substituted into the Vistro software and analyzed. The only network modifications included the addition of the site access points, all assumed to be STOP-controlled.

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

Similar to the No-Build condition, all signalized intersections are shown to operate with an overall LOS D or better conditions throughout the peak morning time period. The unsignalized northbound to westbound left-turn movement at the Gibson/I-25 Northbound Off-Ramp, shows slightly reduced operation with the added site traffic.

Overall, the same 3 signalized intersections (Gibson at University, Yale, and Quincy) continue to show LOS F operation for at least one movement while all other signalized intersections operate without a LOS F movement. At the new site driveway locations, the Gibson Blvd westbound left-turn movement into the site shows LOS F conditions beginning at 6:30 AM while outbound right-turn movements shown LOS E/F conditions. These appear to be unrealistic results, noting low volume conditions (6 or less turn vehicles per 15-minute period) and the location of a near-by downstream signal that will create gaps in the eastbound traffic stream. All other site driveway locations show LOS C or better operation.

Overall, 27 LOS F and 217 LOS E movements (excluding site driveways) are estimated for the 3-hour period, essentially the same as No-Build conditions.

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

Similar to the No-Build condition, only the Gibson/Truman intersection operates at an overall LOS F condition while all other signalized intersections operate at LOS D or better conditions. However, 1 or more movements at University, Yale, Carlisle, Quincy, Truman, and San Mateo show LOS F operation. All Sunport intersections and both unsignalized left-turn movements at Gibson Blvd and the I-25 ramps operate acceptably. At the new site driveways, all movement show LOS E or better operation during all time periods, with most movements displaying LOS C or better conditions.

Overall 73 movements show LOS F conditions while 182 show LOS E (excluding site driveways), this is a slight increase from No-Build conditions of 63 and 185, respectively.

These results show relatively minor additional delay to the road network due to the addition of the Orion project's traffic.

Table 10: 2025 No-Build Intersection LOS Analysis Summary, AM Peak Period

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



Table 10. 2025 No-Build Intersection LOS Analysis Summary, AM Peak Period (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	5:00	A	A	A	A	A	A	E	E	E	F	F	F	A
		5:15	A	A	A	A	A	A	E	E	E	F	F	F	A
		5:30	A	A	A	A	A	A	E	E	E	F	F	F	A
		5:45	A	A	A	A	A	A	E	E	E	F	F	F	A
		6:00	A	A	A	A	A	A	E	E	E	F	F	F	A
		6:15	A	A	A	A	A	A	E	E	E	F	F	F	A
		6:30	A	A	A	A	A	A	E	E	E	F	F	F	A
		6:45	A	A	A	A	A	A	E	E	E	F	F	F	A
		7:00	A	A	A	C	A	A	E	E	E	F	F	F	A
		7:15	A	A	A	C	A	A	E	E	E	F	F	F	A
		7:30	A	A	A	B	A	A	E	E	E	E	E	E	A
		7:45	A	A	A	B	A	A	E	E	E	E	E	E	A
Int 9	Gibson & Truman	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	B	A	A	D	D	D	D	D	D	A
		6:45	A	B	B	D	A	A	D	D	C	E	E	E	B
		7:00	B	B	B	D	A	A	D	D	C	D	D	D	B
		7:15	D	C	D	D	A	A	D	D	B	D	D	D	C
		7:30	B	B	B	D	A	A	D	D	C	D	D	D	B
		7:45	C	C	C	D	B	B	E	E	C	D	D	D	C
Int 10	Gibson & San Mateo	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	C	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	5:00	-	-	-	D	-	C	-	A	A	A	A	-	B
		5:15	-	-	-	D	-	C	-	A	A	A	A	-	B
		5:30	-	-	-	D	-	C	-	A	A	A	A	-	B
		5:45	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:00	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:15	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:30	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:45	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:00	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:15	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:30	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:45	-	-	-	D	-	C	-	B	A	A	A	-	B
Int 12	Sunport & Broadway	5:00	C	D	D	C	D	C	A	A	A	A	A	A	B
		5:15	C	D	D	C	C	C	A	A	A	A	A	A	B
		5:30	C	D	D	C	D	C	A	A	A	A	A	A	B
		5:45	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:00	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:15	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:30	C	D	D	C	D	C	A	B	B	A	B	A	B
		6:45	C	D	D	C	D	C	A	B	B	A	B	A	B
		7:00	C	D	D	C	C	C	A	B	B	A	B	B	B
		7:15	C	D	D	C	C	C	A	B	B	A	B	B	B
		7:30	C	D	D	C	D	C	A	B	B	A	B	A	B
		7:45	C	D	D	C	C	C	A	B	B	A	B	B	B
Int 13	Sunport & Interchange (SB)	5:00	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:15	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:30	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:45	-	A	A	A	A	-	-	-	-	C	C	C	C
		6:00	-	A	A	A	A	-	-	-	-	D	D	C	C
		6:15	-	A	A	A	A	-	-	-	-	C	C	C	C
		6:30	-	A	A	A	A	-	-	-	-	C	C	C	B
		6:45	-	A	A	A	A	-	-	-	-	C	C	C	C
		7:00	-	A	A	A	A	-	-	-	-	C	C	C	B
		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
Int 14	Sunport & Interchange (NB)	5:00	A	A	-	-	A	A	D	D	D	-	-	-	A
		5:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		5:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		5:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:45	A	A	-	-	A	A	C	C	D	-	-	-	A

Table 11: 2025 No-Build Intersection LOS Analysis Summary, PM Peak Period

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

Table 11. 2025 No-Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

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



Table 12: 2025 Build Intersection LOS Analysis Summary, AM Peak Period

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

Table 12. 2025 Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 8	Gibson & Quincy	5:00	A	A	A	A	A	A	E	E	E	F	F	F	A
		5:15	A	A	A	A	A	A	E	E	E	F	F	F	A
		5:30	A	A	A	A	A	A	E	E	E	E	E	E	A
		5:45	A	A	A	A	A	A	E	E	E	E	E	E	A
		6:00	A	A	A	A	A	A	E	E	E	F	F	F	A
		6:15	A	A	A	A	A	A	E	E	E	E	E	E	A
		6:30	A	A	A	A	A	A	E	E	E	F	F	F	A
		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	A
		7:15	A	A	A	C	A	A	E	E	E	F	F	F	A
		7:30	A	A	A	B	A	A	E	E	E	E	E	E	A
		7:45	A	A	A	B	A	A	E	E	E	E	E	E	A
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	B	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	B	D	A	A	D	D	C	D	D	D	B
		7:15	D	C	D	D	A	A	D	D	B	D	D	D	C
		7:30	B	B	B	D	A	A	D	D	C	D	D	D	B
		7:45	C	C	C	D	B	B	E	E	C	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	B	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	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	C	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	-	-	-	D	-	C	-	A	A	A	A	-	A
		5:15	-	-	-	D	-	C	-	A	A	A	A	-	B
		5:30	-	-	-	D	-	C	-	A	A	A	A	-	B
		5:45	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:00	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:15	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:30	-	-	-	D	-	C	-	A	A	A	A	-	B
		6:45	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:00	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:15	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:30	-	-	-	D	-	C	-	B	A	A	A	-	B
		7:45	-	-	-	D	-	C	-	B	A	A	A	-	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	C	D	D	C	C	C	A	A	A	A	A	A	B
		5:15	C	D	D	C	C	C	A	A	A	A	A	A	B
		5:30	C	D	D	C	C	C	A	A	A	A	A	A	B
		5:45	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:00	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:15	C	D	D	C	D	C	A	A	A	A	A	A	B
		6:30	C	D	D	C	C	C	A	B	B	A	B	A	B
		6:45	C	D	D	C	C	C	A	B	B	A	B	B	B
		7:00	C	D	D	C	C	C	A	B	B	A	B	B	B
		7:15	C	D	D	C	C	C	A	B	B	A	B	B	B
		7:30	C	D	D	C	D	C	A	B	B	A	B	A	B
		7:45	C	D	D	C	C	C	A	B	B	A	B	B	B
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	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:15	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:30	-	A	A	A	A	-	-	-	-	C	C	C	C
		5:45	-	A	A	A	A	-	-	-	-	C	C	C	C
		6:00	-	A	A	A	A	-	-	-	-	D	D	C	C
		6:15	-	A	A	A	A	-	-	-	-	C	C	C	C
		6:30	-	A	A	A	A	-	-	-	-	C	C	C	B
		6:45	-	B	A	A	A	-	-	-	-	C	C	C	C
		7:00	-	A	A	A	A	-	-	-	-	C	C	C	B
		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
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	D	-	-	-	A
		5:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		5:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		5:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		6:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		7:45	A	A	-	-	A	A	C	C	D	-	-	-	A

Table 12. 2025 Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	5:00	C	-	C	-	-	-	A	A	-	-	A	A	-
		5:15	C	-	C	-	-	-	A	A	-	-	A	A	-
		5:30	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:45	C	-	C	-	-	-	B	A	-	-	A	A	-
		6:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	5:00	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:15	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:30	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:45	-	-	-	C	-	-	-	-	B	-	-	-	-
		6:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		6:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		6:45	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:00	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:15	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:45	-	-	-	F	-	-	-	-	D	-	-	-	-
Int 52	Girard & Site Driveway 2	5:00	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:15	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:30	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:45	-	-	-	C	-	-	A	-	-	-	-	-	-
		6:00	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:15	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:30	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:45	-	-	-	B	-	-	A	-	-	-	-	-	-
		7:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:45	-	-	-	B	-	-	A	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	5:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		6:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	B	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	5:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:45	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:45	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:45	-	-	-	A	-	-	A	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	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	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	Time Period	Eastbound			Westbound			Northbound			Southbound			Intersection
		5:00	A			A			A			A			A
		5:15	A			A			A			A			A
		5:30	A			A			A			A			A
		5:45	A			A			A			A			A
		6:00	A			A			A			A			A
		6:15	A			A			A			A			A
		6:30	A			A			A			A			A
		6:45	A			A			A			A			A
		7:00	A			A			A			A			A
		7:15	A			A			A			A			A
		7:30	A			A			A			A			A
		7:45	A			A			A			A			A



Table 13: 2025 Build Intersection LOS Analysis Summary, PM Peak Period

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

Table 13. 2025 Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

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

Table 13. 2025 Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	15:00	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:15	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:30	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:45	D	-	A	-	-	-	A	A	-	-	A	A	-
		16:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	15:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:15	-	-	-	C	-	-	-	-	C	-	-	-	-
		15:30	-	-	-	C	-	-	-	-	C	-	-	-	-
		15:45	-	-	-	D	-	-	-	-	C	-	-	-	-
		16:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		16:15	-	-	-	C	-	-	-	-	C	-	-	-	-
		16:30	-	-	-	C	-	-	-	-	C	-	-	-	-
		16:45	-	-	-	C	-	-	-	-	C	-	-	-	-
		17:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		17:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		17:30	-	-	-	C	-	-	-	-	C	-	-	-	-
		17:45	-	-	-	C	-	-	-	-	B	-	-	-	-
Int 52	Girard & Site Driveway 2	15:00	-	-	-	C	-	-	-	-	-	-	-	-	-
		15:15	-	-	-	C	-	-	-	-	-	-	-	-	-
		15:30	-	-	-	C	-	-	-	-	-	-	-	-	-
		15:45	-	-	-	C	-	-	-	-	-	-	-	-	-
		16:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	15:00	E	-	D	-	-	-	A	-	-	-	-	-	-
		15:15	E	-	D	-	-	-	A	-	-	-	-	-	-
		15:30	E	-	E	-	-	-	A	-	-	-	-	-	-
		15:45	E	-	E	-	-	-	A	-	-	-	-	-	-
		16:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:30	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:45	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	15:00	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:15	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:30	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:45	-	-	-	B	-	B	-	-	-	-	-	-	-
		16:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	15:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	Time Period	Eastbound				Westbound				Northbound				Intersection
		15:00	A				A				A				A
		15:15	A				A				A				A
		15:30	A				A				A				A
		15:45	A				A				A				A
		16:00	A				A				A				A
		16:15	A				A				A				A
		16:30	A				A				A				A
		16:45	A				A				A				A
		17:00	A				A				A				A
		17:15	A				A				A				A
		17:30	A				A				A				A
		17:45	A				A				A				A



## PHASE 1 CAPACITY MITIGATIONS AND CORRIDOR IMPROVEMENT STRATEGIES

Capacity mitigation and street improvement measures have been considered for the Gibson corridor noting the poor operation at most of the side street locations, although many of the movements are a result of low overall volume and long cycle lengths (low v/c ratios). The following mitigation efforts were considered:

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

From review of aerial images, the following mitigation options could easily be implemented to improve intersection operations, if beneficial to the network:

- At the Gibson/University intersection, pavement marking hatching would permit a second southbound left-turn lane and the northbound approach a second left or thru lane, without the need for intersection construction (traffic signal modifications may be required).
- At the Gibson/Yale intersection, pavement marking design would permit a second southbound left-turn lane to be added without construction (traffic signal modifications may be required).
- At the Gibson/Girard intersection, pavement marking design would permit a second northbound left-turn lane to be added without construction (traffic signal modifications may be required).

When the above options are evaluated, low side-street approach volumes at University and Yale do not warrant the addition of a second left-turn lane which would require a protective turn phase and a likely reduction of green time afforded to Gibson Blvd. Therefore, these options are not recommended at this time. In the 2025 Build condition, LOS E operations exist for the single lane northbound left-turn movement at Girard while showing an estimated 95<sup>th</sup> percentile queue length exceeding 400 feet, extending beyond the length of the current turn bay. A second northbound left-turn lane is recommended to minimize queue and limit use of other travel routes to reach points west.

Widening of Gibson Blvd to add additional capacity via the addition of through lanes or dual left-turn movements at specific intersections can't be simply completed due to right-of-way constraints and other potential infrastructure limitations. Other potential improvement options, such as improving bicycle/pedestrian connectivity or adding transit service should be pursued but are not anticipated to provide immediate vehicle reductions to the study area. It is recommended that a comprehensive corridor-wide analysis of Gibson Blvd be conducted to assess potential improvement options for the benefit of all users that travel the roadway. It is noted that shifting site employee trips 60 minutes prior to the traditional peak-hour of the roadway utilizing the available unused capacity during those time periods, helping reduce vehicle demand during the roadway peak hours.

### 2025 BUILD MITIGATION

Including the additional Girard Blvd northbound left-turn lane and modifying the turn phase from protected/permissive to protected only, the Gibson corridor was optimized in an attempt to better accommodate the estimated 2025 Build traffic volumes. The AM and PM cycle lengths were maintained for both periods to minimize other potential impacts and to provide a basis of comparison between conditions. An equal east/west weighted optimization method was used for the corridor. No hand adjustments to timings or offsets to improve individual movement operation was attempted, although some minor

adjustments could be beneficial. A copy of the output summary tables for all intersections is provided in the Appendix. Only the Gibson/Girard intersection LOS summary with mitigation is shown below.

*LOS Summary for the 2025 Build Mitigation Condition at the Gibson/Girard Intersection*

AM Peak Period

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 5	Gibson & Girard	5:00	A	A	A	A	A	A	A	A	D	D	D	D	A
		5:15	A	A	A	A	A	A	D	A	D	D	D	D	A
		5:30	A	A	A	B	A	A	D	A	D	D	D	D	B
		5:45	A	B	A	C	A	A	D	D	D	D	D	D	B
		6:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		6:15	A	A	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	B	A	D	A	A	D	D	D	D	D	D	B
		7:00	A	B	A	D	A	A	D	D	D	D	D	D	B
		7:15	A	B	A	D	A	A	D	D	D	D	D	D	B
		7:30	A	B	A	D	A	A	D	D	D	D	D	D	B
		7:45	A	B	A	C	A	A	D	D	D	D	D	D	B

PM Peak Period

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 5	Gibson & Girard	15:00	B	C	A	A	B	A	D	D	D	D	E	D	C
		15:15	B	B	A	A	B	A	D	D	D	D	E	D	C
		15:30	C	B	A	A	B	A	D	D	D	D	D	D	C
		15:45	C	B	A	A	B	A	D	D	D	D	D	D	C
		16:00	C	A	A	A	B	A	D	D	D	D	E	D	B
		16:15	D	A	A	A	B	A	D	D	D	D	E	D	B
		16:30	D	A	A	B	B	A	D	D	D	D	D	D	B
		16:45	D	A	A	A	B	A	D	D	D	D	E	D	B
		17:00	C	A	A	A	B	A	D	D	D	D	D	D	B
		17:15	D	A	A	B	B	A	D	D	D	D	D	D	B
		17:30	B	A	A	A	B	A	D	D	D	D	D	D	B
		17:45	A	A	A	A	A	A	D	D	D	D	D	D	B

The results indicate:

- Overall, no change (improvement) to AM peak hour movement LOS along the entire Gibson corridor is noted, except at the Girard Blvd intersection which shows minor improvement. This is a possible indication the existing timing plan may best accommodate the high-volume conditions that exist within the corridor. The only LOS F operation identified for the eastbound or westbound Gibson Blvd movements remain the eastbound to northbound left-turn movement at University (2 periods), at Yale (one 15-minute period) and the westbound left-turn movement entering from Gibson Blvd at the site driveway.
- Similar to the AM peak period, all intersection movement operations remain the same, only improving at the Girard intersection with the added dual northbound left-turn movements. The improvement eliminates the LOS E conditions from the northbound through and left-turn movements (now LOS D), reduces the left-turn queue length, and changes the overall intersection operation in a few time periods from LOS C to LOS B.

## 2030 YEAR SCENARIOS

It is important to note that Phase 2 is not a part of the current development application before the City and is somewhat speculative on the Owner's part regarding need. Any development beyond Phase 1 would require a new development submittal application to the City of Albuquerque, with formal review as Phase One is currently undergoing. Any development proposed beyond Phase 1 would require another, updated traffic study to evaluate the impacts and propose mitigation for future development, if it were to occur.

The following traffic volume figures have been developed to analyze conditions from 2030 to 2040:

- Figures 27 and 28, 2030 No Build volumes for the Gibson Corridor
- Figures 29 and 30, 2030 No-Build volumes for the Sunport/Girard Corridors
- Figures 31 and 32, 2030 Build volumes for the Gibson Corridor
- Figures 33 and 34, 2030 Build volumes for the Sunport/Girard Corridors

The following tables have been developed based on the analysis of the volume figures:

- Tables 14 and 15 show the 15-minute LOS results for the 2030 No-Build scenario intersections under the peak period of the roadway network (5:00 to 8:00AM and 3:00 to 6:00PM), respectively. This scenario includes Phase 1 site traffic, 5 years of background traffic growth at 1% per year, and any roadway network modifications made in the 2025 Mitigation scenario. In addition, improvements to the I-25 corridor which modifies and signalizes the Gibson/I-25 Ramp intersections have been incorporated.
- Tables 16 and 17 show the 15-minute LOS results for the 2030 Build scenario intersections under the peak period of the roadway network (5:00 to 8:00AM and 3:00 to 6:00PM), respectively. This scenario adds the estimated Phase 2 site trips to the 2030 No-Build scenario.

## 2030 NO-BUILD RESULTS

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

With new signalized control replacing the minor-street STOP conditions at the Gibson/I-25 northbound and southbound ramps, both intersections show LOS E/F conditions occur beginning at 6:30 AM under the planned design condition. Also, conditions along Gibson Blvd continue to reflect increased delays with the additional background traffic growth although the only intersection operating with an overall LOS E for 2 time periods is at University. All other intersections operate at LOS D or better. All Sunport intersections are identified to operate in an acceptable manner throughout the entire AM peak period. Other than the site driveway accommodating trips from Gibson Blvd, all other site driveway movements are shown to at LOS C or better.

Overall, in the 3-hour morning period, a total of 52 movements show LOS F operation and 228 movements show LOS E operation (excluding site driveway locations) within the study area. When compared to 2025 Build conditions, 27 movements operated at LOS F while 217 movements operated at LOS E.

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

The new Gibson Blvd intersection with the I-25 northbound ramps shows LOS E or F operation from 3:00 PM to 5:30 PM. The south intersection operates at LOS D, likely due to the upstream flow being metered. All other Gibson intersections, except for Truman, operates at LOS D or better, except for 3:30 time period at University and the 4:30 PM time period at San Mateo which operate at LOS E. Overall, LOS F movements are



identified at I-25 Northbound ramps, University, Yale, Carlisle, Quincy, Truman and Sam Mateo. All Sunport intersections are shown to operate at LOS C or better. The only stop-controlled site driveway operating at LOS E is at the north parking lot driveway to Girard Blvd, operating at LOS E from 3:00 to 4:00 PM (544 total vehicles, 516 left, 28 right).

Overall, 111 movements operate at LOS F and 182 operate at LOS E (excluding the site driveways) compared to 73 and 173 in the 2025 No-Build Mitigation condition.

## **2030 BUILD RESULTS**

With Phase 2 site traffic added to background traffic conditions, the poorly performing Gibson Blvd intersections continue to deteriorate without adding roadway capacity or a way to reduce traffic demand. In the morning peak, additional Gibson Blvd movements show LOS E/F operations at University, Yale and for the westbound left-turn movement entering the site at Girard. Signalized intersections to the east of Girard are nearly similar to No-Build conditions. All Sunport intersections continue to operate in an acceptable manner and the unsignalized site driveways appear to operate in an acceptable manner as the stop-controlled movements are mostly accommodating the small number of morning trips exiting the site.

In the PM peak, overall intersection LOS F conditions are shown for the Gibson/I-25 south ramps, north ramps, and Truman while individual LOS F movements include University (WB through), Yale (WB through), Carlisle (EB left, WB through, NB left), Quincy (SB approach), and San Mateo (EB lefts). All Sunport intersections operate at LOS C or better conditions. Near the site, the eastbound left-turn movements at the STOP-controlled intersections with Girard and Miles and Girard and the driveway to the north parking lot operate at LOS F for vehicles exiting the site between 3:00 and 4:00PM. The other movements show acceptable service levels.

Overall, the morning peak period shows 288 movements operating at LOS E/F (excluding site driveways) while the PM peak period indicates 308 movements at LOS E/F during the three-hour period.

## **2030 BUILD MITIGATION**

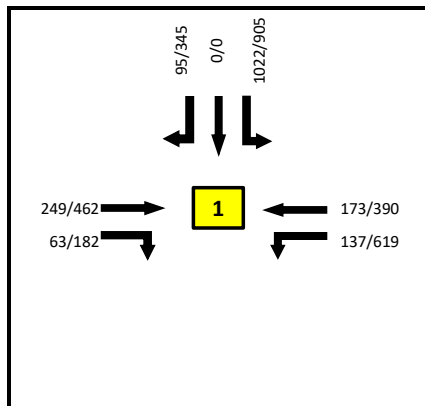
The ability for the Project Orion to adjust shift hours to outside of the roadway peak, as analyzed in this report, is very helpful in utilizing the unused roadway capacity in the “shoulder” periods as opposed to the traditional peak hours. No practical mitigation along Gibson Blvd is offered for analysis in the 2030 Build condition. As poor as the LOS results for the 2030 Build indicate, the Gibson corridor likely operates worse when considering un-served vehicle demand from one 15-minute analysis period has not been considered for the next subsequent 15-minute period. As calculated previously for the 2025 No-Build scenario, the Gibson corridor in the AM peak period exceeds capacity by approximately 17% although LOS C values are still identified. With added site trips, non-development traffic and background traffic growth, the estimated vehicle demand at the Yale eastbound approach increases to just over 3,700 vehicles per hour or 1,235 vphpl, well above the LOS E vphpl threshold value (982 vphpl). The 1,235 vphpl would require over 70% of cycle length green time to be dedicated to the Gibson through movements to operate in an acceptable manner, well above the 55% of the cycle length it is currently afforded today during the morning commute. Alternatively, a 4<sup>th</sup> through travel lane on Gibson Blvd would reduce demand volume to 925 vphpl, 50 vphpl less than the 2020 Existing conditions. Noting the poor operation of the Gibson Blvd side street approach movements and main-street left-turn volumes, additional time and/or dual left-turn lanes are required for many of these movements to operate in an acceptable manner. .

In all likelihood, there will be an increase in site and non-site traffic using the Sunport corridor in the morning to avoid travel along Gibson Blvd with the estimated high delays if originating from the south. In the evening,

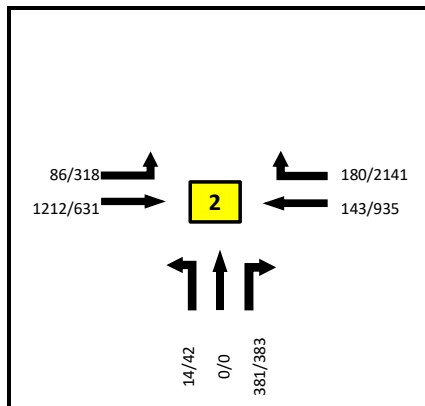
site-related vehicles destined to the west will use Sunport to access northbound or southbound I-25, avoiding the delays exiting the site via Girard Blvd, at Yale, and at University.

The Vistro software program indicates under the 2025 Mitigated roadway network and 2030 Build volumes, an optimal cycle length of 130 seconds in the AM peak and 160 seconds in the PM peak is best for Gibson Blvd. to accommodate the traffic demand.

