

# Traffic Impact Study (TIS) Gibson In-N-Out

## Draft Report

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Prepared for:  
In-N-Out Burger

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## EXECUTIVE SUMMARY

The following contains a Traffic Impact Study (TIS) for an In-N-Out fast-food restaurant to be developed on Gibson Boulevard between Alumni Drive and the I-25 Interchange in Albuquerque, New Mexico. Lee Engineering has completed this report for In-N-Out Burger. All analyses and items contained herein conform to scoping requirements set forth in a scoping meeting held on April 29<sup>th</sup>, 2024, with In-N-Out corporation, the City of Albuquerque (CABQ), and the New Mexico Department of Transportation (NMDOT).

## BACKGROUND

The proposed development is an In-N-Out Burger quick service restaurant on Gibson Boulevard between Alumni Drive and the I-25 Interchange.

The site, which is to comprise of a 3,886 square foot building with 74 parking spaces and a drive-through window, is anticipated to generate 145 ingress and 140 egress trips during the MD peak hour, and 105 ingress trips and 97 egress trips during the PM peak hour. The number of vehicle trips generated by the proposed development was based on average driveway traffic data collected from 12 In-N-Out Burger developments in California. Trip data from these 12 developments and trips based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, land use code 934-Fast-Food Restaurant with Drive-Through can be found in Appendix C for comparison.

Site access is available according to current site plans through one site access driveway on Gibson Boulevard and two on Alumni Drive.

Study intersections include:

- 1) Gibson Boulevard and I-25 SB
- 2) Gibson Boulevard and I-25 NB
- 3) Gibson Boulevard and Mulberry Street
- 4) Alumni Drive and Site Driveway 1
- 5) Alumni Drive and Site Driveway 2
- 6) Gibson Boulevard and Alumni Drive
- 7) Gibson Boulevard and University Boulevard

For the purposes of this analysis, the development is assumed to reach full completion by 2026. The development is to be constructed in one phase.

Analysis scenarios for this study include:

- Existing 2024 – Existing field-counted traffic volumes.
- Build-Out Year 2026 Background – 2026 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the Mid-Region Council of Governments (MRCOG) Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by adjacent developments.
- Build-Out Year 2026 Total – 2026 background volumes plus trips generated by the proposed development.
- Horizon Year 2036 Background – 2036 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by adjacent developments.

- Horizon Year 2036 Total – 2036 background volumes plus trips generated by the proposed development.

Existing turning movement counts were collected on Thursday, May 16<sup>th</sup>, 2024, for the following study intersections:

- Gibson Boulevard and I-25 SB Interchange
- Gibson Boulevard and I-25 NB Interchange
- Gibson Boulevard and Mulberry Street
- Gibson Boulevard and Alumni Drive
- Gibson Boulevard and University Boulevard

These volumes were analyzed unaltered in the Existing scenario of the Level of Service and Queueing Analysis section. Site trips for the development site were generated based on trip survey data collected from 12 In-N-Out Burger developments in California. Proposed development-generated trips were used to analyze Build-Out Year and Horizon Year Total volumes.

## SUMMARY OF TRAFFIC ANALYSIS AND RECOMMENDATIONS

The following presents a summary of the traffic analysis and recommendations included in this report.

### ASSUMPTIONS

The following assumptions regarding new developments in the roadway network were made for the Build-Out Year scenarios based on the information discussed in the scoping meeting:

- Alumni Drive is assumed to be extended north of its current location to Avenida Caesar Chavez through a project designed and funded by the University of New Mexico. Site Driveways 1 and 2 will be constructed on the west side of the new segment of Alumni Drive. For this analysis, the full extension of Alumni Drive is assumed to be completed by Horizon Year 2036.
- The Gibson Boulevard and I-25 Interchange is currently being redesigned by NMDOT. Capacity and queueing issues at the interchange are assumed to be addressed in the future by this reconstruction project. Therefore, mitigations for the interchange are not provided in this analysis.

### CONCLUSIONS

The capacity and queueing analysis showed that several study intersection movements operate at unacceptable levels of service under Existing and Background conditions.

Under Existing 2024 conditions, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS E during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - SBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

Under Background 2026 conditions, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD peak hour.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD and PM peak hours.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS F during the PM peak hours.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.

Under the Full-Build 2026 scenario, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS F during the MD and PM peak hours.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD peak hour.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS F PM peak hours.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

Detailed traffic operation results for Existing, Build Out Year 2026 Background, Build Out Year 2026 Full-Build, Horizon Year 2036 Background, and Horizon Year 2036 Full-Build scenarios can be found in the LOS, Capacity and Queuing section of the report.

## **SITE RECOMMENDATIONS**

- Proposed Access Points and Locations:
  - Full access configuration, with right and left turns being permitted, is recommended for Site Driveways 1 and 2 on Alumni Drive, to provide adequate site circulation for ingress and egress Development trips.
  - An area bounded by the required sight distance of 355 feet for left-turning vehicle and 290 feet for right-turning vehicles should be cleared and maintained free of obstructions on either side of each site driveway.

## **OFF-SITE INTERSECTION RECOMMENDATIONS**

- Alumni Drive and Gibson Boulevard

- A “Do Not Block Intersection” sign (R-10-7) should be installed on Alumni Drive for southbound traffic, between Site Driveway 2 and the fire station access driveway.
- Refreshed striping is recommended on Alumni Drive between Gibson Boulevard and the proposed Development.

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## INTRODUCTION

This report details the procedures and findings of a Traffic Impact Study (TIS) performed by Lee Engineering for In-N-Out Burger. This report and the analyses herein were performed for a quick service development to be constructed on Gibson Boulevard between Alumni Drive and the I-25 interchange in Albuquerque, New Mexico. This study examines the impacts of the proposed development on surrounding traffic conditions and discusses the potential impacts of trips generated by the development on the study intersections.

The scope of this report and the analyses performed were completed in agreement with the scoping requirements set forth by the City of Albuquerque (CoA) and the New Mexico Department of Transportation (NMDOT). Scoping meeting notes from the scoping meeting held on April 29th, 2024, are included in Appendix A. Analysis procedures, conclusions, and recommendations for this study were developed according to the *Highway Capacity Manual (HCM) 7<sup>th</sup> Edition* and the *Manual on Uniform Traffic Control Devices (MUTCD) 11<sup>th</sup> Edition*.

For the purposes of this analysis, the development is assumed to be completed in one phase and to reach full completion by 2026. The site plan displayed in Figure 1 shows that the proposed development is a travel center. Traffic generated by the site is anticipated to generate 145 ingress and 140 egress trips during the MD peak hour, and 105 ingress trips and 97 egress trips during the PM peak hour. Figure 2 shows the site plan for the development. Lee Engineering conducted a Level of Service and Queuing Analysis for the following MD and PM peak hour scenarios:

### Traffic Analysis

- Existing 2024 – Existing field-counted traffic volumes.
- Build-Out Year 2026 Background – 2026 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by adjacent developments.
- Build-Out Year 2026 Total – 2026 background volumes plus trips generated by the proposed development.
- Horizon Year 2036 Background – 2036 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by adjacent developments.
- Horizon Year 2036 Total – 2036 background volumes plus trips generated by the proposed development.

The Level of Service and Queuing Analysis Reports are presented in full in the Appendix.

## BACKGROUND INFORMATION

### PROJECT LOCATION & SITE PLAN

The In-N-Out Burger development will be located on Gibson Boulevard between Alumni Drive and the I-25 Interchange. Figure 1 shows the complete proposed site plan, and Figure 2 shows the site location, study intersections, and the surrounding area. Nearby intersections include the following:

- 1) Gibson Boulevard and I-25 SB
- 2) Gibson Boulevard and I-25 NB
- 3) Gibson Boulevard and Mulberry Street
- 4) Alumni Drive and Site Driveway 1

- 5) Alumni Drive and Site Driveway 2
- 6) Gibson Boulevard and Alumni Drive
- 7) Gibson Boulevard and University Boulevard

The proposed development would convert approximately 2.06 acres of land into an In-N-Out Burger development. For the purposes of this analysis, the development is anticipated to comprise a total of a 3,886 square foot building with 74 parking spaces and a drive-through window. Proposed access points include two driveways on Alumni Drive.

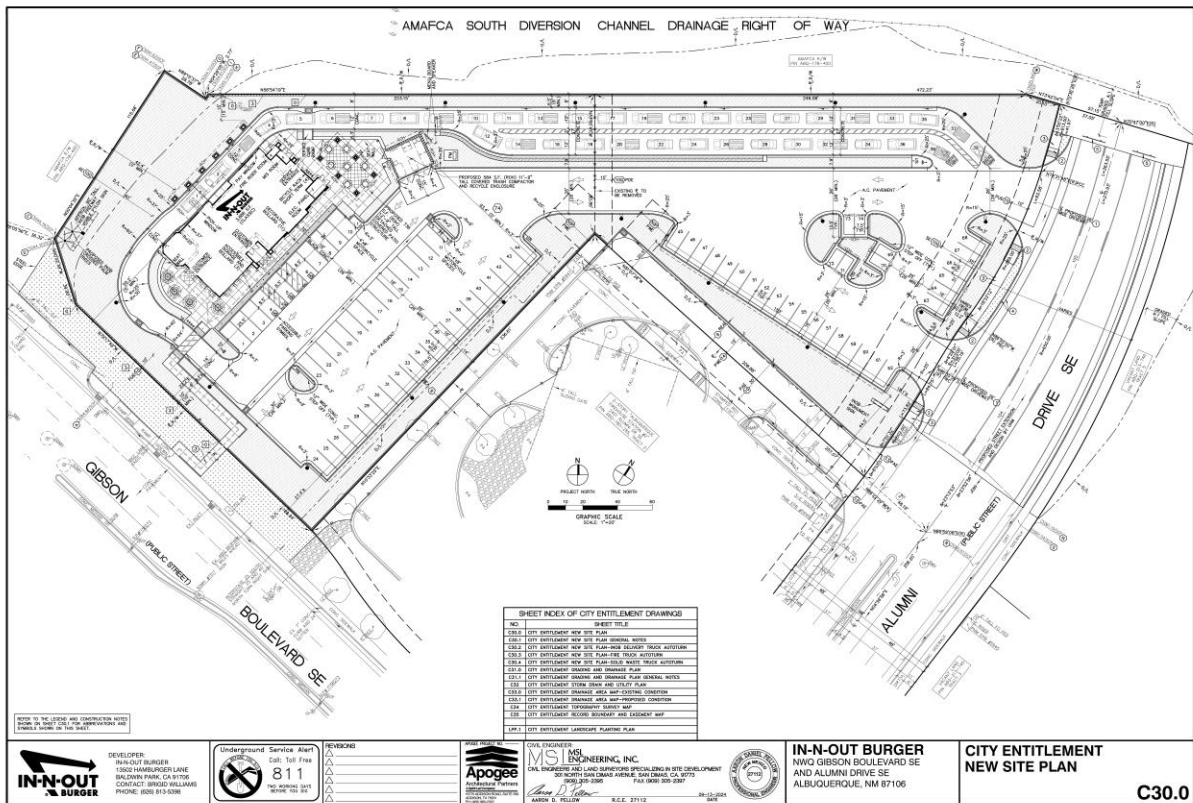


Figure 1: Site Plan



Figure 2: Vicinity Map

## STUDY AREA, AREA LAND USE, AND STREETS NARRATIVE SUMMARY

### STUDY AREA

The study area is defined as North of Gibson Boulevard, from the I-25 interchange to University Boulevard. The following intersections were identified for analysis during the scoping meeting:

- 1) Gibson Boulevard and I-25 SB
- 2) Gibson Boulevard and I-25 NB
- 3) Gibson Boulevard and Mulberry Street
- 4) Alumni Drive and Site Driveway 1
- 5) Alumni Drive and Site Driveway 2
- 6) Gibson Boulevard and Alumni Drive
- 7) Gibson Boulevard and University Boulevard

### AREA LAND USE

As described, the development is to be located on the north side of Gibson Boulevard, and immediately west of Alumni Drive. Adjacent to and surrounding the project site are land uses consisting of the following:

- Undeveloped: The land immediately North and West of the site is currently undeveloped.
- Fire Station: The proposed development is neighboring Albuquerque Fire Station 2.
- Educational: Schools located within 2 miles of the proposed development include Lowell Elementary, East San Jose Elementary, John Marshall School, South Valley Preparatory, William W. Josephine Dorn Charter, Mission Achievement and Success Charter, and University of New Mexico.

- Residential: Several areas surrounding the development are Single-family detached housing, as well as University of New Mexico student housing developments.
- Commercial: Other fast-food developments in the vicinity of the proposed development include Subway, Burger King, Del Taco, Wienerschnitzel, Chick-Fil-A, and Blake's Lotaburger.

## STREETS

The following details the characteristics and features of streets included in the study area:

**Gibson Boulevard** is a CoA-maintained, six-lane roadway with a raised median that runs east and west. The roadway is classified by MRCOG as a principal arterial. The posted speed limit on westbound Gibson Boulevard is 45 MPH east of the I-25 SB ramps, and 35 MPH west of the I-25 SB ramps. The posted speed limit on eastbound Gibson Boulevard is 35 MPH west of the proposed development and 45 MPH east of the development. There are bike lanes, curb and gutter, and sidewalks present on both sides of the roadway.

**Alumni Drive** is a CoA-maintained, two-lane roadway with a raised median that runs north and south. The roadway is classified by MRCOG as a local urban street. The posted speed limit is 30 MPH. There are bike lanes, curb and gutter, and sidewalks present on both sides of the roadway. The roadway ends approximately 320 feet north of Gibson Boulevard.

**University Boulevard** is a CoA-maintained roadway that runs north and south. North of Gibson Boulevard, the roadway is classified as a minor arterial, comprises four lanes divided by a raised median, and has the posted speed limit is 40 MPH. South of Gibson Boulevard, the roadway is classified as a local urban street, comprises two lanes, and has a posted speed limit is 25 MPH. Curb, gutter, and Sidewalks are present on both sides of the roadway. Bike lanes are present on both sides of the roadway north of Gibson Boulevard, and sharrows markings and bike route signing is present south of Gibson Boulevard.

**Mulberry Street** is a CoA-maintained, two-way, undivided roadway that runs north and south. The roadway is classified by MRCOG as a local urban street, and the posted speed limit is 25 MPH. Curb, gutter, and sidewalks are present on both sides of the roadway.

**I-25** is an NMDOT-maintained interstate that runs north and south. At Gibson Boulevard and NB I-25, there are three ramps: an off-ramp with an advisory speed limit of 45 MPH that splits into two lanes, one to EB Gibson Boulevard and one to WB Gibson Boulevard, an on-ramp from EB Gibson to NB I-25, and a one-lane on-ramp from WB Gibson to NB I-25. At Gibson Boulevard and SB I-25, there are three ramps: a one-lane off-ramp from SB I-25 to EB Gibson Boulevard with an advisory speed limit of 25 MPH, a one-lane off-ramp from SB-I-25 to WB Gibson Boulevard with an advisory speed limit of 35 MPH, and an on-ramp to SB I-25 with one lane at the base of the ramp from EB Gibson Boulevard and one lane at the base of the ramp from WB Gibson Boulevard. The two lanes merge after entering the on-ramp.

## INTERSECTIONS

The following details the traffic control and characteristics of the existing intersections in the study area:

**Gibson Boulevard and I-25 SB** is an interchange joining two interstate off-ramps, an interstate on-ramps, and a principal arterial. The north leg comprises the I-25 Southbound off-ramp to WB Gibson Boulevard, joining Gibson Boulevard without stop or yield control via an added lane. The south leg comprises the I-25 Southbound off-ramp to EB Gibson Boulevard, joining Gibson Boulevard without stop or yield control via an added lane. The east leg comprises two through lanes and a left-turn lane onto

the I-25 SB on-ramp. The west leg comprises two through lanes and a right-turn lane onto the I-25 SB on-ramp. No crosswalks are present.

**Gibson Boulevard and I-25 NB** is an interchange joining an interstate off-ramp, two interstate on-ramps, and a principal arterial. The south leg comprises the I-25 NB off-ramp to Gibson Boulevard, which splits into one left-turn lane and one right-turn lane. Stop control is present on the left-turn lane, while the right-turn lane joins Gibson Boulevard EB without stop or yield control via an added lane. The east leg comprises two through lanes and a right-turn lane onto an I-25 NB on-ramp. The west leg comprises two through lanes and a right-turn lane onto an I-25 NB on-ramp. No crosswalks are present.

**Gibson Boulevard and Mulberry Street** is a 3-legged, minor-street stop-controlled intersection. The south leg is stop-controlled and comprises a right-turn lane and a left-turn lane. The east leg comprises three through lanes and a left-turn lane. The west leg comprises two through lanes and a shared right-turn through lane. No crosswalks are present.

**Gibson Boulevard and Alumni Drive** is a 4-legged, minor-street stop-controlled intersection. The north leg is stop-controlled and consists of a bike lane, a right-turn lane, and a left-turn lane. The south leg is a business access driveway with one lane, with left and right turns permitted. No stop sign is present on the south leg. The east leg comprises a left-turn lane, three through lanes, a bike lane, and a right-turn lane. The west leg comprises a left turn lane, two through lanes, a shared through/right-turn lane, and a bike lane. A crosswalk is present on the north leg of the intersection.

**Gibson Boulevard and University Boulevard** is a 4-legged, signalized intersection. The north leg comprises a left-turn lane, a through lane, a bike lane, and a right-turn lane. The south leg comprises a left-turn lane and a shared right-turn/through lane. The east leg comprises a left-turn lane, three through lanes, a bike lane, and a right-turn lane. The west leg comprises a left-turn lane, three through lanes, a bike lane, and a right-turn lane. Left-turn phasing at the south, east, and west legs is protected-permitted with five-section signal heads. Left-turn phasing at the north leg is protected only. Vehicle detection is present on each approach, and emergency vehicle preemption is present on Gibson Boulevard for each direction. Crosswalks, pedestrian pushbuttons, and pedestrian signal heads are present on each approach.

## BICYCLE FACILITIES

Bicycle lanes are present within the study area on Gibson Boulevard, Alumni Drive, and University Boulevard. A paved multi-use trail is present on Gibson Boulevard, east of University Boulevard. South of Gibson Boulevard, University Boulevard is classified as a bike route with sharrows pavement markings and bike route signing present.

## ADJACENT DEVELOPMENTS

Two adjacent developments are planned for construction near the study area, and site trips for these developments were included in the background traffic volumes for this analysis.

A Raising Cane's Restaurant is planned on the northeast corner of Gibson Boulevard and Alumni Drive, and the build-out year listed in the Traffic Impact Study is 2023. The infrastructure improvements required by the City for this development are as follows:

On Alumni Drive, SE Centerline:

- Removal of Curb and Gutter
- Removal of Concrete Sidewalk
- Removal of Concrete Median Pavement
- Removal and Replacement of Asphalt Pavement for Utility Trenching

- Removal of Sewer Manhole
- Removal of Sewer Line
- Sidewalk Flume (Per COA #2236)
- Standard Curb & Gutter (Per COA #2415A)
- Concrete Median Pavement (Per COA #2408)
- Public Concrete Sidewalk (Per COA #2430)
- Barrier Free Ramp (Per COA #2446)
- White Pavement Striping to Match Existing
- 1.5' Domestic Water Meter (Per ABCWUA #2363)
- 1.5" Domestic Water Service

At Proposed Sewer Easement North of the Subject Property:

- Relocated Sewer Line and Associated Appurtenances – to be fully designed with Work Order #W20230006

A commercial development owned by Prime Properties is planned on the southwest corner of Gibson Boulevard and Yale Boulevard, just east of the proposed In-N-Out Burger restaurant. The build-out year listed in the Traffic Impact Study for the commercial development is 2023.

An extension of Alumni Drive to University Boulevard, designed and funded by the University of New Mexico, is also planned for development. A build out year for this project is not yet available; however, the extension is assumed to be complete in Horizon Year 2036 for the purpose of this analysis.

## DATA COLLECTION

The following section details the data collection method used in subsequent analyses of this report. The data discussed below was collected via a combination of field observations and machine/video recordings.

### FIELD DATA COLLECTION

#### On-Street Parking

No dedicated on-street space is provided in the study area.

#### Pedestrians and Bicycles

Pedestrian and bicycle volumes were collected at all study intersections with turning movement counts (see Turning Movement Counts section below). Pedestrian and bicycle hourly volumes are provided in Appendix B.

#### Transit

According to the City of Albuquerque's ABQ Ride System Map (2023), no bus routes pass through the study area.

#### Signal Timings

The City of Albuquerque Traffic Engineering Division provided signal timing for the signalized intersection of Gibson Boulevard and University Boulevard. Signal timing sheets used in the capacity analyses are provided in Appendix C.

## TRAFFIC SCENARIO DEVELOPMENT

The following sections detail the methods and calculations used to obtain traffic volumes for the existing 2026 and 2036 analysis scenarios. This process used the following tools as described below: Traffic Projections, Site Trip Generation, and Trip Distribution and Assignment. Figures at the end of this section show the resulting traffic volumes determined for the 2026 and 2036 analysis scenarios.

### TRAFFIC COUNTS, GROWTH RATES, ADJACENT SITE TRIPS AND TRIP GENERATIONS TURNING MOVEMENT COUNTS

Turning movement counts (TMC) were collected for nine hours in three periods: 6:00 AM-9:00 AM, 11:00 AM-2:00 PM, and 3:30 PM-6:30 PM on Thursday, May 16<sup>th</sup>, 2024 for each of the study intersections. Turning Since the development will not operate during the AM hours, the Midday and PM peak hours were calculated and analyzed. Table 1 shows the observed peak hours for each intersection where traffic counts were collected and the peak hours for the entire study area (network peak). MD and PM peak-hour traffic volumes are shown in Figure 3. Complete turning movement counts can be found in Appendix B.

*Table 1: Intersection and Network Peak Hours*

Intersection	MD Peak Hour	PM Peak Hour
I-25 SB Ramps & Gibson Blvd	12:00 PM	3:30 PM
I-25 NB Ramps & Gibson Blvd	12:00 PM	3:30 PM
Gibson Blvd & Mulberry St	12:00 PM	3:30 PM
Gibson Blvd & Alumni Dr	12:00 PM	3:30 PM
Gibson Blvd & University Blvd	12:00 PM	3:30 PM
<b>Network Peak Hours:</b>	<b>12:00 PM</b>	<b>3:30 PM</b>

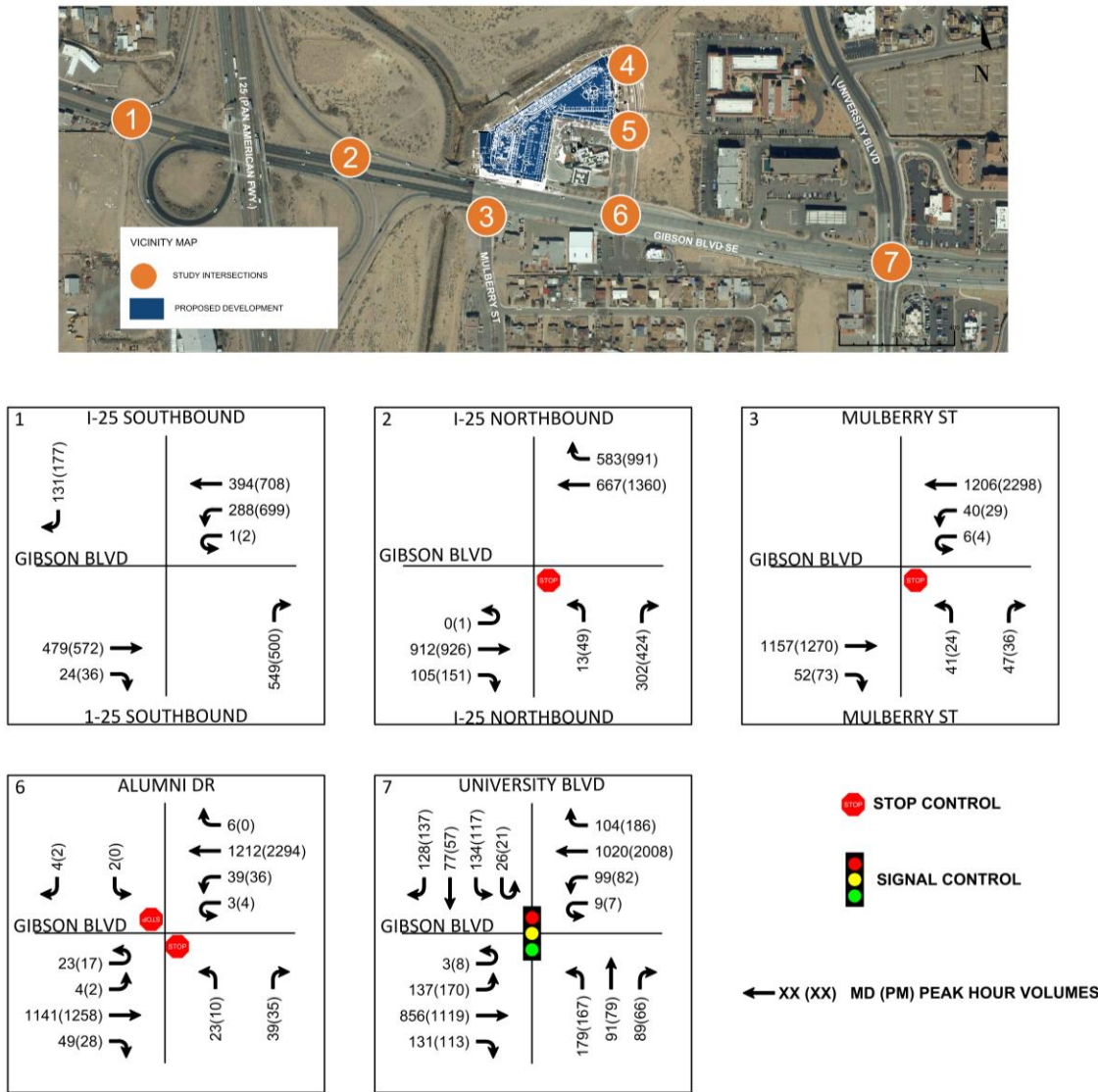


Figure 3: Existing Traffic Counts

## TRAFFIC GROWTH

For the purposes of this analysis, the future year volumes were forecast from existing traffic volumes using values from 2016 and 2040 (updated) travel demand models provided by MRCOG. These models were then compared using AM and PM peak hour direction volumes (AMPH LOAD and PMPH LOAD) to calculate anticipated growth rates for individual roadways near the study area. Roadways calculated to have a yearly growth rate of less than 1% were analyzed with a 1% per year growth rate to facilitate a conservative analysis. Growth rates were then converted to growth factors for specific analysis scenarios. Values provided by MRCOG are reproduced verbatim in Table 2, in addition to the calculated growth rates used in the analysis. Growth rates were then applied to the 2024 existing volumes to forecast future volumes. Projected turning movement volumes were used along with adjacent developments' site-generated trips for the Build-Out Year 2026 Background scenario. 2026 Background volumes plus the proposed development's site-generated trips were used for the Build-Out Year 2026 Full-Build scenario.

Table 2: Yearly Growth Rates

Street	Segment Begin	Segment End	Direction	Period	MRCOG 2016 Model "Peak Hour Load"	MRCOG 2040 Model "Peak Hour Load"	Annual Growth Rate	Average Annual Growth	Growth Rate for Analysis
Gibson Blvd	Node 3659	University	WB	AM PH	1270	1440	0.52%	1.13%	1.10%
				PM PH	2184	1775	-0.86%		
	University	Node 3659	EB	AM PH	2133	2043	-0.18%		
				PM PH	1389	1694	0.83%		
	University	Node 3652	WB	AM PH	1475	1730	0.67%		
				PM PH	2845	2798	-0.07%		
	Node 3652	University	EB	AM PH	2645	2780	0.21%		
				PM PH	1643	2140	1.11%		
	Node 3652	Node 3649	WB	AM PH	557	1730	4.84%		
				PM PH	1786	2798	1.89%		
Node 3649	Node 3652	EB	AM PH	1729	2780	2.00%			
			PM PH	1164	2140	2.57%			
University Blvd	Gibson	Node 3631	NB	AM PH	407	752	2.59%	2.84%	2.80%
				PM PH	290	475	2.08%		
	Node 3631	Gibson	SB	AM PH	230	398	2.31%		
				PM PH	675	1132	2.18%		
	Node 3631	Sunshine	NB	AM PH	337	749	3.38%		
				PM PH	225	466	3.08%		
	Sunshine	Node 3631	SB	AM PH	123	371	4.71%		
				PM PH	644	1146	2.43%		
I-25 North	Node 3720	Node 3688	NB	AM PH	3815	5287	1.37%	0.93%	1.00%
				PM PH	3279	4746	1.55%		
	Node 3688	Node 3648	NB	AM PH	2866	3879	1.27%		
				PM PH	2772	3868	1.40%		
	Node 3648	Node 3615	NB	AM PH	3233	3879	0.76%		
				PM PH	3653	3868	0.24%		
	Node 3615	Node 3558	NB	AM PH	4185	4806	0.58%		
				PM PH	4741	5026	0.24%		
I-25 South	Node 3568	Node 3618	SB	AM PH	4283	4238	-0.04%	0.28%	0.30%
				PM PH	4229	4392	0.16%		
	Node 3618	Node 3650	SB	AM PH	3897	3305	-0.68%		
				PM PH	4027	3602	-0.46%		
	Node 3650	Node 3679	SB	AM PH	2733	3305	0.79%		
				PM PH	3170	3602	0.53%		
	Node3679	Node 3721	SB	AM PH	3071	3945	1.05%		
				PM PH	3961	4951	0.93%		
Alumni Dr	N/A							---	1.00%
Mulberry St	N/A							---	1.00%

Source: MRCOG 2016 and 2040 Models

## SITE TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Trip generation for the Proposed Development was taken from trip survey data for 12 In-N-Out Burger Restaurants. The average of the 12 developments' Mid-day and PM peak hour trips was used for this analysis. Pass-by Trip rates of 50% for the Mid-day peak hour and 55% for the PM peak hour taken from the ITE Trip Generation Manual for land use code 934-Fast-Food Restaurant with Drive-Through were used.

Trip data from 12 In-N-Out Burger restaurants show higher peak hour volumes than those based on the ITE Trip Generation Manual. Trip survey data and ITE Trip Generation data can be found in Appendix C for comparison. Trips generated by the proposed development are shown in the tables below. Site-generated trips were added to the Background traffic volumes to create the Total Build-Out and Horizon Year traffic volumes. Table 3 shows the trip generation volumes and percents.

*Table 3: Proposed Development Trip Generation*

In-N-Out Burger Trip Generation			
	Peak Hour	INGRESS	EGRESS
PASS-BY	MD	72	70
	PM	57	53
DIRECT	MD	73	70
	PM	48	44
TOTAL <sup>1</sup>	MD	145	140
	PM	105	97

### *Trip Distribution and Assignment – Build Out Year 2026*

The proposed site-generated trip distribution was determined based on the analysis of existing intersection demand characteristics within the study area. These direct trips were routed within the roadway network to and from the Development based on the proportions of existing turning movement counts during the AM and PM peak hours. Figures 4 through 7 show the routing percentages and trips generated by the development. Pass-by trip percentages for Build-Out Year 2026 are also shown in Table 4.

*Table 4: Pass-by Trip Percentages – Build-Out Year 2026*

Pass-by Trip Percentages		
From	To	
I-25 SB	I-25 SB	35%
I-25 NB	I-25 NB	20%
Gibson EB	Gibson EB	10%
Gibson WB	University NB	5%
Gibson WB	I-25 SB	5%
Gibson WB	I-25 NB	5%
University SB	I-25 SB	5%
University SB	I-25 NB	10%
University SB	University SB	5%
Total		100%

<sup>1</sup> Average trips from data collected for 12 In-N-Out Burger developments, see Appendix C