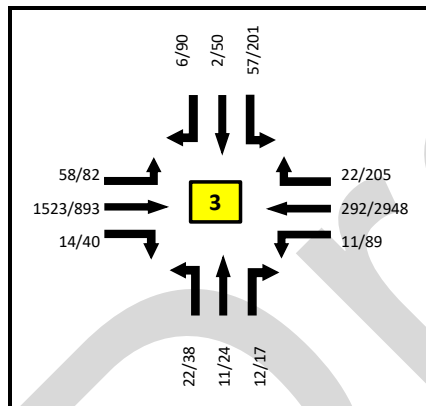
Draft



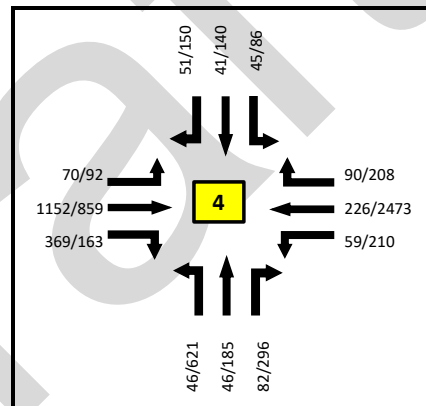
Gibson and I-25 SB Ramps



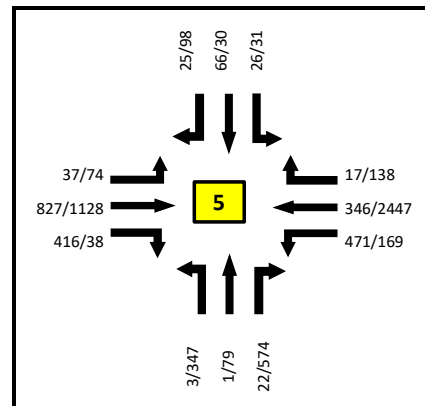
Gibson and I-25 NB Ramps



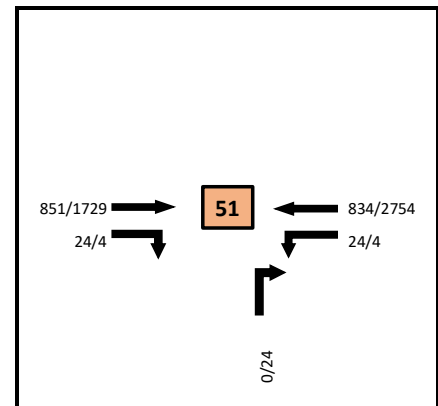
Gibson and University



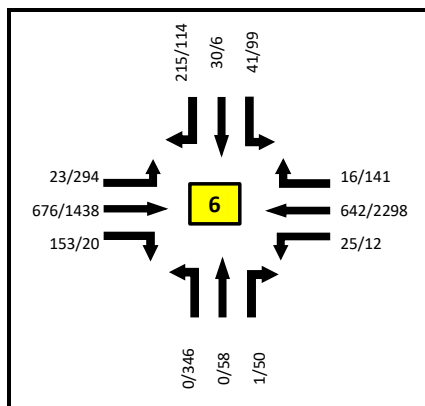
Gibson and Yale



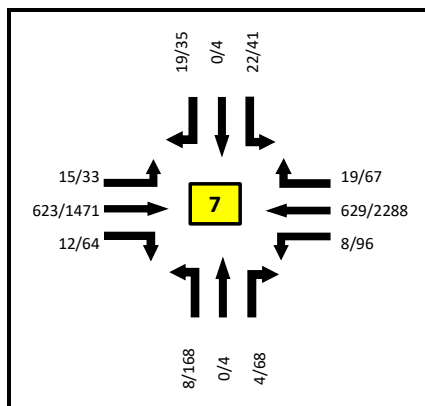
Gibson and Girard



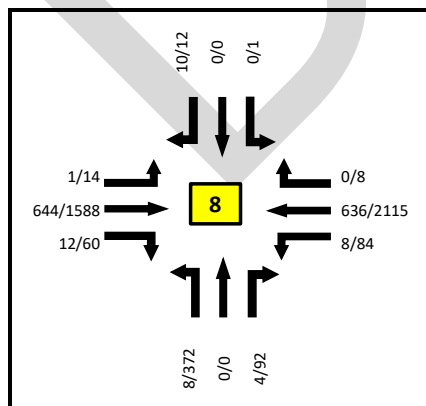
Gibson and Site Driveway



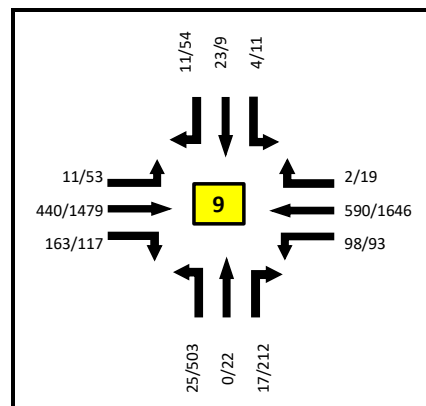
Gibson and Carlisle



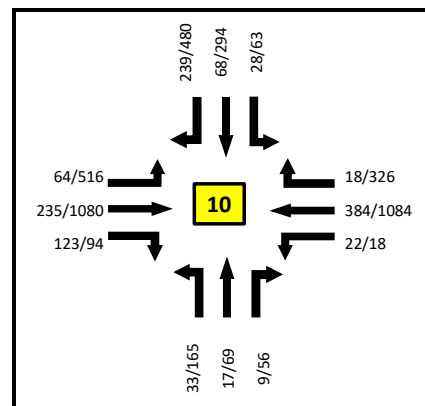
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

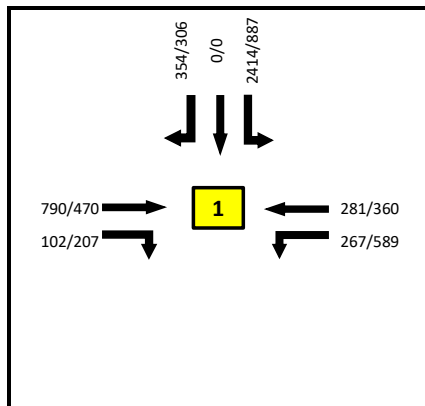
**2030 NO-BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**



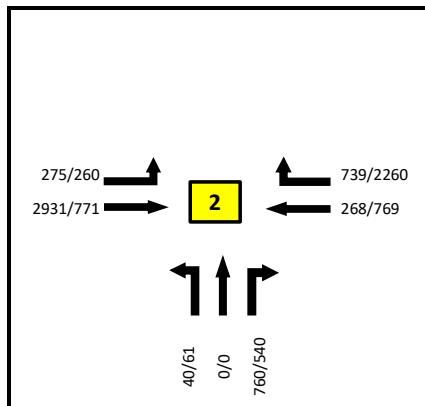
Legend  
 AM / PM Volumes

**FIGURE 27**

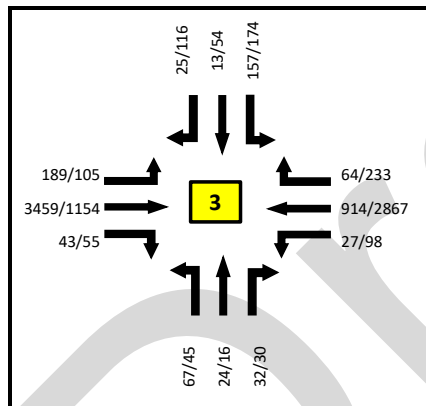




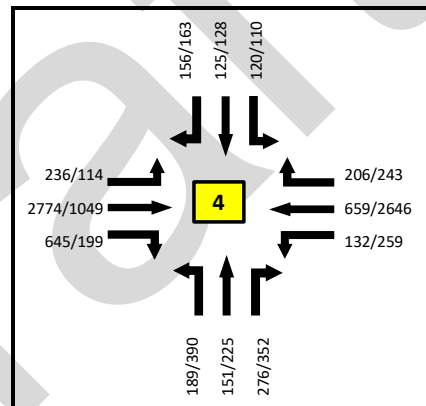
Gibson and I-25 SB Ramps



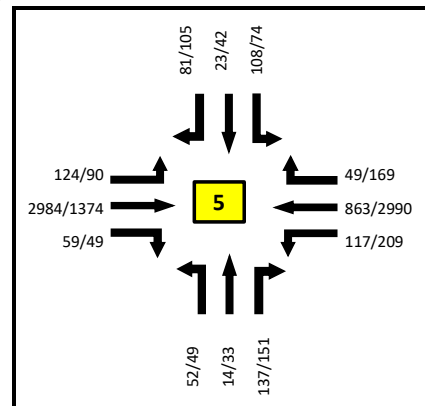
Gibson and I-25 NB Ramps



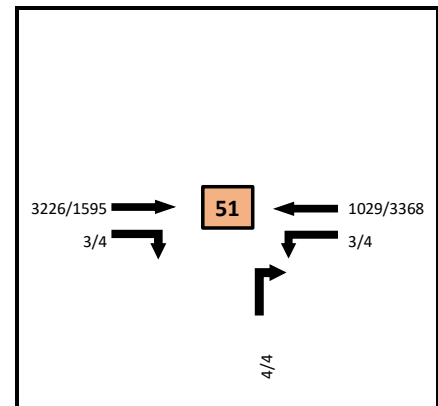
Gibson and University



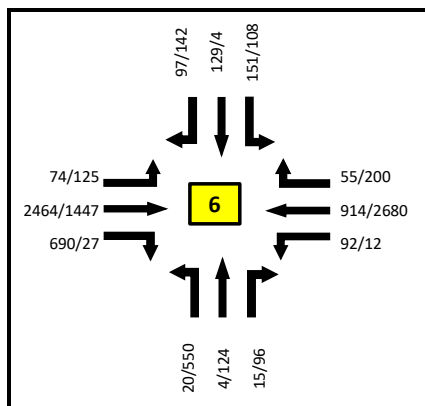
Gibson and Yale



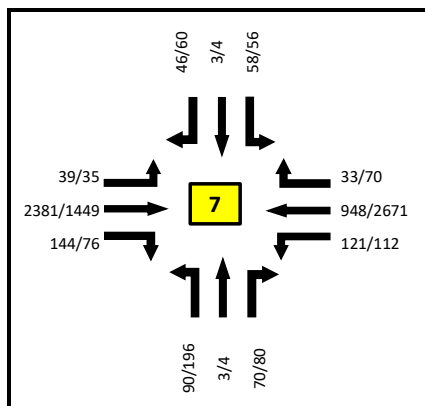
Gibson and Girard



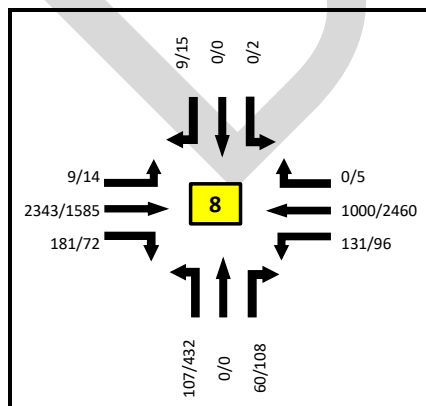
Gibson and Site Driveway



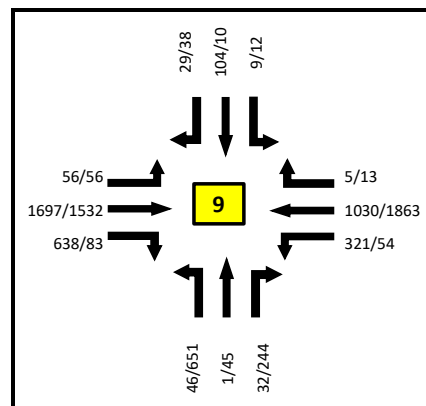
Gibson and Carlisle



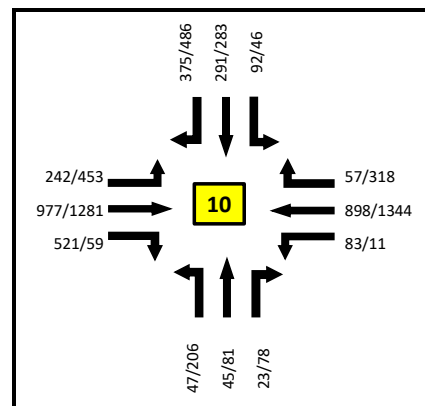
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

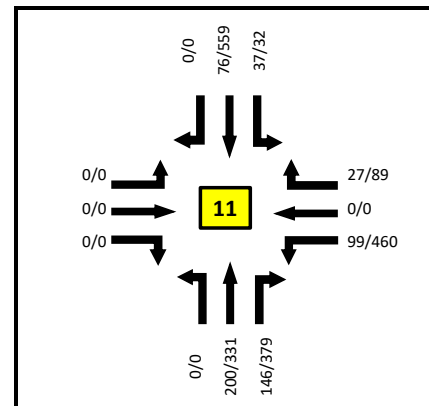


**2030 NO- BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

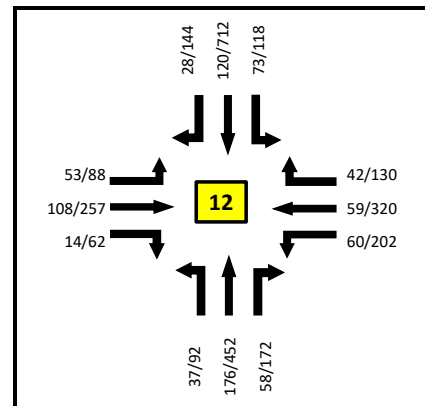
Legend  
 AM / PM Volumes

**FIGURE 28**

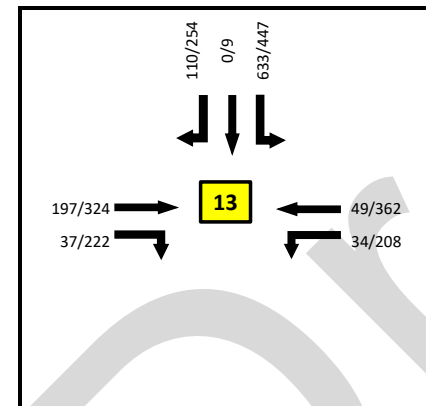




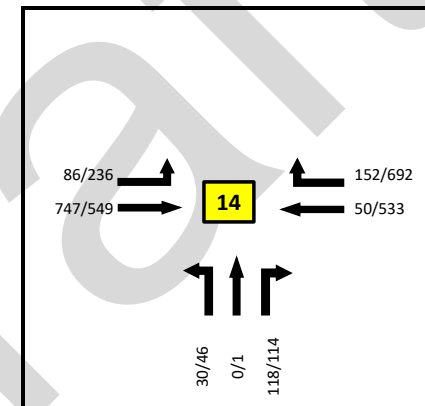
Woodward / Sunport Ext. and 2nd Street



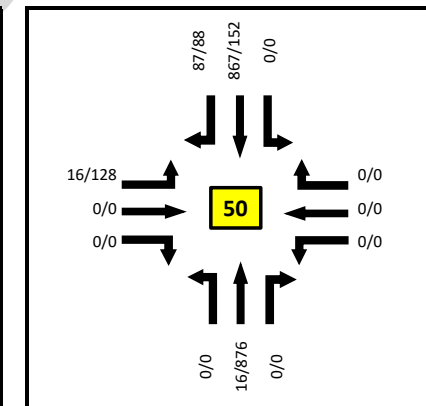
Woodward / Sunport Ext. and Broadway



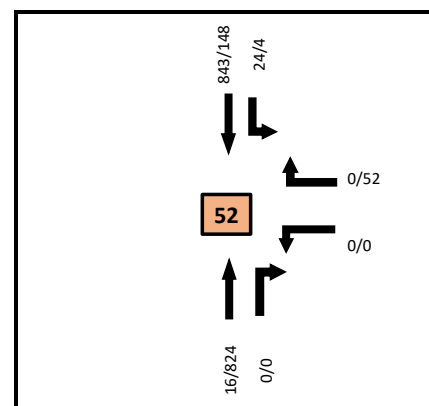
Sunport and I-25 SB Ramps



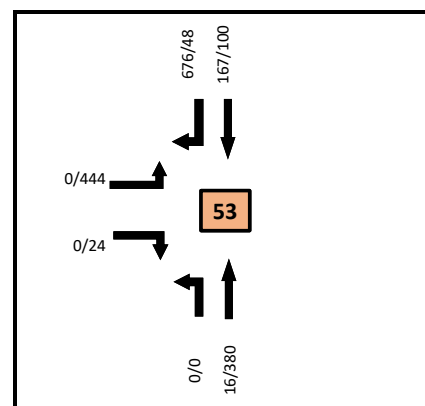
Sunport and I-25 NB Ramps



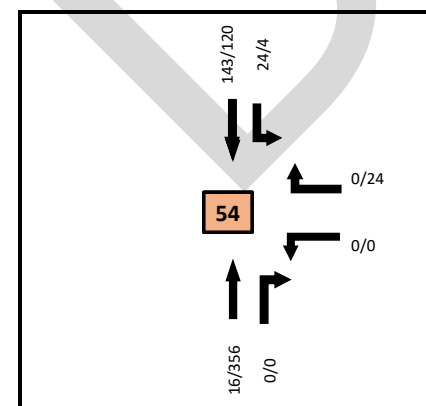
Girard and Miles



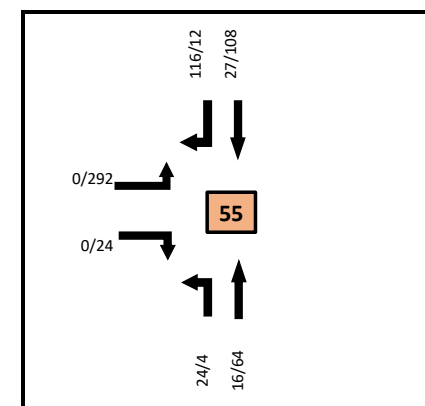
Girard Site Driveway to East



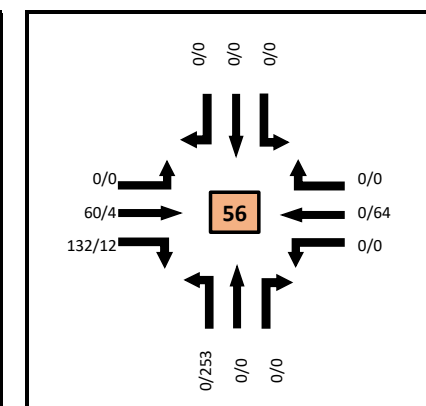
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



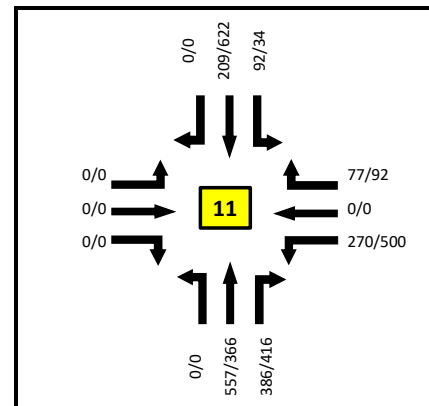
Columbia and Alamo/North Parking Lot Driveway

**2030 NO-BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

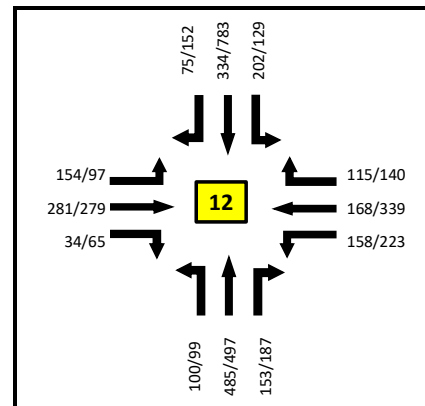
**LEGEND**  
 AM / PM Volumes

**FIGURE 29**

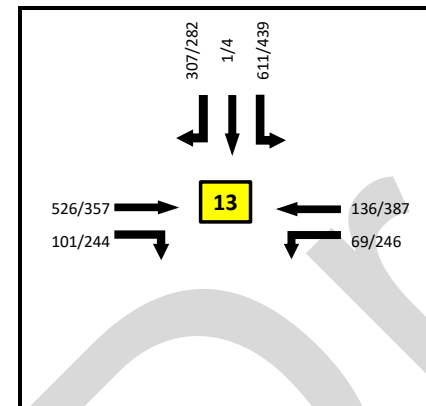




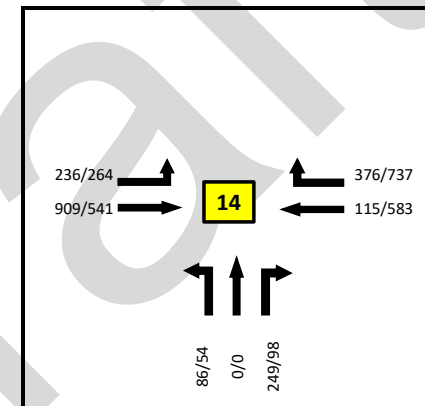
Woodward / Sunport Ext. and 2nd Street



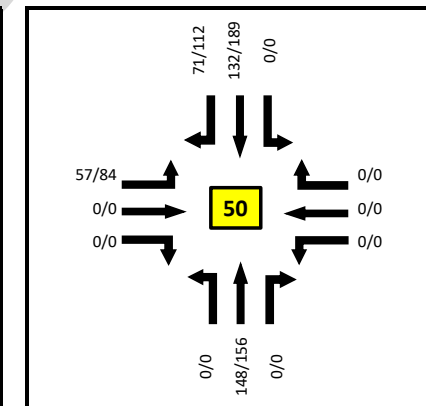
Woodward / Sunport Ext. and Broadway



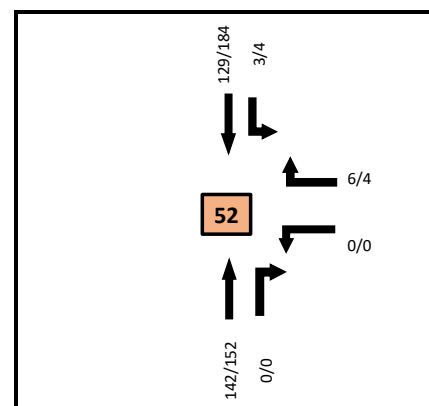
Sunport and I-25 SB Ramps



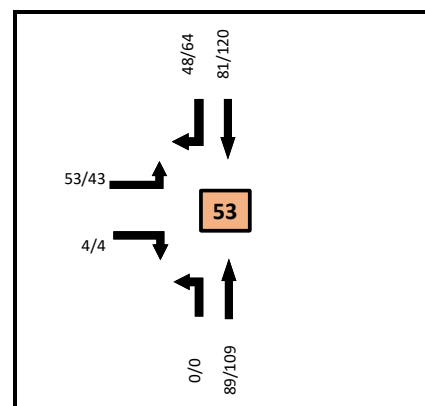
Sunport and I-25 NB Ramps



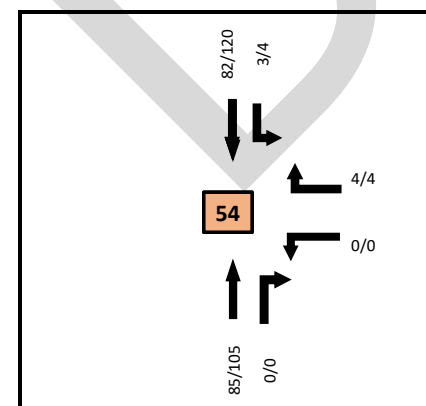
Girard and Miles



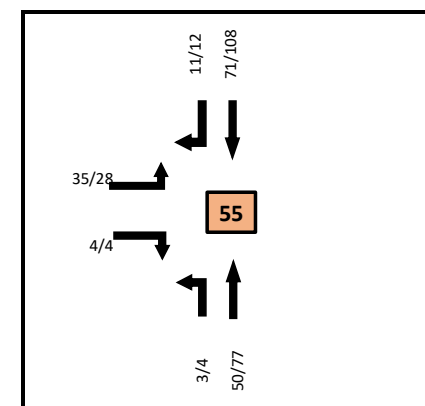
Girard Site Driveway to East



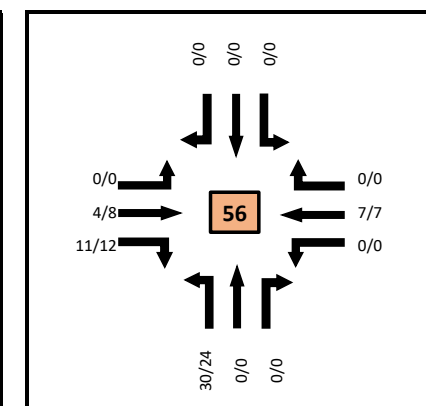
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway

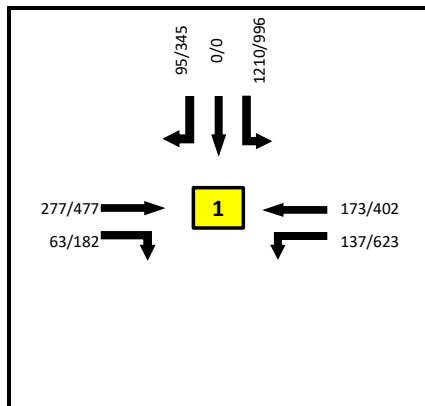


**2030 NO-BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

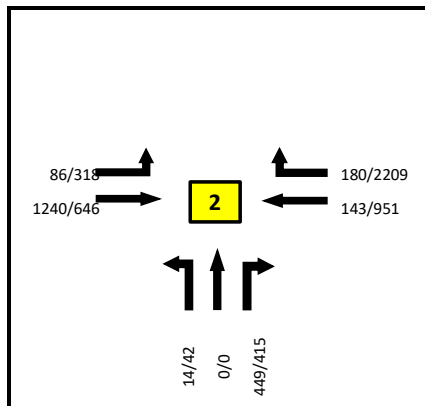
**LEGEND**  
 AM / PM Volumes

**FIGURE 30**

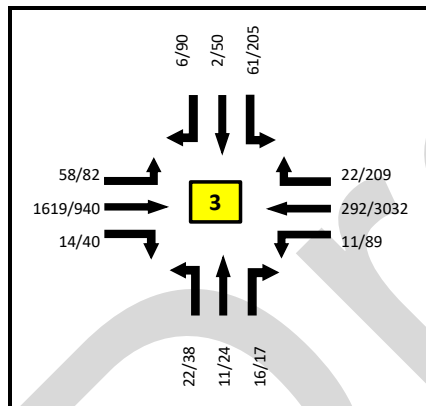




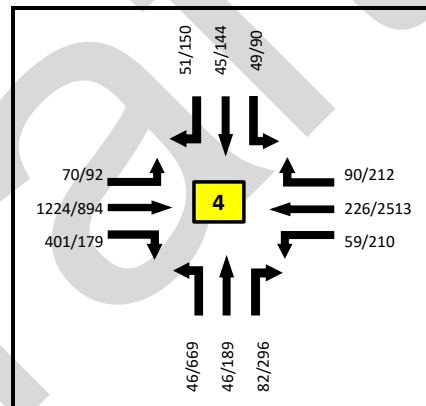
Gibson and I-25 SB Ramps



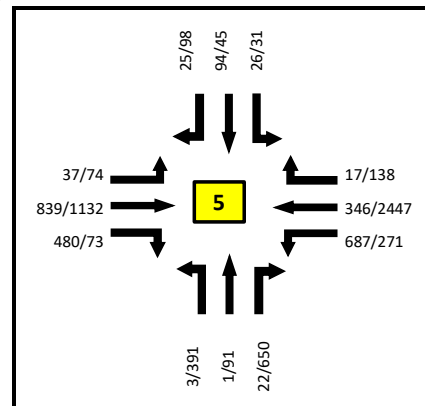
Gibson and I-25 NB Ramps



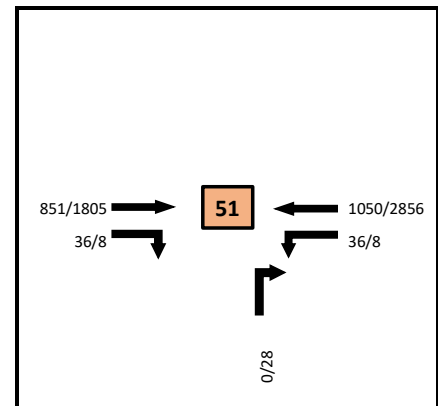
Gibson and University



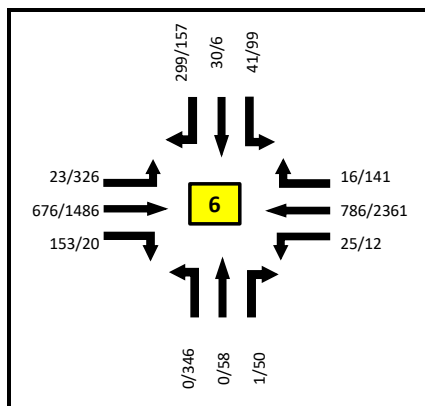
Gibson and Yale



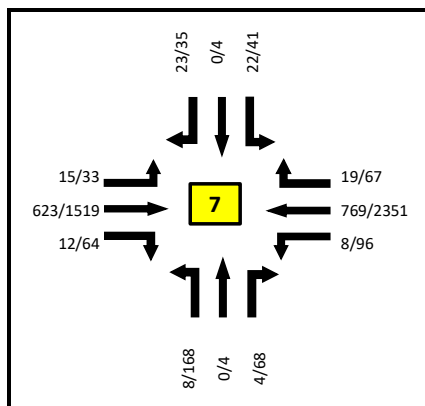
Gibson and Girard



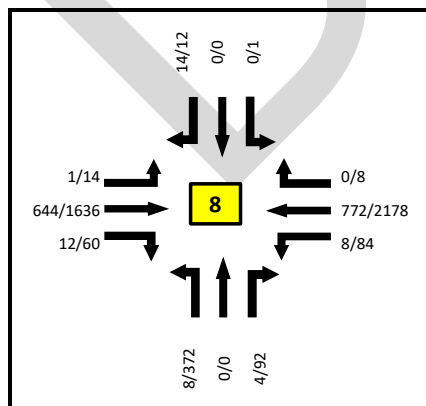
Gibson and Site Driveway



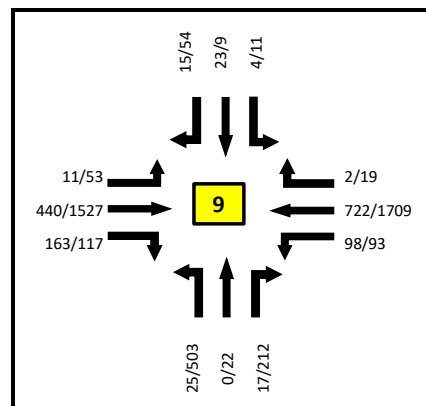
Gibson and Carlisle



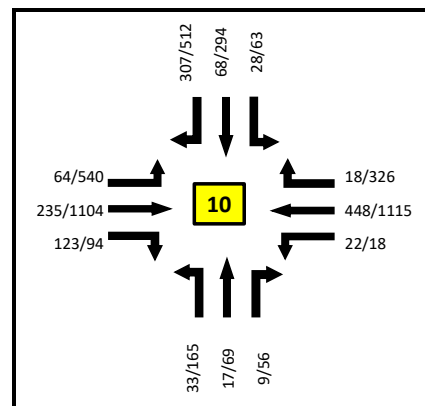
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