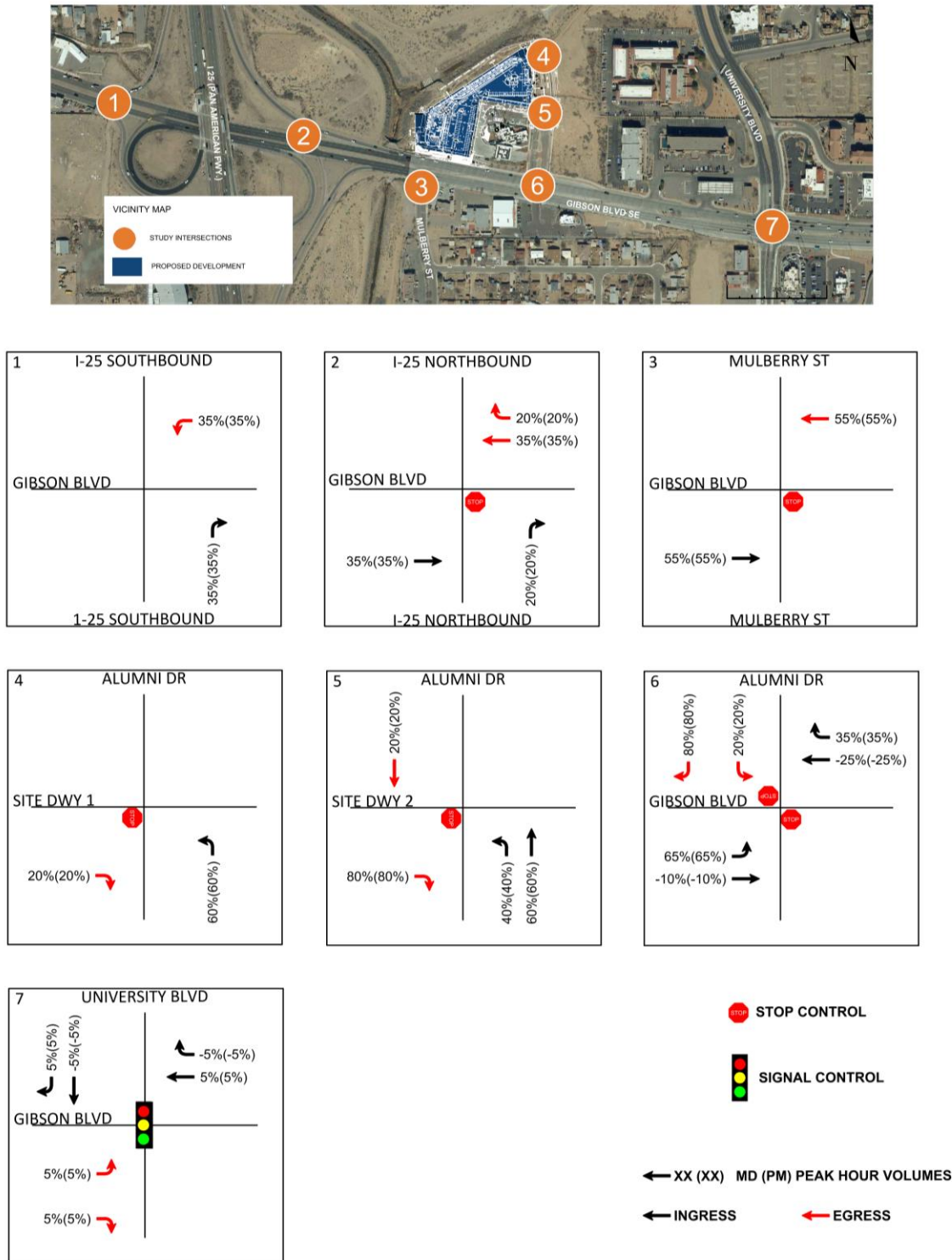


Figure 4: Pass-by Trip Percentages

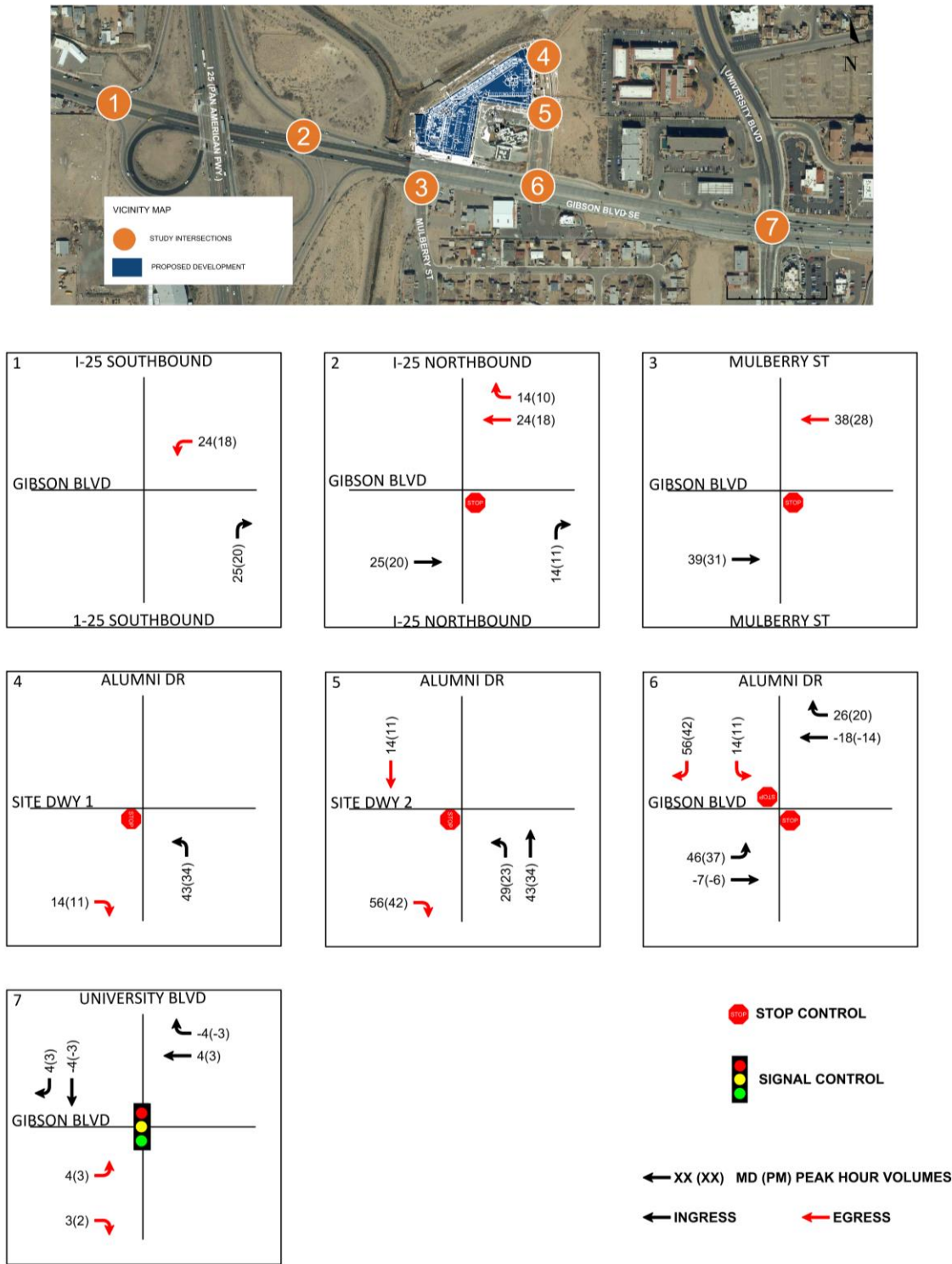


Figure 5: Pass-by Trip Volumes

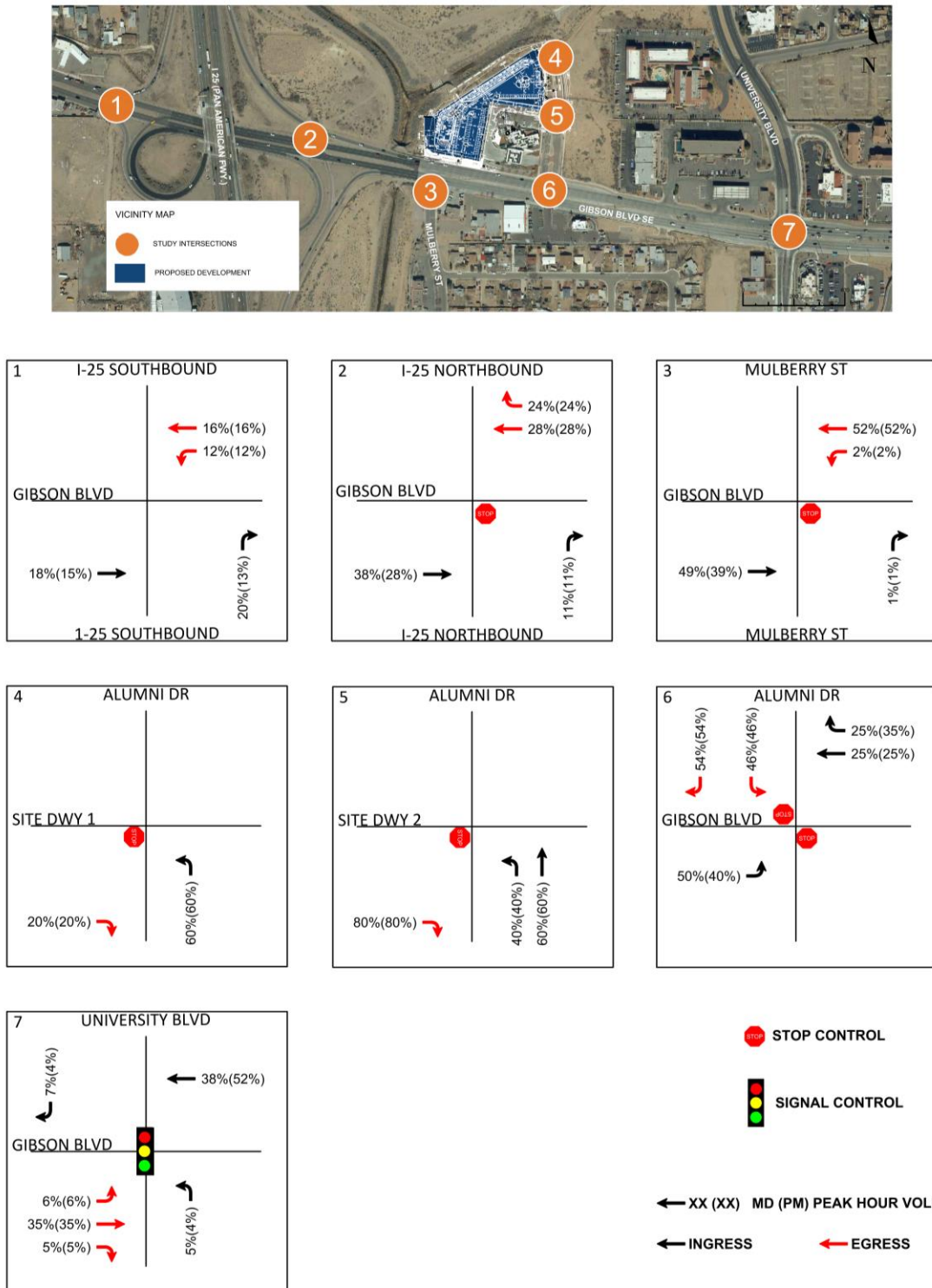


Figure 6: Direct Trip Percentages

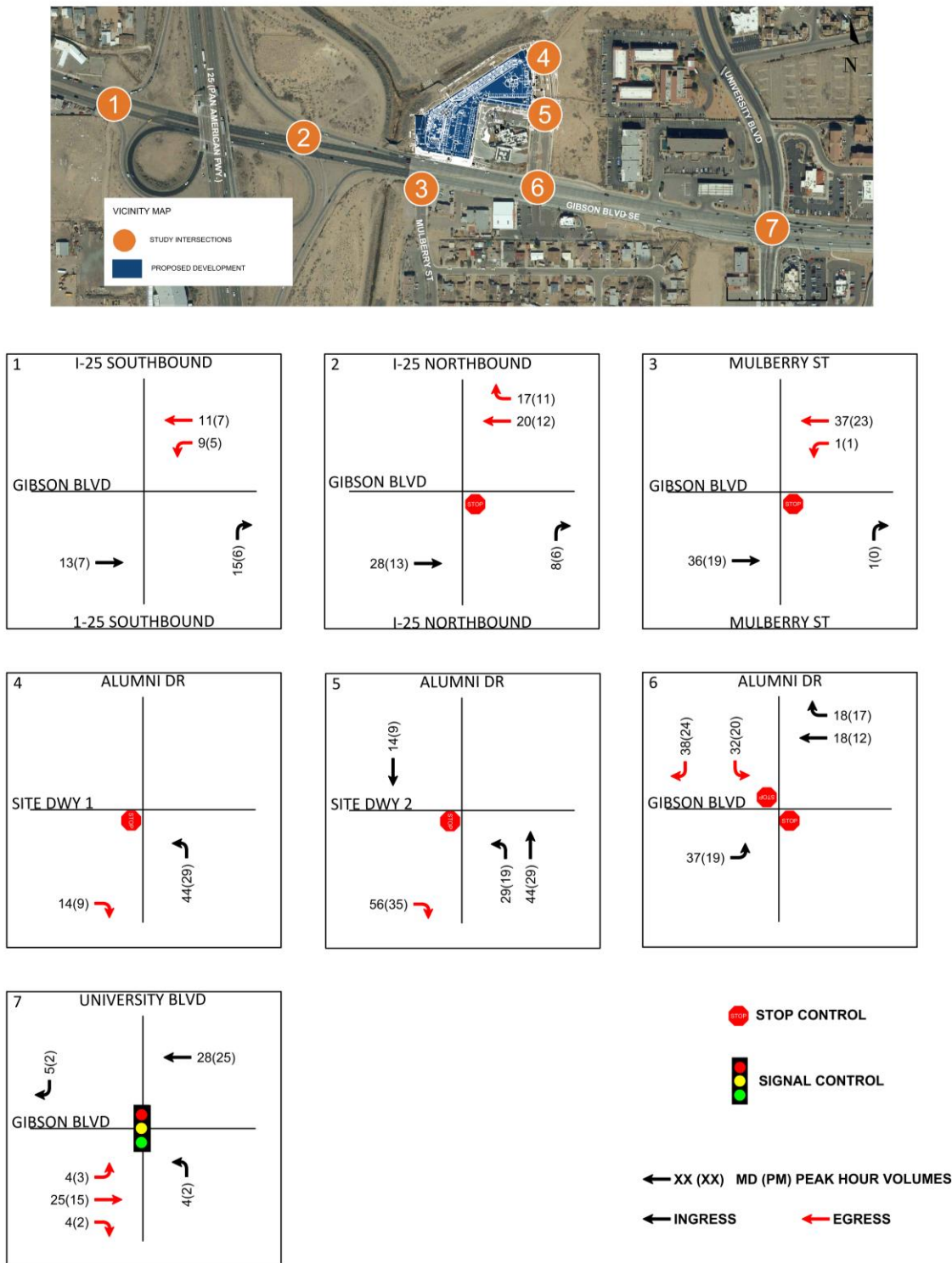


Figure 7: Direct Trip Volumes

### ***Trip Distribution and Assignment – Horizon Year 2036***

Since the extension of Alumni Drive is assumed to be completed in Horizon Year 2036, a second trip distribution was created for the Horizon Year. Figures 8 through 11 show the routing percentages and trips generated by the development. Pass-by trip percentages for Build-Out Year 2026 are also shown in Table 5. Direct and pass-by trips to and from the extended portion of Alumni Drive are approximated based on assumed future traffic patterns. Without existing volumes, routing percentages could not be calculated from existing traffic patterns.

*Table 5: Pass-By Trip Percentages - Horizon Year 2036*

<b>Pass-by Trip Percentages - Horizon Year 2036</b>		
<b>From</b>	<b>To</b>	<b>Percentage</b>
I-25 SB	I-25 SB	30%
I-25 NB	I-25 NB	15%
Gibson EB	Gibson EB	10%
Gibson EB	Alumni NB	5%
Gibson WB	Gibson WB	10%
Gibson WB	Alumni NB	5%
Gibson WB	I-25 SB	5%
Gibson WB	I-25 NB	5%
University SB	University SB	5%
University SB	I-25 SB	5%
University SB	I-25 NB	5%
<b>Total</b>		<b>100%</b>

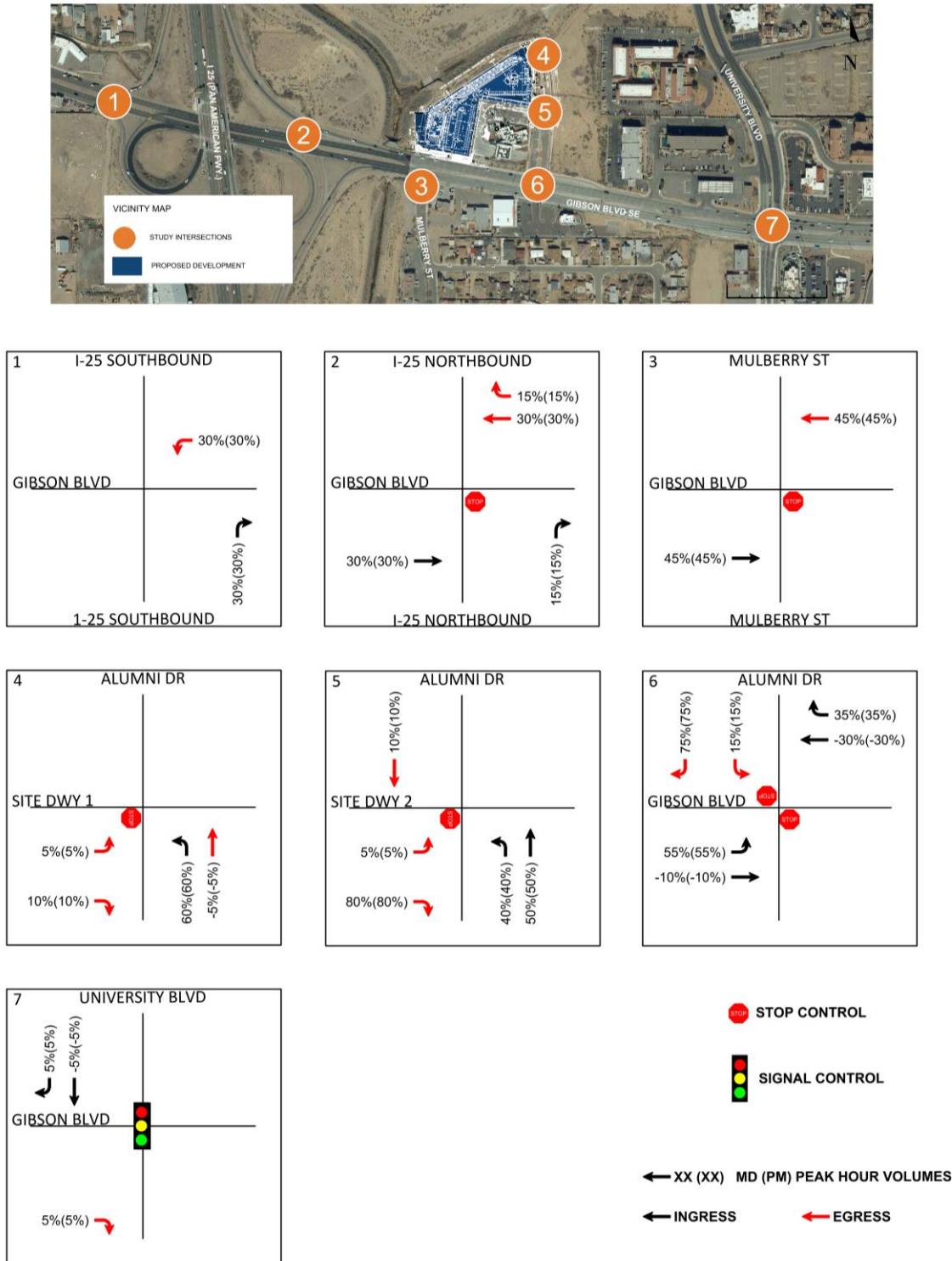


Figure 8: Horizon Year Pass-By Trip %

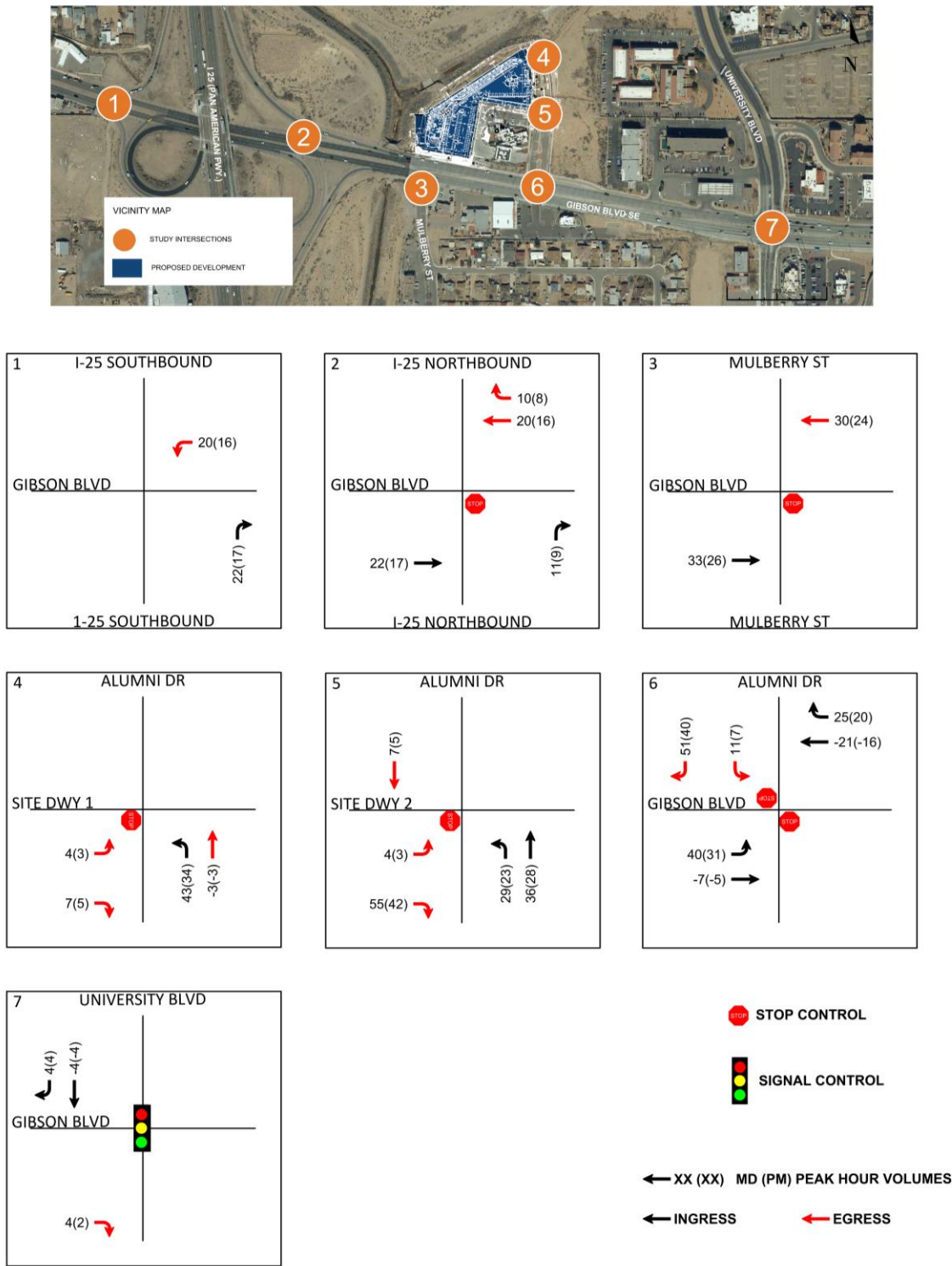


Figure 9: Horizon Year Pass-By Trip Volumes

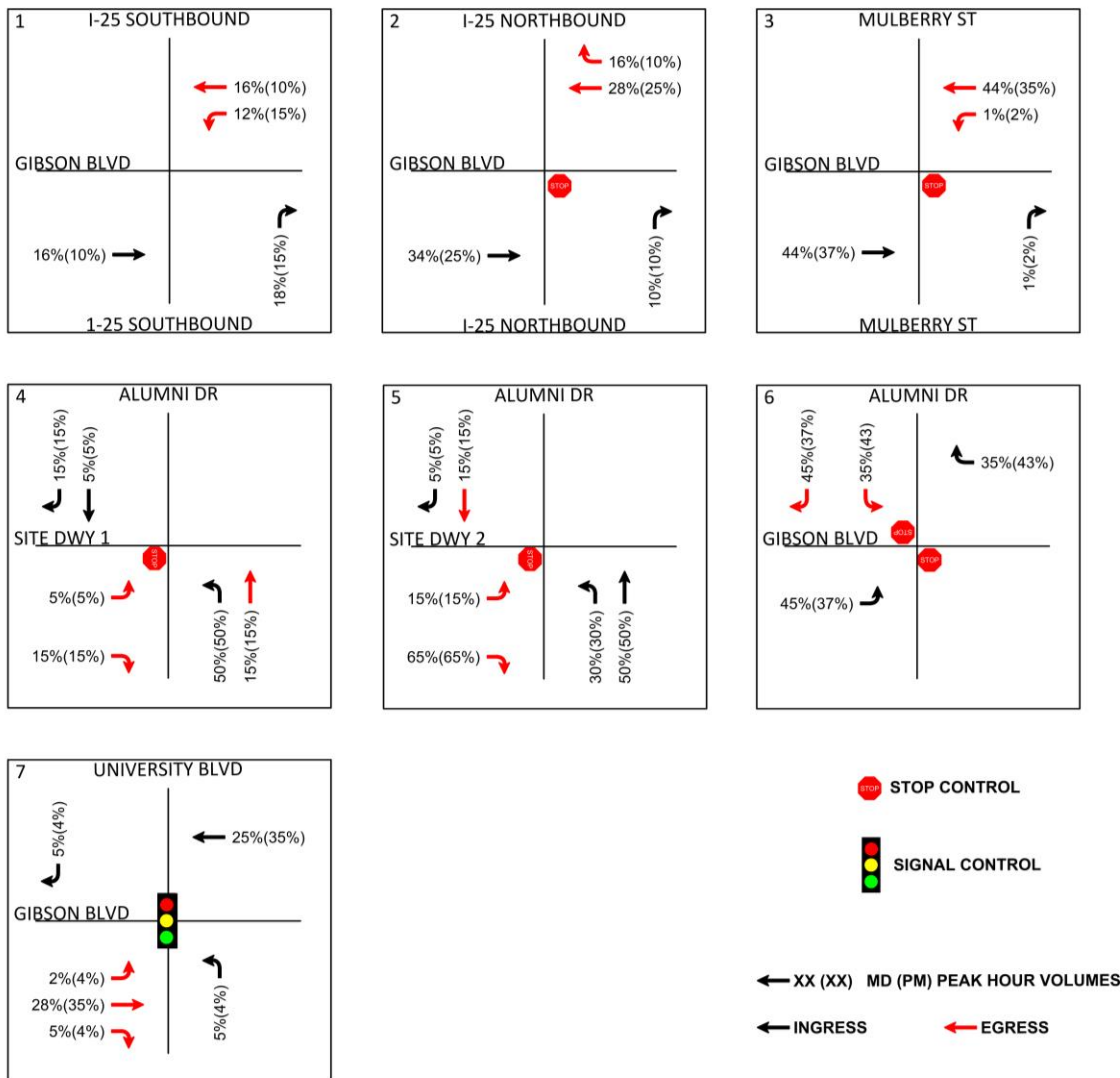


Figure 10: Horizon Year Direct Trip %

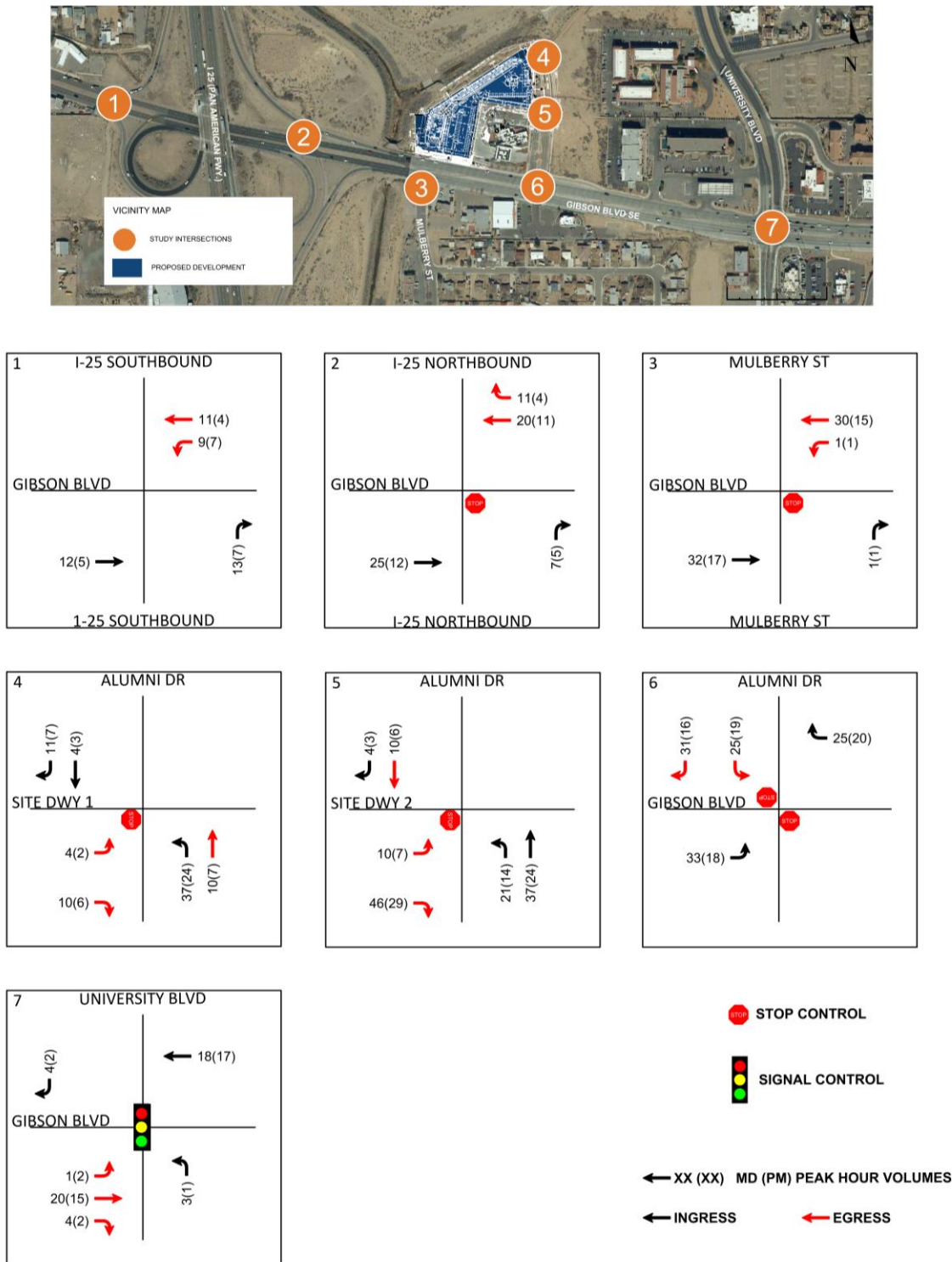


Figure 11: Horizon Year Direct Trip Volumes

## TRAFFIC VOLUME CALCULATIONS

Traffic volumes used in the Build-Out Year and Horizon Year analyses were calculated as follows:

- Build-Out Year 2026 Background – 2026 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by the adjacent developments.
- Build-Out Year 2026 Total – 2026 background volumes plus trips generated by the proposed development.
- Horizon Year 2036 Background – 2036 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by the adjacent developments.
- Horizon Year 2036 Total – 2036 traffic volumes projected from the Existing traffic volumes via the application of a growth factor developed from the MRCOG Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model, plus trips generated by the proposed development.

Figures 12 through 15 show the volumes for each Build-Out Year and Horizon Year scenario.

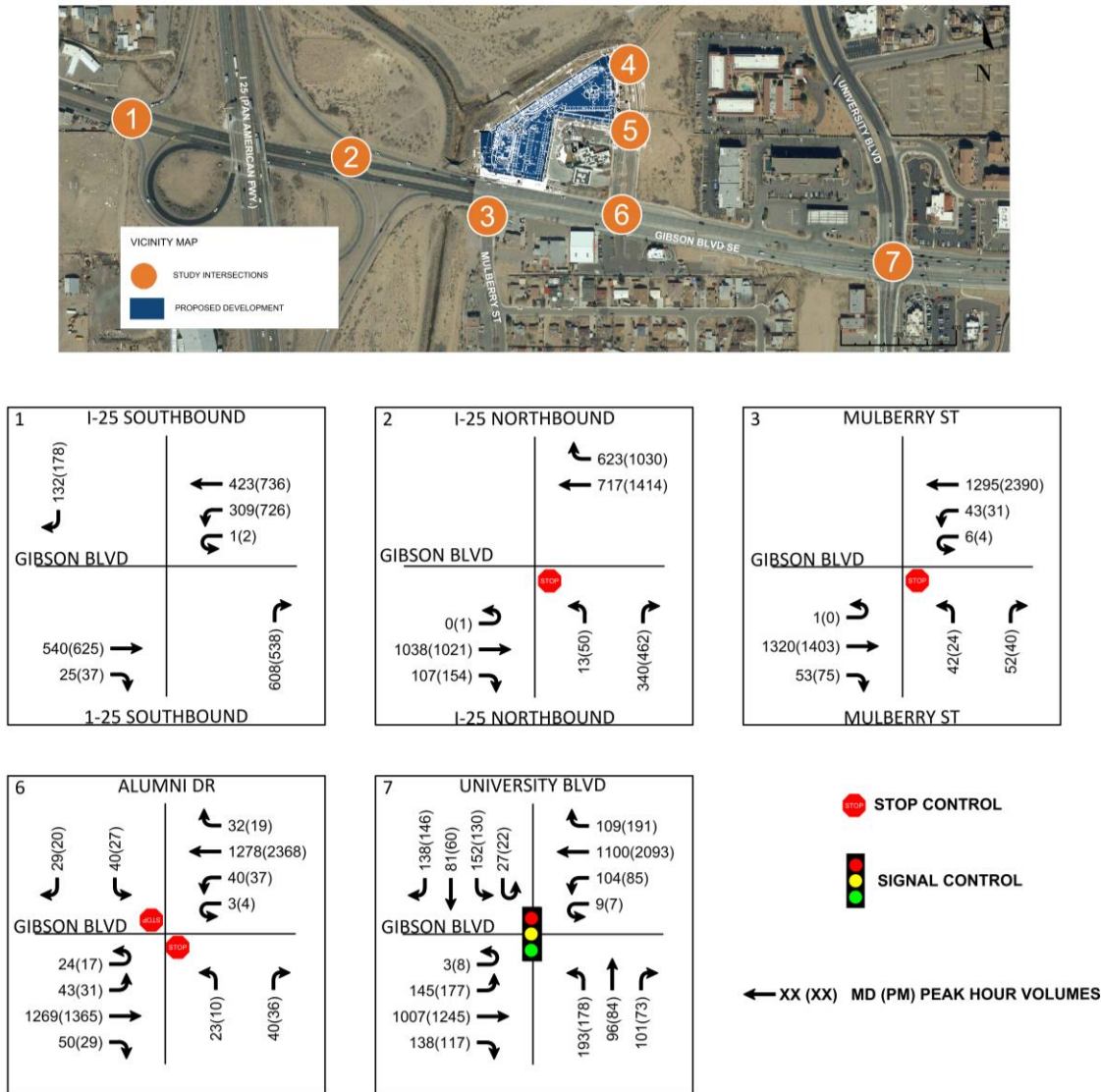


Figure 12: Build Out Year 2026 Background Volumes

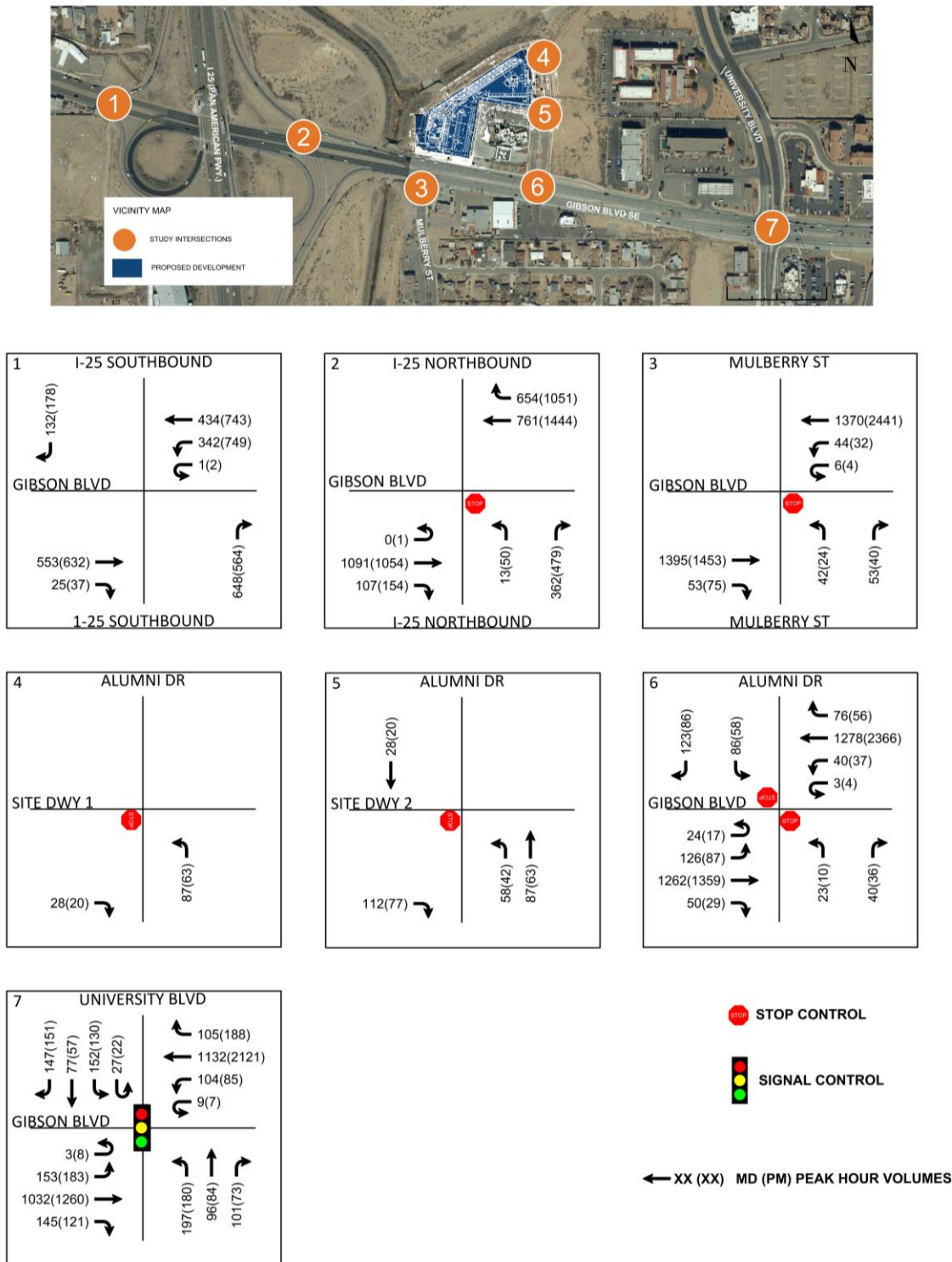


Figure 13: Build Out Year 2026 Full-Build Volumes

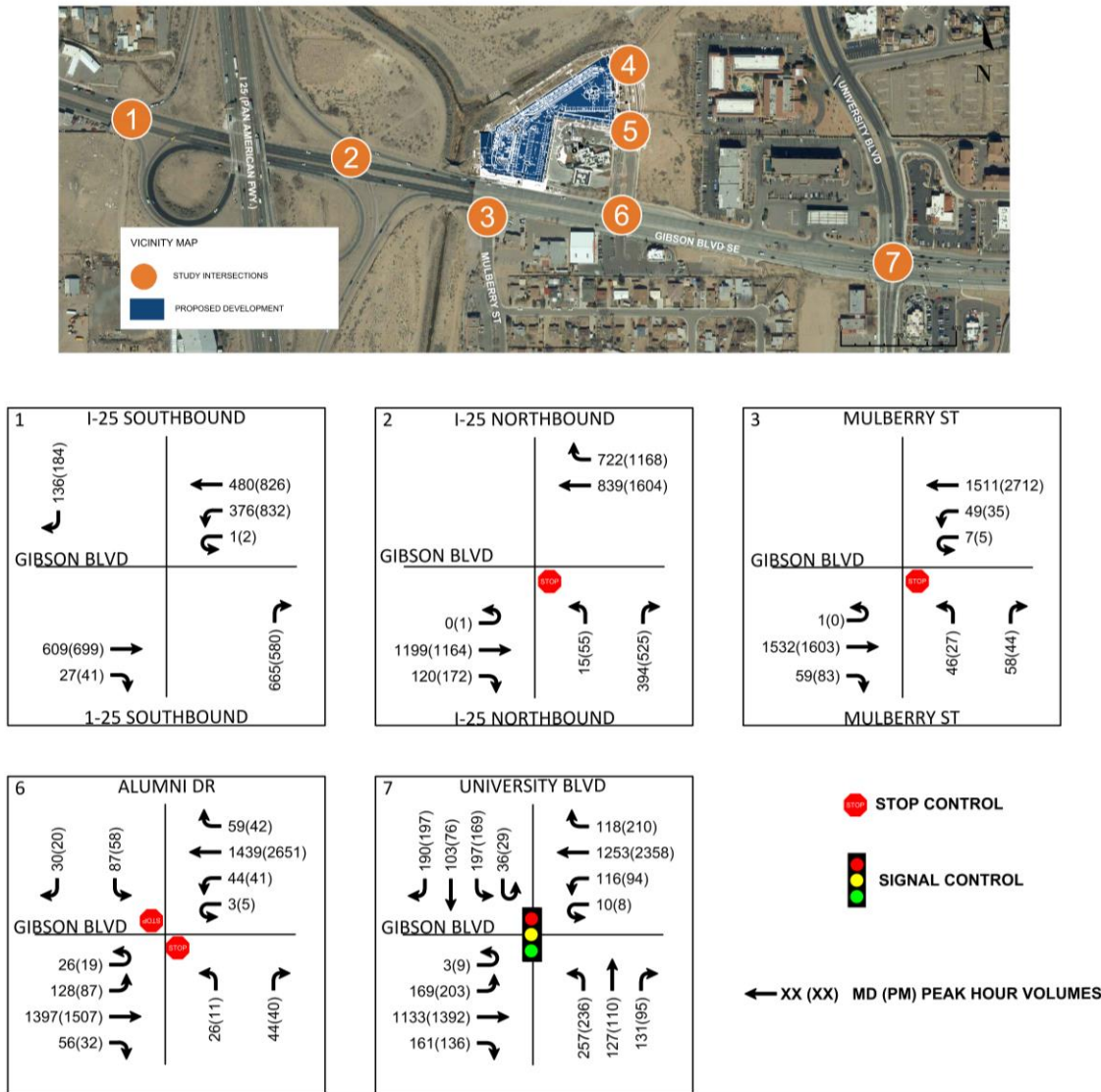


Figure 14: Horizon Year 2036 Background Volumes

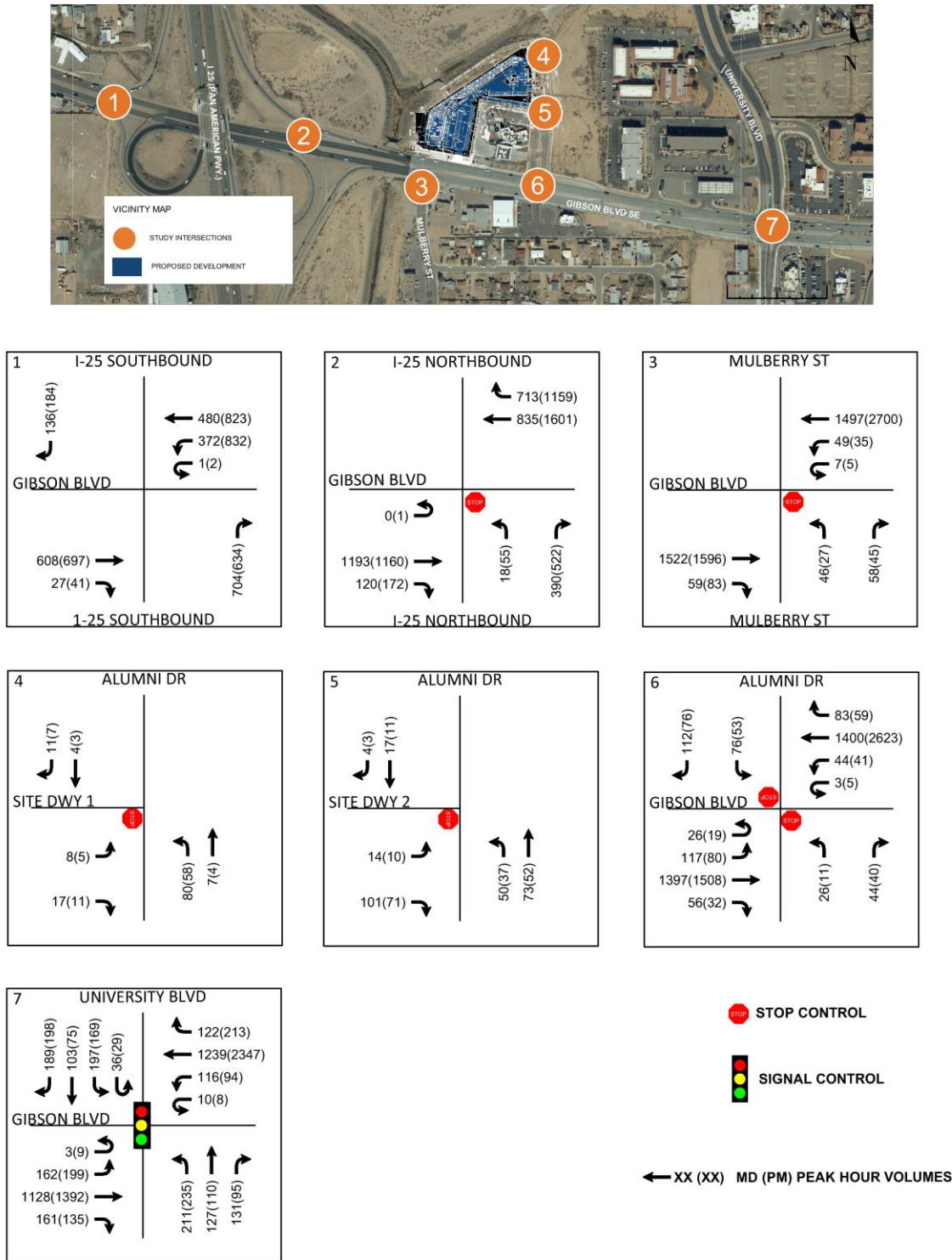


Figure 15: Horizon Year 2036 Full-Build Volumes

## SITE CONDITIONS AND SITE ANALYSIS

### ASSUMPTIONS

The following assumptions regarding new developments in the roadway network were made for the Build-Out Year scenarios based on the information discussed in the scoping meeting:

- Alumni Drive is assumed to be extended north of its current location through a project designed and funded by the University of New Mexico. Site Driveways 1 and 2 will be constructed on the west side of the new segment of Alumni Drive.
- The Gibson Boulevard and I-25 Interchange is currently being redesigned by NMDOT. Capacity and queuing issues at the interchange are assumed to be addressed in the future by this reconstruction project. Therefore, mitigations for the interchange are not provided in this analysis.

### SITE ACCESS ANALYSIS AND JUSTIFICATION

Site access is to be provided via two driveways on Alumni Drive. CoA Development Process Manual (DPM) requirements were reviewed for the three access driveways. DPM Table 7.4.45 provides a minimum distance between commercial site access points and intersections, and DPM Table 7.4.46 provides the maximum number of commercial site access points per site. The results of this analysis are shown in Table 6.

Table 6: Access Spacing Requirements from CABQ DPM

City of Albuquerque Development Process Manual Recommended Access Spacing							
Site Access	Major Street	Cross Street	Design Speed (MPH)	DPM Table 7.4.45 Minimum Distance Between Commercial Site Access and Intersection		DPM Table 7.4.46 Maximum Number of Commercial Site Access Points Per Site	Distance from Site Access to Intersection
				Approach Distance	Departure Distance		
Driveway 1	Alumni Dr (Local)	Gibson Blvd (Principal Arterial)	30	75 ft	75 ft	---	470
Driveway 2	Alumni Dr (Local)	Gibson Blvd (Principal Arterial)	30	75 ft	75 ft	---	360

Based on the information above, both driveways on Alumni Drive meet COA DPM requirements.

### SITE CIRCULATION AND QUEUEING ANALYSIS

In the current Development site plans, queuing space for up to 39 vehicles is provided between the entrance of the development on the east side of the parcel and the drive through window. The trip and queuing data provided for this report from other In-N-Out Burger restaurants shows that the max drive-through queue length during a 15-minute period for any of the locations studied was 25 vehicles. Therefore, the left-turn lane shown in the current Development plans is adequate to accommodate anticipated site trips.

## AUXILIARY LANE ANALYSIS

Since Alumni Drive is a CoA maintained local street, the CoA DPM was used to analyze the need for left-turn auxiliary turn lanes from Alumni Drive to Site Driveways 1 and 2 in the Build Out Year 2026 scenario. The need for right-turn auxiliary turn lanes from Alumni Drive to Site Driveways 1 and 2 in the Horizon Year were also analyzed, in anticipation of the extension of Alumni Drive. Table 7 provides the thresholds from Table 7.4.67 of the DPM and the warrant results at each driveway.

Table 7: Turn Lane Warrants – City of Albuquerque DPM Requirements

Location	Posted Speed Limit	Movement	Right Turning Volume MD (PM)	DPM Criteria - Turn Volume Per Hour	Turn Lane Warrant Result (DPM)
Site Driveway 1 & Alumni Dr	30 MPH	NBL	87 (63)	40	Required
Site Driveway 2 & Alumni Dr	30 MPH	NBL	58 (42)	40	Required
Site Driveway 1 & Alumni Dr	30 MPH	SBR	11 (7)	50	Not Required
Site Driveway 2 & Alumni Dr	30 MPH	SBR	4 (3)	50	Not Required

## Deceleration Lane Lengths

Guidelines in the CoA DPM Chapter 7 state that:

- Where traffic is to be controlled by a traffic signal, the left turn lane should be of sufficient length to store the turning vehicles and clear the equivalent lane volume of all other traffic on the approach, where feasible.
- The total length of the turn lane and taper should accommodate storage requirements plus deceleration and taper. If this is not feasible, the lane should accommodate the 95<sup>th</sup> percentile queue length.

Table 8 displays the recommended deceleration lengths for each turn lane.

Table 8: Deceleration Lane Lengths

Location	Posted Speed Limit	Movement	Existing or Planned Auxiliary Lane Length	Recommended Auxiliary Lane Lengths Per CoA Guidelines
Site Driveway 1 & Alumni Dr	30 MPH	NBL	160 ft	150 - 150 Reverse Curve
Site Driveway 2 & Alumni Dr	30 MPH	NBL	160 ft	150 - 150 Reverse Curve

The NBL movement from Alumni Drive to Site Driveways 1 and 2 requires deceleration lengths shown in Table 8. The site plan for the proposed Development shows striping for a two-way left-turn lane (TWLTL) in the extended segment of Alumni Drive, and there is 35 feet between the beginning of the TWLTL and

Site Driveway 2. There is 160 feet between the beginning of the TWLTL and Site Driveway 1. The Full-Build 95<sup>th</sup> percentile queue length for the NBL movements at each driveway is less than one vehicle length and could be accommodated in the space provided in the current plans.

## SITE DRIVEWAYS SIGHT DISTANCE

The following presents a narrative detailing the development's recommended intersection sight distance requirements. Intersection sight distance requirements were calculated using the 2018 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.

The intersection sight distance for Case B2 at all access driveways was calculated based on the assumption that the design vehicle turns into the nearest traffic lane. A passenger vehicle was used as the design vehicle. The required sight distance values provided in Table 9 rounded up to the nearest 5-foot increment. Formulas, values, and calculations used in the sight distance analysis can be found in Appendix F.

*Table 9: Required Sight Distance Values*

Access Location	Posted Speed Limit (MPH)	Case	Required Sight Distance (FT)
Site Driveway 1 & Alumni Drive	30	B1	355
		B2	290
Site Driveway 2 and Alumni Drive	30	B1	355
		B2	290

Using the values shown above, all development driveways are recommended to adhere to the sight distance provisions detailed in the AASHTO "Green Book," and CABQ DPM Section 7-4(I)(5)(iii). An area bounded by the above sight distances with the decision point placed 14.5 feet back from the edge of the shoulder midway between the outbound driving lane should be maintained clear of any obstructions.

Since the section of Alumni Drive where Site Driveway's 1 and 2 are planned is not constructed yet, no measurements of existing sight distance could be collected. When this section of Alumni Drive is constructed, an area bounded by the above sight distance of 290 feet for right-turning vehicles should be kept clear of any obstructions. When Alumni Drive is extended beyond the northern barrier shown in the site plans, and left-turns can be made from Site Driveways 1 and 2, the required 355 feet of sight distance should be kept clear of any obstructions.

## TRAFFIC ANALYSIS

Highway Capacity Software (HCS) was used to analyze each study intersection for Level of Service (LOS) and 95<sup>th</sup> percentile queueing conditions. HCS implements methods and procedures detailed by the Highway Capacity Manual (HCM). Detailed capacity output sheets showing all individual movements can be found in Appendix D.

## LOS, CAPACITY, AND QUEUING ANALYSIS

Per the HCM, LOS 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, but it 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 thresholds. In such cases, a narrative is offered in subsequent sections specific to the individual movement in question.

Table 10 and Table 11, reproduced from the HCM, show delay thresholds and the associated Level of service assigned to delay ranges for signalized intersections and stop-controlled intersections, respectively. Generally, a LOS of D or better is considered an acceptable level of service.

*Table 10: LOS Criteria and Descriptions for Signalized Intersections*

Level of service	Average Control Delay (sec/vehicle)	General Description (Signalized Intersections)
A	≤10	Free flow
B	>10 – 20	Stable flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

*Table 11: LOS Criteria for Unsignalized Intersections*

Level of service	Average Control Delay (sec/vehicle)
A	≤10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

Queueing is reported in feet for all intersections with queue lengths greater than one vehicle, with a base assumption of 25 feet queue length per vehicle. Queues are reported for queue measurements falling within the 95<sup>th</sup> percentile. It should be noted that 95<sup>th</sup> percentile queues are statistically expected to occur during only 5% of the peak hour's sign cycles. It is also noted that unreported average queueing at an intersection would statistically be much shorter than 95th-percentile queueing.

The volume-to-capacity (V/C) ratio is a performance measure that shows the ratio of traffic volume to the lane group capacity. A V/C ratio greater than 1.00 indicates that demand creates a residual queue for the analysis period.

For the purposes of this analysis, acceptable levels of service (LOS) are defined to be a LOS D or better. Based on procedures outlined in the HCM, 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. For all other control types, they are taken for the whole intersection. Detailed output sheets can be found in Appendix D.