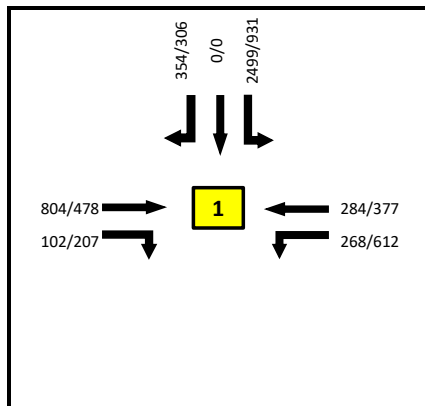


**2030 BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

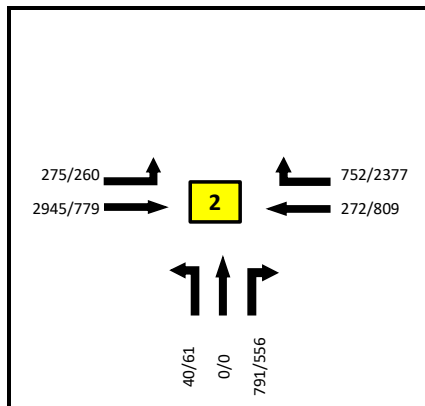
Legend  
 AM / PM Volumes

**FIGURE 31**

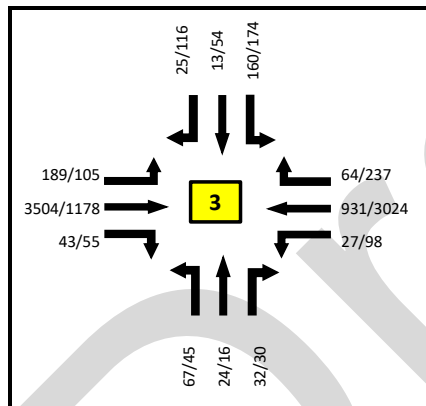




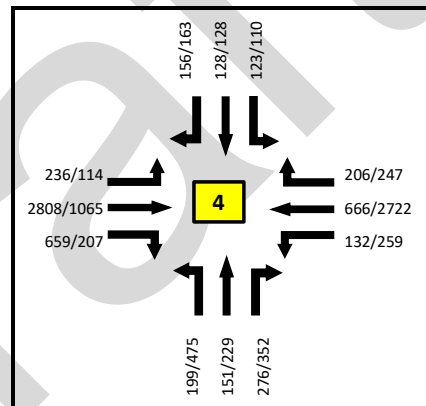
Gibson and I-25 SB Ramps



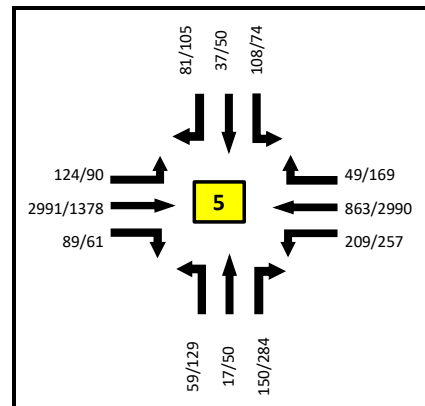
Gibson and I-25 NB Ramps



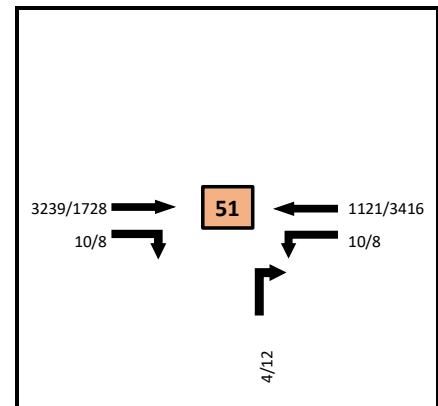
Gibson and University



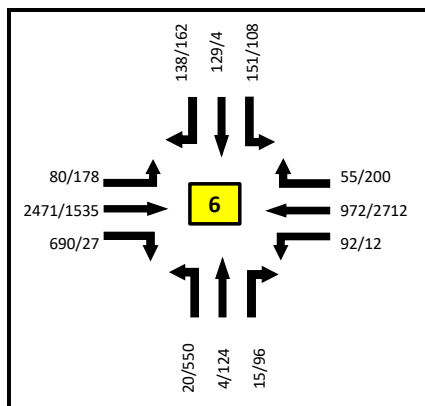
Gibson and Yale



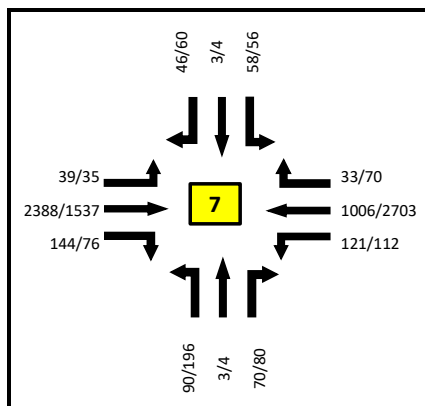
Gibson and Girard



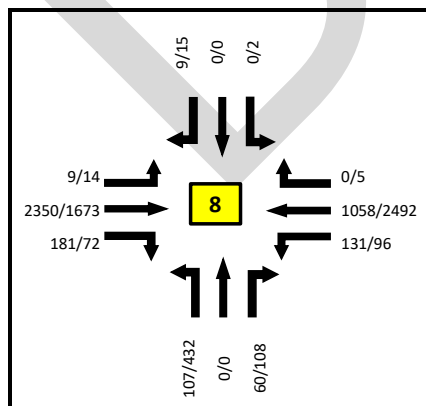
Gibson and Site Driveway



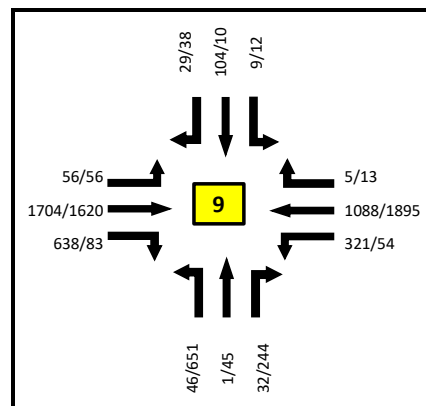
Gibson and Carlisle



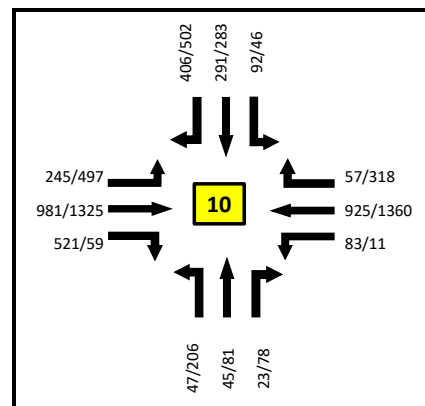
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

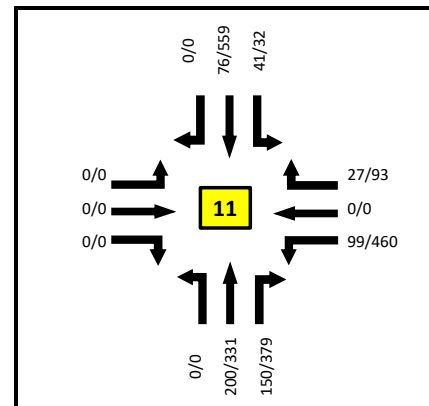


**2030 BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

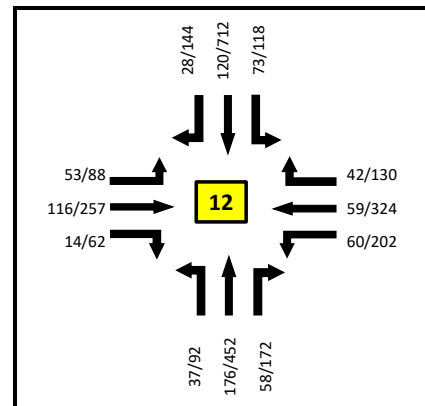
Legend  
 AM / PM Volumes

**FIGURE 32**

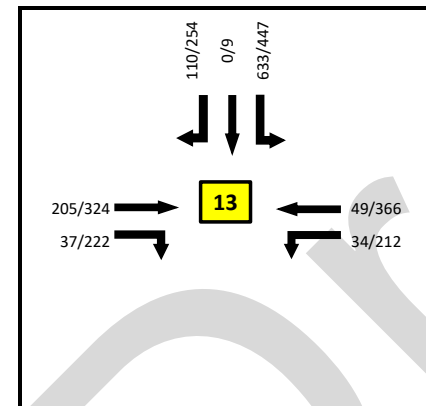




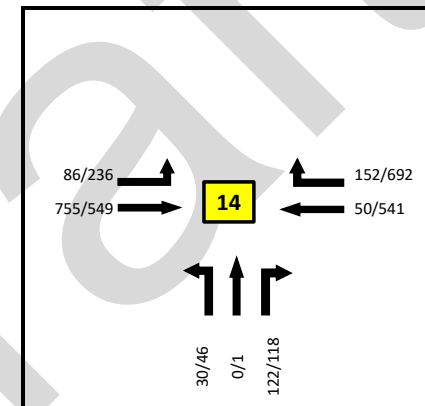
Woodward / Sunport Ext. and 2nd Street



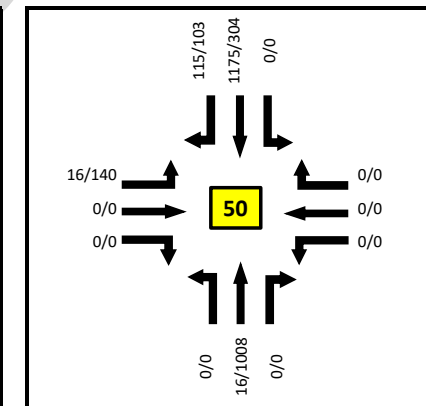
Woodward / Sunport Ext. and Broadway



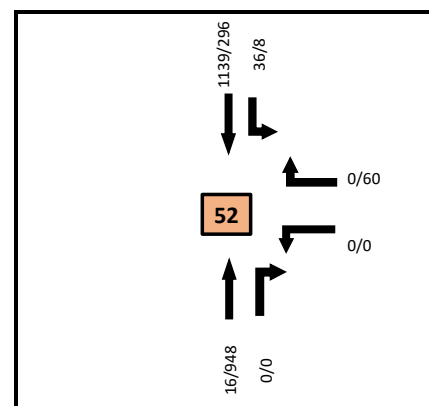
Sunport and I-25 SB Ramps



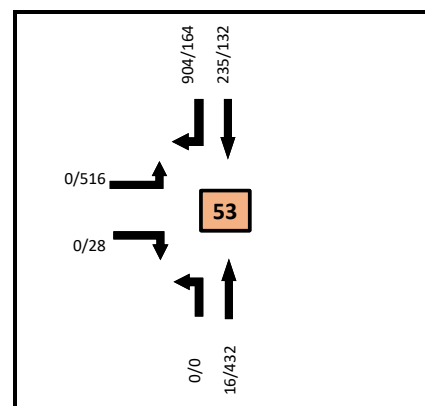
Sunport and I-25 NB Ramps



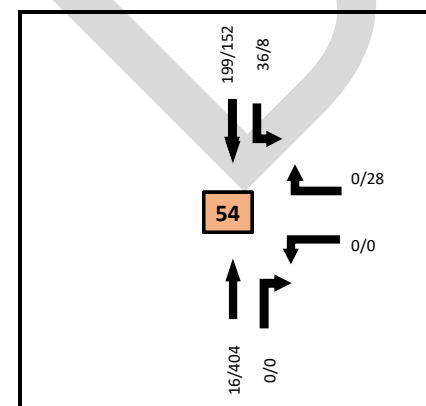
Girard and Miles



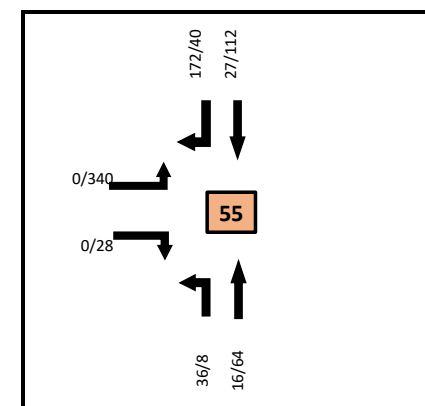
Girard Site Driveway to East



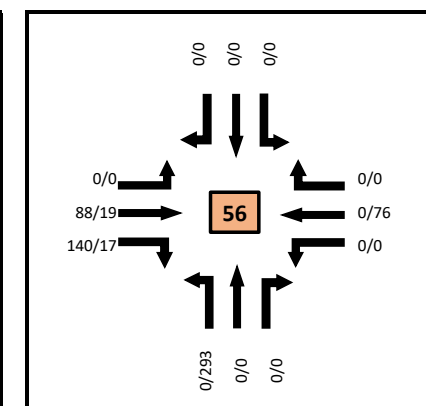
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway

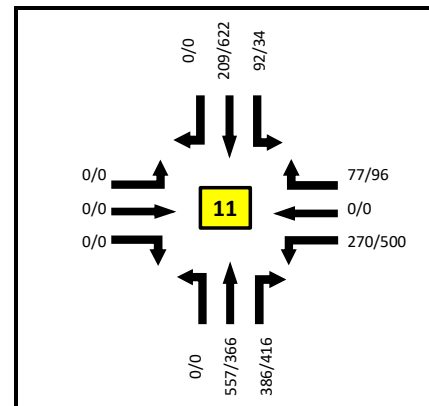


**2030 BUILD PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

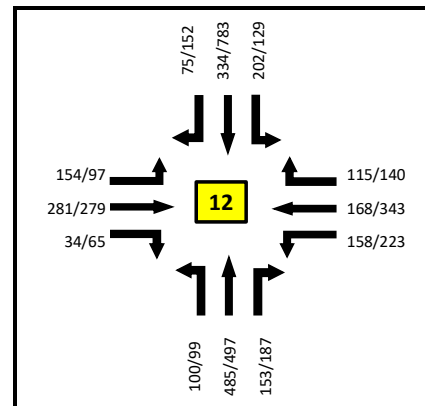
**LEGEND**  
 AM / PM Volumes

**FIGURE 33**

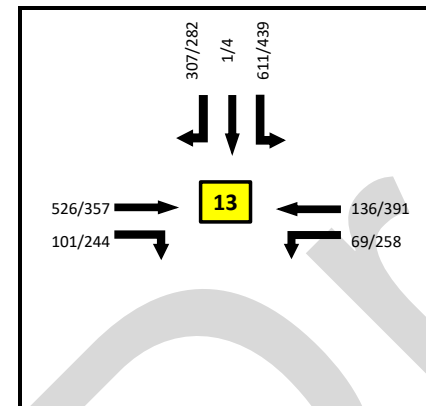




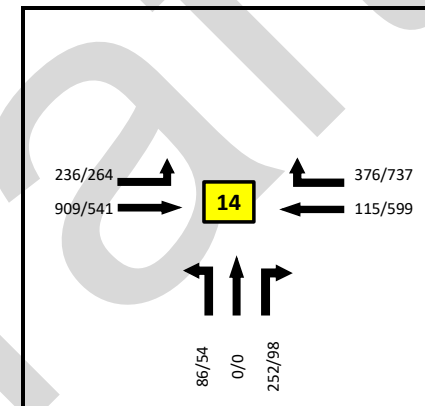
Woodward / Sunport Ext. and 2nd Street



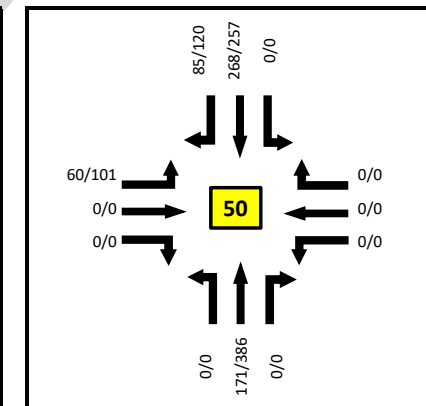
Woodward / Sunport Ext. and Broadway



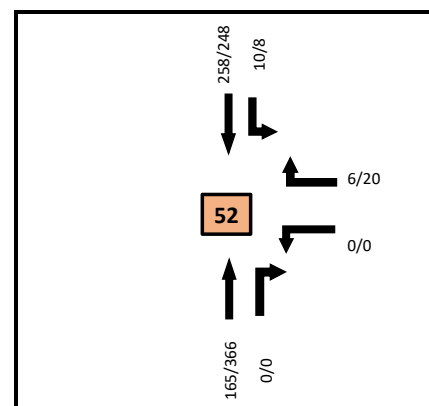
Sunport and I-25 SB Ramps



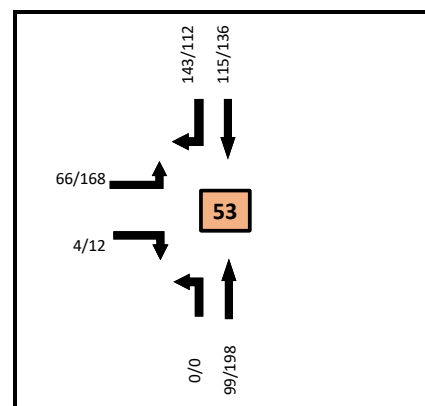
Sunport and I-25 NB Ramps



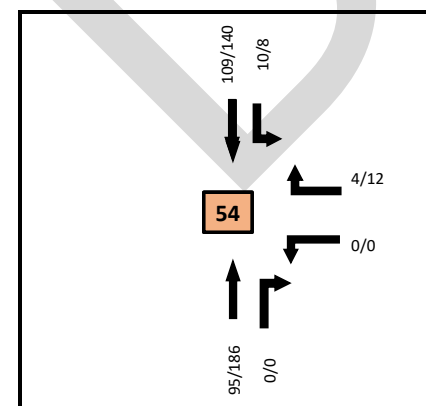
Girard and Miles



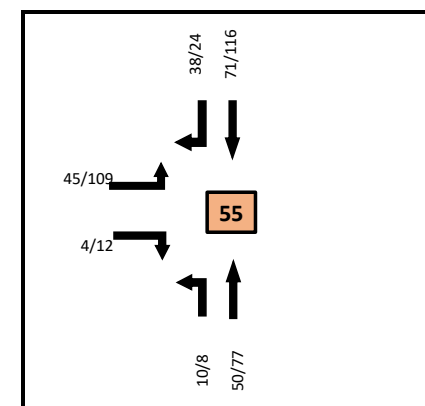
Girard Site Driveway to East



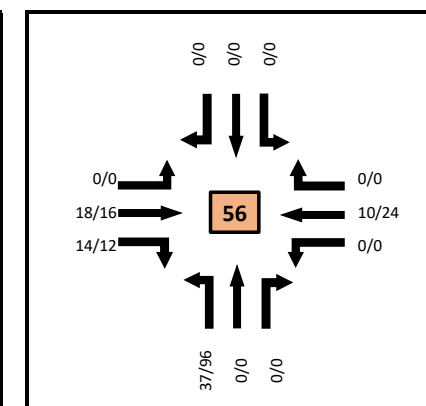
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway



**2030 BUILD PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

**FIGURE 34**

Table 14: 2030 No-Build Intersection LOS Analysis Summary, AM Peak Period

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

Table 14. 2030 No-Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

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



Table 14. 2030 No-Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	5:00	C	-	C	-	-	-	A	A	-	-	A	A	-
		5:15	C	-	C	-	-	-	A	A	-	-	A	A	-
		5:30	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:45	C	-	C	-	-	-	B	A	-	-	A	A	-
		6:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	5:00	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:15	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:30	-	-	-	C	-	-	-	-	B	-	-	-	-
		5:45	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		6:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		6:45	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:00	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:15	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:45	-	-	-	F	-	-	-	-	D	-	-	-	-
Int 52	Girard & Site Driveway 2	5:00	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:15	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:30	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:45	-	-	-	C	-	A	-	-	-	-	-	-	-
		6:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:45	-	-	-	B	-	A	-	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	5:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		5:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		6:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	B	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	B	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	5:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		5:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		5:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		5:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	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	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	5:00	Eastbound			Westbound			Northbound			Southbound			Intersection
		5:00	A			A			A			A			A
		5:15	A			A			A			A			A
		5:30	A			A			A			A			A
		5:45	A			A			A			A			A
		6:00	A			A			A			A			A
		6:15	A			A			A			A			A
		6:30	A			A			A			A			A
		6:45	A			A			A			A			A
		7:00	A			A			A			A			A
		7:15	A			A			A			A			A
		7:30	A			A			A			A			A
		7:45	A			A			A			A			A

Table 15: 2030 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	-	C	D	D	B	-	-	-	-	D	D	D	-
		15:15	-	C	D	D	A	-	-	-	-	D	D	D	-
		15:30	-	C	D	D	A	-	-	-	-	D	D	D	-
		15:45	-	C	D	D	B	-	-	-	-	D	D	D	-
		16:00	-	C	D	D	A	-	-	-	-	D	D	D	-
		16:15	-	C	D	D	A	-	-	-	-	D	D	D	-
		16:30	-	C	D	D	A	-	-	-	-	D	D	D	-
		16:45	-	C	D	D	B	-	-	-	-	D	D	D	-
		17:00	-	C	D	D	A	-	-	-	-	D	D	D	-
		17:15	-	C	D	D	B	-	-	-	-	D	D	D	-
		17:30	-	C	D	D	A	-	-	-	-	D	D	D	-
		17:45	-	C	D	D	A	-	-	-	-	D	D	D	-
Int 2	Gibson & Interchange (NB)	15:00	F	A	-	-	B	F	D	D	F	-	-	-	E
		15:15	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:45	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:00	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:15	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		16:45	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:00	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:15	F	A	-	-	B	F	D	D	F	-	-	-	E
		17:30	F	A	-	-	B	F	D	D	F	-	-	-	D
		17:45	E	B	-	-	C	D	C	C	E	-	-	-	C
Int 3	Gibson & University	15:00	D	B	B	A	C	B	D	D	-	E	D	-	C
		15:15	C	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	D	B	D	D	-	E	D	-	C
		16:00	D	B	A	A	C	B	D	D	-	E	D	-	C
		16:15	D	B	A	A	C	B	D	D	-	E	D	-	C
		16:30	D	B	A	A	C	B	D	D	-	E	D	-	C
		16:45	D	B	A	B	D	B	D	D	-	E	D	-	C
		17:00	D	B	B	B	F	B	C	C	-	E	D	-	D
		17:15	D	B	B	B	D	B	D	C	-	E	D	-	D
		17:30	C	B	A	A	C	B	D	D	-	E	D	-	C
		17:45	B	B	A	A	B	B	D	D	-	E	D	-	B
Int 4	Gibson & Yale	15:00	C	C	B	B	C	A	D	D	C	C	D	D	C
		15:15	C	C	A	B	C	A	D	D	C	D	D	D	C
		15:30	D	C	B	B	F	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	C	A	B	C	A	D	D	C	D	E	E	C
		16:15	D	C	A	B	C	A	D	D	D	D	D	E	C
		16:30	D	C	A	B	C	A	D	D	D	D	E	E	C
		16:45	D	C	B	B	C	A	D	D	D	D	E	E	C
		17:00	D	C	B	B	C	A	D	D	D	D	E	E	C
		17:15	D	C	B	B	C	A	D	D	C	D	D	D	C
		17:30	C	C	B	B	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	C	A	A	B	A	D	D	D	D	E	D	C
		15:15	B	C	A	A	B	A	D	D	D	D	E	D	C
		15:30	C	B	A	A	B	A	D	D	D	D	D	D	C
		15:45	C	B	A	A	B	A	D	D	D	D	D	D	C
		16:00	D	A	A	A	B	A	D	D	D	D	E	D	B
		16:15	D	A	A	A	B	A	D	D	D	D	E	D	B
		16:30	D	A	A	B	B	A	D	D	D	D	D	D	B
		16:45	D	A	A	B	B	A	D	D	D	D	E	D	B
		17:00	C	A	A	A	B	A	D	D	D	D	D	D	B
		17:15	D	A	A	B	B	A	D	D	D	D	D	D	B
		17:30	C	A	A	A	B	A	D	D	D	D	D	D	B
		17:45	A	A	A	A	A	A	D	D	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	F	B	A	A	C	A	F	D	D	D	E	D	D
		15:45	F	B	A	A	C	A	D	D	D	D	E	D	D
		16:00	C	B	A	A	C	A	F	D	D	D	E	D	D
		16:15	D	B	A	B	F	A	F	D	D	D	D	D	D
		16:30	D	B	A	A	C	A	F	D	D	D	E	D	D
		16:45	E	B	A	A	C	A	F	D	D	D	E	D	C
		17:00	D	B	A	A	C	A	D	D	D	D	E	D	C
		17:15	E	B	A	A	C	A	E	D	D	D	E	D	C
		17:30	D	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	A	A	E	E	E	D	E	E	B
		15:15	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:30	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:45	A	A	A	E	B	B	E	E	E	D	E	E	B
		16:00	A	B	A	E	B	B	E	E	E	D	E	E	B
		16:15	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:30	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:45	C	B	A	E	B	B	E	E	E	D	E	E	B
		17:00	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:15	B	A	A	E	B	B	E	E	E	D	E	E	B
		17:30	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:45	A	A	A	E	A	A	E	E	E	D	E	E	B

Table 15. 2030 No-Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

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



Table 15. 2030 No-Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	15:00	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:15	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:30	D	-	A	-	-	-	A	A	-	-	A	A	-
		15:45	D	-	A	-	-	-	A	A	-	-	A	A	-
		16:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		16:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		17:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	15:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:15	-	-	-	C	-	-	-	-	C	-	-	-	-
		15:30	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:45	-	-	-	D	-	-	-	-	C	-	-	-	-
		16:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		16:15	-	-	-	C	-	-	-	-	C	-	-	-	-
		16:30	-	-	-	D	-	-	-	-	C	-	-	-	-
		16:45	-	-	-	D	-	-	-	-	C	-	-	-	-
		17:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		17:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		17:30	-	-	-	C	-	-	-	-	C	-	-	-	-
		17:45	-	-	-	C	-	-	-	-	C	-	-	-	-
Int 52	Girard & Site Driveway 2	15:00	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:15	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:30	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:45	-	-	-	C	-	C	-	-	-	-	-	-	-
		16:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	B	-	A	-	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	15:00	E	-	D	-	-	-	A	-	-	-	-	-	-
		15:15	E	-	E	-	-	-	A	-	-	-	-	-	-
		15:30	E	-	E	-	-	-	A	-	-	-	-	-	-
		15:45	E	-	E	-	-	-	A	-	-	-	-	-	-
		16:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:30	B	-	A	-	-	-	A	-	-	-	-	-	-
		16:45	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	15:00	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:15	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:30	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:45	-	-	-	B	-	B	-	-	-	-	-	-	-
		16:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	15:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	15:00	Eastbound			Westbound			Northbound			Southbound			Intersection
		15:15	A			A			A			A			A
		15:30	A			A			A			A			A
		15:45	A			A			A			A			A
		16:00	A			A			A			A			A
		16:15	A			A			A			A			A
		16:30	A			A			A			A			A
		16:45	A			A			A			A			A
		17:00	A			A			A			A			A
		17:15	A			A			A			A			A
		17:30	A			A			A			A			A
		17:45	A			A			A			A			A