## EXISTING YEAR 2024 CONDITIONS

Table 12 summarizes the intersection delay, level of service, and queueing under Existing Year 2024 conditions. The following conclusions are made from the Existing Conditions analysis:

### *Delay and LOS Results*

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the MD and PM peaks except:

- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS E during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - SBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

### *Queueing Results*

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95<sup>th</sup> percentile queue lengths except:

- At the signalized intersection of Gibson Boulevard and University Boulevard
  - The SBR lane is not expected to accommodate the 95<sup>th</sup> percentile queue lengths during the MD and PM peak hours.

Table 12: HCM Results for Existing Year (2024) Conditions

Gibson Blvd & I-25 SB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBR	180.0	0.76	23.2	C	23.2	C		NBR	172.5	0.75	23.9	C	23.9	C
	SBR	<1 Veh	0.17	10.4	B				SBR	32.5	0.30	13.2	B		
	EBT	----	----	----	----				EBT	----	----	----	----		
	EBR	----	----	----	----				EBR	----	----	----	----		
	WBL	30.0	0.29	10.0	A				WBL	197.5	0.77	20.2	C		
	WBT	----	----	----	----	WBT	----		----	----	----				
Gibson Blvd & I-25 NB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.11	37.0	E	37.0	E		NBL	95.0	0.83	178.0	F	178.0	F
	NBR	87.5	0.56	19.7	C				NBR	217.5	0.84	37.8	E		
	EBT	----	----	----	----				EBT	----	----	----	----		
	EBR	----	----	----	----				EBR	----	----	----	----		
	WBT	----	----	----	----				WBT	----	----	----	----		
	Gibson Blvd & Mulberry St (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	25.0	0.27	36.4	E	36.4	E		NBL	<1 Veh	0.25	50.9	F	50.9	F
	NBR	<1 Veh	0.13	15.9	C				NBR	<1 Veh	0.12	17.4	C		
	EBT	----	----	----	----				EBT	----	----	----	----		
	EBR	----	----	----	----				EBR	----	----	----	----		
	WBL	<1 Veh	0.14	18.1	C				WBL	<1 Veh	0.13	20.9	C		
	WBT	---	---	2.4	A				WBT	---	---	2.7	A		
Gibson Blvd & Alumni Dr (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL/R	35.0	0.34	33.7	D	47.9	E		NBL/R	27.5	0.27	33.5	D	282.2	F
	SBL	<1 Veh	0.02	47.9	E				SBL	<1 Veh	0.00	282.2	F		
	SBR	<1 Veh	0.01	14.9	B				SBR	<1 Veh	0.01	28.9	D		
	EBL	<1 Veh	0.06	13.5	B				EBL	<1 Veh	0.13	33.0	D		
	EBT	----	----	----	----				EBT	----	----	----	----		
	EBR	----	----	----	----				EBR	----	----	----	----		
	WBL	<1 Veh	0.14	18.4	C				WBL	<1 Veh	0.15	20.6	C		
	WBT	----	----	----	----				WBT	----	----	----	----		
	WBR	----	----	----	----				WBR	----	----	----	----		
Gibson Blvd & University Blvd (Signalized)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	23.1	0.52	40.0	D	20.0	B		NBL	198.7	0.46	42.1	D	21.9	C
	NBT/R	194.3	0.41	37.5	D				NBT/R	170.0	0.33	40.1	D		
	SBL	209.0	0.65	50.5	D				SBL	200.4	0.63	56.4	E		
	SBT	92.9	0.26	45.0	D				SBT	76.6	0.23	50.9	D		
	SBR	161.7	0.52	47.3	D				SBR	195.4	0.66	55.1	E		
	EBL	61.5	0.34	10.2	B				EBL	150.1	0.79	26.3	C		
	EBT	161.3	0.28	12.7	B				EBT	222.8	0.36	13.3	B		
	EBR	70.2	0.14	11.6	B				EBR	61.9	0.12	11.2	B		
	WBL	47.8	0.24	10.0	B				WBL	43.6	0.25	10.9	B		
	WBT	203.3	0.35	13.8	B				WBT	475.4	0.67	19.7	B		
	WBR	55.6	0.11	11.8	B				WBR	114.4	0.20	13.2	B		

## **BUILD-OUT YEAR (2026) BACKGROUND CONDITIONS**

Table 13 summarizes the intersection delay, level of service, and queueing under Build-Out Year 2026 Background conditions. The following conclusions are made for the Build-Out Year Background analysis:

### ***Delay and LOS Results***

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the MD and PM peaks except:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD peak hour.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD and PM peak hours.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS F during the PM peak hours.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.

### ***Queueing Results***

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95<sup>th</sup> percentile queue lengths.

Table 13: HCM Results for Build-Out Year (2026) Background Conditions

Gibson Blvd & I-25 SB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBR	275.0	0.88	35.2	E	35.2	E		NBR	235.0	0.84	32.2	D	32.2	D
	SBR	<1 Veh	0.18	10.6	B				SBR	32.5	0.31	13.5	B		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	37.5	0.34	10.7	B				WBL	275.0	0.86	28.7	D		
	WBT	---	---	---	---				WBT	---	---	---	---		
Gibson Blvd & I-25 NB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.14	48.0	E	48.0	E		NBL	115.0	1.06	278.2	F	278.2	F
	NBR	135.0	0.70	27.4	D				NBR	327.5	0.99	66.1	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
	Gibson Blvd & Mulberry St (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	35.0	0.35	49.1	E	49.1	E		NBL	27.5	0.30	64.2	F	64.2	F
	NBR	<1 Veh	0.16	17.8	C				NBR	<1 Veh	0.14	19.2	C		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.19	21.6	C				WBL	<1 Veh	0.17	24.4	C		
	WBT	---	---	3.6	A				WBT	---	---	4.0	A		
Gibson Blvd & Alumni Dr (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL/R	60.0	0.52	61.4	F	119.7	F		NBL/R	62.5	0.55	88.7	F	1632.4	F
	SBL	65.0	0.61	119.7	F				SBL	115.0	2.93	1632.4	F		
	SBR	<1 Veh	0.09	16.2	C				SBR	<1 Veh	0.15	34.2	D		
	EBL	<1 Veh	0.22	19.9	C				EBL	67.5	0.60	97.5	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.17	21.1	C				WBL	<1 Veh	0.18	23.2	C		
	WBT	---	---	---	---				WBT	---	---	---	---		
	WBR	---	---	---	---				WBR	---	---	---	---		
Gibson Blvd & University Blvd (Signalized)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	37.0	0.52	38.9	D	20.9	C		NBL	207.0	0.47	40.9	D	23.4	C
	NBT/R	206.0	0.42	36.1	D				NBT/R	182.0	0.34	39.0	D		
	SBL	228.0	0.67	49.4	D				SBL	216.0	0.65	55.6	E		
	SBT	96.0	0.25	43.1	D				SBT	79.0	0.22	49.5	D		
	SBR	171.0	0.50	45.5	D				SBR	203.0	0.64	53.7	D		
	EBL	70.0	0.39	11.6	B				EBL	155.0	0.86	30.2	C		
	EBT	205.0	0.35	14.5	B				EBT	259.0	0.41	14.8	B		
	EBR	79.0	0.15	12.9	B				EBR	67.0	0.12	12.1	B		
	WBL	54.0	0.29	11.5	B				WBL	48.0	0.29	12.2	B		
	WBT	232.0	0.39	15.6	B				WBT	527.0	0.72	22.1	C		
	WBR	62.0	0.12	13.1	B				WBR	123.0	0.21	14.3	B		

## **BUILD-OUT YEAR (2026) FULL-BUILD CONDITIONS**

Table 14 summarizes the intersection delay, level of service, and queueing under Build-Out Year 2026 Full-Build conditions. The following conclusions are made for the Build-Out Year Full-Build analysis:

### ***Delay and LOS Results***

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the MD and PM peaks except:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS F during the MD and PM peak hours.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NB L/R operates at LOS F during the MD peak hour.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS E during the MD peak hour and LOS F during the PM peak hour.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

### ***Queueing Results***

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95<sup>th</sup> percentile queue lengths.

Table 14: HCM Results for Build-Out Year (2026) Full-Build Conditions

Gibson Blvd & I-25 SB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBR	345.0	0.95	46.4	E	46.4	E		NBR	272.5	0.89	37.9	E	37.9	E
	SBR	<1 Veh	0.18	10.6	B				SBR	32.5	0.31	13.6	B		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	47.5	0.40	11.6	B				WBL	322.5	0.91	34.3	D		
	WBT	---	---	---	---	WBT	---		---	---	---				
Gibson Blvd & I-25 NB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.16	55.1	F	55.1	F		NBL	122.5	1.16	326.4	F	326.4	F
	NBR	170.0	0.77	34.0	D				NBR	382.5	1.05	84.0	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
	Gibson Blvd & Mulberry St (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	40.0	0.39	57.6	F	57.6	F		NBL	30.0	0.32	70.8	F	70.8	F
	NBR	<1 Veh	0.17	18.7	C				NBR	<1 Veh	0.15	19.9	C		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.21	23.6	C				WBL	<1 Veh	0.18	26.0	D		
	WBT	---	---	4.4	A	WBT	---		---	4.6	A				
Gibson Blvd & Alumni Dr (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL/R	147.5	1.27	345.4	F	1038.4	F		NBL/R	---	---	---	---	1818.8	F
	SBL	257.5	2.72	1038.4	F				SBL	210.0	3.94	1818.8	F		
	SBR	40.0	0.36	21.0	C				SBR	<1 Veh	0.15	34.6	D		
	EBL	87.5	0.59	37.1	E				EBL	242.5	1.67	463.2	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.16	20.9	C				WBL	<1 Veh	0.18	23.1	C		
	WBT	---	---	---	---				WBT	---	---	---	---		
	WBR	---	---	---	---				WBR	---	---	---	---		
	WBL	---	---	---	---				WBL	---	---	---	---		
WBT	---	---	---	---	WBT				---	---	---	---			
Gibson Blvd & University Blvd (Signalized)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	54.0	0.58	42.4	D	20.1	C		NBL	213.4	0.50	43.0	D	22.3	C
	NBT/R	211.5	0.45	38.4	D				NBT/R	186.7	0.37	40.9	D		
	SBL	200.7	0.63	50.7	D				SBL	191.3	0.62	56.6	E		
	SBT	93.5	0.27	45.4	D				SBT	77.1	0.24	51.5	D		
	SBR	189.5	0.61	48.7	D				SBR	214.5	0.75	57.1	E		
	EBL	67.0	0.40	10.5	B				EBL	158.9	0.85	29.7	C		
	EBT	197.1	0.34	12.9	B				EBT	248.6	0.40	13.4	B		
	EBR	77.7	0.16	11.5	B				EBR	66.1	0.13	11.0	B		
	WBL	46.3	0.26	10.3	B				WBL	41.1	0.26	11.1	B		
	WBT	225.2	0.38	14.2	B				WBT	508.8	0.70	20.3	C		
	WBR	56.2	0.11	11.7	B				WBR	114.2	0.20	13.0	B		
	WBL	---	---	---	---				WBL	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
Alumni Dr & Site DWY 1 (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.08	8.4	A	9.0	A		NBL	<1 Veh	0.06	8.3	A	9.0	A
	EBR	<1 Veh	0.01	9.0	A				EBR	<1 Veh	0.02	9.0	A		
Alumni Dr & Site DWY 2 (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.02	7.4	A	10.1	A		NBL	<1 Veh	0.02	7.3	A	9.6	A
	NBT	---	---	---	---				NBT	---	---	---	---		
	SBT	---	---	---	---				SBT	---	---	---	---		
	EBL	<1 Veh	0.00	10.1	A				EBL	<1 Veh	0.00	9.6	A		
	EBR	<1 Veh	0.12	8.9	A				EBR	<1 Veh	0.08	8.7	A		

## **HORIZON YEAR (2036) BACKGROUND CONDITIONS**

Table 15 summarizes the intersection delay, level of service, and queueing under Horizon Year 2036 Background conditions. The following conclusions are made for the Horizon Year analysis:

### ***Delay and LOS Results***

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the MD and PM peaks except:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD and PM peak hours.
  - WBL operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS F during the MD and PM peak hours.
  - NBR operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD and PM peak hours.
  - SBL operates at LOS F during the MD and PM peak hours.
  - SBR operates at LOS E during the PM peak hour.
  - EBL operates at LOS F during the PM peak hour.

### ***Queueing Results***

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95<sup>th</sup> percentile queue lengths.

Table 15: HCM Results for Horizon Year (2036) Background Conditions

Gibson Blvd & I-25 SB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBR	337.5	0.95	46.8	E	46.8	E		NBR	292.5	0.91	43.1	E	67.0	F
	SBR	<1 Veh	0.19	10.8	B				SBR	37.5	0.34	14.5	B		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	50.0	0.41	12.0	B				WBL	512.5	1.05	67.0	F		
	WBT	---	---	---	---				WBT	---	---	---	---		
Gibson Blvd & I-25 NB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.20	65.1	F	65.1	F		NBL	157.5	1.65	568.3	F	568.3	F
	NBR	200.0	0.83	41.0	E				NBR	505.0	1.18	130.9	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
	Gibson Blvd & Mulberry St (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	50.0	0.47	70.8	F	70.8	F		NBL	42.5	0.43	97.0	F	97.0	F
	NBR	<1 Veh	0.19	19.9	C				NBR	<1 Veh	0.18	21.8	C		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.25	26.1	D				WBL	<1 Veh	0.22	30.0	D		
	WBT	---	---	5.7	A				WBT	---	---	6.5	A		
Gibson Blvd & Alumni Dr (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL/R	100.0	0.77	117.7	F	215.6	F		NBL/R	155.0	1.76	643.4	F	656.2	F
	SBL	87.5	0.85	215.6	F				SBL	97.5	1.46	656.2	F		
	SBR	<1 Veh	0.10	17.7	C				SBR	<1 Veh	0.18	43.0	E		
	EBL	27.5	0.27	23.6	C				EBL	97.5	0.86	185.7	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.21	25.1	D				WBL	<1 Veh	0.24	28.5	D		
	WBT	---	---	---	---				WBT	---	---	---	---		
	WBR	---	---	---	---				WBR	---	---	---	---		
Gibson Blvd & University Blvd (Signalized)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	98.6	0.57	35.2	D	25.4	C		NBL	251.7	0.55	38.8	D	33.8	C
	NBT/R	239.4	0.43	30.7	C				NBT/R	218.9	0.38	35.5	D		
	SBL	287.1	0.73	48.9	D				SBL	268.2	0.71	54.1	D		
	SBT	116.0	0.23	36.7	D				SBT	99.6	0.22	45.0	D		
	SBR	204.6	0.47	39.2	D				SBR	246.8	0.64	49.7	D		
	EBL	97.8	0.51	17.1	B				EBL	290.7	0.88	50.8	D		
	EBT	267.5	0.44	20.8	C				EBT	327.6	0.49	19.5	B		
	EBR	109.7	0.20	18.2	B				EBR	88.7	0.15	15.4	B		
	WBL	75.5	0.39	16.5	B				WBL	65.8	0.37	16.9	B		
	WBT	306.8	0.50	22.6	C				WBT	784.4	0.93	39.8	D		
	WBR	87.4	0.16	18.5	B				WBR	172.9	0.27	20.4	C		

## **HORIZON YEAR (2036) FULL-BUILD CONDITIONS**

Table 16 summarizes the intersection delay, level of service, and queueing under Horizon Year 2036 Full-Build conditions. Horizon Year 2036 Conditions were analyzed with existing signal timing. The following conclusions are made for the Horizon Year analysis:

### ***Delay and LOS Results***

At all intersections where LOS results are present, all movements operate at acceptable LOS during the MD and PM peaks except:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - All movements operate at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD peak hour.
  - SBL operates at LOS F during the MD and PM peak hours.
  - SBR operates at LOS E during the PM peak hour.
  - EBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.

### ***Queueing Results***

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95<sup>th</sup> percentile queue lengths.

Table 16: HCM Results for Horizon Year (2036) Full-Build Condition

Gibson Blvd & I-25 SB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBR	502.5	1.08	80.5	F	80.5	F		NBR	447.5	1.05	74.7	F	74.7	F
	SBR	<1 Veh	0.19	10.9	B				SBR	37.5	0.34	14.6	B		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	---	---	---	---				WBL	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
Gibson Blvd & I-25 NB Ramps (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	25.0	0.28	78.7	F	78.7	F		NBL	162.5	1.79	641.4	F	641.4	F
	NBR	245.0	0.90	52.8	F				NBR	565.0	1.24	154.7	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBT	---	---	---	---				WBT	---	---	---	---		
	Gibson Blvd & Mulberry St (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	57.5	0.52	83.2	F	83.2	F		NBL	45.0	0.46	107.2	F	107.2	F
	NBR	<1 Veh	0.21	20.9	C				NBR	<1 Veh	0.19	22.6	C		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	27.5	0.27	28.5	D				WBL	<1 Veh	0.24	32.0	D		
	WBT	---	---	6.9	A				WBT	---	---	7.5	A		
Gibson Blvd & Alumni Dr (Stop-Controlled)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL/R	205.0	2.56	1001.4	F	1694.7	F		NBL/R	---	---	---	---	4227.7	F
	SBL	297.5	3.90	1694.7	F				SBL	230.0	8.23	4227.7	F		
	SBR	<1 Veh	0.36	22.6	C				SBR	<1 Veh	0.18	42.4	E		
	EBL	110.0	0.65	46.4	E				EBL	277.5	1.94	603.9	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.21	24.9	C				WBL	<1 Veh	0.24	28.3	D		
	WBT	---	---	---	---				WBT	---	---	---	---		
	WBR	---	---	---	---				WBR	---	---	---	---		
Gibson Blvd & University Blvd (Signalized)															
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	37.0	0.47	32.3	C	25.2	C		NBL	252.4	0.55	38.8	D	35.2	D
	NBT/R	239.4	0.43	30.7	C				NBT/R	218.9	0.38	35.5	D		
	SBL	287.1	0.73	48.9	D				SBL	268.2	0.71	54.1	D		
	SBT	111.4	0.22	36.6	D				SBT	94.3	0.21	44.9	D		
	SBR	212.6	0.49	39.5	D				SBR	253.8	0.66	49.9	D		
	EBL	98.5	0.52	17.3	B				EBL	294.3	0.88	52.0	D		
	EBT	272.4	0.45	20.9	C				EBT	353.0	0.53	22.1	C		
	EBR	116.1	0.21	18.3	B				EBR	99.1	0.17	17.5	B		
	WBL	75.5	0.39	16.6	B				WBL	131.5	0.65	19.6	B		
	WBT	312.1	0.51	22.7	C				WBT	804.9	0.94	40.6	D		
	WBR	87.4	0.16	18.5	B				WBR	174.0	0.27	20.6	B		
	Alumni Dr & Site DWY 1 (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.05	7.4	A	9.8	A		SBR	<1 Veh	0.04	7.3	A	9.4	A
	EBL	<1 Veh	0.01	9.8	A				EBT	<1 Veh	0.01	9.4	A		
	EBR	<1 Veh	0.02	8.4	A				WBT	<1 Veh	0.01	8.4	A		
	Alumni Dr & Site DWY 2 (Stop-Controlled)														
MD Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay	Intersection LOS
	NBL	<1 Veh	0.03	7.4	A	9.9	A		NBL	<1 Veh	0.03	7.3	A	9.5	A
	EBL	<1 Veh	0.02	9.9	A				---	<1 Veh	0.01	9.5	A		
	EBR	<1 Veh	0.10	8.8	A				---	<1 Veh	0.07	8.6	A		

## COMPARISON OF BACKGROUND AND FULL-BUILD SCENARIO RESULTS

Based on the results for Existing, Background and Full-Build results for the Build-Out and Horizon Years, capacity and queuing concerns are currently present at the study intersections and, except for the intersection of Gibson Boulevard and Alumni Drive, are not significantly impacted by the proposed Development. The following presents a summary of the differences between Background and Full-Build results for each analysis year.

In the Build-Out Year 2026 scenarios:

- At the intersection of Gibson Boulevard and I-25 SB, the NBR movement changes from LOS D under Background conditions to LOS E under Full-Build conditions. These results are present in the PM peak hour.
- At the intersection of Gibson Boulevard and I-25 NB, the NBL movement change from LOS E under Background conditions to LOS F under Full-Build conditions. These results are present in the MD peak hour.
- At the intersection of Gibson Boulevard and Mulberry Street, the NBL movement changes from LOS E under Background conditions to LOS F under Full-Build conditions. These results are present in the MD peak hour.
- At the intersection of Gibson Boulevard and Alumni Drive, the EBL movement changes from LOS C under Background conditions to LOS E under Full-Build conditions. These results are present in the MD peak hour.
- At the intersection of Gibson Boulevard and University Boulevard, the SBR movement changes from LOS D under Background conditions to LOS E under Full-Build conditions. These results are present in the PM peak hour.

In the Horizon Year 2036 scenarios:

- At the intersection of Gibson Boulevard and I-25 SB, the NBR movement changes from LOS E under Background conditions to LOS F under Full-Build conditions. These results are present in the MD and PM peak hours.
- At the intersection of Gibson Boulevard and I-25 NB, the NBR movement changes from LOS E under Background conditions to LOS F under Full-Build conditions. These results are present in the MD peak hour.
- At the intersection of Gibson Boulevard and Alumni Drive, the EBL movement changes from LOS C under Background conditions to LOS E under Full-Build conditions. These results are present in the MD peak hour.
- At the intersection of Gibson Boulevard and University Boulevard, the EBL movement changes from LOS C under Background conditions to LOS E under Full-Build conditions. These results are present in the MD peak hour.

## INTERSECTION CAPACITY MITIGATIONS

### GIBSON BOULEVARD

The Gibson Boulevard and I-25 interchange and the intersections of Gibson Boulevard and Mulberry Street, Gibson Boulevard and Alumni Drive, and Gibson Boulevard and University Boulevard experience capacity and queueing issues in the Existing and Build-Out Year 2026 Background scenarios.

The Gibson Boulevard and I-25 interchange is currently being redesigned by the NMDOT, and traffic operations are expected to improve when reconstruction is complete. Therefore, no mitigations for the interchange are provided in this report.

The minor street stop-controlled intersections Gibson Boulevard and Mulberry Street and Gibson Boulevard and Alumni Drive are too close to the interchange to be signalized. At Mulberry Street, capacity and queueing issues are only present on the stop-controlled approach and do not affect operations on Gibson Boulevard. Therefore, no mitigations are recommended in this report.

At Alumni Drive, in addition to the northbound and southbound movements, the eastbound left turn movement is expected to experience delays and queueing issues. These issues are present in the Background 2026 traffic scenario and are not triggered by the proposed development. When Alumni Drive is extended to Avenida Caesar Chavez, and traffic can travel to and from the north on Alumni Drive, delay and queueing at Alumni Drive and Gibson Boulevard is expected to decrease. The existing left-turn lane for the EBL movement at the intersection is sufficient to accommodate the 95<sup>th</sup> Percentile queue lengths in every scenario; therefore, the delay for this movement is not anticipated to affect operations for through traffic on Gibson Boulevard.

## CRASH DATA SUMMARY

At the request of the NMDOT, a crash summary for the major intersections within the study area has been completed. The purpose of this analysis is to highlight trends and observations from summarized crash data. Crash data provided by the New Mexico Department of Transportation (NMDOT) for the years 2017 to 2021 is summarized in Table 17.

Table 17: Crash Summary

Crash Summary		Gibson Blvd & I-25 NB	Gibson Blvd & I-25 SB	Gibson Blvd & Alumni Dr	Gibson Blvd & Mulberry St	Gibson Blvd & University Blvd
<b>Total Crashes</b>		<b>151</b>	<b>50</b>	<b>9</b>	<b>57</b>	<b>162</b>
Crash Type	2018	35	16	1	14	42
	2019	34	11	2	12	40
	2020	24	7	1	12	23
	2021	41	8	5	10	36
	2022	17	8	0	9	21
	Fixed Object - Barricade	1	1	0	0	1
	Fixed Object - Guard or Reflector Posts	1	0	0	0	0
	Fixed Object - Guard Rail	3	0	0	0	0
	Fixed Object - Light Standard (Light Pole)	3	1	0	0	0
	Fixed Object - Median Raised Or Curb	3	0	0	1	0
	Fixed Object - Roadway Divider - Concrete Jersey Bounce	0	1	0	0	0
	Fixed Object - Sign or Sign Post (Traffic)	0	1	0	0	0
	Fixed Object - Unknown/Not Stated	2	0	1	0	0
	Non-Collision - All Other/Not Stated	1	0	0	0	0
	Non-Collision - Vehicle Downhill Into Canyon/Ravine	1	0	0	0	0
	Other Object - All Other	0	0	0	0	1
	Other Object - Object Dropped From Vehicle - Furniture	0	1	0	0	0
	Other Object - Unknown/Not Stated	2	2	0	0	0
	Other Vehicle - Both Going Straight/Entering At Angle	9	6	0	5	11
	Other Vehicle - Both Turn Left/Entering At Angle	0	0	0	0	1
	Other Vehicle - From Opposite Direction	18	4	0	8	18
	Other Vehicle - From Opposite Direction/Both Going Straight	1	0	0	0	2
	Other Vehicle - From Opposite Direction/One Left Turn	1	0	1	1	5
	Other Vehicle - From Opposite Direction/One Right Turn	1	0	0	0	0
	Other Vehicle - From Same Direction/All Others	0	0	0	0	1
	Other Vehicle - From Same Direction/Both Going Straight	9	8	0	3	13
	Other Vehicle - From Same Direction/One Left Turn	0	0	0	1	0
	Other Vehicle - From Same Direction/One Right Turn	0	0	0	1	1
	Other Vehicle - From Same Direction/One Stopped	0	1	0	0	1
	Other Vehicle - From Same Direction/One Vehicle Spun On Roadway Before Being Hit	1	0	0	0	0
	Other Vehicle - From Same Direction/Rear End Collision	12	2	1	4	24
	Other Vehicle - From Same Direction/Sideswipe Collision	10	3	1	1	2
	Other Vehicle - From Same Direction/Vehicle Backing	1	0	0	0	1
	Other Vehicle - One Left Turn/Entering At Angle	2	0	0	1	7
	Other Vehicle - One Right Turn/Entering At Angle	0	0	0	2	0
	Other Vehicle - One Stopped/Entering At Angle	0	0	0	0	1
	Other Vehicle - One Vehicle/Making A U-Turn	0	0	0	1	0

	Other Vehicle - Vehicle Wrong Way On Divided Hwy - Other Improper Entry	1	0	0	0	0
	Overturn/Rollover - Left Side of Road	1	0	0	0	0
	Overturn/Rollover - Right Side of Road	1	0	0	0	0
	Pedestrian Collision - Vehicle Going Straight	0	0	0	0	2
	Pedestrian Collision - Vehicle Turning Right	0	0	0	0	1
	Rollover - Left Side of Road	1	0	0	0	0
	Rollover - On The Road	1	0	0	0	0
	Vehicle On Other Roadway - Not Stated	0	0	0	3	0
	Vehicle Struck Pedalcyclist At Angle	0	0	0	0	1
	%Other Vehicle - From Same Direction/Rear End Collision	8%	4%	11%	7%	15%
	%Other Vehicle - From Opposite Direction	12%	8%	0%	14%	11%
	%Other Vehicle - From Same Direction/Both Going Straight	6%	16%	0%	5%	8%
Lighting Conditions	Daylight	95	30	5	38	109
	Dark-Lighted	29	12	3	7	28
	Dark-Not Lighted	6	2	0	2	2
	Dusk/Dawn	0	0	0	0	0
	%Daylight	63%	60%	56%	67%	67%
	%Dark-Lighted	19%	24%	33%	12%	17%
Severity	Fatal Crash (K)	3	0	0	0	0
	Suspected Serious Injury (A)	4	1	1	1	6
	Suspected Minor Injury (B)	5	1	0	4	9
	Complaint of Injury (C)	20	8	3	13	35
	Property Damage Only Crash (O)	120	41	6	40	113
	%Suspected Minor Injury	3%	2%	0%	7%	6%
	%Complaint of Injury	13%	16%	33%	23%	83%
	%Property Damage Only Crash	79%	82%	67%	70%	70%
Bike/Ped Involvement	Pedestrian Involved	1	0	0	0	3
	Pedalcycle Involved	0	0	0	0	1
	%Pedestrian Involved	1%	0%	0%	0%	2%
	%Pedalcycle Involved	0%	0%	0%	0%	1%
Contributing Factors	Avoid No Contact Other	4	1	0	0	1
	Avoid No Contact Vehicle	8	5	0	3	5
	Cell Phone	0	0	0	0	1
	Defective Steering	0	1	0	0	0
	Defective Tires	1	1	0	0	0
	Disregarded Traffic Signal	0	0	0	0	14
	Driver Inattention	76	25	6	25	95
	Driverless Moving Vehicle	0	0	0	0	0
	Drove Left Of Center	2	1	0	1	0
	Excessive Speed	20	5	1	11	11
	Failed To Yield For Emergency Vehicle	0	0	0	1	0
	Failed To Yield For Police Vehicle	1	0	0	0	0
	Failed To Yield Right Of Way	17	1	1	15	26
	Following Too Closely	23	10	1	5	22
	High Speed Pursuit	0	0	0	1	0
	Improper Backing	0	0	0	0	3
	Improper Lane Change	13	6	1	8	7
	Improper Overtaking	5	0	0	2	6
	Inadequate Brakes	3	1	0	0	5
	Low Visibility Due To Smoke	0	0	0	0	0
	Made Improper Turn	5	1	1	5	13
	None	49	28	2	14	82

Other Improper Driving	18	7	0	2	9
Other Mechanical Defect	4	0	0	1	1
Other, No Driver Error	57	18	5	24	65
Passed Stop Sign	0	0	0	1	1
Pedestrian Error	0	0	0	0	2
Road Defect	2	0	0	0	1
Speed Too Fast For Conditions	7	4	0	1	4
Texting	0	0	0	0	1
Traffic Control Missing	0	0	0	0	0
Under The Influence Of Drugs	1	0	0	1	0
Under The Influence Of Alcohol	8	1	0	1	7
Vehicle Skidded Before Braking	2	0	0	1	1
Animal(S) In Roadway	0	1	0	0	0
Backup - Prior Crash	0	0	0	0	0
Backup - Prior Incident	0	0	0	0	0
Traffic Congestion	0	0	0	0	0
Coupling Device (Hitch, Chains)	0	0	0	0	0
Debris	1	0	0	0	0
Exhaust System	1	0	0	0	0
Low Visibility Due To Glare	0	0	0	0	0
Lights (Head, Signal, Tail)	0	0	0	1	0
Mirrors	0	0	0	0	0
Driver Distracted By Other Activity	2	1	1	0	3
Driver Distracted By Passenger	1	0	0	0	1
Obstruction In Road	3	0	0	1	0
Road Surface Conditions	6	4	0	0	1
Suspension	0	0	0	0	0
Driver Distracted By Talking On Hands-Free Device	0	0	0	0	0
Driver Distracted By Talking On Cell Phone	0	0	0	0	0
Other Visual Obstruction(S)	3	0	0	1	0
Weather Conditions	4	3	0	0	1
Wheels	0	2	0	0	0
Windows/Windshield	0	0	0	0	0
Wipers	0	0	0	0	0
%Driver Inattention	50%	50%	67%	44%	59%
%None	32%	56%	22%	25%	51%
%Other, No Driver Error	38%	36%	56%	42%	40%

From the table, the following observations are made:

- For the intersection of Gibson Boulevard and I-25 Southbound:
  - Within the years 2018 to 2022, 50 crashes were reported.
  - The most common crash types were Other Vehicle – From Same Direction/ Both Going Straight and Other Vehicle - Both Going Straight/Entering At Angle.
  - 60% of reported crashes occurred during daylight hours and 24% occurred during Dark-Lighted conditions.
  - No fatal crashes were reported from 2018 to 2022.
  - 2 Injury Crashes were reported; 41 crashes were classified as Property Damage Only.
  - The most common contributing factor was Driver Inattention.
  - No pedestrian-involved or bicyclist-involved crashes were reported from 2019 to 2021.
- For the intersection of Gibson Boulevard and I-25 Northbound

- Within the years 2018 to 2022, 151 crashes were reported.
- The most common crash types were Other Vehicle – From Opposite Direction and Other Vehicle - From Same Direction/Rear End Collision.
- 63% of reported crashes occurred during daylight hours and 19% occurred during Dark-Lighted conditions.
- 3 fatal crashes were reported from 2018 to 2022.
  - The reported fatal pedestrian-involved crash occurred on September 1<sup>st</sup>, 2022, at 2:00 AM. The crash was reported in clear, Dark Not-Lighted conditions. The contributing factor was listed as Other-None. The crash resulted in one pedestrian fatality.
  - The reported fatal crash occurred August 8<sup>th</sup>, 2020, at 1:00 AM. The crash was reported to be clear, Dark-Lighted conditions. The contributing factors were reported as Under the Influence of Alcohol and Drove Left of Center. The crash resulted in one fatality.
  - The reported fatal crash occurred January 1<sup>st</sup>, 2021, at 5:00 PM. The crash was reported in clear, Dusk conditions. The contributing factor was reported as Failed to Yield Right of Way. One fatality was reported.
- 9 Injury crashes were reported.
- The most common contributing factors were Driver Inattention, None, and Other – No Driver Error.
- 1 fatal pedestrian-involved crash was reported (Described above).
- For the intersection of Gibson Boulevard and Alumni Drive:
  - Within the years 2018 to 2022, 9 crashes were reported.
  - The most common crash types were Other Vehicle - From Same Direction/Rear End Collision and Other Vehicle - From Opposite Direction/One Left Turn.
  - 56% of reported crashes occurred during daylight hours and 33% occurred during Dark-Lighted conditions.
  - No fatal crashes were reported from 2018 to 2022.
  - 1 Injury crash was reported; 6 crashes were classified as Property Damage Only.
  - The most common contributing factors were Driver Inattention and No Driver Error.
  - No pedestrian-involved crashes were reported from 2018 to 2022.
- For the intersection of Gibson Boulevard and Mulberry Street:
  - Within the years 2018 to 2022, 57 crashes were reported.
  - The most common crash types were Other Vehicle - From Opposite Direction and Other Vehicle - Both Going Straight/Entering at Angle.
  - 67% of crashes at this intersection occurred during daylight hours and 12% occurred under Dark-Lighted conditions.
  - No fatal crashes were reported from 2018 to 2022.
  - 17 injury crashes were reported; 40 crashes were classified as Property Damage Only.
  - The most common contributing factors were Driver Inattention and Other – No Driver Error.
  - No pedestrian or bicyclist-involved crashes were reported from 2018 to 2022.

- For the intersection of Gibson Boulevard and University Boulevard:
  - Within the years 2018 to 2022, 162 crashes were reported.
  - The most common crash types were Other Vehicle - From Same Direction/Rear End Collision and Other Vehicle - From Opposite Direction.
  - 67% of crashes at this intersection occurred during daylight hours and 17% occurred under Dark-Lighted conditions.
  - No fatal crashes were reported from 2018 to 2022.
  - 15 injury crashes were reported; 113 crashes were classified as Property Damage Only.
  - The most common contributing factors were Driver Inattention and Failed to Yield Right of Way.
  - 3 pedestrian-involved crashes were reported.
    - One reported pedestrian-involved crash occurred on September 9<sup>th</sup>, 2018, at 5:00 PM. The crash was reported with clear, Daylight conditions. The contributing factor was listed as Other-None. Complaint of injury reported by pedestrian.
    - One reported pedestrian-involved crash occurred May 5<sup>th</sup>, 2020, at 10:00 AM. The crash was reported to be in clear, daylight conditions. The contributing factor was listed as Other-Mechanical Defect. No injuries were reported.
    - The reported pedestrian-involved crash occurred on November 11<sup>th</sup>, 2020, at 8:00 PM. The crash reportedly had clear, dark-lighted conditions. The contributing factor was Other-Improper Driving. Serious injury was reported for the pedestrian involved.
  - 1 bicyclist-involved crash was reported.
    - The reported bicyclist-involved crash occurred June 6<sup>th</sup>, 2019, at 9:00 PM. The crash was reported in clear, Dark-Lighted conditions. The contributing factor was listed as Disregarded Traffic Signal.

## CONCLUSIONS AND RECOMMENDATIONS

The following presents a summary of the traffic analysis and recommendations included in this report.

### ASSUMPTIONS

The following assumptions regarding new developments in the roadway network were made for the Build-Out Year scenarios based on the information discussed in the scoping meeting:

- Alumni Drive is assumed to be extended north of its current location to Avenida Caesar Chavez through a project designed and funded by the University of New Mexico. Site Driveways 1 and 2 will be constructed on the west side of the new segment of Alumni Drive. For this analysis, the full extension of Alumni Drive is assumed to be completed by Horizon Year 2036.
- The Gibson Boulevard and I-25 Interchange is currently being redesigned by NMDOT. Capacity and queuing issues at the interchange are assumed to be addressed in the future by this reconstruction project. Therefore, mitigations for the interchange are not provided in this analysis.

### CONCLUSIONS

The capacity and queuing analysis showed that several study intersection movements operate at unacceptable levels of service under Existing and Background conditions.

Under Existing 2024 conditions, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS E during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - SBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

Under Background 2026 conditions, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD peak hour.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS E and LOS F during the MD and PM peak hours, respectively.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD and PM peak hours.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS F during the PM peak hours.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.

Under the Full-Build 2026 scenario, traffic operation is summarized as follows:

- At the stop-controlled intersection of Gibson Boulevard and I-25 SB Off-Ramp
  - NBR operates at LOS E during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and I-25 NB Off-Ramp
  - NBL operates at LOS F during the MD and PM peak hours.
  - NBR operates at LOS F during the PM peak hour.
- At the stop-controlled intersection of Gibson Boulevard and Mulberry Street
  - NBL operates at LOS F during the MD and PM peak hours.
- At the stop-controlled intersection of Gibson Boulevard and Alumni Drive
  - NBL/R operates at LOS F during the MD peak hour.
  - SBL operates at LOS F during the MD and PM peak hours.
  - EBL operates at LOS F PM peak hours.
- At the signalized intersection of Gibson Boulevard and University Boulevard
  - SBL operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.

Detailed traffic operation results for Existing, Build Out Year 2026 Background, Build Out Year 2026 Full-Build, Horizon Year 2036 Background, and Horizon Year 2036 Full-Build scenarios can be found in the LOS, Capacity and Queuing section of the report. Mitigated 2026 and 2036 Full-Build scenario results are also provided.

## **SITE RECOMMENDATIONS**

- Proposed Access Points and Locations:
  - Full access configuration, with right and left turns being permitted, is recommended for Site Driveways 1 and 2 on Alumni Drive, to provide adequate site circulation for ingress and egress Development trips.
  - An area bounded by the required sight distance of 355 feet for left-turning vehicle and 290 feet for right-turning vehicles should be cleared and maintained free of obstructions on either side of each site driveway.

## **OFF-SITE INTERSECTION RECOMMENDATIONS**

- Alumni Drive and Gibson Boulevard
  - A “Do Not Block Intersection” sign (R-10-7) should be installed on Alumni Drive for southbound traffic, between Site Driveway 2 and the fire station access driveway.
  - Refreshed striping is recommended on Alumni Drive between Gibson Boulevard and the proposed Development.

## Appendix A: Scoping Meeting Notes

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**Agenda for Traffic Study Scoping Meeting****Gibson In-N-Out****April 29, 2024****-Meeting Notes in Red-****Attendees:****Nancy Perea – NMDOT  
Margaret Haynes – NMDOT  
Matt Grush – CABQ****Jonathon Kruse – Lee Engineering  
Abigail Yoerger – Lee Engineering**

1. Introductions
2. Review of Site Plan
  - a. Site Plan & Land Uses
  - b. Access Review
3. Discussion of Scope for TIS
  - a. Study Intersections
    - i. **Site Driveways**
    - ii. **Gibson & Alumni**
    - iii. **Gibson & University**
    - iv. **Gibson & Interchange**
      1. **Note: Interchange construction is horizon. Analyze as is today under buildout conditions and as 30% designed under horizon year conditions.**
      2. **Camera to gauge queueing from interchange.**
    - v. **Gibson & Mulberry**
      1. **Interim fix for Mulberry = restrict access. Future access in NMDOT access plan is right in / right out / left in. NMDOT ROW Map.**
  - b. Data Collection
    - i. Existing Study Intersections
    - ii. **Extra camera to capture queues at interchange**
  - c. Trip Generation, Pass By, & Internal Capture
    - i. Trip Generation Manual (11<sup>th</sup> Edition) Land Use
      1. ITE 934 – Fast Food Restaurant with Drive-Through
      2. **Check for comparable sites for trip generation.**

Use	Units		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Total	Enter	Exit	In	Out	Total	Enter	Exit	In	Out
ITE 934 -Fast-Food Restaurant with Drive-Through	3885	Sq. Ft.	197	52%	48%	102	95	198	51%	49%	101	97

- ii. Pass-by/Diverted trips. **Full allowance.**
  - iii. No Internal Capture
  - iv. Trips distributed based on existing traffic patterns
- d. Known Developments or Pending Improvements in Area
  - i. **Gibson Interchange.**
  - ii. **Gibson & Yale Development: partially built. Matt to provide study.**
  - iii. **Raising Cane's at Gibson & Alumni (South Side). Matt to provide study.**
- e. Build-out Year and Growth Rate
  - i. Build-Out Year (**2026**)
    - 1. Will look at Historic Traffic Volumes and calculate growth rate, if less than 1%, will assume 1% growth per year.
- f. Analysis scenarios
  - i. Existing Conditions
  - ii. Opening Year Background (No Build)
  - iii. Opening Year Buildout (Full Build)
  - iv. Opening Year Buildout Optimized (if needed)
    - 1. All scenarios with existing signal timings except opening year buildout optimized.
  - v. Horizon year – 10 Years from opening (**Background & Buildout**).
- g. Required Analysis & Methodology
  - i. LOS Capacity and Queueing analysis based on HCM 6<sup>th</sup> Edition (HCS)
    - 1. Capacity & Queueing for network peak
    - 2. **Mid-Day and PM Peak Hours**
  - ii. No Arterial Analysis.
  - iii. Auxiliary Lane Analysis
  - iv. Sight Distance Analysis at Proposed Driveways
  - v. Safety (Crash) Summary
    - 1. **5 Years for Gibson & Alumni and study intersections**
    - 2. **Highlight bike & ped crashes in summary**
  - vi. **Weaving Analysis for Right-Out onto Gibson**
  - vii. **Right out access justification**
- 4. Agency Input (Comments & Issues)
  - a. **SB Queues on Alumni would likely support right out access onto Gibson.**
- 5. Meeting Notes (distributed by Lee Engineering)

## Appendix B: Turning Movement Counts



ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

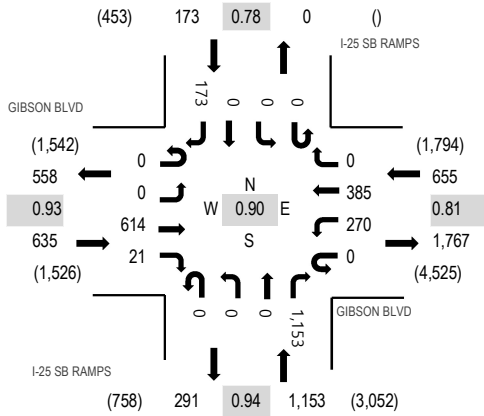
Location: 1 I-25 SB RAMPS & GIBSON BLVD AM

Date: Thursday, May 16, 2024

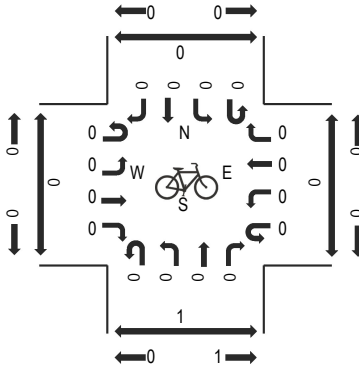
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