Table 16: 2030 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	-	B	C	D	A	-	-	-	-	D	D	C	D
		5:15	-	B	C	E	A	-	-	-	-	D	D	C	D
		5:30	-	C	C	E	B	-	-	-	-	C	C	C	C
		5:45	-	C	B	E	C	-	-	-	-	C	C	B	C
		6:00	-	C	C	E	B	-	-	-	-	D	D	C	C
		6:15	-	C	B	E	C	-	-	-	-	C	C	B	C
		6:30	-	F	A	F	C	-	-	-	-	D	D	A	E
		6:45	-	F	B	F	C	-	-	-	-	F	F	B	F
		7:00	-	F	B	F	C	-	-	-	-	F	F	B	F
		7:15	-	F	A	F	D	-	-	-	-	F	E	A	E
		7:30	-	F	A	F	C	-	-	-	-	D	D	A	E
		7:45	-	E	A	E	C	-	-	-	-	D	D	A	D
Int 2	Gibson & Interchange (NB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	D	A	-	-	A	A	D	D	E	-	-	-	B
		5:15	D	A	-	-	B	B	D	D	E	-	-	-	B
		5:30	D	B	-	-	C	C	C	C	D	-	-	-	C
		5:45	D	B	-	-	B	B	C	C	D	-	-	-	C
		6:00	E	A	-	-	A	A	D	D	E	-	-	-	B
		6:15	D	B	-	-	B	B	D	D	D	-	-	-	B
		6:30	E	F	-	-	B	B	D	D	F	-	-	-	E
		6:45	E	F	-	-	B	C	D	D	F	-	-	-	F
		7:00	D	F	-	-	C	D	C	C	F	-	-	-	F
		7:15	E	F	-	-	B	C	C	C	F	-	-	-	F
		7:30	E	F	-	-	C	E	C	C	F	-	-	-	E
		7:45	F	C	-	-	C	F	C	C	F	-	-	-	E
Int 3	Gibson & University	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		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	-	B
		6:00	A	A	A	A	A	A	D	D	-	E	D	-	A
		6:15	A	A	A	A	A	A	D	D	-	E	D	-	B
		6:30	A	C	A	C	B	A	D	D	-	D	D	-	C
		6:45	B	F	A	C	B	B	D	C	-	D	D	-	E
		7:00	A	F	A	D	B	A	D	D	-	D	D	-	E
		7:15	A	F	A	D	B	B	D	D	-	D	D	-	D
		7:30	B	D	A	C	B	B	C	C	-	D	D	-	C
		7:45	B	C	B	C	B	B	C	C	-	D	C	-	C
Int 4	Gibson & Yale	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		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	B	A	A	D	D	D	D	D	D	B
		6:00	A	B	A	A	B	A	D	D	C	D	D	D	B
		6:15	A	B	A	B	A	A	D	D	C	D	D	D	B
		6:30	A	C	B	C	B	A	D	D	C	D	D	D	C
		6:45	A	F	B	C	B	A	D	D	C	D	D	D	D
		7:00	A	F	B	C	B	A	D	D	C	D	D	D	E
		7:15	A	F	B	D	B	A	D	D	C	D	D	D	D
		7:30	A	D	B	C	B	A	D	D	C	D	D	D	C
		7:45	A	C	A	C	B	A	D	D	C	D	E	E	C
Int 5	Gibson & Girard	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	B	B	B	A	A	A	A	C	D	D	D	B
		5:15	A	B	B	B	A	A	D	A	C	D	D	D	B
		5:30	A	B	B	D	A	A	D	A	C	D	D	D	C
		5:45	A	C	B	E	A	A	D	D	C	D	D	D	C
		6:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		6:15	A	A	A	B	A	A	D	D	D	D	D	D	B
		6:30	A	B	A	D	A	A	D	D	D	D	D	D	B
		6:45	A	B	A	E	A	A	D	D	D	D	D	D	B
		7:00	A	C	A	F	A	A	D	D	D	D	D	D	C
		7:15	A	C	A	E	A	A	D	D	D	D	D	D	C
		7:30	A	C	A	E	A	A	D	D	D	D	D	D	C
		7:45	A	B	A	D	A	A	D	D	D	D	D	D	B
Int 6	Gibson & Carlisle	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	A	A	A	A	A	A	A	D	D	E	B
		5:15	A	A	A	A	A	A	A	A	A	D	D	E	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	B	A	A	A	A	A	D	C	D	D	E	D	B
		6:30	B	B	A	B	A	A	D	B	D	D	E	D	B
		6:45	B	C	A	C	B	A	D	D	D	D	E	D	B
		7:00	C	C	A	D	B	A	D	D	D	D	E	D	C
		7:15	B	C	A	D	B	A	D	D	D	D	E	D	C
		7:30	C	C	A	C	B	A	D	D	D	D	E	D	C
		7:45	B	B	A	C	B	A	D	D	D	D	E	D	B
Int 7	Gibson & Maxwell	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		5:00	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:15	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:30	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:45	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:00	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:15	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:30	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:45	A	A	A	A	A	A	D	E	E	D	E	E	A
		7:00	A	B	A	D	A	A	D	E	E	D	E	E	B
		7:15	A	B	A	C	A	A	D	E	E	D	E	E	B
		7:30	A	B	A	C	A	A	D	E	E	D	E	E	B
		7:45	A	B	A	B	A	A	D	E	E	D	E	E	B

Table 16. 2030 Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

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



Table 16. 2030 Build Intersection LOS Analysis Summary, AM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	5:00	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:15	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:30	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:45	D	-	C	-	-	-	B	A	-	-	A	A	-
		6:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:45	B	-	B	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	5:00	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:15	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:30	-	-	-	C	-	-	-	-	B	-	-	-	-
		5:45	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:00	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		6:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		6:45	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:00	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:15	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		7:45	-	-	-	F	-	-	-	-	D	-	-	-	-
Int 52	Girard & Site Driveway 2	5:00	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:15	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:30	-	-	-	C	-	A	-	-	-	-	-	-	-
		5:45	-	-	-	D	-	A	-	-	-	-	-	-	-
		6:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		7:45	-	-	-	B	-	A	-	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	5:00	B	-	B	-	-	B	-	-	-	-	-	-	-
		5:15	B	-	B	-	-	B	-	-	-	-	-	-	-
		5:30	B	-	B	-	-	B	-	-	-	-	-	-	-
		5:45	B	-	B	-	-	B	-	-	-	-	-	-	-
		6:00	B	-	A	-	-	A	-	-	-	-	-	-	-
		6:15	B	-	A	-	-	A	-	-	-	-	-	-	-
		6:30	B	-	A	-	-	A	-	-	-	-	-	-	-
		6:45	B	-	A	-	-	A	-	-	-	-	-	-	-
		7:00	B	-	A	-	-	A	-	-	-	-	-	-	-
		7:15	B	-	A	-	-	A	-	-	-	-	-	-	-
		7:30	B	-	A	-	-	A	-	-	-	-	-	-	-
		7:45	B	-	A	-	-	A	-	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	5:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		5:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		5:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		5:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		6:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		6:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		7:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	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	-	A	-	-	A	-	-	-	-	-	-	-
		6:30	A	-	A	-	-	A	-	-	-	-	-	-	-
		6:45	A	-	A	-	-	A	-	-	-	-	-	-	-
		7:00	A	-	A	-	-	A	-	-	-	-	-	-	-
		7:15	A	-	A	-	-	A	-	-	-	-	-	-	-
		7:30	A	-	A	-	-	A	-	-	-	-	-	-	-
		7:45	A	-	A	-	-	A	-	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	5:00	Eastbound			Westbound			Northbound			Southbound			Intersection
		5:00	A			A			A			A			A
		5:15	A			A			A			A			A
		5:30	A			A			A			A			A
		5:45	A			A			A			A			A
		6:00	A			A			A			A			A
		6:15	A			A			A			A			A
		6:30	A			A			A			A			A
		6:45	A			A			A			A			A
		7:00	A			A			A			A			A
		7:15	A			A			A			A			A
		7:30	A			A			A			A			A
		7:45	A			A			A			A			A

Table 17: 2030 Build Intersection LOS Analysis Summary, PM Peak Hour

		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 1	Gibson & Interchange (SB)	15:00	-	C	C	D	B	-	-	-	-	D	D	C	D
		15:15	-	C	D	F	A	-	-	-	-	D	D	D	F
		15:30	-	C	D	D	B	-	-	-	-	D	D	D	D
		15:45	-	C	C	D	B	-	-	-	-	D	D	C	D
		16:00	-	C	D	D	A	-	-	-	-	D	D	D	D
		16:15	-	C	D	D	B	-	-	-	-	D	D	D	D
		16:30	-	C	D	D	A	-	-	-	-	D	D	D	D
		16:45	-	C	C	D	B	-	-	-	-	D	D	C	D
		17:00	-	C	D	D	A	-	-	-	-	D	D	D	D
		17:15	-	C	D	D	B	-	-	-	-	D	D	D	D
		17:30	-	C	D	D	A	-	-	-	-	D	D	D	C
		17:45	-	C	D	D	B	-	-	-	-	D	D	D	C
Int 2	Gibson & Interchange (NB)	15:00	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:15	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:45	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:00	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:15	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		16:45	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:00	F	A	-	-	A	F	D	D	F	-	-	-	F
		17:15	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:30	F	A	-	-	B	F	D	D	F	-	-	-	E
		17:45	E	B	-	-	C	D	C	C	E	-	-	-	D
Int 3	Gibson & University	15:00	D	B	B	A	C	B	D	D	-	E	D	-	C
		15:15	D	B	B	A	C	B	D	D	-	E	D	-	C
		15:30	D	B	B	B	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	D	B	D	D	-	E	D	-	C
		16:45	D	B	A	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	B	D	D	-	E	D	-	C
		17:45	C	B	A	A	B	B	D	D	-	E	D	-	C
Int 4	Gibson & Yale	15:00	D	C	B	B	C	B	D	D	C	C	D	D	C
		15:15	C	C	B	B	C	A	D	D	C	C	D	D	C
		15:30	D	C	B	B	F	B	D	D	C	C	D	D	D
		15:45	D	C	B	C	F	B	D	D	C	C	D	D	E
		16:00	D	C	B	B	C	A	D	D	C	D	D	D	C
		16:15	D	C	A	B	C	A	D	D	D	D	D	E	C
		16:30	D	C	B	B	D	A	D	D	C	D	D	D	C
		16:45	D	C	B	B	D	A	D	D	C	D	D	D	D
		17:00	D	C	B	B	C	A	D	D	C	D	D	D	C
		17:15	D	C	B	B	F	B	D	D	C	D	D	D	D
		17:30	C	C	B	B	C	A	D	D	C	D	D	E	C
		17:45	B	C	A	A	B	A	D	D	C	D	D	E	C
Int 5	Gibson & Girard	15:00	B	C	A	B	B	A	D	D	D	D	E	D	C
		15:15	B	C	A	B	B	A	D	D	D	D	E	D	C
		15:30	C	B	A	B	B	A	D	D	D	D	E	D	C
		15:45	D	B	A	B	B	A	D	D	D	D	E	D	C
		16:00	D	A	A	B	B	A	D	D	E	D	E	D	B
		16:15	D	A	A	B	B	A	D	D	E	D	E	D	B
		16:30	D	A	A	B	B	A	D	D	E	D	E	D	B
		16:45	D	A	A	B	B	A	D	D	E	D	E	D	B
		17:00	C	A	A	A	B	A	D	D	E	D	D	D	B
		17:15	D	A	A	B	B	A	D	D	E	D	E	D	B
		17:30	C	A	A	A	B	A	D	D	E	D	D	D	B
		17:45	A	B	A	A	A	A	D	D	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	F	B	A	A	C	A	F	D	D	D	E	D	D
		15:45	F	B	A	A	C	A	D	D	D	D	E	D	D
		16:00	D	B	A	A	C	A	F	D	D	D	E	D	D
		16:15	E	B	A	B	F	A	F	D	D	D	D	D	D
		16:30	E	B	A	A	C	A	F	D	D	D	E	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	E	D	D	D	E	D	C
		17:30	E	A	A	A	B	A	D	E	D	D	E	D	B
		17:45	C	A	A	A	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	15:00	A	A	A	A	E	A	E	E	E	D	E	E	B
		15:15	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:30	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:45	B	A	A	E	B	B	E	E	E	D	E	E	B
		16:00	A	B	A	E	B	B	E	E	E	D	E	E	B
		16:15	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:30	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:45	C	B	A	E	B	B	E	E	E	D	E	E	B
		17:00	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:15	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:30	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:45	A	A	A	E	A	A	E	E	E	D	E	E	B

Table 17. 2030 Build Intersection LOS Analysis Summary, PM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 8	Gibson & Quincy	15:00	A	A	A	A	A	A	E	D	D	E	E	E	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	B	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	F	F	F	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	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	A	A	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	D	C	C	C	B	B	F	F	C	C	C	C	F
		15:15	E	C	C	C	B	C	F	F	C	C	C	C	F
		15:30	E	C	C	C	C	C	F	F	C	C	C	C	F
		15:45	F	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	F	C	C	B	C	C	F	F	C	C	C	C	F
		16:45	E	C	C	C	C	C	F	F	C	D	D	D	F
		17:00	E	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	E	C	C	C	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	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	F	B	C	B	C	C	E	E	E	D	D	C	D
		15:15	F	C	C	B	C	C	E	E	E	D	D	C	E
		15:30	F	C	C	B	C	D	E	E	E	D	D	C	E
		15:45	F	C	C	B	D	D	E	E	E	D	D	C	E
		16:00	F	B	B	B	C	C	E	E	E	D	D	D	E
		16:15	F	C	C	B	D	D	E	D	D	D	D	D	E
		16:30	F	C	C	A	D	E	E	D	D	D	D	D	E
		16:45	F	C	C	B	D	D	E	E	E	D	D	C	D
		17:00	F	B	B	B	C	C	E	E	E	D	D	C	D
		17:15	F	C	C	B	C	C	E	E	E	D	D	C	D
		17:30	F	B	B	B	C	C	E	E	E	D	D	C	D
		17:45	E	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	-	-	-	C	-	C	-	B	B	A	A	-	B
		15:15	-	-	-	C	-	C	-	B	B	A	B	-	B
		15:30	-	-	-	C	-	C	-	B	B	A	B	-	B
		15:45	-	-	-	C	-	B	-	B	B	A	B	-	B
		16:00	-	-	-	C	-	B	-	B	B	A	B	-	B
		16:15	-	-	-	C	-	B	-	B	B	A	B	-	B
		16:30	-	-	-	C	-	B	-	B	B	A	B	-	B
		16:45	-	-	-	C	-	B	-	B	B	A	B	-	B
		17:00	-	-	-	C	-	C	-	B	B	A	B	-	B
		17:15	-	-	-	C	-	B	-	B	B	A	B	-	B
		17:30	-	-	-	C	-	C	-	B	B	A	B	-	B
		17:45	-	-	-	C	-	C	-	B	B	A	A	-	B
Int 12	Sunport & Broadway	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	C	C	C	C	C	C	A	B	B	A	B	B	B
		15:15	C	C	C	C	C	C	A	B	B	A	B	B	B
		15:30	C	C	C	C	C	C	B	B	B	A	B	B	C
		15:45	C	C	C	C	C	C	B	B	B	A	B	B	C
		16:00	B	C	C	C	C	C	B	B	B	A	B	B	C
		16:15	B	C	C	C	C	C	B	B	B	A	B	B	C
		16:30	B	C	C	C	C	C	B	B	B	A	B	B	C
		16:45	C	C	C	C	C	C	B	B	B	A	B	B	C
		17:00	C	C	C	C	C	C	B	B	B	A	B	B	C
		17:15	C	C	C	C	C	C	B	B	B	A	B	B	C
		17:30	C	C	C	C	C	C	A	B	B	A	B	B	B
		17:45	C	C	C	C	C	C	A	B	B	A	B	B	B
Int 13	Sunport & Interchange (SB)	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	-	A	A	A	A	-	-	-	-	C	C	C	B
		15:15	-	A	A	A	A	-	-	-	-	C	C	C	B
		15:30	-	A	A	A	A	-	-	-	-	C	C	C	B
		15:45	-	A	A	A	A	-	-	-	-	C	C	C	B
		16:00	-	A	A	A	A	-	-	-	-	C	C	C	B
		16:15	-	A	A	A	A	-	-	-	-	C	C	C	B
		16:30	-	A	A	A	A	-	-	-	-	C	C	D	B
		16:45	-	A	A	A	A	-	-	-	-	C	C	C	B
		17:00	-	A	A	A	A	-	-	-	-	C	C	D	B
		17:15	-	A	A	A	A	-	-	-	-	C	C	D	B
		17:30	-	A	A	A	A	-	-	-	-	C	C	D	B
		17:45	-	A	A	A	A	-	-	-	-	D	D	D	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	D	-	-	-	A
		15:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		15:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		15:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		16:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		16:15	A	A	-	-	A	A	C	C	D	-	-	-	A
		16:30	A	A	-	-	A	A	D	D	D	-	-	-	A
		16:45	A	A	-	-	A	A	C	C	D	-	-	-	A
		17:00	A	A	-	-	A	A	C	C	D	-	-	-	A
		17:15	A	A	-	-	A	A	D	D	D	-	-	-	A
		17:30	A	A	-	-	A	A	C	C	D	-	-	-	A
		17:45	A	A	-	-	A	A	C	C	D	-	-	-	A



Table 17. 2030 Build Intersection LOS Analysis Summary, PM Peak Period (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	
Int 51 Gibson & Site Driveway 1	15:00	-	-	-	D	-	-	-	-	C	-	-	-	-
	15:15	-	-	-	D	-	-	-	-	C	-	-	-	-
	15:30	-	-	-	D	-	-	-	-	C	-	-	-	-
	15:45	-	-	-	D	-	-	-	-	C	-	-	-	-
	16:00	-	-	-	C	-	-	-	-	C	-	-	-	-
	16:15	-	-	-	C	-	-	-	-	C	-	-	-	-
	16:30	-	-	-	D	-	-	-	-	C	-	-	-	-
	16:45	-	-	-	D	-	-	-	-	C	-	-	-	-
	17:00	-	-	-	D	-	-	-	-	C	-	-	-	-
	17:15	-	-	-	D	-	-	-	-	C	-	-	-	-
	17:30	-	-	-	C	-	-	-	-	C	-	-	-	-
	17:45	-	-	-	C	A	-	-	-	C	-	-	-	-
Int 52 Girard & Site Driveway 2	15:00	-	-	-	D	-	C	-	-	-	-	-	-	-
	15:15	-	-	-	D	-	C	-	-	-	-	-	-	-
	15:30	-	-	-	D	-	C	-	-	-	-	-	-	-
	15:45	-	-	-	D	-	C	-	-	-	-	-	-	-
	16:00	-	-	-	B	-	B	-	-	-	-	-	-	-
	16:15	-	-	-	B	-	B	-	-	-	-	-	-	-
	16:30	-	-	-	B	-	B	-	-	-	-	-	-	-
	16:45	-	-	-	B	-	B	-	-	-	-	-	-	-
	17:00	-	-	-	B	-	B	-	-	-	-	-	-	-
	17:15	-	-	-	B	-	B	-	-	-	-	-	-	-
	17:30	-	-	-	B	-	B	-	-	-	-	-	-	-
	17:45	-	-	-	B	-	B	-	-	-	-	-	-	-
Int 53 Girard & Site Driveway 3	15:00	F	-	F	-	-	-	A	-	-	-	-	-	-
	15:15	F	-	F	-	-	-	A	-	-	-	-	-	-
	15:30	F	-	F	-	-	-	A	-	-	-	-	-	-
	15:45	F	-	F	-	-	-	A	-	-	-	-	-	-
	16:00	B	-	B	-	-	-	A	-	-	-	-	-	-
	16:15	B	-	B	-	-	-	A	-	-	-	-	-	-
	16:30	B	-	B	-	-	-	A	-	-	-	-	-	-
	16:45	B	-	B	-	-	-	A	-	-	-	-	-	-
	17:00	B	-	B	-	-	-	A	-	-	-	-	-	-
	17:15	B	-	B	-	-	-	A	-	-	-	-	-	-
	17:30	B	-	B	-	-	-	A	-	-	-	-	-	-
	17:45	B	-	B	-	-	-	A	-	-	-	-	-	-
Int 54 Girard & Site Driveway 4	15:00	-	-	-	B	-	B	-	-	-	-	-	-	-
	15:15	-	-	-	B	-	B	-	-	-	-	-	-	-
	15:30	-	-	-	B	-	B	-	-	-	-	-	-	-
	15:45	-	-	-	B	-	B	-	-	-	-	-	-	-
	16:00	-	-	-	B	-	A	-	-	-	-	-	-	-
	16:15	-	-	-	B	-	A	-	-	-	-	-	-	-
	16:30	-	-	-	B	-	A	-	-	-	-	-	-	-
	16:45	-	-	-	B	-	A	-	-	-	-	-	-	-
	17:00	-	-	-	B	-	A	-	-	-	-	-	-	-
	17:15	-	-	-	B	-	A	-	-	-	-	-	-	-
	17:30	-	-	-	B	-	A	-	-	-	-	-	-	-
	17:45	-	-	-	B	-	A	-	-	-	-	-	-	-
Int 55 Girard & Site Driveway 5	15:00	B	-	B	-	-	-	A	-	-	-	-	-	-
	15:15	B	-	B	-	-	-	A	-	-	-	-	-	-
	15:30	B	-	B	-	-	-	A	-	-	-	-	-	-
	15:45	B	-	B	-	-	-	A	-	-	-	-	-	-
	16:00	B	-	A	-	-	-	A	-	-	-	-	-	-
	16:15	B	-	A	-	-	-	A	-	-	-	-	-	-
	16:30	B	-	A	-	-	-	A	-	-	-	-	-	-
	16:45	B	-	A	-	-	-	A	-	-	-	-	-	-
	17:00	B	-	A	-	-	-	A	-	-	-	-	-	-
	17:15	B	-	A	-	-	-	A	-	-	-	-	-	-
	17:30	B	-	A	-	-	-	A	-	-	-	-	-	-
	17:45	B	-	A	-	-	-	A	-	-	-	-	-	-
Int 56 Alamo / Site Parking & Columbia	15:00	Eastbound			Westbound			Northbound			Southbound			Intersection
	15:00	A			A			A			A			A
	15:15	A			A			A			A			A
	15:30	A			A			A			A			A
	15:45	A			A			A			A			A
	16:00	A			A			A			A			A
	16:15	A			A			A			A			A
	16:30	A			A			A			A			A
	16:45	A			A			A			A			A
	17:00	A			A			A			A			A
	17:15	A			A			A			A			A
	17:30	A			A			A			A			A
	17:45	A			A			A			A			A

## **2040 YEAR SCENARIO (2030 BUILD + 10 YEARS)**

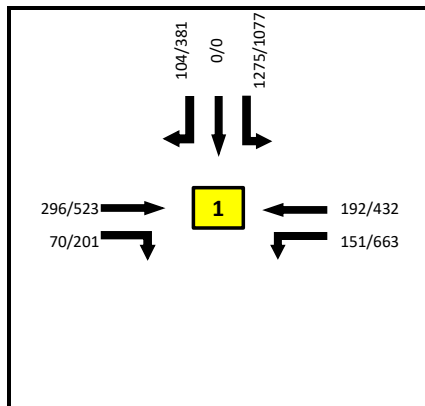
The volumes for the 2040 scenarios have been developed and provided as indicated below:

- Figures 35 and 36, 2040 Horizon Year volumes for the Gibson Corridor
- Figures 37 and 38, 2040 Horizon Year volumes for the Sunport/Girard Corridors

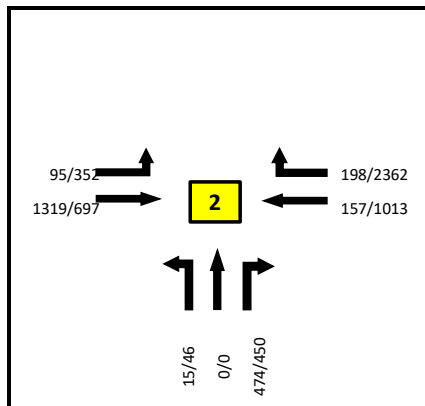
Tables 18 and 19 show the 15-minute LOS results for the 2040 scenario, 10 years after Phase 2 build-out for the AM and PM peak periods, respectively.

Without improvements to the 2030 road network, results will deteriorate from the 2030 Build scenario, if not in LOS designations, then in delay and vehicle queue which are not shown in these tables. Overall, the number of LOS E/F movements for the AM period is equal to 74/234, respectively, and in the PM peak period 141 and 182, respectively.

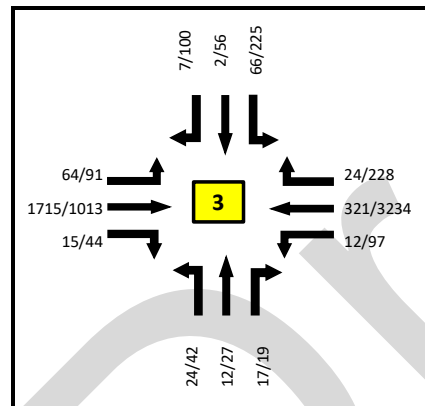
Draft



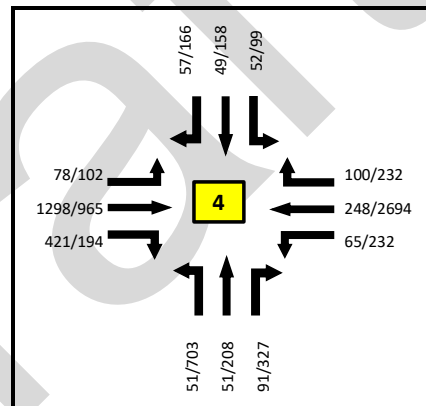
Gibson and I-25 SB Ramps



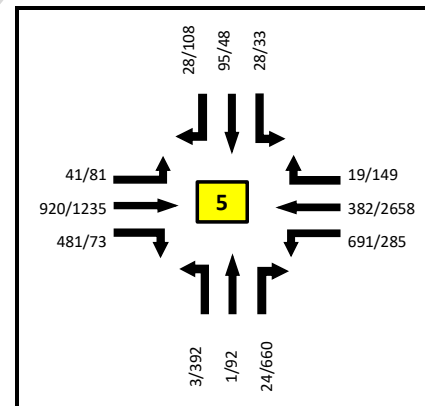
Gibson and I-25 NB Ramps



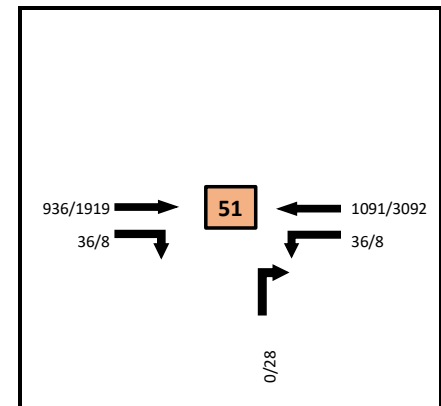
Gibson and University



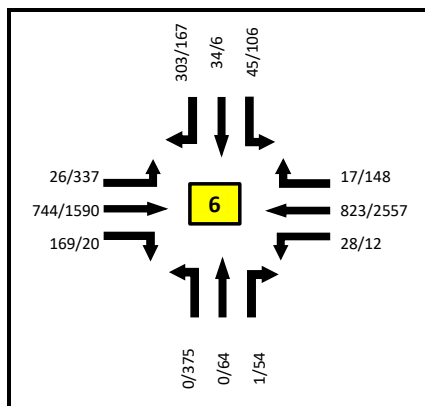
Gibson and Yale



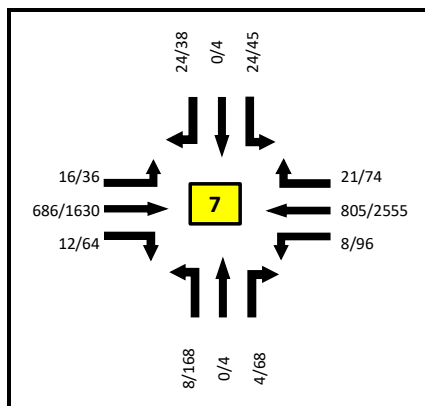
Gibson and Girard



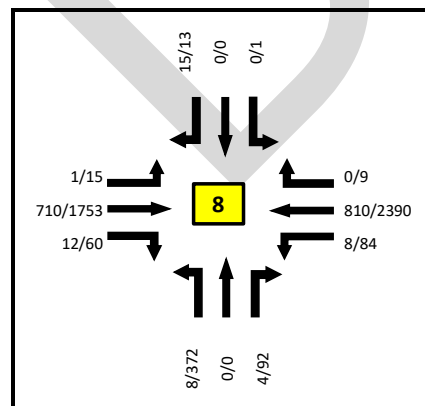
Gibson and Site Driveway



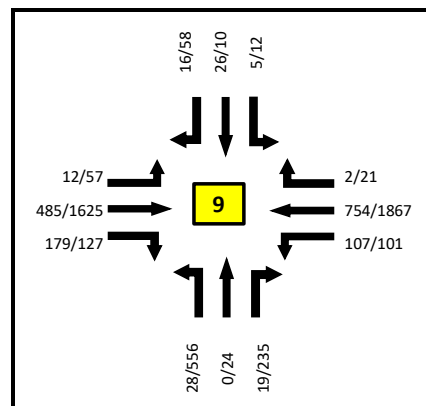
Gibson and Carlisle



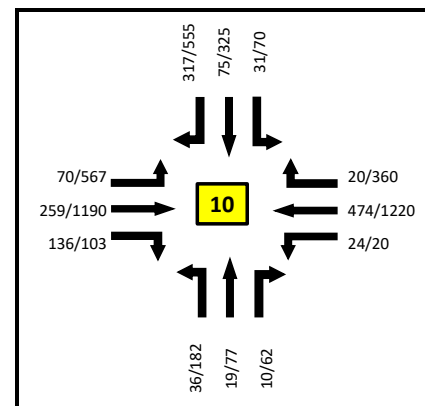
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



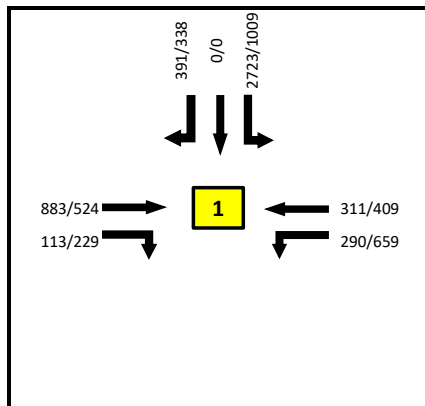
Gibson and San Mateo

**2040 HORIZON YEAR PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**GIBSON BOULEVARD CORRIDOR**

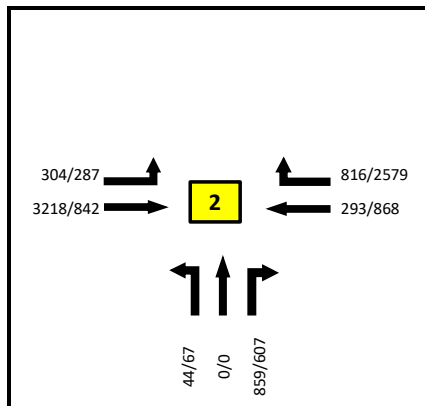
Legend  
 AM / PM Volumes

**FIGURE 35**

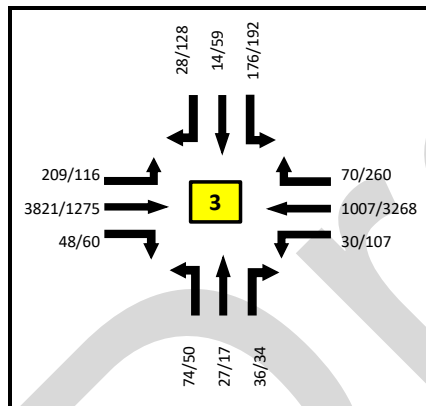




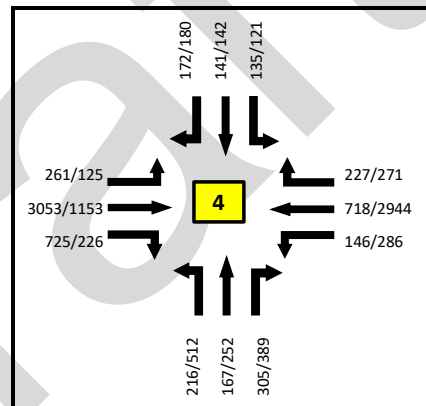
Gibson and I-25 SB Ramps



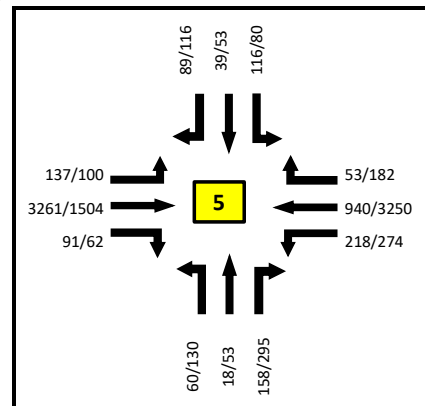
Gibson and I-25 NB Ramps



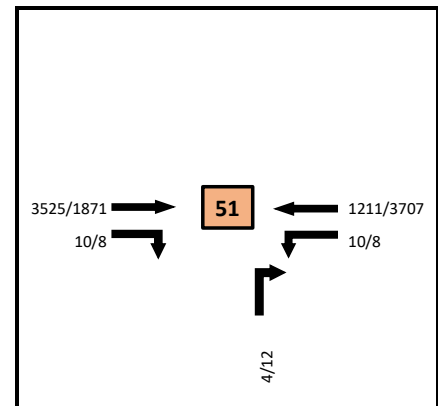
Gibson and University



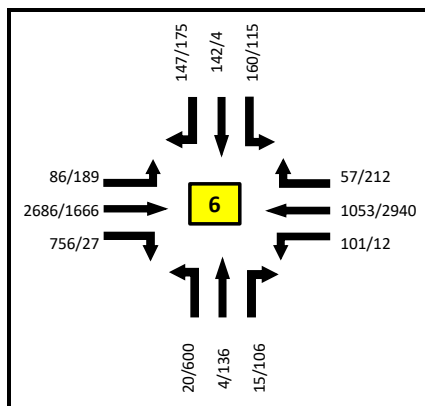
Gibson and Yale



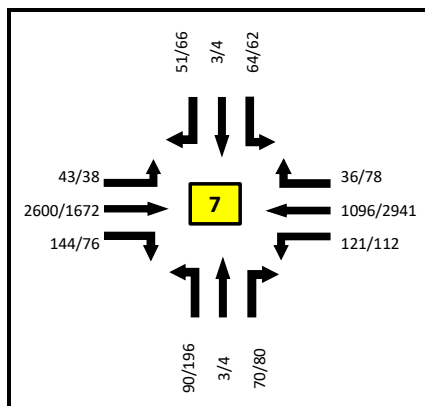
Gibson and Girard



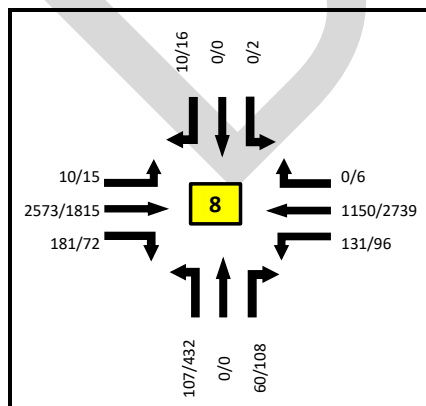
Gibson and Site Driveway



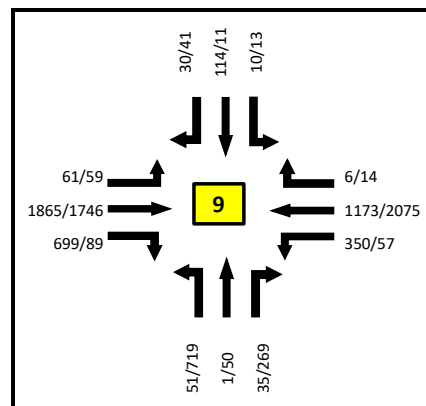
Gibson and Carlisle



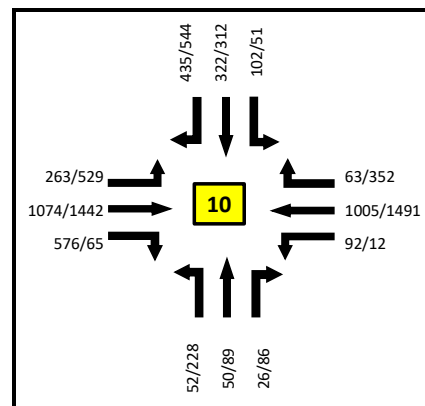
Gibson and Maxwell



Gibson and Quincy



Gibson and Truman



Gibson and San Mateo

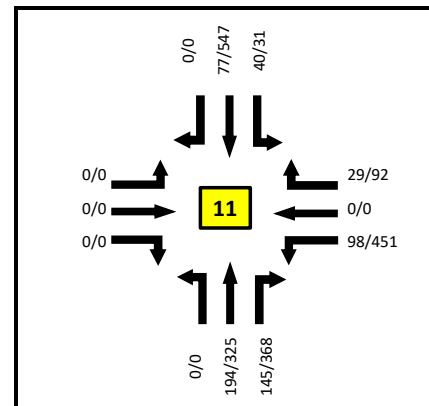
**2040 HORIZON YEAR PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**GIBSON BOULEVARD CORRIDOR**

Legend  
 AM / PM Volumes

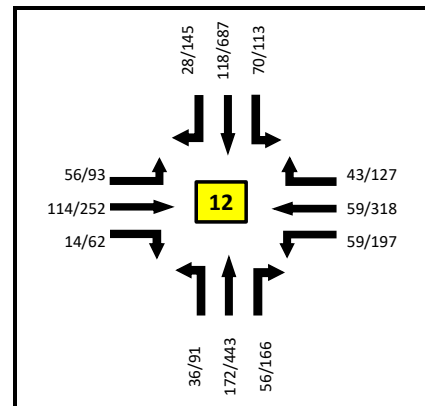
**FIGURE 36**



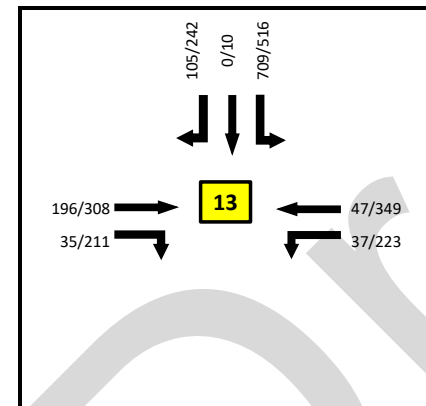




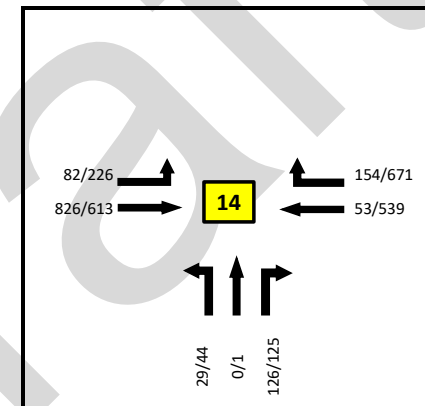
Woodward / Sunport Ext. and 2nd Street



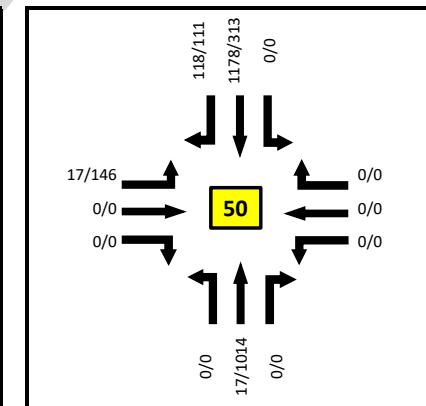
Woodward / Sunport Ext. and Broadway



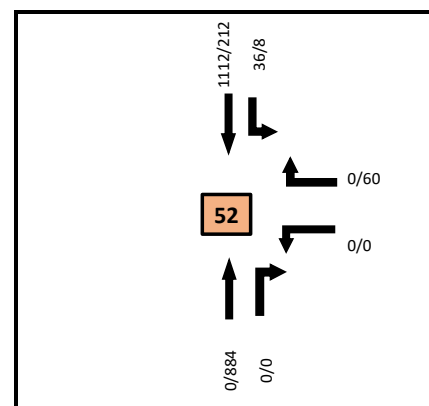
Sunport and I-25 SB Ramps



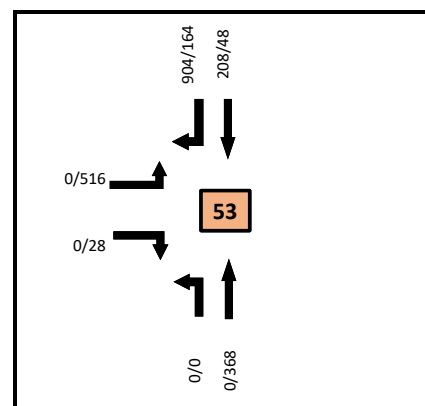
Sunport and I-25 NB Ramps



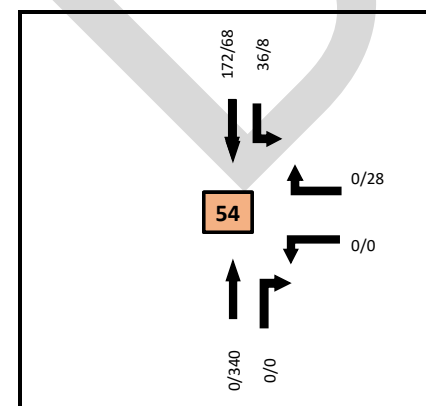
Girard and Miles



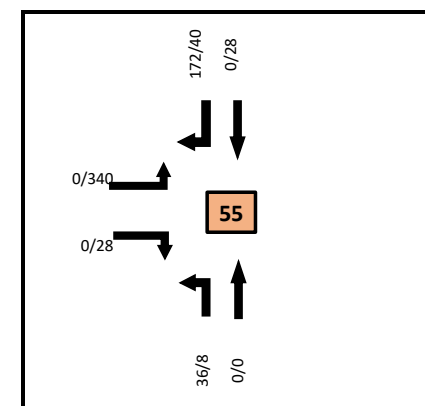
Girard Site Driveway to East



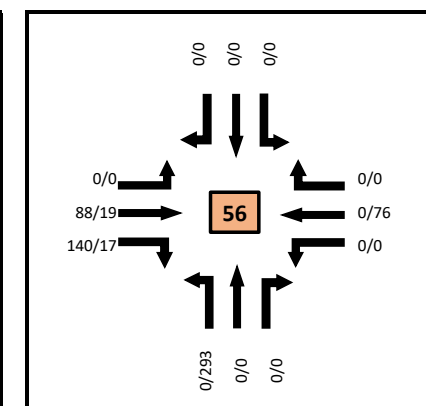
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



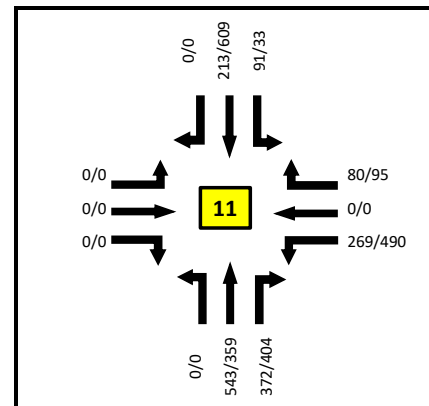
Columbia and Alamo/North Parking Lot Driveway

**2040 HORIZON YEAR PEAK-HOUR VOLUMES**  
**5:00AM to 6:00AM & 3:00PM to 4:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

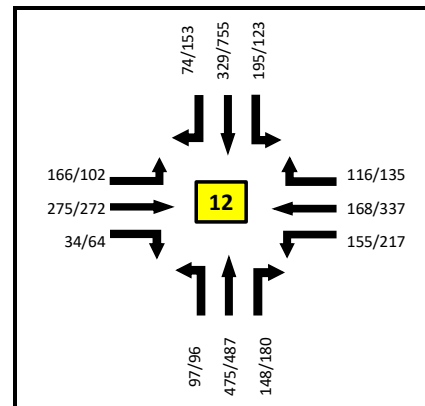
**LEGEND**  
 AM / PM Volumes

**FIGURE 37**

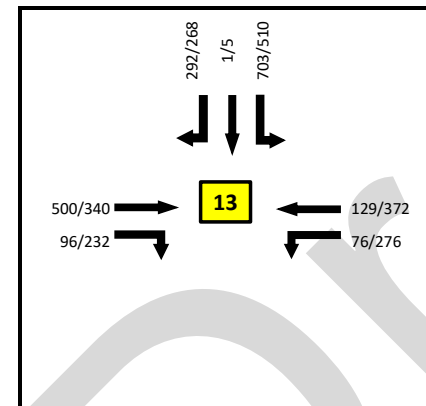




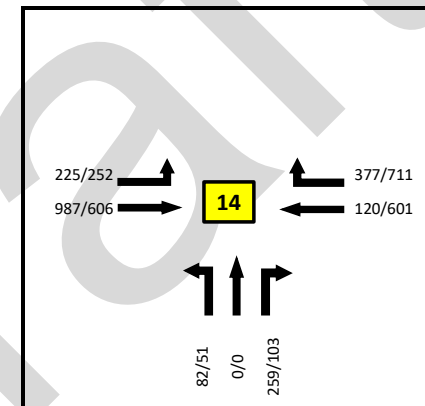
Woodward / Sunport Ext. and 2nd Street



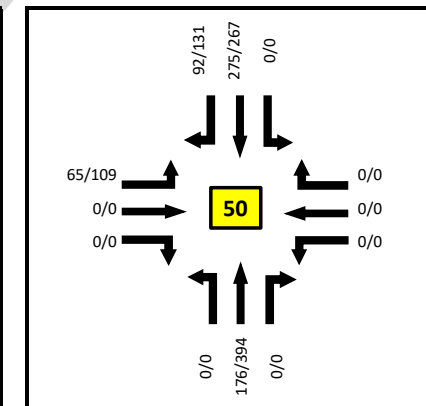
Woodward / Sunport Ext. and Broadway



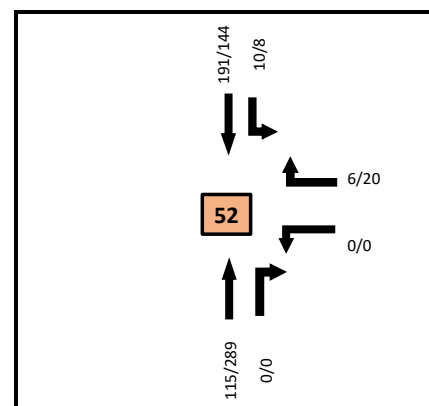
Sunport and I-25 SB Ramps



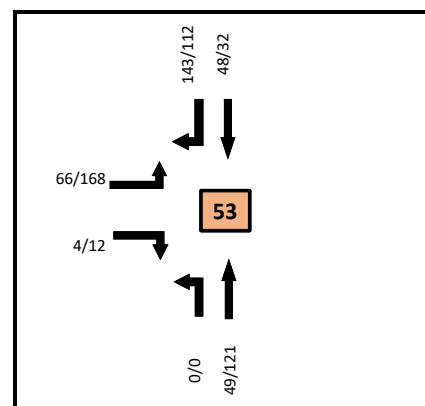
Sunport and I-25 NB Ramps



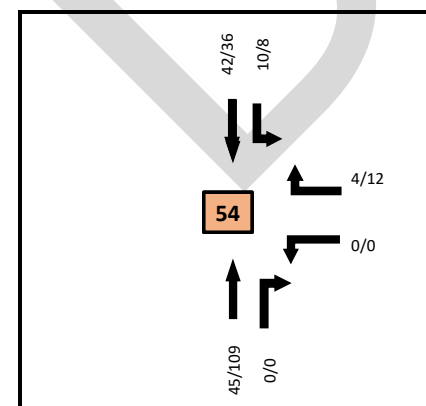
Girard and Miles



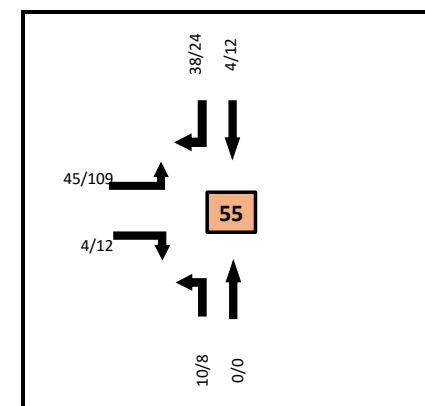
Girard Site Driveway to East



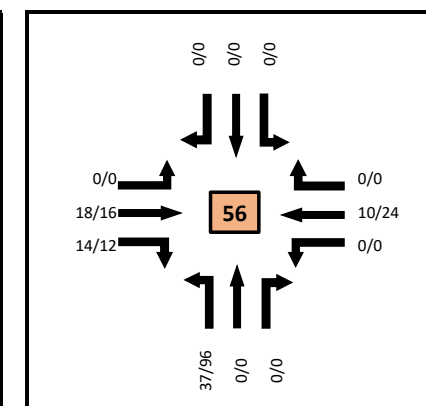
Girard and North Pkg Lot Driveway



Girard and Truck Driveway



Girard and South Site Roadway



Columbia and Alamo/North Parking Lot Driveway

**2040 HORIZON YEAR PEAK-HOUR VOLUMES**  
**6:45AM to 7:45AM & 4:00PM to 5:00PM**  
**SUNPORT BOULEVARD CORRIDOR**

**LEGEND**  
 AM / PM Volumes

**FIGURE 38**



Table 18: 2040 Horizon Year 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	-	B	C	D	A	-	-	-	-	D	D	C	C
		5:15	-	B	C	E	B	-	-	-	-	D	D	C	C
		5:30	-	C	B	E	B	-	-	-	-	C	C	B	C
		5:45	-	C	B	E	C	-	-	-	-	C	C	B	C
		6:00	-	C	B	E	B	-	-	-	-	C	C	B	C
		6:15	-	D	B	E	C	-	-	-	-	C	C	B	C
		6:30	-	F	A	F	C	-	-	-	-	F	E	A	F
		6:45	-	F	B	F	C	-	-	-	-	F	F	B	F
		7:00	-	F	B	F	C	-	-	-	-	F	F	B	F
		7:15	-	F	A	F	D	-	-	-	-	F	F	A	F
		7:30	-	F	B	F	C	-	-	-	-	F	F	B	F
		7:45	-	F	A	F	C	-	-	-	-	F	D	A	E
Int 2	Gibson & Interchange (NB)	5:00	D	A	-	-	A	B	D	D	E	-	-	-	B
		5:15	D	A	-	-	B	B	D	D	E	-	-	-	B
		5:30	D	B	-	-	B	B	C	C	D	-	-	-	C
		5:45	D	B	-	-	B	B	C	C	D	-	-	-	C
		6:00	E	A	-	-	A	B	D	D	E	-	-	-	B
		6:15	E	B	-	-	B	B	D	D	D	-	-	-	C
		6:30	E	F	-	-	B	C	D	D	F	-	-	-	F
		6:45	E	F	-	-	B	C	D	D	F	-	-	-	F
		7:00	C	F	-	-	D	F	C	C	F	-	-	-	F
		7:15	E	F	-	-	B	D	C	C	F	-	-	-	F
		7:30	F	F	-	-	C	F	C	C	F	-	-	-	F
		7:45	F	D	-	-	C	F	C	C	F	-	-	-	F
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	B	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	B	F	A	C	B	B	D	D	D	D	-	-	D
		6:45	B	F	A	C	B	B	C	C	-	D	D	-	F
		7:00	A	F	A	D	B	B	D	D	-	D	D	-	F
		7:15	B	F	A	C	B	B	D	D	-	D	D	-	E
		7:30	B	F	B	C	B	B	C	C	-	D	D	-	E
		7:45	B	F	B	C	C	B	C	C	-	D	C	-	D
Int 4	Gibson & Yale	5:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		5:15	A	B	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	B	B	A	D	D	C	D	D	D	B
		6:00	A	B	A	B	B	A	D	D	C	D	D	D	B
		6:15	A	B	A	B	B	A	D	D	C	D	D	D	B
		6:30	A	D	B	C	B	A	D	D	C	D	D	D	C
		6:45	B	F	B	C	B	A	D	D	C	D	D	D	E
		7:00	B	F	B	C	B	A	D	D	C	D	D	D	F
		7:15	B	F	B	D	B	A	D	D	C	D	D	D	D
		7:30	A	F	B	D	B	A	D	D	D	D	D	D	D
		7:45	B	C	B	D	B	A	D	D	C	D	E	E	C
Int 5	Gibson & Girard	5:00	A	B	B	B	A	A	A	A	C	D	D	D	B
		5:15	A	B	B	C	A	A	D	A	C	D	D	D	B
		5:30	A	C	B	D	A	A	D	A	C	D	D	D	C
		5:45	A	C	B	F	A	A	D	D	C	D	D	D	C
		6:00	A	A	A	A	A	A	D	D	D	D	D	D	B
		6:15	A	A	A	B	A	A	D	D	D	D	D	D	B
		6:30	A	B	A	E	A	A	D	D	D	D	D	D	B
		6:45	A	C	A	F	A	A	D	D	D	D	D	D	C
		7:00	A	F	A	F	A	A	D	D	D	D	D	D	D
		7:15	A	C	A	F	A	A	D	D	D	D	D	D	C
		7:30	A	C	A	F	A	A	D	D	D	D	D	D	C
		7:45	A	C	A	E	A	A	D	D	D	D	D	D	C
Int 6	Gibson & Carlisle	5:00	A	A	A	A	A	A	A	A	A	D	D	E	B
		5:15	A	A	A	A	A	A	A	A	A	D	D	E	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	A	C	D	D	D	B
		6:00	B	A	A	A	A	A	D	E	D	D	E	D	B
		6:15	B	B	A	A	A	A	D	E	D	D	E	D	B
		6:30	C	B	A	B	A	A	D	B	D	D	E	D	B
		6:45	C	C	B	C	B	A	D	D	C	D	E	D	C
		7:00	C	D	A	D	B	A	D	D	C	D	E	D	C
		7:15	B	C	A	D	B	A	D	D	C	D	E	D	C
		7:30	B	C	A	D	B	A	D	D	D	D	E	D	C
		7:45	B	B	A	D	B	A	D	D	D	D	E	D	B
Int 7	Gibson & Maxwell	5:00	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:15	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:30	A	A	A	A	A	A	D	E	E	D	E	E	A
		5:45	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:00	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:15	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:30	A	A	A	A	A	A	D	E	E	D	E	E	A
		6:45	A	A	A	B	A	A	D	E	E	D	E	E	B
		7:00	A	B	A	D	A	A	D	E	E	D	E	E	B
		7:15	A	B	A	C	A	A	D	E	E	D	E	E	B
		7:30	A	B	A	D	A	A	D	E	E	D	E	E	B
		7:45	A	B	A	C	A	A	D	E	E	D	E	E	B

Table 18. 2040 Horizon Year Intersection LOS Analysis Summary, AM Peak Period (Continued)

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

Table 18. 2040 Horizon Year Intersection LOS Analysis Summary, AM Peak Period (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 50	Girard & Miles	5:00	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:15	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:30	C	-	C	-	-	-	B	A	-	-	A	A	-
		5:45	D	-	C	-	-	-	B	A	-	-	A	A	-
		6:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		6:45	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:00	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:15	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:30	B	-	A	-	-	-	A	A	-	-	A	A	-
		7:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	5:00	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:15	-	-	-	B	-	-	-	-	B	-	-	-	-
		5:30	-	-	-	C	-	-	-	-	B	-	-	-	-
		5:45	-	-	-	C	-	-	-	-	C	-	-	-	-
		6:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		6:15	-	-	-	E	-	-	-	-	C	-	-	-	-
		6:30	-	-	-	F	-	-	-	-	E	-	-	-	-
		6:45	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:00	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:15	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:30	-	-	-	F	-	-	-	-	F	-	-	-	-
		7:45	-	-	-	F	-	-	-	-	E	-	-	-	-
Int 52	Girard & Site Driveway 2	5:00	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:15	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:30	-	-	-	C	-	-	A	-	-	-	-	-	-
		5:45	-	-	-	C	-	-	A	-	-	-	-	-	-
		6:00	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:15	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:30	-	-	-	B	-	-	A	-	-	-	-	-	-
		6:45	-	-	-	B	-	-	A	-	-	-	-	-	-
		7:00	-	-	-	B	-	-	A	-	-	-	-	-	-
		7:15	-	-	-	B	-	-	A	-	-	-	-	-	-
		7:30	-	-	-	B	-	-	A	-	-	-	-	-	-
		7:45	-	-	-	B	-	-	A	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	5:00	B	-	B	-	-	-	B	-	-	-	-	-	-
		5:15	B	-	B	-	-	-	B	-	-	-	-	-	-
		5:30	B	-	B	-	-	-	B	-	-	-	-	-	-
		5:45	B	-	B	-	-	-	B	-	-	-	-	-	-
		6:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	5:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		5:45	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		6:45	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:00	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:15	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:30	-	-	-	A	-	-	A	-	-	-	-	-	-
		7:45	-	-	-	A	-	-	A	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	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	-	A	-	-	-	A	-	-	-	-	-	-
		6:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		6:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		7:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	Time Period	Eastbound			Westbound			Northbound			Southbound			Intersection
		5:00	A			A			A			A			A
		5:15	A			A			A			A			A
		5:30	A			A			A			A			A
		5:45	A			A			A			A			A
		6:00	A			A			A			A			A
		6:15	A			A			A			A			A
		6:30	A			A			A			A			A
		6:45	A			A			A			A			A
		7:00	A			A			A			A			A
		7:15	A			A			A			A			A
		7:30	A			A			A			A			A
		7:45	A			A			A			A			A