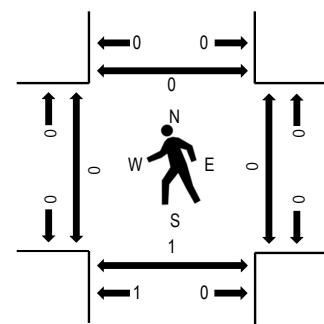
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				I-25 SB RAMPS Northbound				I-25 SB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	0	72	4	0	46	24	0	0	0	0	181	0	0	0	21	348	1,936	0	0	0	0
6:15 AM	0	0	73	2	0	38	39	0	0	0	0	227	0	0	0	28	407	2,156	0	0	0	1
6:30 AM	0	0	104	6	0	66	62	0	0	0	0	291	0	0	0	67	596	2,357	0	0	0	0
6:45 AM	0	0	128	3	0	50	70	0	0	0	0	280	0	0	0	54	585	2,399	0	0	0	0
7:00 AM	0	0	117	4	0	59	65	0	0	0	0	290	0	0	0	33	568	2,540	0	0	0	0
7:15 AM	0	0	122	7	0	53	72	0	0	0	0	300	0	0	0	54	608	2,616	0	0	0	0
7:30 AM	0	0	163	5	0	72	81	0	0	0	0	266	0	0	0	51	638	2,566	0	0	0	0
7:45 AM	0	0	167	5	0	73	129	0	0	0	0	312	0	0	0	40	726	2,489	0	0	0	0
8:00 AM	0	0	162	4	0	72	103	0	0	0	0	275	0	0	0	28	644	2,349	0	0	1	0
8:15 AM	0	0	130	6	0	53	107	0	0	0	0	230	0	0	0	32	558		0	0	0	0
8:30 AM	0	0	112	3	0	57	157	0	0	0	0	213	0	0	0	19	561		0	0	0	0
8:45 AM	0	0	123	4	0	66	180	0	0	0	0	187	0	0	0	26	586		0	0	0	0
Count Total	0	0	1,473	53	0	705	1,089	0	0	0	0	3,052	0	0	0	453	6,825		0	0	1	1
Peak Hour	0	0	614	21	0	270	385	0	0	0	0	1,153	0	0	0	173	2,616		0	0	1	0



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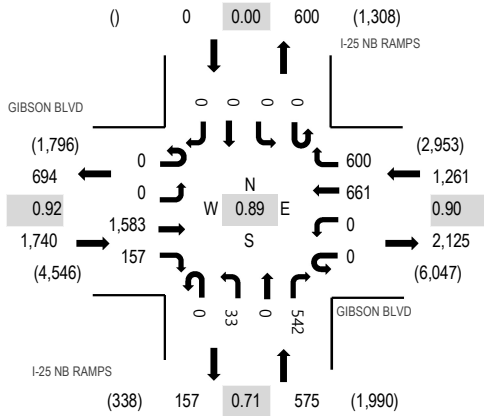
Location: 2 I-25 NB RAMPS & GIBSON BLVD AM

Date: Thursday, May 16, 2024

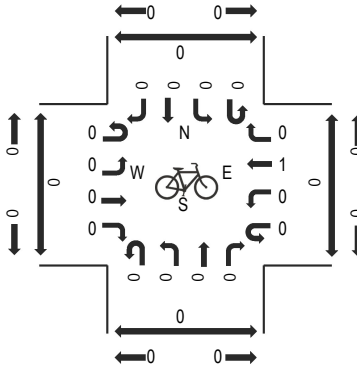
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

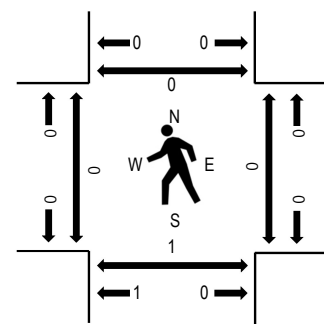
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				I-25 NB RAMPS Northbound				I-25 NB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	0	237	18	0	0	70	72	0	3	0	120	0	0	0	0	520	2,729	0	0	0	0
6:15 AM	0	0	281	17	0	0	74	84	0	2	0	138	0	0	0	0	596	2,956	0	0	0	0
6:30 AM	0	0	366	25	0	0	124	122	0	4	0	154	0	0	0	0	795	3,139	0	0	0	0
6:45 AM	0	0	383	30	0	0	118	122	0	3	0	162	0	0	0	0	818	3,202	0	0	0	0
7:00 AM	0	0	370	33	0	0	118	87	0	6	0	133	0	0	0	0	747	3,390	0	0	0	0
7:15 AM	0	0	373	34	0	0	122	119	0	1	0	130	0	0	0	0	779	3,505	0	0	0	0
7:30 AM	0	0	397	44	0	0	140	133	0	7	0	137	0	0	0	0	858	3,576	0	0	0	0
7:45 AM	0	0	432	45	0	0	196	154	0	12	0	167	0	0	0	0	1,006	3,559	0	0	0	0
8:00 AM	0	0	393	40	0	0	173	133	0	8	0	115	0	0	0	0	862	3,370	0	0	1	0
8:15 AM	0	0	361	28	0	0	152	180	0	6	0	123	0	0	0	0	850		0	0	0	0
8:30 AM	0	0	321	15	0	0	171	62	0	47	0	225	0	0	0	0	841		0	0	0	0
8:45 AM	0	0	294	9	0	0	187	40	0	52	0	235	0	0	0	0	817		0	0	0	0
Count Total	0	0	4,208	338	0	0	1,645	1,308	0	151	0	1,839	0	0	0	0	9,489		0	0	1	0
Peak Hour	0	0	1,583	157	0	0	661	600	0	33	0	542	0	0	0	0	3,576		0	0	1	0



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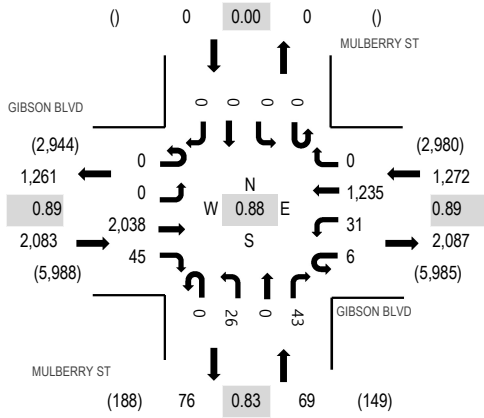
Location: 3 MULBERRY ST & GIBSON BLVD AM

Date: Thursday, May 16, 2024

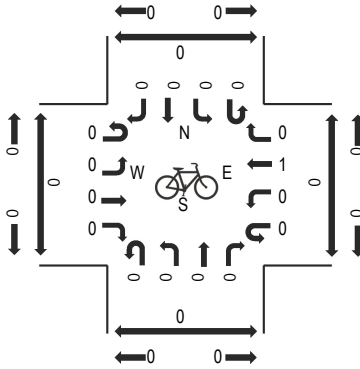
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

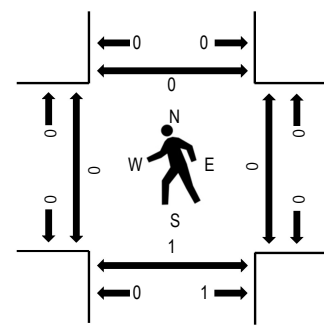
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				MULBERRY ST Northbound				MULBERRY ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	0	350	7	1	3	139	0	0	3	0	2	0	0	0	0	505	2,660	0	0	0	0
6:15 AM	0	0	414	3	1	2	159	0	0	1	0	3	0	0	0	0	583	2,861	0	0	0	0
6:30 AM	0	0	508	12	0	7	236	0	0	2	0	6	0	0	0	0	771	3,047	0	0	0	0
6:45 AM	0	0	534	10	1	7	240	0	0	7	0	2	0	0	0	0	801	3,085	0	1	1	0
7:00 AM	0	0	488	9	2	0	200	0	0	2	0	5	0	0	0	0	706	3,252	0	0	0	0
7:15 AM	0	0	500	6	5	7	232	0	0	9	0	10	0	0	0	0	769	3,381	0	0	0	0
7:30 AM	0	0	507	11	3	3	268	0	0	5	0	12	0	0	0	0	809	3,424	0	0	1	0
7:45 AM	0	0	589	8	2	10	345	0	0	5	0	9	0	0	0	0	968	3,407	0	0	0	0
8:00 AM	0	0	496	14	0	10	298	0	0	6	0	11	0	0	0	0	835	3,205	0	0	0	0
8:15 AM	0	0	446	12	1	8	324	0	0	10	0	11	0	0	0	0	812		0	0	0	0
8:30 AM	0	0	529	10	1	9	225	0	0	6	0	12	0	0	0	0	792		0	0	0	0
8:45 AM	0	0	512	13	4	7	220	0	0	2	0	8	0	0	0	0	766		0	0	0	0
Count Total	0	0	5,873	115	21	73	2,886	0	0	58	0	91	0	0	0	0	9,117		0	1	2	0
Peak Hour	0	0	2,038	45	6	31	1,235	0	0	26	0	43	0	0	0	0	3,424		0	0	1	0



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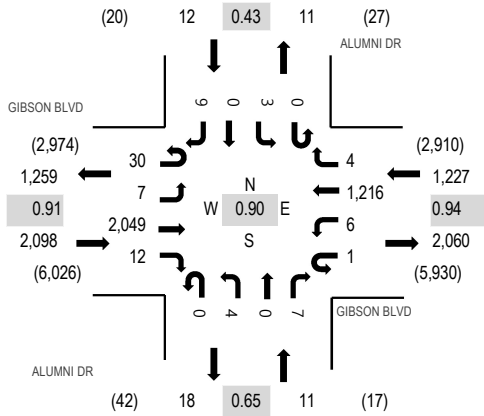
Location: 4 ALUMNI DR & GIBSON BLVD AM

Date: Thursday, May 16, 2024

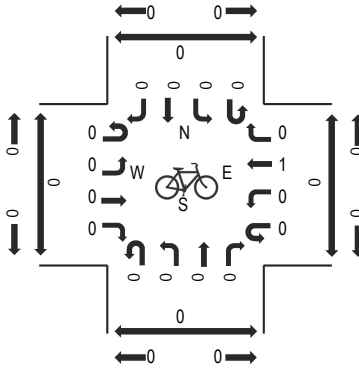
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

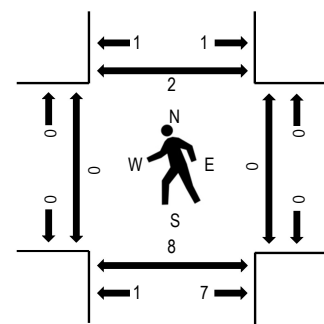
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				ALUMNI DR Northbound				ALUMNI DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	0	340	1	0	1	140	0	0	0	0	0	0	0	0	0	482	2,589	0	0	0	0
6:15 AM	8	1	407	1	0	0	154	0	0	0	0	0	0	0	0	0	571	2,813	0	0	0	0
6:30 AM	4	1	511	1	0	0	247	1	0	0	0	0	0	0	0	0	765	2,994	0	0	4	0
6:45 AM	3	6	533	1	0	1	226	0	0	0	0	1	0	0	0	0	771	3,047	0	0	1	1
7:00 AM	7	3	495	0	0	0	199	0	0	0	0	1	0	0	0	1	706	3,201	0	0	0	1
7:15 AM	11	2	502	3	1	2	229	0	0	0	0	0	0	0	0	2	752	3,346	0	0	5	0
7:30 AM	8	2	519	3	0	0	277	0	0	0	0	2	0	1	0	6	818	3,348	0	0	4	0
7:45 AM	6	2	587	3	1	1	323	1	0	0	0	0	0	0	0	1	925	3,317	0	0	2	1
8:00 AM	11	2	503	4	0	3	321	2	0	3	0	1	0	1	0	0	851	3,183	0	0	2	0
8:15 AM	5	1	440	2	0	2	295	1	0	1	0	4	0	1	0	2	754		0	0	0	1
8:30 AM	5	0	532	3	0	3	242	0	0	0	0	0	0	2	0	0	787		0	0	3	0
8:45 AM	4	1	539	3	3	4	229	1	0	1	0	3	0	0	0	3	791		0	1	0	1
Count Total	72	21	5,908	25	5	17	2,882	6	0	5	0	12	0	5	0	15	8,973		0	1	21	5
Peak Hour	30	7	2,049	12	1	6	1,216	4	0	4	0	7	0	3	0	9	3,348		0	0	8	2



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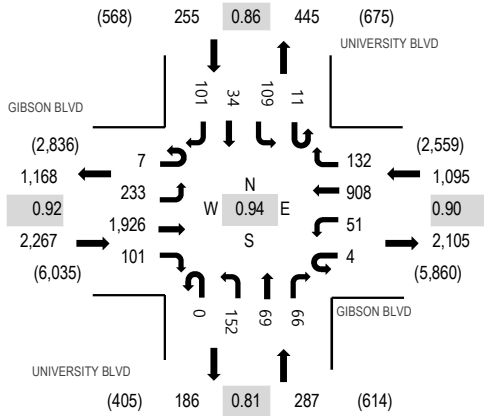
Location: 5 UNIVERSITY BLVD & GIBSON BLVD AM

Date: Thursday, May 16, 2024

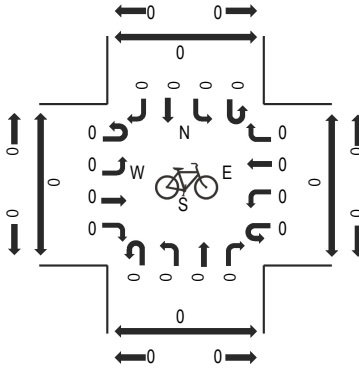
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

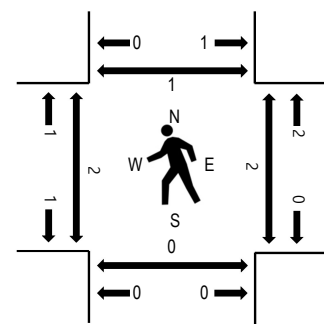
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				UNIVERSITY BLVD Northbound				UNIVERSITY BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	4	352	5	2	4	96	2	0	16	1	3	0	5	2	8	500	2,798	0	0	0	0
6:15 AM	0	7	409	17	1	4	119	2	0	27	1	13	1	13	4	12	630	3,097	0	1	1	0
6:30 AM	0	11	518	15	1	4	200	6	0	26	0	14	1	12	2	14	824	3,282	0	2	0	1
6:45 AM	1	16	527	17	3	4	179	2	0	28	8	15	1	17	6	20	844	3,431	0	0	0	1
7:00 AM	2	17	492	25	0	3	171	11	0	16	6	11	0	27	5	13	799	3,625	0	0	0	0
7:15 AM	0	25	482	18	1	7	177	13	0	33	3	7	0	24	7	18	815	3,862	2	0	1	2
7:30 AM	2	45	490	30	1	9	259	28	0	38	5	14	1	22	5	24	973	3,904	0	1	0	0
7:45 AM	3	79	528	20	1	10	201	33	0	49	17	23	3	36	8	27	1,038	3,659	0	1	0	1
8:00 AM	1	73	492	32	0	22	239	43	0	26	27	14	4	27	10	26	1,036	3,353	0	0	0	0
8:15 AM	1	36	416	19	2	10	209	28	0	39	20	15	3	24	11	24	857		2	0	0	0
8:30 AM	1	17	354	15	0	6	228	15	0	25	8	9	2	29	6	13	728		0	1	1	0
8:45 AM	1	22	377	21	1	13	177	12	0	30	15	12	1	24	9	17	732		0	0	0	0
Count Total	12	352	5,437	234	13	96	2,255	195	0	353	111	150	17	260	75	216	9,776		4	6	3	5
Peak Hour	7	233	1,926	101	4	51	908	132	0	152	69	66	11	109	34	101	3,904		2	2	0	1







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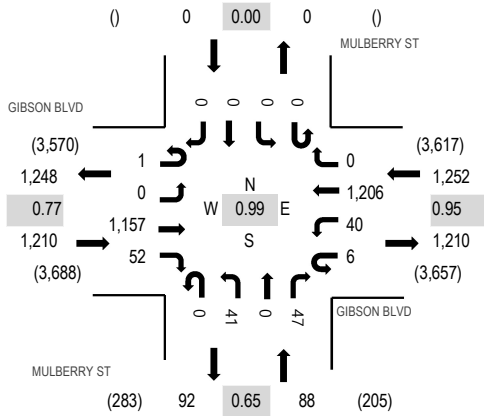
Location: 3 MULBERRY ST &amp; GIBSON BLVD Noon

Date: Thursday, May 16, 2024

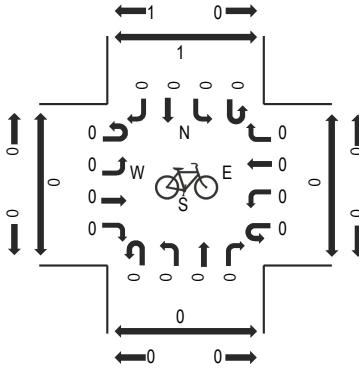
Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:30 PM - 12:45 PM

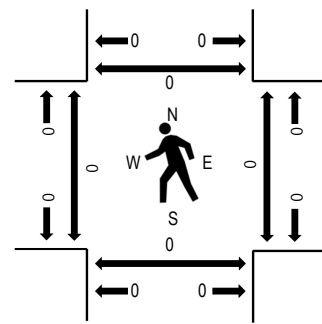
## Peak Hour - Motorized Vehicles



## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				MULBERRY ST Northbound				MULBERRY ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:00 AM	4	0	437	8	3	14	199	0	0	3	0	5	0	0	0	0	673	2,486	0	0	0	0
11:15 AM	5	0	383	14	1	12	220	0	0	4	0	11	0	0	0	0	650	2,452	0	1	0	0
11:30 AM	0	0	256	15	2	14	257	0	0	8	0	9	0	0	0	0	561	2,437	0	0	0	0
11:45 AM	2	0	258	8	4	17	298	0	0	8	0	7	0	0	0	0	602	2,522	0	0	0	0
12:00 PM	0	0	299	17	2	14	284	0	0	9	0	14	0	0	0	0	639	2,550	0	0	0	0
12:15 PM	0	0	271	12	0	3	315	0	0	14	0	20	0	0	0	0	635	2,511	0	0	0	0
12:30 PM	0	0	289	11	4	10	320	0	0	6	0	6	0	0	0	0	646	2,503	0	0	0	0
12:45 PM	1	0	298	12	0	13	287	0	0	12	0	7	0	0	0	0	630	2,495	0	0	0	0
1:00 PM	0	0	274	14	3	8	284	0	0	7	0	10	0	0	0	0	600	2,474	0	0	0	0
1:15 PM	2	0	255	11	0	14	333	0	0	5	0	7	0	0	0	0	627		0	0	1	0
1:30 PM	0	0	262	12	0	5	340	0	0	9	0	10	0	0	0	0	638		0	0	0	0
1:45 PM	0	0	247	11	0	14	323	0	0	11	0	3	0	0	0	0	609		0	0	0	0
Count Total	14	0	3,529	145	19	138	3,460	0	0	96	0	109	0	0	0	0	7,510		0	1	1	0
Peak Hour	1	0	1,157	52	6	40	1,206	0	0	41	0	47	0	0	0	0	2,550		0	0	0	0



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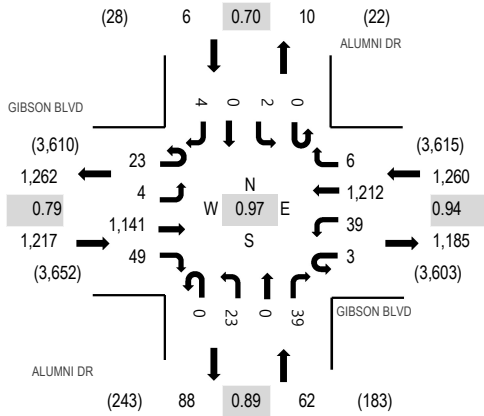
Location: 4 ALUMNI DR &amp; GIBSON BLVD Noon

Date: Thursday, May 16, 2024

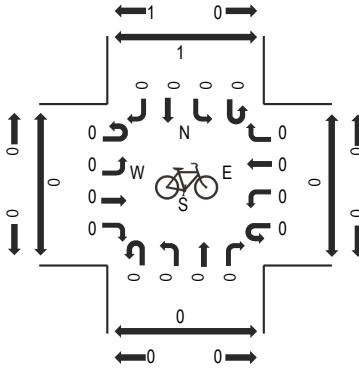
Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:00 PM - 12:15 PM

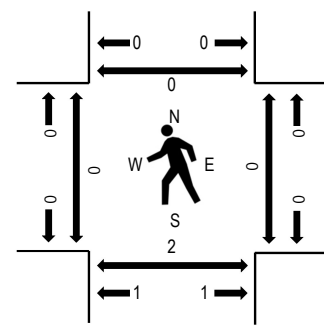
## Peak Hour - Motorized Vehicles



## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				ALUMNI DR Northbound				ALUMNI DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:00 AM	6	1	419	11	1	10	202	1	0	1	0	9	0	2	0	3	666	2,475	1	0	0	2
11:15 AM	6	1	385	15	0	10	221	1	0	2	0	11	0	0	0	3	655	2,462	0	0	0	0
11:30 AM	5	0	256	7	1	6	249	1	0	4	0	16	0	1	0	4	550	2,424	0	0	6	1
11:45 AM	4	0	249	17	0	8	310	1	0	3	0	11	0	1	0	0	604	2,525	0	0	0	0
12:00 PM	6	1	291	16	0	11	313	4	0	5	0	6	0	0	0	0	653	2,545	0	0	1	0
12:15 PM	8	1	274	6	0	10	297	1	0	10	0	9	0	0	0	1	617	2,476	0	0	0	0
12:30 PM	6	2	281	13	2	8	320	1	0	3	0	13	0	2	0	0	651	2,492	0	0	1	0
12:45 PM	3	0	295	14	1	10	282	0	0	5	0	11	0	0	0	3	624	2,468	0	0	0	0
1:00 PM	6	1	256	9	2	10	278	1	0	6	0	14	0	0	0	1	584	2,458	0	0	2	0
1:15 PM	5	0	244	11	1	8	347	0	0	5	0	11	0	0	0	1	633		0	0	2	0
1:30 PM	1	1	264	5	4	11	329	0	0	4	0	8	0	0	0	0	627		0	0	2	0
1:45 PM	2	1	241	6	1	11	329	1	0	7	0	9	1	1	0	4	614		0	0	0	0
Count Total	58	9	3,455	130	13	113	3,477	12	0	55	0	128	1	7	0	20	7,478		1	0	14	3
Peak Hour	23	4	1,141	49	3	39	1,212	6	0	23	0	39	0	2	0	4	2,545		0	0	2	0