Table 19: 2040 Horizon Year 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	-	C	C	D	B	-	-	-	-	D	D	C	D
		15:15	-	C	D	D	B	-	-	-	-	D	D	D	D
		15:30	-	D	C	D	B	-	-	-	-	D	D	C	D
		15:45	-	D	C	D	B	-	-	-	-	D	D	C	D
		16:00	-	C	D	D	B	-	-	-	-	D	D	D	D
		16:15	-	C	D	D	B	-	-	-	-	D	D	D	D
		16:30	-	C	D	D	B	-	-	-	-	D	D	D	D
		16:45	-	C	C	D	B	-	-	-	-	D	D	C	D
		17:00	-	C	D	D	B	-	-	-	-	D	D	D	D
		17:15	-	C	D	D	B	-	-	-	-	D	D	D	D
		17:30	-	C	D	D	B	-	-	-	-	D	D	D	C
		17:45	-	C	D	D	B	-	-	-	-	D	D	D	C
Int 2	Gibson & Interchange (NB)	15:00	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:15	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		15:45	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:00	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:15	F	A	-	-	A	F	D	D	F	-	-	-	F
		16:30	F	A	-	-	B	F	D	D	F	-	-	-	F
		16:45	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:00	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:15	F	A	-	-	B	F	D	D	F	-	-	-	F
		17:30	F	A	-	-	B	F	D	D	F	-	-	-	E
		17:45	F	B	-	-	C	E	C	C	E	-	-	-	D
Int 3	Gibson & University	15:00	D	B	B	B	F	B	D	D	-	E	D	-	D
		15:15	D	B	B	B	F	B	D	D	-	E	D	-	D
		15:30	C	B	B	B	F	B	D	C	-	E	D	-	F
		15:45	D	B	B	A	F	B	D	D	-	E	D	-	E
		16:00	D	B	B	B	F	B	D	D	-	E	D	-	D
		16:15	D	B	B	A	F	B	D	D	-	E	D	-	E
		16:30	D	B	A	B	F	B	D	D	-	E	D	-	D
		16:45	D	B	B	B	F	B	D	D	-	E	D	-	E
		17:00	D	B	B	B	F	B	C	C	-	E	D	-	F
		17:15	D	B	B	B	F	B	C	C	-	E	D	-	F
		17:30	D	B	B	A	C	B	D	D	-	E	D	-	C
		17:45	C	B	B	A	C	B	D	D	-	E	D	-	C
Int 4	Gibson & Yale	15:00	D	C	B	B	D	B	D	D	C	C	D	D	D
		15:15	D	C	B	B	D	B	D	D	C	C	D	D	D
		15:30	D	C	B	C	F	B	D	D	C	C	D	D	F
		15:45	D	C	B	C	F	B	D	D	C	C	D	D	F
		16:00	D	C	B	B	F	A	D	D	C	D	D	D	D
		16:15	D	C	B	B	F	A	D	D	C	D	D	D	D
		16:30	D	C	B	C	F	B	D	D	C	D	D	D	E
		16:45	D	C	B	C	F	B	D	D	C	D	D	D	E
		17:00	D	C	B	C	F	B	D	D	C	C	D	D	D
		17:15	D	D	B	C	F	B	D	D	C	C	D	D	E
		17:30	D	C	B	B	C	A	D	D	C	D	D	D	C
		17:45	C	C	B	B	C	A	D	D	C	D	D	D	C
Int 5	Gibson & Girard	15:00	C	C	A	B	B	A	D	D	D	D	E	D	C
		15:15	C	C	A	B	B	A	D	D	D	D	E	D	C
		15:30	D	C	A	B	C	A	D	D	D	D	E	D	C
		15:45	D	B	A	B	C	A	D	D	D	D	D	D	C
		16:00	D	A	A	B	B	A	D	D	E	D	E	D	B
		16:15	D	A	A	B	C	A	D	D	E	D	E	D	C
		16:30	E	A	A	C	B	A	D	D	E	D	E	D	C
		16:45	E	A	A	C	B	A	D	D	E	D	E	D	C
		17:00	D	A	A	B	B	A	D	E	E	D	E	D	B
		17:15	E	B	A	C	B	A	D	E	E	D	E	D	B
		17:30	C	A	A	A	B	A	D	E	E	D	D	D	B
		17:45	B	B	A	A	B	A	D	D	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	C	A	D	D	D	D	E	D	C
		15:30	F	B	A	A	C	A	F	D	D	D	E	D	D
		15:45	F	B	A	A	C	A	D	D	D	D	E	D	D
		16:00	E	B	A	A	C	A	F	D	D	D	E	D	D
		16:15	E	C	A	B	F	B	E	D	C	C	D	C	F
		16:30	E	B	A	B	D	A	F	D	D	D	D	D	D
		16:45	F	B	A	A	F	A	F	D	D	D	E	D	D
		17:00	F	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	D
		17:30	E	A	A	A	C	A	D	E	D	D	D	D	C
		17:45	D	A	A	A	B	A	D	E	D	D	E	D	B
Int 7	Gibson & Maxwell	15:00	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:15	A	A	A	E	A	A	E	E	E	D	E	E	B
		15:30	B	A	A	E	A	B	E	E	E	D	E	E	B
		15:45	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:00	B	B	A	E	B	B	E	E	E	D	E	E	B
		16:15	C	B	A	E	B	B	E	E	E	D	E	E	B
		16:30	C	B	A	E	B	B	E	E	E	D	E	E	B
		16:45	D	B	A	E	B	B	E	E	E	D	E	E	B
		17:00	C	B	A	E	B	B	E	E	E	D	E	E	B
		17:15	C	B	A	E	B	B	E	E	E	D	E	E	B
		17:30	B	B	A	E	B	B	E	E	E	D	E	E	B
		17:45	B	B	B	E	B	B	D	D	D	D	E	E	B

Table 19. 2040 Horizon Year Intersection LOS Analysis Summary, PM Peak Period (Continued)

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

Table 19. 2040 Horizon Year Intersection LOS Analysis Summary, PM Peak Period (Continued)

		Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
Int 50	Girard & Miles	15:00	F	-	A	-	-	-	A	A	-	-	A	A	-
		15:15	F	-	A	-	-	-	A	A	-	-	A	A	-
		15:30	F	-	B	-	-	-	A	A	-	-	A	A	-
		15:45	F	-	A	-	-	-	A	A	-	-	A	A	-
		16:00	C	-	A	-	-	-	A	A	-	-	A	A	-
		16:15	C	-	A	-	-	-	A	A	-	-	A	A	-
		16:30	C	-	A	-	-	-	A	A	-	-	A	A	-
		16:45	C	-	A	-	-	-	A	A	-	-	A	A	-
		17:00	C	-	A	-	-	-	A	A	-	-	A	A	-
		17:15	C	-	A	-	-	-	A	A	-	-	A	A	-
		17:30	C	-	A	-	-	-	A	A	-	-	A	A	-
		17:45	B	-	A	-	-	-	A	A	-	-	A	A	-
Int 51	Gibson & Site Driveway 1	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:30	-	-	-	D	-	-	-	-	C	-	-	-	-
		15:45	-	-	-	E	-	-	-	-	D	-	-	-	-
		16:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		16:15	-	-	-	D	-	-	-	-	C	-	-	-	-
		16:30	-	-	-	E	-	-	-	-	C	-	-	-	-
		16:45	-	-	-	E	-	-	-	-	C	-	-	-	-
		17:00	-	-	-	D	-	-	-	-	C	-	-	-	-
		17:15	-	-	-	E	-	-	-	-	C	-	-	-	-
		17:30	-	-	-	D	-	-	-	-	C	-	-	-	-
		17:45	-	-	-	C	-	-	-	-	C	-	-	-	-
Int 52	Girard & Site Driveway 2	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:15	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:30	-	-	-	C	-	C	-	-	-	-	-	-	-
		15:45	-	-	-	C	-	C	-	-	-	-	-	-	-
		16:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	B	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	B	-	A	-	-	-	-	-	-	-
Int 53	Girard & Site Driveway 3	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	F	-	F	-	-	-	A	-	-	-	-	-	-
		15:15	F	-	F	-	-	-	A	-	-	-	-	-	-
		15:30	F	-	F	-	-	-	A	-	-	-	-	-	-
		15:45	F	-	F	-	-	-	A	-	-	-	-	-	-
		16:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		17:00	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	B	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	B	-	A	-	-	-	A	-	-	-	-	-	-
Int 54	Girard & Site Driveway 4	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:15	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:30	-	-	-	B	-	B	-	-	-	-	-	-	-
		15:45	-	-	-	B	-	B	-	-	-	-	-	-	-
		16:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		16:45	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:00	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:15	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:30	-	-	-	A	-	A	-	-	-	-	-	-	-
		17:45	-	-	-	A	-	A	-	-	-	-	-	-	-
Int 55	Girard & Site Driveway 5	Time Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Intersection
		15:00	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:15	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:30	B	-	B	-	-	-	A	-	-	-	-	-	-
		15:45	B	-	B	-	-	-	A	-	-	-	-	-	-
		16:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		16:45	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:00	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:15	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:30	A	-	A	-	-	-	A	-	-	-	-	-	-
		17:45	A	-	A	-	-	-	A	-	-	-	-	-	-
Int 56	Alamo / Site Parking & Columbia	Time Period	Eastbound			Westbound			Northbound			Southbound			Intersection
		15:00	A			A			A			A			A
		15:15	A			A			A			A			A
		15:30	A			A			A			A			A
		15:45	A			A			A			A			A
		16:00	A			A			A			A			A
		16:15	A			A			A			A			A
		16:30	A			A			A			A			A
		16:45	A			A			A			A			A
		17:00	A			A			A			A			A
		17:15	A			A			A			A			A
		17:30	A			A			A			A			A
		17:45	A			A			A			A			A



## 2040 POTENTIAL MITIGATION OPTIONS

The poor operational conditions identified along the Gibson corridor requires a need for additional travel lanes, turn lanes, potential restriction of turn movements mainline or side-streets to permit additional green time for the eastbound/westbound through movements. From the previous roadway capacity guidance along signalized arterial streets, the 2040 AM peak hour volume arriving at the eastbound Yale approach (highest hourly volume) is 4,039 vehicles. Assuming Gibson as an 8-lane facility, the roadway would have to accommodate 1,101 vphpl. Assuming 55% of the green time can be provided to the through movements, the projected 8-lane Gibson facility would operate very near the LOS B/C threshold.

If an additional travel lane is to be considered on Gibson Blvd, additional widening for dual left turn lanes should also be provided, accommodating locations requiring two turn lanes.

Alternatively, two travel options using Sunport Blvd to Girard Blvd exist. The first option requires travel through the AIS arrivals roadway, crossing 3 pedestrian roadway crossings. This would not be permitted as a viable routing alternative. Second, site-destined motorists could exit via University Blvd, turn east onto Randolph Road, north onto Yale Blvd, then east onto Alamo Ave to access the west side of the site's parking facilities. As roughly estimated, this travel route would take about 5 minutes 3 seconds to traverse. This is only about 3 seconds longer than taking I-25 north to Gibson Blvd, east to Girard Blvd then travel south to the parking structure. With travel duration being about equal, the 1% of the total 13% of vehicular site trips assumed to approach the site from the south using Sunport Blvd is likely an under-estimate.

Northbound Travel Duration Entering Site, Existing Conditions													
Roadway	From	To	Distance (Ft)	Speed Limit (MPH)	Speed (F/S)	Travel Duration (Sec)	Roadway	From	To	Distance (Ft)	Speed Limit (MPH)	Speed (F/S)	Travel Duration (Sec)
<b>Using Gibson Blvd</b>							<b>Using Sunport Blvd (Option 2)</b>						
I-25	Sunport Ramp	Gibson Ramp	4700	65	95.3	49.3	Sunport Ramp	I-25	Sunport Blvd	1600	45	66.0	24.2
Gibson Ramp	I-25	Gibson Blvd	1200	45	66.0	18.2	Sunport Blvd	Sunport Ramp	University Blvd	1800	35	51.3	35.1
Gibson Blvd	Gibson Ramp	Girard Blvd	6820	45	66.0	103.3	University Blvd	Sunport Blvd	Randolph Rd	1750	30	44.0	39.8
Girard Blvd	Gibson Blvd	North Lot Drv	1400	25	36.7	38.2	Randolph Rd	University Blvd	Yale Blvd	2700	30	44.0	61.4
Total Route =			14120			209.0	Yale Blvd	Randolph Rd	Alamo Ave	300	30	44.0	6.8
Traffic Control Penalty =				3	30	90.0	Alamo Ave	Yale Blvd	Columbia Dr	2000	30	44.0	45.5
<b>Total Route Duration =</b>						<b>299.0</b>	Total Route =			10150			212.7
							Traffic Control Penalty =				3	30	90.0
							<b>Total Route Duration =</b>						<b>302.7</b>

To eliminate the travel along collector roadways that are not designed to carry a large number of vehicles, a new roadway connection from Sunport, prior to the exit to the AIS parking garage, could follow the Sunport Loop roadway alignment, elevate over the loop roadway intersection with Girard, and touch back down onto Girard Blvd further to the northwest or connect directly into the site's parking garage. Figure 39 shows the alternative schematically.

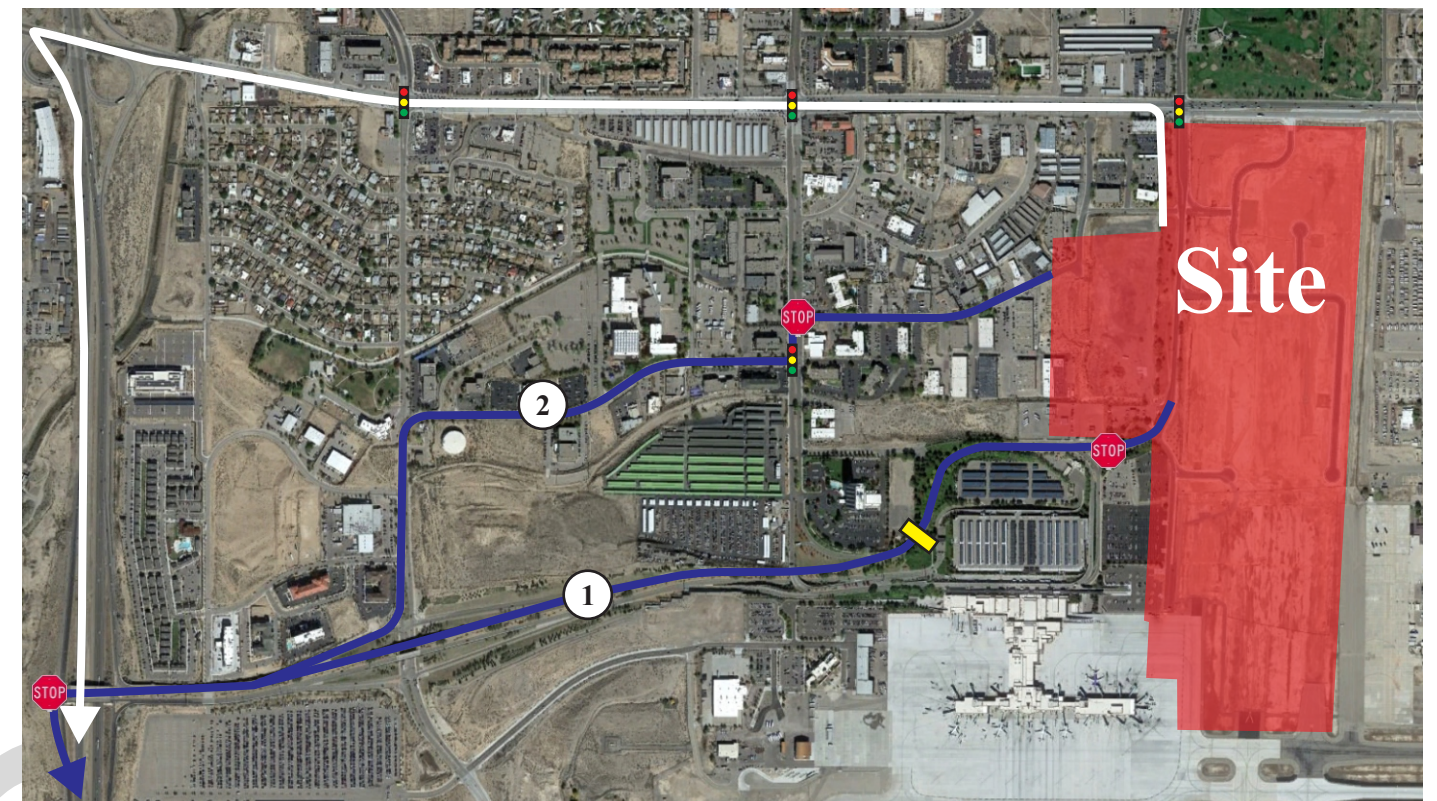
As an alternative to any new roadway construction, it may be beneficial to improve the existing, local roadway network from Sunport to the Alamo/Columbia intersection. Potential widening, eliminating on-street parking, or other options may be available.

In a similar manner, the existing travel duration was calculated for site-related motorists exiting the site and having a destination to I-25 southbound. Analysis results indicates travel via Gibson Blvd is only 3 seconds shorter. Future signalization of the Gibson/I-25 intersections would result in increased travel duration. The 3% of the 13% of vehicular site trips assumed to use Sunport Blvd to I-25 south is likely an under-estimate.

**Southbound Travel Duration Exiting Site, Existing Conditions**

Roadway	From	To	Distance (Ft)	Speed Limit (MPH)	Speed (F/S)	Travel Duration (Sec)
<b>Using Gibson Blvd</b>						
Girard Blvd	North Lot Drv	Gibson Blvd	1400	25	36.7	38.2
Gibson Blvd	Girard Blvd	Gibson Ramp	7800	45	66.0	118.2
Gibson Ramp	Gibson Ramp	I-25	900	45	66.0	13.6
I-25	Gibson Ramp	Sunport Ramp	5200	65	95.3	54.5
Total Route =			15300			224.5
Traffic Control Penalty =				3	30	90.0
<b>Total Route Duration =</b>						<b>314.5</b>

Roadway	From	To	Distance (Ft)	Speed Limit (MPH)	Speed (F/S)	Travel Duration (Sec)
<b>Using Sunport Blvd (Option 1)</b>						
Girard Blvd	South Roadway	Sunport Loop Rd	900	25	36.7	24.5
Sunport Loop Rd	Girard Blvd	Sunport Blvd	1780	30	44.0	40.5
Sunport Blvd	Sunport Loop Rd	I-25 Ramp	5650	35	51.3	110.1
I-25 Ramp	Sunport Blvd	I-25	1450	45	66.0	22.0
Total Route =			9780			197.0
Traffic Control Penalty =				4	30	120.0
<b>Total Route Duration =</b>						<b>317.0</b>



### Potential Arrival Options

- Existing (white): Preferred Option. Travel north on I-25 to the Gibson Blvd exit, east on Gibson, then south on Girard to parking area. Requires travel through 3 traffic signal.
- Existing (light blue): Option 1. Travel Sunport through the AIS Arrivals area to Girard Blvd. Requires drivers to yield for pedestrians within a crossing area and stop for pedestrians crossing between the parking garage and the terminal at two locations.
- Existing (light blue): Option 2. Travel Sunport and exit via University Blvd and take the local roadway network to access the site via Alamo Road. Requires travel through 3 signalized intersections.
- Alternative (orange): Option 3. Construct new roadway leaving Sunport prior to the AIS parking garage exit. Follow the Sunport Loop roadway alignment and elevate over the loop roadway intersection with Girard and touch back down along Girard Blvd further to the northeast.
- Alternative (orange): Option 4. Same as Option 3, but provide a direct connection into the site's parking garage at its 3rd level.

*The total travel distance from I-25 and Sunport to the Girard Blvd parking entrance via Gibson Blvd, the preferred travel route, is about 14,120 feet. Assuming motorists travel at the posted speed limit and a 30 second penalty is added if traveling through any stop sign or traffic signal, total travel time of 299 seconds is estimated (4 min. 59 sec).*

*The total travel distance of Option 2 from the intersection of I-25/Sunport to Alamo/Columbia is about 10,150 feet in length. Using the posted speed limits and a 30 second penalty for traveling through any stop sign or traffic signal, total travel time of 303 seconds is estimated (5 min. 3 sec).*

### Potential Departure Options

- Existing (white): Preferred Option. Travel from parking area north on Girard Blvd, west on Gibson Blvd, then south to I-25. Requires drivers to pass through 3 traffic signals.
- Existing (dark blue): Option 1. Travel Girard Blvd south around the AIS parking structure to I-25. Requires drivers to yield for pedestrians within a crossing area and 1 stop sign.
- Existing (dark blue): Option 2. Travel Alamo Drive west to University Blvd via Randolph Road to Sunport and access I-25 southbound. Requires travel through 2 stop signs and 1 signalized intersection.

*The total travel distance from to parking garage to I-25/Sunport On-Ramp via Gibson Blvd, the preferred travel route, is 15,300 feet. Assuming drivers travel at the posted speed limit and a 30 second penalty is added for traveling through any stop sign or traffic signal, a total travel duration of 314 seconds is estimated (5 min. 14 sec).*

*The total travel distance of Option 1 from the parking garage to bottom of the I-25 SB on-ramp is 9,780 feet in length. Assuming drivers travel at the posted speed limit and a 30 second penalty applied for traveling through any stop, yield or traffic signal, total travel duration of 317 seconds is estimated (5 min. 17 sec).*





## LEFT-TURN VEHICLE STORAGE REQUIREMENTS

As part of the capacity analysis results, vehicle queue was assessed at the site-related left-turn bays where site trips are projected at. Table 20 provides results for the AM and PM peak hour for the 2020 Existing, 2025 Phase 1 Build and the 2030 Phase 1 Phase 2 Build-out scenarios. The table includes the existing storage length available (in feet), project turn volume, and 95<sup>th</sup>-percentile queue length (in feet) as calculated from the capacity analysis software. Turn lane queue that exceeds the available turn lane storage length is highlighted with red text. It is noted that significantly higher volumes may occur during the peak-hour of the generator, which is not displayed.

The results indicate the following concerns in the 2030 Build scenario:

- If needed, the 2<sup>nd</sup> southbound left-turn lanes at University and Yale that are currently hatched could be used for a second turn lane. Installing the second turn lane may require a protected turn phase that may reduce the available green time available to the Gibson Blvd through movements. No modifications are recommended at this time.
- The southbound left-turn movement at Girard exceeds available storage length by approximately 66 feet. Modification would impact a driveway to the north. No modifications are recommended at this time.
- The southbound left-turn movement at Carlisle exceeds available storage length by approximately 67 feet. No modifications are recommended at this time.
- The southbound left-turn movement at Maxwell exceeds available storage length by approximately 31 feet. No modifications are recommended at this time.
- The eastbound and westbound left-turn queue at Truman is anticipated to exceed the available storage length by 108 and 67 feet, respectively. Consider extending the eastbound turn lane to meet estimated queue. Consider providing additional green time to the westbound left-turn phase.
- The eastbound left-turn queue at San Mateo is anticipated to exceed the available storage length by 830 feet. No mitigation is offered to improve operations at this location.

Table 20: Left-Turn Queue Length Summary

Intersection/Movement	Existing Storage Length (ft)	PM Peak Hour (6:45 to 7:45 PM)						PM Peak Hour (4:00 to 5:00 PM)					
		2020 Existing		2025 Build		2030 Build		2020 Existing		2025 Build		2030 Build	
		Volume	Queue	Volume	Queue	Volume	Queue	Volume	Queue	Volume	Queue	Volume	Queue
Gibson / I-25 SB RPMps													
EB Left		-	-	-	-	-	-	-	-	-	-	-	-
WB Left	600 (1,2)	196	25	256	37	268	276	400	45	568	85	612	382
SB Left	>500 (1)	1936	-	2310	-	2499	2152	673	-	851	-	931	551
NB Left		-	-	-	-	-	-	-	-	-	-	-	-
Gibson / I-25 NB Ramps													
EB Left	300 (1)	-	-	-	-	275	420	-	-	-	-	260	665
WB Left		-	-	-	-	-	-	-	-	-	-	-	-
NB Left	750 (1)	37	4	38	6	40	47	54	1	58	1	61	99
SB Left		-	-	-	-	-	-	-	-	-	-	-	-
Gibson / University													
EB Left	225	172	79	180	90	189	99	96	78	100	71	105	79
WB Left	175	26	12	26	15	27	16	85	196	93	48	98	52
NB Left	170 (3)	60	78	64	85	67	88	41	0	43	81	45	84
SB Left	200+ (3)	136	196	150	218	160	230	154	101	166	341	174	358
Gibson/Vale													
EB Left	430	214	101	225	109	236	116	104	72	108	82	114	102
WB Left	415	120	58	126	70	132	75	234	105	246	136	259	171
NB Left	400 (2)	138	72	182	119	199	88	328	0	372	81	475	329
SB Left	200 (3)	100	105	115	170	123	230	97	42	105	204	110	200
Gibson/Girard													
EB Left	220	112	42	118	36	124	38	82	20	86	46	90	52
WB Left	350	75	34	113	63	209	170	149	80	201	69	257	109
NB Left	800 (1,2)	11	20	51	49	59	52	13	0	48	28	129	83
SB Left	100	64	80	105	160	108	166	52	28	71	117	74	123
Gibson/Carlisle													
EB Left	260	46	28	72	57	80	79	96	5	120	154	178	333
WB Left	350	77	30	88	60	92	69	0	102	12	6	12	6
NB Left	220	3	5	20	27	20	27	429	0	527	522	550	563
SB Left	150	76	102	147	213	151	217	57	5	105	196	108	202
Gibson/Maxwell													
EB Left	225	35	5	37	11	39	11	32	0	33	23	35	25
WB Left	UNK (4)	0	0	121	56	121	57	0	88	112	179	112	178
NB Left	UNK (4)	0	0	90	140	90	140	0	0	196	268	196	267
SB Left	70	52	88	55	88	58	94	50	2	53	96	56	101
Gibson/Quincy													
EB Left	160	9	2	9	2	9	2	13	0	13	6	14	6
WB Left	UNK (4)	0	0	131	43	131	45	0	1	96	36	96	38
NB Left	UNK (4)	0	0	107	90	107	90	0	0	432	285	432	285
SB Left	UND (5)	0	1	0	28	0	29	2	90	2	30	2	31
Gibson/Truman													
EB Left	140	39	90	54	205	56	248	32	72	54	93	56	104
WB Left	150	257	133	307	208	321	217	25	176	53	68	54	71
NB Left	UNK (4)	41	72	44	84	46	92	588	0	619	2724	651	2879
SB Left	UND (5)	9	176	9	204	9	211	11	163	11	136	12	147
Gibson/San Mateo													
EB Left	150	154	163	234	262	245	289	276	99	438	605	497	982
WB Left	100	75	68	79	79	83	87	10	157	10	10	11	11
NB Left	160	43	99	45	113	47	118	187	0	196	269	206	280
SB Left	700 (2)	84	157	88	200	92	206	42	0	44	76	46	78
Sunport/Woodward/2nd St													
EB Left	Unk (6)	0	0	0	-	0	-	0	0	0	-	0	-
WB Left	Unk (6)	69	12	257	223	270	231	84	1	476	338	500	350
NB Left	Unk (6)	0	0	0	0	0	0	0	0	0	0	0	0
SB Left	Unk (6)	20	1	88	15	92	17	4	109	32	9	34	10
Sunport/Woodward/Broadway													
EB Left	100 (1)	107	109	147	102	154	107	56	5	92	53	97	55
WB Left	300 (1)	30	68	150	103	158	111	32	7	212	134	223	139
NB Left	100 (1)	15	5	95	28	100	31	14	0	94	34	99	37
SB Left	250 (1)	20	7	192	56	202	61	3	0	123	39	129	43
Sunport/I-25 SB Ramps													
WB Left	500 (1,2)	61	-	66	23	69	25	186	-	234	46	258	55
SB Left	500+ (1,2)	757	-	581	253	611	261	570	-	418	169	439	176
Sunport/I-25 NB Ramps													
EB Left	500 (1,2)	1	-	225	60	236	64	7	-	251	58	264	65
NB Left	250	2	-	82	70	86	73	3	-	51	51	54	54
Girard/Miles													
EB Left	UND (5)	45	-	55	7	60	11	70	-	80	13	101	28
Gibson/Site Driveway													
WB Left	430	-	-	3	11	10	41	-	-	4	2	8	5
Girard/Site Driveway to East													
N/A	UND (5)	-	-	-	-	-	-	-	-	-	-	-	-
Girard/North Parking Lot Driveway													
EB Left	UND (5)	-	-	53	12	66	13	-	-	43	5	168	30
Girard/Truck Driveway													
N/A	UND (5)	-	-	-	-	-	-	-	-	-	-	-	-
Girard/South Site Roadway													
EB Left	UND (5)	-	-	35	-	45	0	-	-	28	-	109	1
Alamo/Columbia/Site Driveway													
EB Approach	UND (5)	-	-	15	-	32	3	-	-	20	-	28	2
WB Approach	UND (5)	-	-	7	-	10	1	-	-	7	-	24	2
NB Approach	UND (5)	-	-	30	-	37	6	-	-	24	-	96	10
SB Approach	UND (5)	-	-	0	-	0	0	-	-	0	-	0	0

Notes:

- 1 Future Condition (2025/2030)
- 2 Dual Turn Lane (sum of both lanes)
- 3 2nd left lane available (hatched)
- 4 Unknown, EUL Project
- 5 Undetermined, single lane approach
- 6 Unknown, Sunport Ext. Project

## **FUTURE YEAR NO-BUILD AND BUILD FREEWAY TRAFFIC VOLUMES**

Freeway and ramp volumes were calculated in a similar manner as the intersection volumes that were calculated. The 2025 No-Build volumes included a 1% per year growth rate over 2020 conditions and include the estimated EUL project volumes. 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 using the HCS software without modification from the earlier analysis period.

LOS summary results for the I-25 northbound direction for the 2025 No-Build scenario are provided in Table 20 and the I-25 southbound direction results in Table 21.

2025 Build LOS summary results for the I-25 northbound direction are provided in Table 22 and the I-25 southbound direction in Table 23.

### 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).

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Table 21: 2025 No-Build Freeway LOS Analysis Summary, Northbound I-25

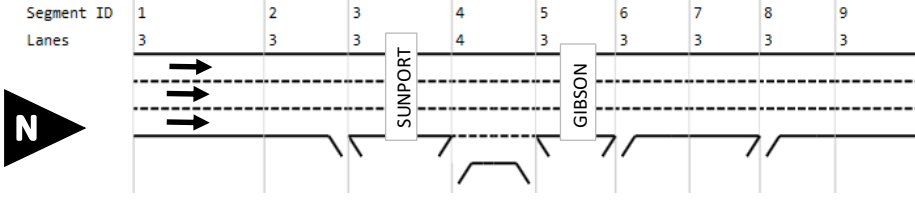
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	A	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	A	B	A	A	A	B	A	B	B
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	C	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	C	C	C	B	B	B	C	C	C
	7:00	C	D	C	C	C	C	C	C	D
	7:15	D	D	D	C	C	C	D	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	14:00	B	B	A	B	B	B	B	C	C
	14:15	B	B	B	B	B	B	B	C	C
	14:30	B	B	B	B	B	B	B	C	C
	14:45	B	B	B	B	B	B	B	C	C
	15:00	B	B	B	B	B	B	B	C	C
	15:15	B	B	B	B	B	B	B	C	C
	15:30	B	B	B	B	B	B	B	D	D
	15:45	B	B	B	B	B	B	B	D	D
	16:00	B	B	B	B	B	B	B	D	D
	16:15	B	B	B	B	B	B	B	E	E
	16:30	B	B	B	B	B	B	B	D	D
	16:45	B	B	B	B	B	B	B	D	D
	17:00	B	B	B	B	B	B	B	D	D
	17:15	B	B	A	B	B	B	B	C	C
	17:30	A	B	A	B	A	B	A	C	B
	17:45	A	B	A	B	A	B	A	B	B
	18:00	A	B	A	B	A	B	A	B	B
	18:15	A	B	A	B	A	B	A	B	B
	18:30	A	B	A	A	A	B	A	B	B
	18:45	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
		1	2	3	4	5	6	7	8	9
Lanes		3	3	3	4	3	3	3	3	3

Table 22: 2025 No-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	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	14:00	C	C	B	B	B	B	B	B	B
	14:15	B	C	B	B	B	B	B	B	B
	14:30	C	C	B	B	B	B	B	B	B
	14:45	C	D	C	B	B	B	B	B	B
	15:00	C	D	C	B	B	B	B	B	B
	15:15	C	C	C	B	B	B	B	B	B
	15:30	C	C	C	B	B	B	B	B	B
	15:45	C	C	C	B	B	B	B	B	B
	16:00	C	C	C	B	B	B	B	B	B
	16:15	C	D	C	B	B	B	B	B	B
	16:30	C	C	B	B	B	B	B	B	B
	16:45	C	C	C	B	B	B	B	B	B
	17:00	C	C	C	B	B	B	B	B	B
	17:15	C	C	C	B	B	B	B	B	B
	17:30	C	C	C	B	B	B	B	B	B
	17:45	C	C	C	B	B	B	B	B	B
	18:00	C	C	C	B	B	B	B	B	B
	18:15	C	C	B	B	B	B	B	B	B
	18:30	B	C	B	B	B	B	B	B	B
	18:45	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
<div>Segment ID</div> <div>Lanes</div> <div></div>		1	2	3	4	5	6	7	8	9
		3	3	3	4	3	4	3	3	3



Table 23: 2025 Build Freeway LOS Analysis Summary, Northbound I-25

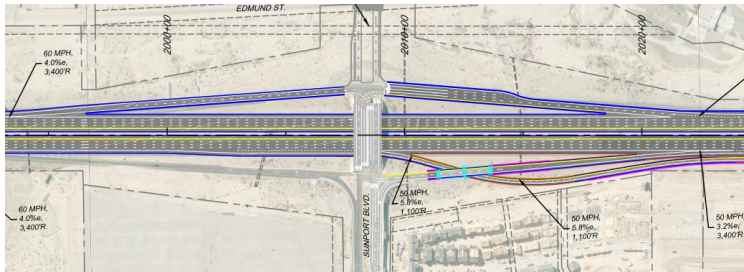
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	B	A	B	A
	5:30	B	B	A	A	A	B	A	B	B
	5:45	A	B	A	A	A	B	A	B	A
	6:00	B	B	B	B	B	B	B	B	B
	6:15	C	C	B	B	B	B	C	C	C
	6:30	C	C	C	B	C	C	C	C	C
	6:45	C	C	C	B	B	B	B	C	C
	7:00	C	D	C	C	C	C	C	D	D
	7:15	D	D	D	C	D	C	D	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	14:00	B	B	B	B	B	B	B	C	C
	14:15	B	B	B	B	B	B	B	C	C
	14:30	B	B	B	B	B	B	B	C	C
	14:45	B	B	B	B	B	B	B	C	C
	15:00	B	B	B	B	B	B	B	D	D
	15:15	B	B	B	B	B	B	B	D	D
	15:30	B	B	B	B	B	B	B	D	D
	15:45	B	B	B	B	B	B	B	D	D
	16:00	B	B	B	B	B	B	B	D	D
	16:15	B	B	B	B	B	B	B	E	E
	16:30	B	B	B	B	B	B	B	D	D
	16:45	B	B	B	B	B	B	B	D	D
	17:00	B	B	B	B	B	B	B	D	D
	17:15	B	B	A	B	B	B	B	C	C
	17:30	A	B	A	B	A	B	A	C	C
	17:45	A	B	A	B	A	B	A	B	B
	18:00	A	B	A	B	A	B	A	B	B
	18:15	A	B	A	B	A	B	A	B	B
	18:30	A	B	A	A	A	B	A	B	B
	18:45	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
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	3	3	3	4	3	3	3	3	3	

Table 24: 2025 Build Freeway LOS Analysis Summary, Southbound I-25

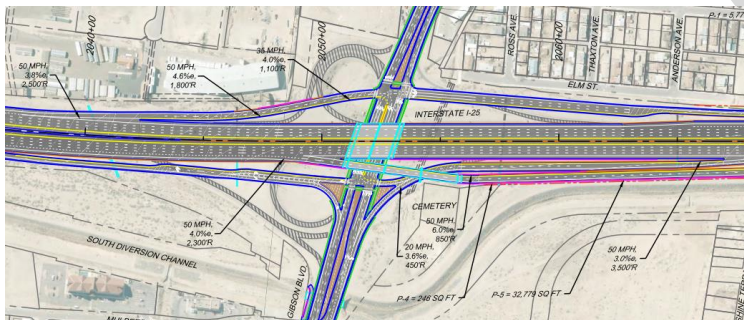
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
AM Time Period	5:00	A	B	A	A	A	A	A	A	A
	5:15	A	B	A	A	A	A	A	A	A
	5:30	B	C	B	A	A	A	A	A	A
	5:45	B	C	B	B	A	A	A	A	A
	6:00	B	C	B	B	A	A	A	A	A
	6:15	C	D	C	B	B	B	A	B	A
	6:30	D	D	C	B	B	B	A	B	B
	6:45	D	D	D	C	B	B	A	B	A
	7:00	D	D	C	B	B	B	A	B	A
	7:15	D	D	D	C	B	B	B	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	14:00	C	C	C	B	B	B	B	B	B
	14:15	C	C	C	B	B	B	B	B	B
	14:30	C	D	C	B	B	B	B	B	B
	14:45	C	D	C	B	B	B	B	B	B
	15:00	C	D	C	B	B	B	B	B	B
	15:15	C	D	C	B	B	B	B	B	C
	15:30	C	D	C	B	B	B	B	B	C
	15:45	C	D	C	B	B	B	B	B	B
	16:00	C	D	C	B	B	B	B	B	B
	16:15	C	D	C	B	B	B	B	B	C
	16:30	C	C	C	B	B	B	B	B	B
	16:45	C	D	C	B	B	B	B	B	C
	17:00	C	C	C	B	B	B	B	B	C
	17:15	C	D	C	B	B	B	B	B	C
	17:30	C	D	C	B	B	B	B	B	B
	17:45	C	C	C	B	B	B	B	B	B
	18:00	C	C	C	B	B	B	B	B	B
	18:15	C	C	C	B	B	B	B	B	B
	18:30	B	C	B	B	B	B	B	B	B
	18:45	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

## 2030 FREEWAY CONDITIONS

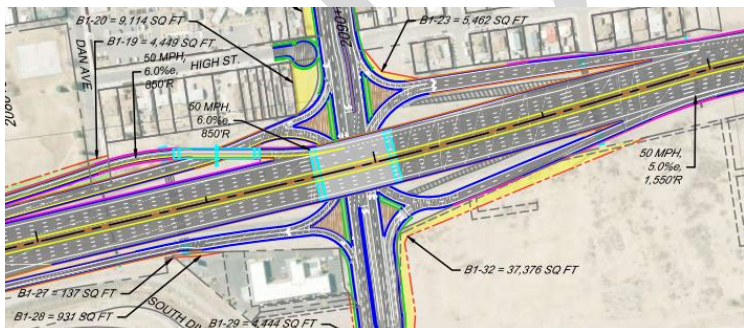
As part of the planned/programmed improvements for the I-25 corridor, it has been assumed the freeway changes outlined in the *I-25 South Corridor Study* that Phase 1B is the preferred alternative for the study area. The changes include adding another general purpose lane to I-25 in both directions, providing a braided ramp design to accommodate Gibson and Avenida Cesar Chavez on-off traffic, and providing for signalized intersections at the ramp intersections with Gibson Blvd. The below snips highlight the modifications that are planned for the Sunport and Gibson intersection areas as well and the southbound off-ramp for Gibson Road just south of Avenida Cesar Chavez.



Sunport Interchange area



Gibson Interchange area



Avenida Cesar Chavez Interchange area

The above freeway modifications were incorporated in the HCS Freeways module for evaluation. Similar to earlier year evaluations, all freeway segments assume 10% trucks on the mainline, 3% trucks on the on/off ramps, and a 1% per year growth from the base year volume condition while adding site and site adjacent development volumes. It is noted that analyzed ramp volumes may be much higher than 2040 volume estimates developed at the time the freeway study was performed and utilized for intersection analysis purposes.

Tables 24 and 25 show the AM and PM peak period LOS summary analysis for the 2030 No-Build Freeway condition while Tables 26 and 27 display the 2030 Build scenario, respectively.



Table 25: 2030 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	A	A	A	A	A	A	A	A
	5:30	A	A	A	A	A	A	A	A	A
	5:45	A	A	A	A	A	A	A	A	A
	6:00	A	A	A	A	A	B	A	A	B
	6:15	B	B	B	A	B	B	B	B	B
	6:30	B	B	B	B	B	B	B	B	B
	6:45	B	B	B	B	B	B	A	A	B
	7:00	B	B	C	B	B	B	B	B	B
	7:15	B	B	C	B	B	B	B	B	C
	7:30	B	B	B	B	B	B	B	B	C
	7:45	A	A	B	A	A	A	A	A	B
	8:00	A	A	B	A	A	B	A	A	B
	8:15	A	A	B	A	A	A	A	A	B
	8:30	A	A	B	A	A	A	A	A	B
	8:45	A	A	A	A	A	A	A	A	A
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	14:00	A	A	A	A	A	A	A	A	B
	14:15	A	A	A	A	A	A	A	A	B
	14:30	A	A	A	A	A	A	A	A	B
	14:45	A	A	A	A	A	A	A	B	B
	15:00	A	A	A	A	A	B	A	B	C
	15:15	A	A	A	A	A	A	A	B	C
	15:30	A	A	A	A	A	A	A	B	C
	15:45	A	A	A	A	A	A	A	B	C
	16:00	A	A	A	A	A	B	B	B	C
	16:15	A	A	A	A	A	B	B	B	C
	16:30	A	A	A	A	A	B	B	B	C
	16:45	A	A	A	A	A	A	A	B	C
	17:00	A	A	A	A	A	B	B	B	C
	17:15	A	A	A	A	A	A	A	B	B
	17:30	A	A	A	A	A	A	A	A	B
	17:45	A	A	A	A	A	A	A	A	A
	18:00	A	A	A	A	A	A	A	A	A
	18:15	A	A	A	A	A	A	A	A	A
	18:30	A	A	A	A	A	A	A	A	A
	18:45	A	A	A	A	A	A	A	A	A
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		5280	1500	1100	800	1600	2200	2200	700	2640
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport and Gibson Ramps	Off-Ramp to Gibson	Btw Gibson Off and Sunport On Ramps	Btw Sunport On and ACC Off Ramps	North of ACC Off Ramp	On-Ramp from Gibson	North of Gibson On-Ramp
<div> <div>Segment ID</div> <div>Lanes</div> <div> </div> </div>		1	2	3	4	5	6	7	8	9

Table 26: 2030 No-Build Freeway LOS Analysis Summary, Southbound I-25

		Level of Service										
	Segment	1	2	3	4	5	6	7	8	9	10	11
AM Time Period	5:00	A	A	A	A	A	A	A	A	A	A	A
	5:15	A	A	A	A	A	A	A	A	A	A	A
	5:30	A	A	A	A	A	A	A	A	A	A	A
	5:45	B	A	A	A	A	A	A	A	A	A	A
	6:00	B	A	A	A	A	A	A	A	A	A	A
	6:15	B	B	A	A	A	A	A	A	A	A	A
	6:30	C	B	A	A	A	A	A	A	A	A	A
	6:45	C	B	A	A	A	A	A	A	A	A	A
	7:00	B	B	A	A	A	A	A	A	A	A	A
	7:15	C	B	A	A	A	A	A	A	A	A	A
	7:30	B	B	A	A	A	A	A	A	A	A	A
	7:45	B	B	A	A	A	A	A	A	A	A	A
	8:00	B	B	A	A	A	A	A	A	A	A	A
	8:15	B	B	A	A	A	A	A	A	A	A	A
	8:30	B	B	A	A	A	A	A	A	A	A	A
	8:45	B	A	A	A	A	A	A	A	A	A	A
PM Time Period	14:00	B	A	A	A	A	A	A	A	A	A	A
	14:15	B	A	A	A	A	A	A	A	A	A	B
	14:30	B	B	A	A	B	A	A	A	B	A	B
	14:45	B	B	A	A	B	A	A	A	B	A	B
	15:00	B	B	A	A	B	A	A	A	B	A	B
	15:15	B	A	A	A	B	A	A	A	B	B	B
	15:30	B	A	A	A	B	A	A	A	B	B	B
	15:45	B	A	A	A	B	A	A	A	B	A	B
	16:00	B	A	A	A	B	A	A	A	B	A	B
	16:15	B	B	A	A	B	A	A	A	B	B	B
	16:30	B	A	A	A	B	A	A	A	B	A	B
	16:45	B	A	A	A	B	A	A	A	B	B	B
	17:00	B	A	A	A	B	A	A	A	B	B	B
	17:15	B	A	A	A	B	A	A	A	B	B	B
	17:30	B	A	A	A	B	A	A	A	B	A	B
	17:45	B	A	A	A	B	A	A	A	B	A	B
	18:00	B	A	A	A	B	A	A	A	B	A	B
	18:15	B	A	A	A	B	A	A	A	B	A	B
	18:30	B	A	A	A	A	A	A	A	A	A	A
	18:45	B	A	A	A	A	A	A	A	A	A	A
Type		Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Merge	Basic
Length, ft		2640	600	1750	600	2400	600	2000	800	900	800	2640
Segment ID		1	2	3	4	5	6	7	8	9	10	11
Southbound Locations		North of Avenida Cesar Chavez	Off-Ramp to Gibson	Btw Gibson and ACC Ramps	On-Ramp from ACC	Btw ACC and Sunport Ramps	Off-Ramp to Sunport	Btw Sunport and Gibson Ramps	On-Ramp from Gibson	Btw Gibson and Sunport Ramps	On-Ramp from Sunport	South of Sunport
		<p>Segment ID 1 2 3 4 5 6 7 8 9 10 11</p> <p>Lanes 4 5 4 5 4 5 4 5 4 5 4</p> <p>ACC GIBSON SUNPORT</p>										

Table 27: 2030 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	A	A	A	A	A	A	A	A
	5:30	A	A	A	A	A	A	A	A	A
	5:45	A	A	A	A	A	A	A	A	A
	6:00	A	A	A	A	A	B	A	A	B
	6:15	B	B	B	A	B	B	B	B	B
	6:30	B	B	B	B	B	B	B	B	B
	6:45	B	B	B	B	B	B	A	A	B
	7:00	B	B	C	B	B	B	B	B	B
	7:15	B	B	C	B	B	B	B	B	C
	7:30	B	B	B	B	B	B	B	B	C
	7:45	A	A	B	A	A	A	A	A	B
	8:00	A	A	B	A	A	B	A	A	B
	8:15	A	A	B	A	A	A	A	A	B
	8:30	A	A	B	A	A	A	A	A	B
	8:45	A	A	A	A	A	A	A	A	A
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	14:00	A	A	A	A	A	A	A	A	B
	14:15	A	A	A	A	A	A	A	A	B
	14:30	A	A	A	A	A	A	A	A	B
	14:45	A	A	A	A	A	A	A	B	B
	15:00	A	A	A	A	A	B	A	B	C
	15:15	A	A	A	A	A	A	A	B	C
	15:30	A	A	A	A	A	A	A	B	C
	15:45	A	A	A	A	A	A	A	B	C
	16:00	A	A	A	A	A	B	B	B	C
	16:15	A	A	A	A	A	B	B	B	C
	16:30	A	A	A	A	A	B	B	B	C
	16:45	A	A	A	A	A	A	A	B	C
	17:00	A	A	A	A	A	B	B	B	C
	17:15	A	A	A	A	A	A	A	B	B
	17:30	A	A	A	A	A	A	A	A	B
	17:45	A	A	A	A	A	A	A	A	A
	18:00	A	A	A	A	A	A	A	A	A
	18:15	A	A	A	A	A	A	A	A	A
	18:30	A	A	A	A	A	A	A	A	A
	18:45	A	A	A	A	A	A	A	A	A
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		5280	1500	1100	800	1600	2200	2200	700	2640
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport and Gibson Ramps	Off-Ramp to Gibson	Btw Gibson Off and Sunport On Ramps	Btw Sunport On and ACC Off Ramps	North of ACC Off Ramp	On-Ramp from Gibson	North of Gibson On-Ramp
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	5	5	4	5	4	5	4	5	4	



Table 28: 2030 Build Freeway LOS Analysis Summary, Southbound I-25

		Level of Service											
	Segment	1	2	3	4	5	6	7	8	9	10	11	
AM Time Period	5:00	A	A	A	A	A	A	A	A	A	A	A	
	5:15	A	A	A	A	A	A	A	A	A	A	A	
	5:30	B	A	A	A	A	A	A	A	A	A	A	
	5:45	B	B	A	A	A	A	A	A	A	A	A	
	6:00	B	A	A	A	A	A	A	A	A	A	A	
	6:15	B	B	A	A	A	A	A	A	A	A	A	
	6:30	C	B	A	A	A	A	A	A	A	A	A	
	6:45	C	B	A	A	A	A	A	A	A	A	A	
	7:00	B	B	A	A	A	A	A	A	A	A	A	
	7:15	C	B	A	A	A	A	A	A	A	A	A	
	7:30	B	B	A	A	A	A	A	A	A	A	A	
	7:45	B	B	A	A	A	A	A	A	A	A	A	
	8:00	B	B	A	A	A	A	A	A	A	A	A	
	8:15	B	B	A	A	A	A	A	A	A	A	A	
	8:30	B	B	A	A	A	A	A	A	A	A	A	
	8:45	B	A	A	A	A	A	A	A	A	A	A	
PM Time Period	14:00	B	B	A	A	A	A	A	A	A	A	A	
	14:15	B	B	A	A	A	A	A	A	A	A	B	
	14:30	B	B	A	A	B	A	A	A	B	A	B	
	14:45	B	B	A	A	B	A	A	A	B	A	B	
	15:00	B	B	A	A	B	A	A	A	B	A	B	
	15:15	B	A	A	A	B	A	A	A	B	B	B	
	15:30	B	A	A	A	B	A	A	A	B	B	B	
	15:45	B	A	A	A	B	A	A	A	B	A	B	
	16:00	B	B	A	A	B	A	A	A	B	A	B	
	16:15	B	B	A	A	B	A	A	A	B	B	B	
	16:30	B	A	A	A	B	A	A	A	B	A	B	
	16:45	B	B	A	A	B	A	A	A	B	B	B	
	17:00	B	A	A	A	B	A	A	A	B	B	B	
	17:15	B	B	A	A	B	A	A	A	B	B	B	
	17:30	B	A	A	A	B	A	A	A	B	A	B	
	17:45	B	A	A	A	B	A	A	A	B	A	B	
	18:00	B	B	A	A	B	A	A	A	B	A	B	
	18:15	B	A	A	A	B	A	A	A	B	A	B	
18:30	B	A	A	A	A	A	A	A	A	A	A		
18:45	B	A	A	A	A	A	A	A	A	A	A		
Type		Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Merge	Basic	
Length, ft		2640	600	1750	600	2400	600	2000	800	900	800	2640	
Segment ID		1	2	3	4	5	6	7	8	9	10	11	
Southbound Locations		North of Avenida Cesar Chavez	Off-Ramp to Gibson	Btw Gibson and ACC Ramps	On-Ramp from ACC	Btw ACC and Sunport Ramps	Off-Ramp to Sunport	Btw Sunport and Gibson and Gibson Ramps	On-Ramp from Gibson	Btw Gibson and Sunport Ramps	On-Ramp from Sunport	South of Sunport	
		Segment ID	1	2	3	4	5	6	7	8	9	10	11
		Lanes	4	5	4	5	4	5	4	5	4	5	4

## 2030 YEAR FREEWAY ANALYSIS RESULTS

From review of the above LOS tables, the following commentary is provided:

### 2030 NO-BUILD RESULTS

#### I-25 Northbound AM and PM Peak Periods

With the additional general purpose lane on I-25 northbound compared to current conditions, all merge, diverge, and basic freeway segments are shown to operate at LOS C or better conditions. The only weaving section, between the Sunport On Ramp and the Avenida Cesar Chavez Off-Ramp, is estimated to operate at LOS B conditions in both the AM and PM peak periods. The HCS software indicates the following warning message during the PM peak: *“Merge capacity is less than merge demand on Segment 8 (On-Ramp from Gibson Blvd).”*

#### I-25 Southbound AM and PM Peak Periods

All freeway segments are shown to operate at LOS C or better conditions throughout the AM and PM peak periods. However, the HCS software indicates the following warning message during the morning peak: *“The diverge capacity on Segment 2 (off-ramp to Gibson Blvd) is less than the diverge demand. This may result in an off-ramp queue affecting mainline flow. This is not currently modeled in HCM methodologies. Use cautious when comparing LOS results.”*

### 2030 BUILD RESULTS

Overall, the 2030 Build condition is very similar to the 2030 No-Build condition in both the AM and PM peak periods. The only exception is there are a few more LOS B periods on the southbound Gibson Off-Ramp diverge segment (Segment 2) than in the no-build scenario. The same warning texts were noted for the build condition as the no-build.

### 2040 FREEWAY CONDITIONS

Background traffic volumes were increased at a rate of 1% per year for 10 years to estimate 2040 volume conditions on the I-25 corridor from south of Sunport Blvd to north of Gibson Blvd. As indicated in the intersection analysis, the 2040 forecast volumes entering and exiting Gibson Blvd as estimated in the *I-25 South Corridor Study* are significantly lower than estimated in this report. Therefore, results are thought to be a conservative (high) estimate of potential conditions.

Tables 28 and 29 show the AM and PM peak period LOS summary analysis for the 2040 Horizon Year Freeway condition for the I-25 Northbound and Southbound segments, respectively.

### 2040 HORIZON YEAR RESULTS

The northbound results indicate with the additional background trips, additional segments during the AM peak period will operate at LOS C conditions, the 7:15 AM time period showing the most. During the PM period, one segment is shown to operate at LOS D, Segment 9 (segment north of Gibson On-Ramp) during the 4:15 time period. All other segments and time periods operate at LOS C or better.

The southbound results indicate more LOS B conditions as compared to 2030 conditions. The only LOS C conditions are noted for Segment 1, the segment prior to the Off-Ramp to Gibson. An HCS additional warning note stating *“Oversaturation conditions currently exist in boundary time period 16. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.”* No attempt to alleviate this warning to periods outside of the current analysis was conducted. As indicated previously, analysis volumes may be overestimates and results a conservative (high) estimate of future conditions.

Table 29: 2040 Horizon Year 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	A	A	A	A	A	A	A	A
	5:30	A	A	A	A	A	A	A	A	A
	5:45	A	A	A	A	A	A	A	A	A
	6:00	A	A	B	A	A	B	B	A	B
	6:15	B	B	B	B	B	B	B	B	B
	6:30	B	B	C	B	B	B	B	B	C
	6:45	B	B	B	B	B	B	B	B	B
	7:00	B	B	C	B	B	B	B	B	C
	7:15	C	C	C	B	C	C	B	B	C
	7:30	B	B	C	B	B	B	B	B	C
	7:45	B	B	B	A	A	B	A	A	B
	8:00	B	B	B	A	A	B	A	A	B
	8:15	B	A	B	A	A	B	A	A	B
	8:30	A	A	B	A	A	B	A	A	B
	8:45	A	A	A	A	A	A	A	A	A
		Level of Service								
	Segment	1	2	3	4	5	6	7	8	9
PM Time Period	14:00	A	A	A	A	A	A	A	B	B
	14:15	A	A	A	A	A	B	A	B	B
	14:30	A	A	A	A	A	A	A	B	B
	14:45	A	A	A	A	A	B	A	B	B
	15:00	A	A	A	A	A	B	B	B	C
	15:15	A	A	A	A	A	B	A	B	C
	15:30	A	A	A	A	A	B	B	B	C
	15:45	A	A	A	A	A	B	A	B	C
	16:00	A	A	A	A	A	B	B	C	C
	16:15	A	A	B	A	A	B	B	C	D
	16:30	A	A	B	A	A	B	B	B	C
	16:45	A	A	B	A	A	B	A	B	C
	17:00	A	A	A	A	A	B	B	B	C
	17:15	A	A	A	A	A	A	A	B	B
	17:30	A	A	A	A	A	A	A	A	B
	17:45	A	A	A	A	A	A	A	A	A
	18:00	A	A	A	A	A	A	A	A	B
	18:15	A	A	A	A	A	A	A	A	B
	18:30	A	A	A	A	A	A	A	A	A
	18:45	A	A	A	A	A	A	A	A	A
Type		Basic	Diverge	Basic	Diverge	Basic	Weaving	Basic	Merge	Basic
Length, ft		5280	1500	1100	800	1600	2200	2200	700	2640
Segment ID		1	2	3	4	5	6	7	8	9
Northbound Locations		South of Sunport	Off-Ramp to Sunport	Btw Sunport and Gibson Ramps	Off-Ramp to Gibson	Btw Gibson Off and Sunport On Ramps	Btw Sunport On and ACC Off Ramps	North of ACC Off Ramp	On-Ramp from Gibson	North of Gibson On Ramp
Segment ID	1	2	3	4	5	6	7	8	9	
Lanes	5	5	4	5	4	5	4	5	4	



Table 30: 2040 Horizon Year Freeway LOS Analysis Summary, Southbound I-25

		Level of Service										
	Segment	1	2	3	4	5	6	7	8	9	10	11
AM Time Period	5:00	A	A	A	A	A	A	A	A	A	A	A
	5:15	A	A	A	A	A	A	A	A	A	A	A
	5:30	B	A	A	A	A	A	A	A	A	A	A
	5:45	B	B	A	A	A	A	A	A	A	A	A
	6:00	B	A	A	A	A	A	A	A	A	A	A
	6:15	B	B	A	A	A	A	A	A	A	A	A
	6:30	C	B	A	A	A	A	A	A	A	A	A
	6:45	C	B	A	A	B	A	A	A	A	A	A
	7:00	C	B	A	A	A	A	A	A	A	A	A
	7:15	C	B	A	A	B	A	A	A	A	A	A
	7:30	C	B	A	A	A	A	A	A	A	A	A
	7:45	C	B	A	A	A	A	A	A	A	A	A
	8:00	C	B	A	A	A	A	A	A	A	A	A
	8:15	B	B	A	A	A	A	A	A	A	A	A
PM Time Period	8:30	B	B	A	A	A	A	A	A	A	A	A
	8:45	B	B	A	A	A	A	A	A	A	A	A
	14:00	B	B	A	A	B	A	A	A	B	A	B
	14:15	B	B	A	A	B	A	A	A	B	A	B
	14:30	B	B	A	A	B	A	A	A	B	A	B
	14:45	C	B	B	A	B	A	B	A	B	A	B
	15:00	B	B	A	A	B	A	B	A	B	B	B
	15:15	B	B	A	A	B	A	B	B	B	B	B
	15:30	B	B	A	A	B	A	B	B	B	B	B
	15:45	B	B	A	A	B	A	A	B	B	B	B
	16:00	B	B	A	A	B	A	B	A	B	B	B
	16:15	B	B	A	A	B	B	B	B	B	B	B
	16:30	B	A	A	A	B	A	A	A	B	B	B
	16:45	B	B	A	A	B	A	B	B	B	B	B
	17:00	B	B	A	A	B	A	B	B	B	B	B
	17:15	B	B	A	A	B	A	B	B	B	B	B
	17:30	B	B	A	A	B	A	B	B	B	B	B
	17:45	B	B	A	A	B	A	B	B	B	B	B
	18:00	B	B	B	A	B	A	B	A	B	B	B
	18:15	B	B	B	A	B	A	B	A	B	A	B
	18:30	B	A	A	A	B	A	A	A	B	A	B
	18:45	B	A	A	A	A	A	A	A	A	A	A
Type		Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Merge	Basic
Length, ft		2640	600	1750	600	2400	600	2000	800	900	800	2640
Segment ID		1	2	3	4	5	6	7	8	9	10	11
Southbound Locations		North of Avenida Cesar Chavez	Off-Ramp to Gibson	Btw Gibson and ACC Ramps	On-Ramp from ACC	Btw ACC and Sunport Ramps	Off-Ramp to Sunport	Btw Sunport and Gibson and Gibson Ramps	On-Ramp from Gibson	Btw Gibson and Sunport Ramps	On-Ramp from Sunport	South of Sunport
<p>The diagram illustrates the layout of Southbound I-25 from Segment 1 to Segment 11. Segment 1 (North of Avenida Cesar Chavez) has 4 lanes. Segment 2 (Off-Ramp to Gibson) has 5 lanes. Segment 3 (Btw Gibson and ACC Ramps) has 4 lanes. Segment 4 (On-Ramp from ACC) has 5 lanes. Segment 5 (Btw ACC and Sunport Ramps) has 4 lanes. Segment 6 (Off-Ramp to Sunport) has 5 lanes. Segment 7 (Btw Sunport and Gibson and Gibson Ramps) has 4 lanes. Segment 8 (On-Ramp from Gibson) has 5 lanes. Segment 9 (Btw Gibson and Sunport Ramps) has 4 lanes. Segment 10 (On-Ramp from Sunport) has 10 lanes. Segment 11 (South of Sunport) has 11 lanes. Key locations marked include ACC, GIBSON, and SUNPORT.</p>												

## 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

From review of Table 9, there are 1,719 vehicles estimated to arrive at the site for the start of the day shift during the 5:00 to 6:00AM hour. Below is a discussion regarding the access operation of the site access points during this time period.

The north surface lot east of Girard Blvd is to accommodate approximately 225 parking spaces with both entrances serving this lot from Gibson and Girard are to be gated and having manned security check points. From the estimated traffic volume figures, 108 vehicles are projected to enter this area during the peak morning period, 72 from Gibson, 36 from Girard. Noting both entrances are 2-lane, pre-screened or noted vehicles will not have to stop and will likely be able to continue into the parking area without significant time loss. The security building off of Gibson is located about 100 feet from the south curb line, able to store approximately 4 vehicles per lane. Although it is assumed only 1 lane to be used for validation purposes, it may be difficult for 2 or 3 vehicles to maneuver in the short distance to an appropriate lane, especially if one vehicle is currently being screened, blocking through vehicles that may not have to stop. It would be best to position this check point as far south as practical to minimize potential blocking concerns. An existing right-turn deceleration lane on eastbound Gibson eliminates the potential of vehicle queue from interfering with through vehicles. With 36 vehicles in the peak-hour projected to turn left into the site, the existing 400-foot left-turn storage length can accommodate up to 16 vehicles (assuming 25 feet/vehicle). The Girard Blvd security building is located about 100 feet east of Girard Blvd, however, with less vehicles estimated to enter from this secondary location (36 vehicles) and Girard Blvd being a lower speed roadway facility, the 100-foot distance is viewed to be an acceptable distance from the roadway.

Truck access to the assembly facility is to have a security check point as well upon entering, located about 200 feet from Girard Blvd, This 2-lane entrance would be able to accommodate a 3 truck queue per lane assuming 60 feet per truck before impacting traffic flow on Girard Blvd. From ITE trip analysis, only 7 entering trucks are estimated for any 60-minute period. Assuming vehicle checks are less than 10 minutes per vehicle, up to 12 entering trucks could be serviced in an hour without impeding through traffic on Girard Blvd. Therefore, this location is anticipated to operate and be positioned acceptably.

The remaining employee-based trips ( $1719 - 108 = 1,611$  vehicles) are to utilize the parking facilities located on the west side of Girard Blvd. The site plan indicates 5 total ingress points, one each on Miles Rd, Girard Blvd, and the south service roadway, with 2 entrances off of Columbia Drive. As currently estimated, 1,347 vehicles are to approach the parking area via southbound Girard, 228 via eastbound Alamo, and 36 via northbound Girard.

At this time it is unclear on how access into the parking area/garage is to be accommodated. This could be accommodated via transponder, ticket, or other type of system. From previous work conducted by Lee Engineering, observations were conducted of visitors entering a parking garage prior to an event to estimate the service rate of a longer time dependent, ticket-based system. Visitors entering a garage had to stop and take a ticket from a ticket dispenser, await the ticket, and then proceed past the gate. A sample of 50 vehicles were observed with the average processing time being about 8.5 seconds with a maximum and minimum processing times being 27 seconds and 4 seconds, respectively. The average processing rate of the single gate equates to a vehicle flow of about 423 vehicles per hour. Assuming 1,611 vehicles have to be processed in a 60-minute period, a minimum 3.8 or 4 ticket-based lanes are required.

Noting surge demands and the location from where vehicles may be entering from, the following is provided assuming a longer time-dependent ticket-based system is utilized by Project Orion:

- A single entrance/ticket gate is needed off of the south service roadway to accommodate vehicles entering from ASI.
- A single entrance/ticket gate is needed at both Columbia Drive entrances to accommodate the vehicles arriving from Alamo Avenue.
- To accommodate the 1,347 vehicles arriving from southbound Girard Blvd, 1 ticket gate is needed off of Miles Road, and three ticket gates are needed off of the Girard entrance to accommodate the projected 904 vehicles entering at this location.

In all, an estimated 7 ticket-based systems would be needed to accommodate the vehicle demand estimated to the site in an acceptable manner. However, to account for demand surge and potential breakdown of the ticket mechanism, each entrance should have 1 additional dispenser to serve vehicles. Other systems may require fewer access lanes if transponders or other type of electronic systems are utilized. Assigned parking areas or access entry locations could also reduce the number of physical entering systems needed.

### ***Staffing and Scheduling***

As currently estimated within this report, the following employee schedule has been followed. The client has previously identified that the schedule is flexible to a certain extent, however, the current schedule is beneficial from a traffic perspective where the bulk of employee-related trips to and from the site are contained to off-peak or shoulder time periods utilizing these periods of unused roadway capacity opposed to peak-hour conditions of the roadway where less capacity is available. The Phase 2 employee count has been divided into 2 categories, employees arriving/departing during required work shift periods and employees not bound to these time influences. The total Phase 2 employee estimate was calculated based on the ITE trip generation estimates comparing trips per employee versus trips per 1,000 SF of building area (approx. 2.7 employees per 1,000 SF of building area).



Site Phase	Shift Times / Employees						Site Total
	Day shift		Evening Shift		Night Shift		
	Start 6:00 AM	End 3:00 PM	Start 3:00 PM	End 10:00 PM	Start 10:00 PM	End 6:00 AM	
Phase 1 Employees	1450		850		275		2575
Phase 2 Employees (shift employees)	700		200		100		1000
Phase 2 Employees (unbound by shift times)	1190		340		170		1700
Total Site Employees	3340		1390		545		5275

## Signage

In regards to traffic control, all site driveways exiting onto the adjacent street network should be STOP-controlled. At the new roadway intersections created by the site, the following traffic control is identified to be best accommodate site traffic and conditions:

- Girard and Miles, STOP control on the Miles Road approach.
- Girard and South Roadway, STOP control on the South Roadway approach
- Alamo/Columbia/Site Driveway, ALL-WAY STOP control

No traffic control changes to other study area intersections are warranted.

## ON-SITE QUEUEING

The peak-hour for site vehicles exiting the development is shown in Table 9, occurring during the 3PM hour and totaling 2,010 vehicles. Assuming 4% of vehicles are exiting from the gated northeast lot and 2% are trucks that are leaving, the remaining 94% or 1,890 vehicles are estimated to be exiting from the parking facilities provided on the west side of Girard Blvd. Noting 5 exit points are proposed from the parking facilities, an average of 378 vehicles per hour per exit is calculated. Noting significantly more parking spaces are planned for the south parking garage area or are anticipated to exit onto Girard Blvd, the number of gate mechanisms leading to Girard Blvd may require a second gate or exit lane. Because of the surrounding roadway network provides only single-lane facilities, a second gate would only be needed in case of gate failure or if vehicles would use a left and right exit lane simultaneously and in near equal proportions. A second gate or lane would be beneficial at the north lot to Girard (Int. #53) and to the south roadway where a left turn toward Girard and a right-turn toward Alamo could be anticipated.

## 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 40 below represents the frequency of crashes within a given area throughout the project. Figure 41 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

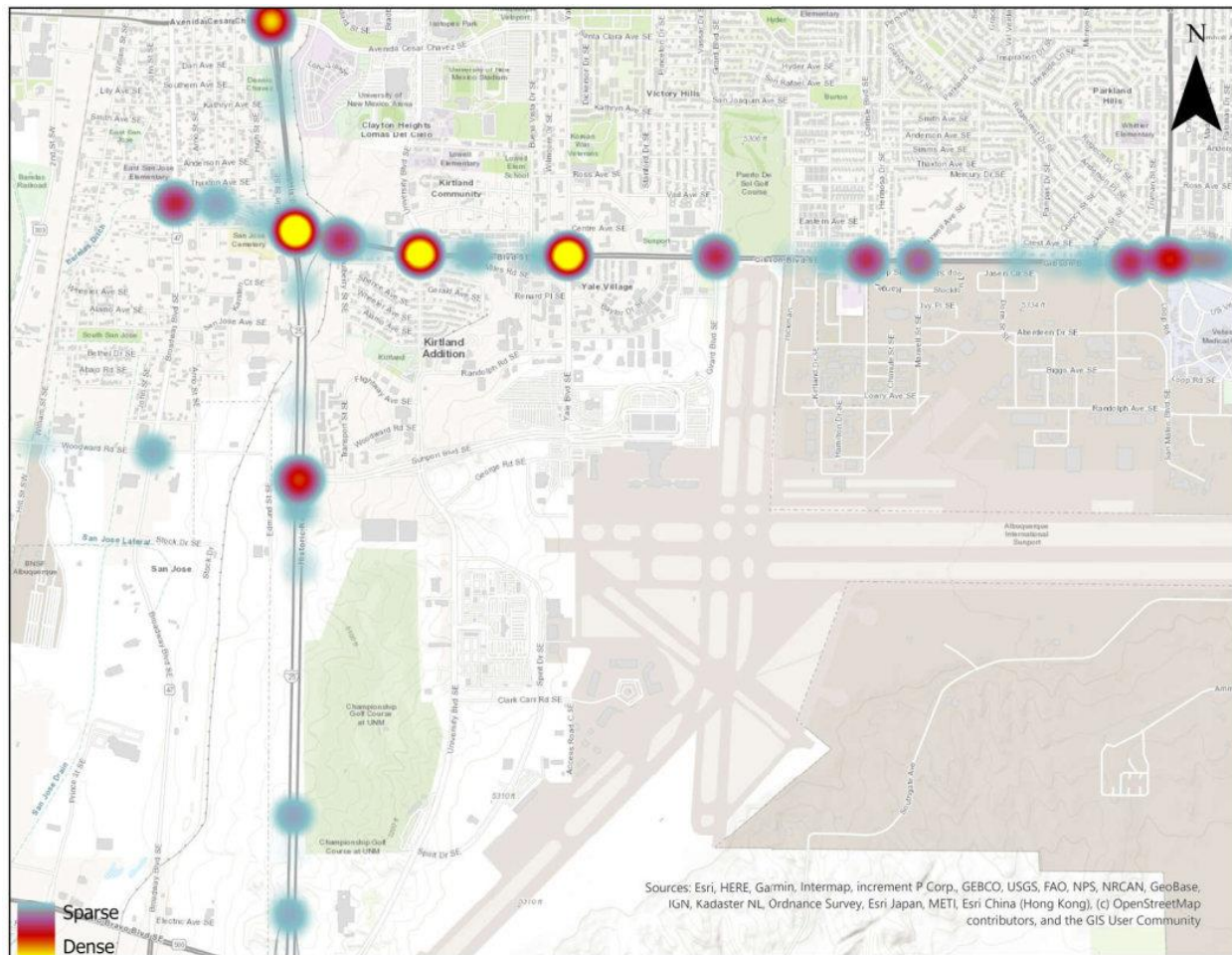


Figure 40: Crash Data Heat Map





Figure 41: Crash Severity Map

## GIBSON BLVD SE CORRIDOR

Table 31, Table 32 & Table 33 below summarize crashes occurring along Gibson Blvd for the project area.

Table 31: 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 32: 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 33: 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 34 below summarizes crashes occurring along Gibson Blvd for the project area.

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Table 34: 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 RAMPS

Table 35 below summarizes crashes occurring at the I-25 On/Off Ramps throughout the project area.

Table 35: 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%.

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## SUNPORT BLVD & GIRARD BLVD

Table 36 below summarizes crashes occurring along Gibson Blvd for the project area.

Table 36: 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 37 below summarizes the intersection crash rates using the 2018 MEV. Table 38 shows the intersection crash rates calculated using the yearly MEV for each intersection.

Table 37: 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 38: 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 CONCLUSIONS

The following is a summary of conclusions identified from the analysis conducted within the body of this report:

### SITE

- Two phases of development are planned. Phase 1 is to consist of an assembly facility, laboratory building, and ancillary developments accommodating about 2,575 employees. Phase 1 is planned for construction starting in 2021 and be complete and operating at full capacity in 2025. Phase 2 has no specific development timeline, but is anticipated for construction once an understanding of Phase 1 operations are known. Phase 2 is to possibly consist of a 1M SF office building to be fully occupied by 2030. Based on approximately 2.7 employees per 1,000 SF of office space, a total of 2,700 employees are anticipated or a grand total of 5,275 employees for both site phases.
- The owners have identified the site to be operating 24-hour a day during the weekdays in three work shifts beginning at 6AM, 3PM, and 10PM. The owners have stated the work shifts are flexible to a certain extent, however, the shifts identified place the majority of employee traffic outside of the traditional peak-hours of the roadway.
- The site is to have multiple access points, either gated with a security check point to the main (visitor) parking area and truck access or via gate mechanism or other type system at the garage/parking facility areas.
- A single site access is planned off of Gibson Blvd east of Girard Blvd (and one off of Girard Blvd) to a parking facility of approximately 220 spaces. Only a limited number of vehicles are planned to enter at this location.
- The majority of site-generated trips will be to and from the parking facilities located on the west side of Girard, south of Miles Road. A total of 5 access points to the parking area are planned.
- A secured truck access is planned off of Girard and a gated emergency access on the east side of the property to/from Gibson is also proposed.

### TRIP GENERATION

- Phase 1 is anticipated to generate a total of 7,493 trips of which 1,030 trips are anticipated to occur via alternative travel mode and/or via TDM strategies that have not been determined at this time. Peak-hour of trips entering the site are anticipated to occur prior to the 6AM day shift start time, equal to 1,160 trips. About 108 trips are estimated during the typical peak-hour of the roadway. In

the evening the 680 employee-based trips are to arrive in the 2PM hour while 1,160 employee-based trips are to exit during the 3PM hour. During the identified 4PM peak-hour of the roadway, only 239 total trip ends are anticipated to be generated by the site and placed onto the adjacent road network

- Phase 2 is to generate an estimated 6,544 vehicle trip ends following the same shift schedule as Phase 1. Being an office building, additional employee trips are anticipated during the traditional peak periods.
- Overall, the entire site when full developed and operational is projected to generate a total of 13,010 vehicle trip ends per day. Due to the shift times planned, the peak-hour of the facility is to begin at 5AM and 3PM, outside of the traditional roadway peak hours. During the site's 5AM peak, 1,821 trip ends (1,728 entering, 93 exiting) are anticipated and during the site's 3PM peak, 2,396 trips are estimated (386 in, 2,010 out). During the peak-hours of the roadway (6:45 to 7:45 AM and 4:00 to 5:00 PM), about 600 morning trips (203 entering, 388 exiting) and 725 evening trips (249 entering, 476 exiting) are estimated.
- As analyzed, a 20% reduction to employee trips was applied to account for alternative travel modes (transit, bike, pedestrian, and travel demand management options) that are in-place or could be enhanced. At this time, TDM strategies are being considered by the site owners.

#### TRIP DISTRIBUTION AND ASSIGNMENT

- Site trips were distributed onto the adjacent roadway network based on standard gravity model methodology using socio-economic data originally obtained from MRCOG. The distribution was estimated from population estimates within the 25 subarea Albuquerque Metropolitan Planning Area.
- Vehicles were assigned to site driveways and routes based on logical travel routes, site driveways, engineering judgement, and limited travel between the site and I-25 south using the local roadway network and the Sunport corridor through the AIS.

#### TRAFFIC VOLUMES

- Intersection turning movement counts and freeway volumes were not collected for this study, but relied upon previously collected counts, count data obtained from other traffic studies, and data provided by MRCOG.
- Count data was adjusted to a 2019 base-year condition and increased by 1% to account for 1 year of ambient traffic growth.
- Count data available for only peak hour time periods were adjusted/expanded to 15-minute intervals outside of the peak hour based on 24-hour count data on Gibson Blvd provided by MRCOG.
- To estimate background traffic conditions for the analysis years, existing traffic volumes were increased by 1% per year (based on MRCOG model forecast volumes between 2014 and 2040) and added to the planned EUL development traffic volumes. Along the Sunport corridor, volumes were estimated based on 2020 forecast volumes with the extension of Sunport Blvd to the west and increased by 1% per year.
- 2025 Total traffic added Phase 1 site trips to the 2025 Background volumes
- 2030 Background traffic included Phase 1 site trips.
- 2040 Horizon Year estimates included Phase 1 and Phase 2 site trips.

#### INTERSECTION CAPACITY ANALYSIS

All intersection analyses were performed using the Vistro software package. Analyses were conducted in 15-minute intervals from 5:00 to 8:00AM and from 3:00 to 6:00PM. Mitigation analyses were performed allowing the software to adjust the green splits and offsets, no attempt to modify the cycle lengths or hand-



adjust the green splits to better accommodate the left-turn or side street movements were made. Results of the analyses indicated (excluding site driveways):

Analysis Scenario	Time Period	Number of Intersection Movements Operating at:			Total Movements
		LOS E	LOS F	Total LOS E/F	
2020 Existing	AM Period	152	5	157	1320
	PM Period	127	41	168	
2025 Background	AM Period	216	32	248	1548
	PM Period	185	63	248	
2025 Total	AM Period	217	27	244	1548
	PM Period	182	73	255	
2025 Mitigation	AM Period	213	27	240	1548
	PM Period	173	73	246	
2030 Background	AM Period	228	52	280	1681
	PM Period	182	111	293	
2030 Total	AM Period	240	48	288	1681
	PM Period	188	120	308	
2040 Horizon	AM Period	234	74	308	1681
	PM Period	185	141	326	

Note: Total number of movements analyzed in the 3 AM and 3 PM periods vary per analysis scenario based on intersection/traffic control changes. Movements exclude site driveway locations

#### GIBSON BOULEVARD ROADWAY CAPACITY ANALYSIS

Analysis of Gibson Boulevard and other roadway segments is typically based on the intersections ability to accommodate the traffic movements at the signalized intersections, typically the capacity constraint along a corridor. To estimate the capacity of Gibson Boulevard, a simplified method was utilized, based on an FHWA article using the speed limit of a roadway, percent green time afforded to the through traffic, and the number of lanes. The analysis was conducted for the eastbound Gibson Blvd roadway segment between University and Yale (highest volume condition) assuming peak-hour traffic is 8% of daily trips. Results indicate the following:

- Analysis indicates eastbound Gibson through traffic is provided 56% of the effective green time within its 120 second cycle length.
- Gibson currently accommodates about 970 vphpl during the AM peak hour. Based on the FHWA table, this is slightly below the LOS E threshold of 982 vphpl. The performance of Gibson Blvd (intersection LOS shows LOS C) shows operational conditions better than the FHWA table indicates. This may be due, in part, to good signal progression along the corridor, minimizing the number of stops vehicles would typically be exposed to.
- The following table highlights the roadway conditions in the other traffic volume scenarios using the FHWA table. Results indicate an 8-lane Gibson Blvd facility could operate at LOS:

Roadway Segment (Eastbound)	Analysis Scenario	AM Peak-Hour Traffic Volume	Vehicles per Hour per Lane	FHWA Estimate of LOS E Upper Threshold Value, 6-lanes (vphpl)	Percent Exceeding LOS E as a 6-Lane Facility	FHWA LOS Estimate Under an 8-Lane Gibson Blvd cross-section
Gibson Bet. Univeristy and Yale	2020 Existing	2908	969	982	-1.3%	B
	2025 No Build	3451	1150	982	17.1%	B
	2025 Build	3500	1167	982	18.8%	B
	2030 No Build	3655	1218	982	24.0%	B
	2030 Build	3703	1234	982	25.7%	B
	2040 Horizon	4039	1346	982	37.1%	B

Note: Under an 8-lane facility, vphpl increases as compared to a 6-lane facility

## I-25 FREEWAY ANALYSIS

Freeway volumes were analyzed assuming 2020 Existing volume conditions, grown at 1% per year plus the addition of the EUL site trips and the Project Orion trips. No attempt to adjust the volumes to match 2040 forecast volumes were attempted. Overall, 2020 volumes exceed 2040 forecast volumes at the Gibson Blvd locations. Therefore, the analysis conducted may overestimate capacity concerns on the freeway. The 2020 and 2025 analyses assume the existing freeway condition while the 2030 and 2040 scenarios assume the programmed facility. Results indicate the following:

- Under 2020 Existing Conditions, all freeway segments operate at LOS D or better conditions. However, notes identified within the HCS software for the AM peak period in the southbound direction states that the diverge capacity is less than the diverge demand at the off-ramp to eastbound Gibson Blvd and may result in off-ramp queue that affects mainline flow.
- In the 2025 Build scenario, segment operations obviously show deterioration, with more southbound segments and time periods showing LOS D conditions in the morning period while LOS D and E sections are noted in the AM and PM peak period in the northbound direction.
- Under the I-25 improved freeway design, the 2040 Horizon year analysis indicates only 1 time period and 1 segment operating at LOS D (northbound on-ramp from Gibson Blvd) in the PM period while all other sections in the northbound and all segments in the southbound direction show LOS C or better conditions.
- Noting volume estimates used in the analysis may over-estimate volumes conditions on the mainline and exiting/entering the on/off ramps, the freeway design as analyzed is anticipated to operate in an acceptable manner through 2040.

## 2025 MITIGATION OPTIONS

Under Existing 2020 traffic volume conditions, some side-street approach movements and Gibson Blvd eastbound/westbound left-turn movements show LOS E/F conditions. Most of the locations have low V/C ratios indicating the elevated delays associated with these movements are due to the longer cycle lengths and the movement demand volumes. The only signalized movements showing poor operation and high traffic volumes are at the northbound approach from Truman and Carlisle, the two approaches serving the Kirtland Airforce Base.

By 2025 with the addition of the EUL site traffic, additional movements begin to along Gibson and at San Mateo. With Phase 1 site traffic added, more movements show LOS E/F operation. To help mitigation conditions, the following improvements were identified that could simply be conducted:

- Utilize the unused left-turn pavement on the northbound Girard Blvd approach to Gibson Blvd to accommodate dual left-turn lanes. A signal phasing change to protected only is recommended.
- Perform corridor signal timing optimization to better accommodate traffic demand in the AM and PM peak hours.

Outside of the above changes, the ability to add capacity to the Gibson Blvd corridor is not possible due to ROW or physical constraints. Repeat motorists that perceive excessive and/or repetitive travel delays may look to alternative travel routes. Site-related vehicles originating or destined to/from I-25 south may choose to travel the Sunport Blvd corridor to by-pass the conditions along Gibson. No simple mitigation options are offered to alleviate the poor conditions along Gibson. It is recommended that a comprehensive analysis of the Gibson Blvd corridor be conducted to determine the best design options to accommodate vehicle demand.

### 2030 MITIGATION OPTIONS

Without improvement to the Gibson Blvd corridor, site and non-site traffic may use the Sunport Blvd/Girard Blvd corridor to by-pass bottleneck locations along Gibson Blvd. Additional concerns east of Girard Blvd, including the intersections with the EUL site and eastbound left-turn movements at Sam Mateo Blvd in the afternoon peak period exist.

To mitigate conditions associated with the site, potential considerations to utilize parking facilities outside of the study area or to improve access to/from the Sunport Blvd corridor are being considered. A potential ingress improvement considers adding a roadway from Sunport Blvd, prior to the exiting toward the AIS parking garage, following the westbound/southbound AIS Loop roadway, and connecting to Girard Blvd or straight into the site's parking garage. Significant study will be required to determine the feasibility and the ability to add and construct to design standards. As an alternative option, it may be more beneficial and cost effective to improve the existing local street network to accommodate increased site traffic.

## **RECOMMENDATIONS**

The following recommendations are made based on the analysis and conclusions of this report:

### Review Agencies

- It is recommended that a comprehensive Gibson Boulevard corridor study be developed to identify potential alternatives that could be implemented to improve the operations of the corridor. At this time, AM and PM peak period conditions appear to be operating near acceptable threshold levels. Future year conditions that include ambient traffic growth and new site development along Gibson Blvd could place demand volumes above capacity levels by 2025. Improvements to alleviate one issue by one developer (say westbound left-turn movements into the Orion site at Girard Blvd) via widening or signal phasing changes, could have significant impacts to other intersections along corridor. The ability to provide options that can be vetted by stakeholders or cost-shared through some type of mechanism would be beneficial. As part of the corridor study, analysis of Sunport Blvd options to accommodate additional traffic or to act as a Gibson Blvd reliever, should be included.

### Other Agency Stakeholders

- To help reduce the number of vehicle trips on Gibson Blvd, a review of bike, pedestrian, transit or other ride-share options is recommended.
- ABQ Ride is currently evaluating options and costs of adding additional service to the site as current transit schedules do not provide service to allow arrival for the 6 AM shift.

### Site Owners

- It is recommended that the site consider staffing and work shift changes that would benefit site operations as well as roadway conditions.

- It is recommended that the site consider TDM strategies that could be implemented to reduce the number of employees that travel to and from the site in single-occupancy vehicles, such as cash incentives for carpooling, subsidized transit passes, and guaranteed rides home.
- It is recommended that site access be reviewed for potential restrictions that would benefit site traffic in selection of their travel route to and from the site.
- It is recommended that the security check point at the Gibson entrance be considered for relocation further to the south, eliminating potential weaving/blockage conditions that may arise due to the limited distance between the check point and the merging of traffic streams south of the Gibson curb line.
- It is recommended that the northbound Girard Blvd left-turn lane pavement markings be removed and a second left-turn lane be incorporated to mitigate long delays associated with this movement in Phase 1. Modifications may require signal equipment improvements.
- It is recommended that the site participate in the Gibson Blvd corridor study as the site is anticipated to generate a significant amount of vehicles trips onto a roadway that is near capacity.

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