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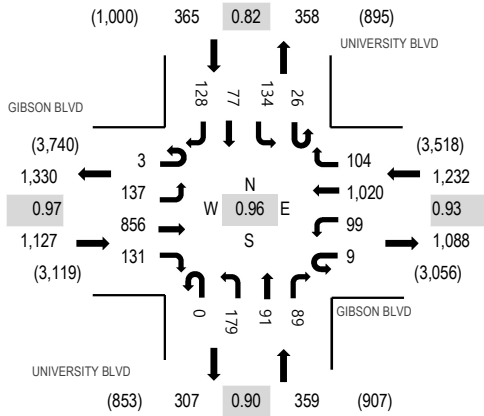
Location: 5 UNIVERSITY BLVD & GIBSON BLVD Noon

Date: Thursday, May 16, 2024

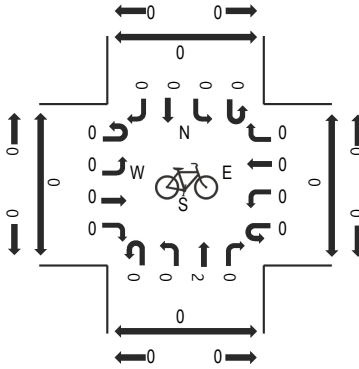
Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:30 PM - 12:45 PM

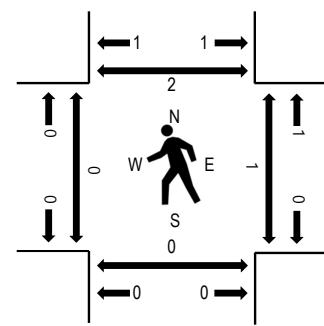
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				UNIVERSITY BLVD Northbound				UNIVERSITY BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:00 AM	2	24	200	26	2	37	205	22	0	25	9	15	4	23	29	28	651	2,649	0	0	0	0
11:15 AM	0	27	189	25	0	22	208	17	0	38	16	18	4	27	18	38	647	2,770	0	0	0	1
11:30 AM	1	22	181	28	2	9	227	25	0	33	17	20	9	32	17	20	643	2,901	0	0	0	1
11:45 AM	1	31	195	36	4	30	230	23	0	37	18	23	8	26	25	21	708	3,057	0	1	0	1
12:00 PM	0	35	214	34	4	29	228	31	0	42	20	23	4	40	25	43	772	3,083	0	0	0	2
12:15 PM	2	40	209	41	2	26	237	27	0	46	31	23	11	35	21	27	778	2,991	0	0	0	0
12:30 PM	1	34	227	30	2	26	286	19	0	43	21	30	4	28	16	32	799	2,888	0	1	0	0
12:45 PM	0	28	206	26	1	18	269	27	0	48	19	13	7	31	15	26	734	2,810	0	0	0	0
1:00 PM	0	36	184	22	6	18	251	26	0	39	9	17	6	35	15	16	680	2,812	1	1	1	0
1:15 PM	1	30	186	31	6	18	245	13	0	43	20	11	3	22	15	31	675		0	0	0	0
1:30 PM	0	14	207	35	2	17	276	14	0	40	17	23	6	39	11	20	721		0	0	0	0
1:45 PM	2	24	205	27	4	24	277	26	0	31	13	16	4	48	11	24	736		1	0	1	1
Count Total	10	345	2,403	361	35	274	2,939	270	0	465	210	232	70	386	218	326	8,544		2	3	2	6
Peak Hour	3	137	856	131	9	99	1,020	104	0	179	91	89	26	134	77	128	3,083		0	1	0	2



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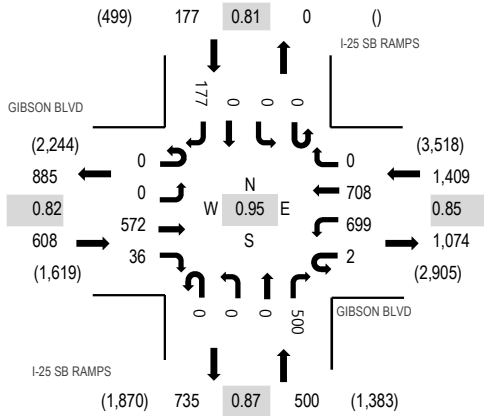
Location: 1 I-25 SB RAMPS &amp; GIBSON BLVD PM

Date: Thursday, May 16, 2024

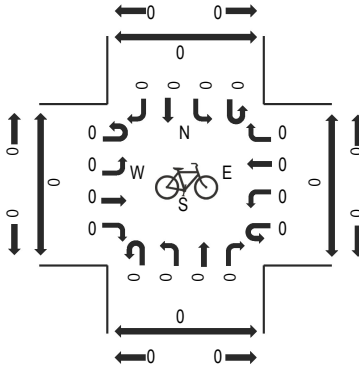
Peak Hour: 03:30 PM - 04:30 PM

Peak 15-Minutes: 03:45 PM - 04:00 PM

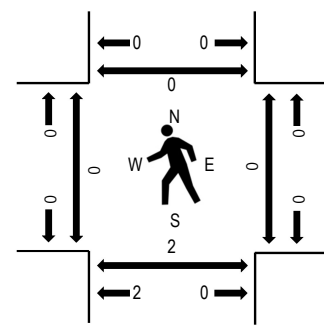
## Peak Hour - Motorized Vehicles



## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				I-25 SB RAMPS Northbound				I-25 SB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	0	174	12	0	154	188	0	0	0	0	144	0	0	0	26	698	2,694	0	0	0	0
3:45 PM	0	0	127	11	0	229	183	0	0	0	0	122	0	0	0	35	707	2,644	0	0	2	0
4:00 PM	0	0	164	6	1	157	170	0	0	0	0	124	0	0	0	54	676	2,531	0	0	0	0
4:15 PM	0	0	107	7	1	159	167	0	0	0	0	110	0	0	0	62	613	2,484	0	0	0	0
4:30 PM	0	0	140	13	0	159	168	0	0	0	0	122	0	0	0	46	648	2,433	0	0	0	0
4:45 PM	0	0	126	6	0	159	166	0	0	0	0	97	0	0	0	40	594	2,294	0	0	1	0
5:00 PM	0	0	133	9	1	160	162	0	0	0	0	122	0	0	0	42	629	2,195	0	0	0	0
5:15 PM	0	0	109	15	0	158	125	0	0	0	0	111	0	0	0	44	562	2,024	0	0	0	0
5:30 PM	0	0	134	6	0	116	103	0	0	0	0	112	0	0	0	38	509	1,892	0	0	0	0
5:45 PM	0	0	104	6	0	113	106	0	0	0	0	127	0	0	0	39	495		0	0	0	0
6:00 PM	0	0	102	4	0	100	111	0	0	0	0	99	0	0	0	42	458		0	0	0	0
6:15 PM	0	0	99	5	0	106	96	0	0	0	0	93	0	0	0	31	430		0	0	0	0
Count Total	0	0	1,519	100	3	1,770	1,745	0	0	0	0	1,383	0	0	0	499	7,019		0	0	3	0
Peak Hour	0	0	572	36	2	699	708	0	0	0	0	500	0	0	0	177	2,694		0	0	2	0



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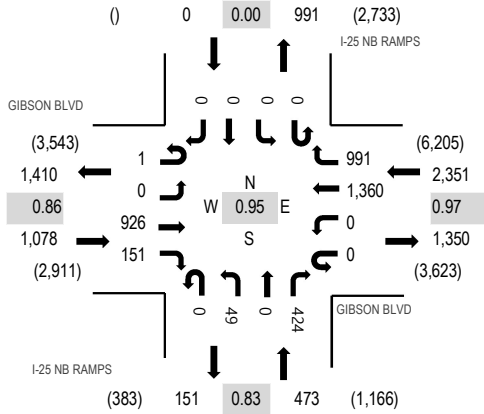
Location: 2 I-25 NB RAMPS & GIBSON BLVD PM

Date: Thursday, May 16, 2024

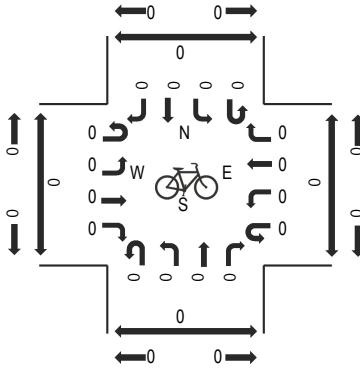
Peak Hour: 03:30 PM - 04:30 PM

Peak 15-Minutes: 03:30 PM - 03:45 PM

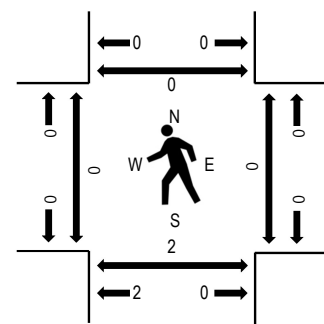
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				I-25 NB RAMPS Northbound				I-25 NB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	0	254	60	0	0	327	282	0	19	0	87	0	0	0	0	1,029	3,902	0	0	0	0
3:45 PM	1	0	230	22	0	0	378	231	0	16	0	126	0	0	0	0	1,004	3,774	0	0	2	0
4:00 PM	0	0	244	44	0	0	332	250	0	8	0	94	0	0	0	0	972	3,659	0	0	0	0
4:15 PM	0	0	198	25	0	0	323	228	0	6	0	117	0	0	0	0	897	3,620	0	0	0	0
4:30 PM	0	0	221	36	0	0	331	227	0	2	0	84	0	0	0	0	901	3,580	0	0	0	0
4:45 PM	0	0	186	36	0	0	319	258	0	6	0	84	0	0	0	0	889	3,479	0	0	0	0
5:00 PM	0	0	230	32	0	0	313	264	0	5	0	89	0	0	0	0	933	3,330	0	0	0	0
5:15 PM	0	0	197	22	0	0	288	242	0	2	0	106	0	0	0	0	857	3,055	0	0	0	0
5:30 PM	0	0	210	43	0	0	223	246	0	0	0	78	0	0	0	0	800	2,800	0	0	0	0
5:45 PM	0	0	206	24	0	0	224	187	0	3	0	96	0	0	0	0	740		0	0	0	0
6:00 PM	0	0	174	16	0	0	217	180	0	2	0	69	0	0	0	0	658		0	0	0	0
6:15 PM	0	0	177	23	0	0	197	138	0	1	0	66	0	0	0	0	602		0	0	0	0
Count Total	1	0	2,527	383	0	0	3,472	2,733	0	70	0	1,096	0	0	0	0	10,282		0	0	2	0
Peak Hour	1	0	926	151	0	0	1,360	991	0	49	0	424	0	0	0	0	3,902		0	0	2	0



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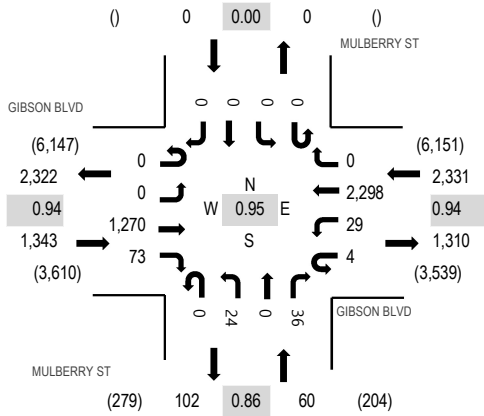
Location: 3 MULBERRY ST &amp; GIBSON BLVD PM

Date: Thursday, May 16, 2024

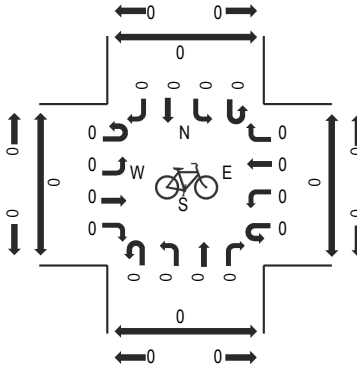
Peak Hour: 03:30 PM - 04:30 PM

Peak 15-Minutes: 03:45 PM - 04:00 PM

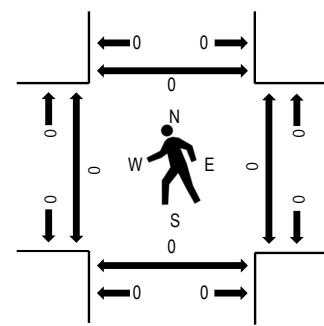
## Peak Hour - Motorized Vehicles



## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				MULBERRY ST Northbound				MULBERRY ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	0	301	27	1	10	609	0	0	5	0	9	0	0	0	0	962	3,734	0	0	0	0
3:45 PM	0	0	343	15	1	2	598	0	0	7	0	14	0	0	0	0	980	3,641	0	0	0	0
4:00 PM	0	0	330	17	2	3	556	0	0	4	0	9	0	0	0	0	921	3,510	0	0	0	0
4:15 PM	0	0	296	14	0	14	535	0	0	8	0	4	0	0	0	0	871	3,516	0	0	0	0
4:30 PM	0	0	291	16	1	8	536	0	0	6	0	11	0	0	0	0	869	3,482	0	0	0	0
4:45 PM	0	0	250	14	1	7	565	0	0	4	0	8	0	0	0	0	849	3,376	0	0	0	0
5:00 PM	0	0	298	21	1	6	579	0	0	8	0	14	0	0	0	0	927	3,247	0	0	0	0
5:15 PM	0	0	282	18	0	3	520	0	0	6	0	8	0	0	0	0	837	2,983	0	0	0	0
5:30 PM	1	0	274	11	0	5	451	0	0	11	0	10	0	0	0	0	763	2,749	0	0	0	0
5:45 PM	1	0	279	15	0	13	392	0	0	11	0	9	0	0	0	0	720		0	0	0	0
6:00 PM	1	0	232	15	2	12	378	0	0	13	0	10	0	0	0	0	663		0	0	0	0
6:15 PM	0	0	241	7	0	6	334	0	0	8	0	7	0	0	0	0	603		0	0	0	0
Count Total	3	0	3,417	190	9	89	6,053	0	0	91	0	113	0	0	0	0	9,965		0	0	0	0
Peak Hour	0	0	1,270	73	4	29	2,298	0	0	24	0	36	0	0	0	0	3,734		0	0	0	0



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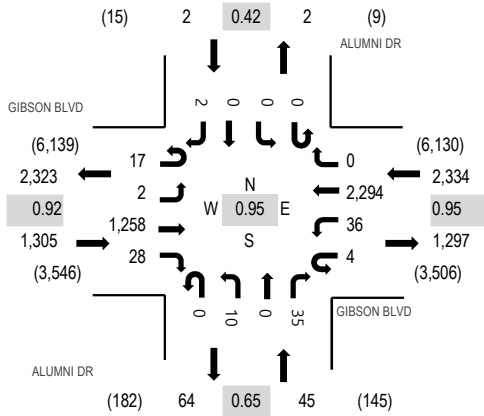
Location: 4 ALUMNI DR &amp; GIBSON BLVD PM

Date: Thursday, May 16, 2024

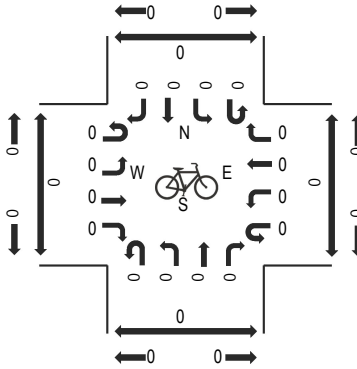
Peak Hour: 03:30 PM - 04:30 PM

Peak 15-Minutes: 03:45 PM - 04:00 PM

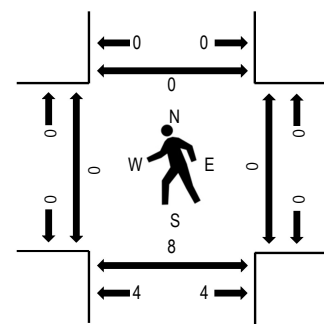
## Peak Hour - Motorized Vehicles



## Peak Hour - Bicycles



## Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

## Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				ALUMNI DR Northbound				ALUMNI DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	8	0	310	4	0	5	606	0	0	4	0	11	0	0	0	0	948	3,686	0	0	6	0
3:45 PM	1	1	342	9	2	9	596	0	0	2	0	8	0	0	0	1	971	3,617	0	0	0	0
4:00 PM	4	0	320	7	1	6	550	0	0	2	0	8	0	0	0	1	899	3,512	0	0	1	0
4:15 PM	4	1	286	8	1	16	542	0	0	2	0	8	0	0	0	0	868	3,520	0	0	1	0
4:30 PM	9	0	286	10	1	10	537	0	0	8	0	15	0	0	0	3	879	3,472	0	0	1	0
4:45 PM	4	3	258	5	2	5	567	0	0	5	0	11	0	1	0	5	866	3,329	0	0	1	0
5:00 PM	5	1	295	10	2	9	575	0	0	2	0	8	0	0	0	0	907	3,170	0	0	0	0
5:15 PM	7	1	279	7	1	3	510	0	0	2	0	9	0	0	0	1	820	2,903	0	0	1	0
5:30 PM	10	1	267	2	1	8	438	0	0	4	0	5	0	0	0	0	736	2,678	0	0	1	0
5:45 PM	2	0	284	8	2	12	385	0	0	5	0	8	0	0	0	1	707		0	1	2	0
6:00 PM	5	1	230	9	0	3	382	0	0	2	0	7	0	0	0	1	640		0	0	0	0
6:15 PM	3	0	231	8	0	9	334	0	0	3	0	6	0	0	0	1	595		0	1	0	0
Count Total	62	9	3,388	87	13	95	6,022	0	0	41	0	104	0	1	0	14	9,836		0	2	14	0
Peak Hour	17	2	1,258	28	4	36	2,294	0	0	10	0	35	0	0	0	2	3,686		0	0	8	0



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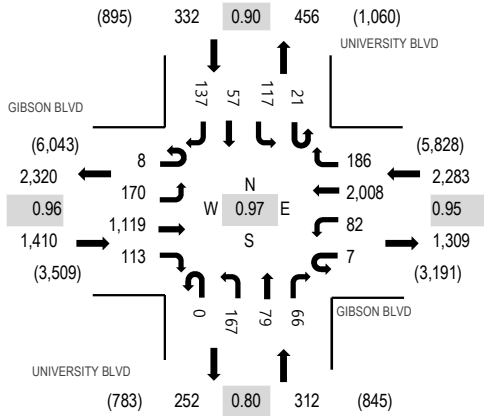
Location: 5 UNIVERSITY BLVD & GIBSON BLVD PM

Date: Thursday, May 16, 2024

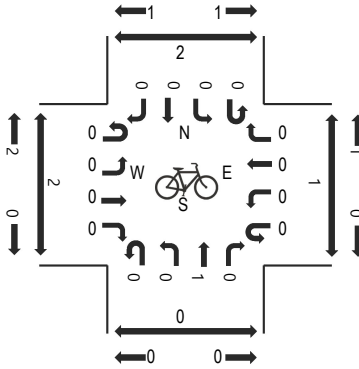
Peak Hour: 03:30 PM - 04:30 PM

Peak 15-Minutes: 04:00 PM - 04:15 PM

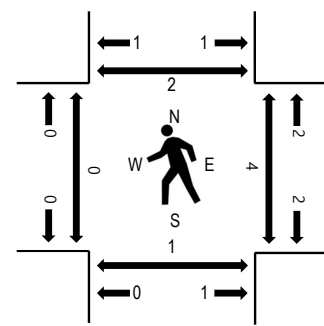
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	GIBSON BLVD Eastbound				GIBSON BLVD Westbound				UNIVERSITY BLVD Northbound				UNIVERSITY BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	2	34	252	25	2	20	516	27	0	56	18	24	7	28	13	37	1,061	4,337	0	3	1	1
3:45 PM	2	48	290	28	1	22	501	55	0	43	24	15	2	39	17	33	1,120	4,191	0	0	0	1
4:00 PM	3	43	294	28	3	27	515	53	0	33	19	13	8	30	14	40	1,123	4,054	0	1	0	0
4:15 PM	1	45	283	32	1	13	476	51	0	35	18	14	4	20	13	27	1,033	3,918	0	0	0	0
4:30 PM	1	28	204	26	2	14	468	44	0	37	15	11	1	22	15	27	915	3,762	0	0	0	0
4:45 PM	2	34	205	27	2	18	515	31	0	38	16	14	2	26	25	28	983	3,573	0	0	0	0
5:00 PM	0	27	212	42	0	14	518	20	0	41	19	13	5	27	12	37	987	3,398	0	0	0	0
5:15 PM	0	43	212	34	3	28	402	24	0	29	14	11	7	23	12	35	877	3,175	3	0	2	0
5:30 PM	1	29	187	37	3	17	316	15	0	40	17	12	9	14	7	22	726	2,978	0	0	2	0
5:45 PM	1	41	193	49	0	22	332	17	0	45	12	15	6	32	13	30	808		1	0	0	6
6:00 PM	2	25	190	25	5	19	346	20	0	40	11	16	3	29	8	25	764		0	0	0	0
6:15 PM	0	29	159	34	4	21	287	18	0	34	15	18	7	18	12	24	680		0	0	0	0
Count Total	15	426	2,681	387	26	235	5,192	375	0	471	198	176	61	308	161	365	11,077		4	4	5	8
Peak Hour	8	170	1,119	113	7	82	2,008	186	0	167	79	66	21	117	57	137	4,337		0	4	1	2

## Appendix C: In N Out Trip Survey Data and ITE Trip Generation

# Fast-Food Restaurant with Drive-Through Window

## (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,  
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 118

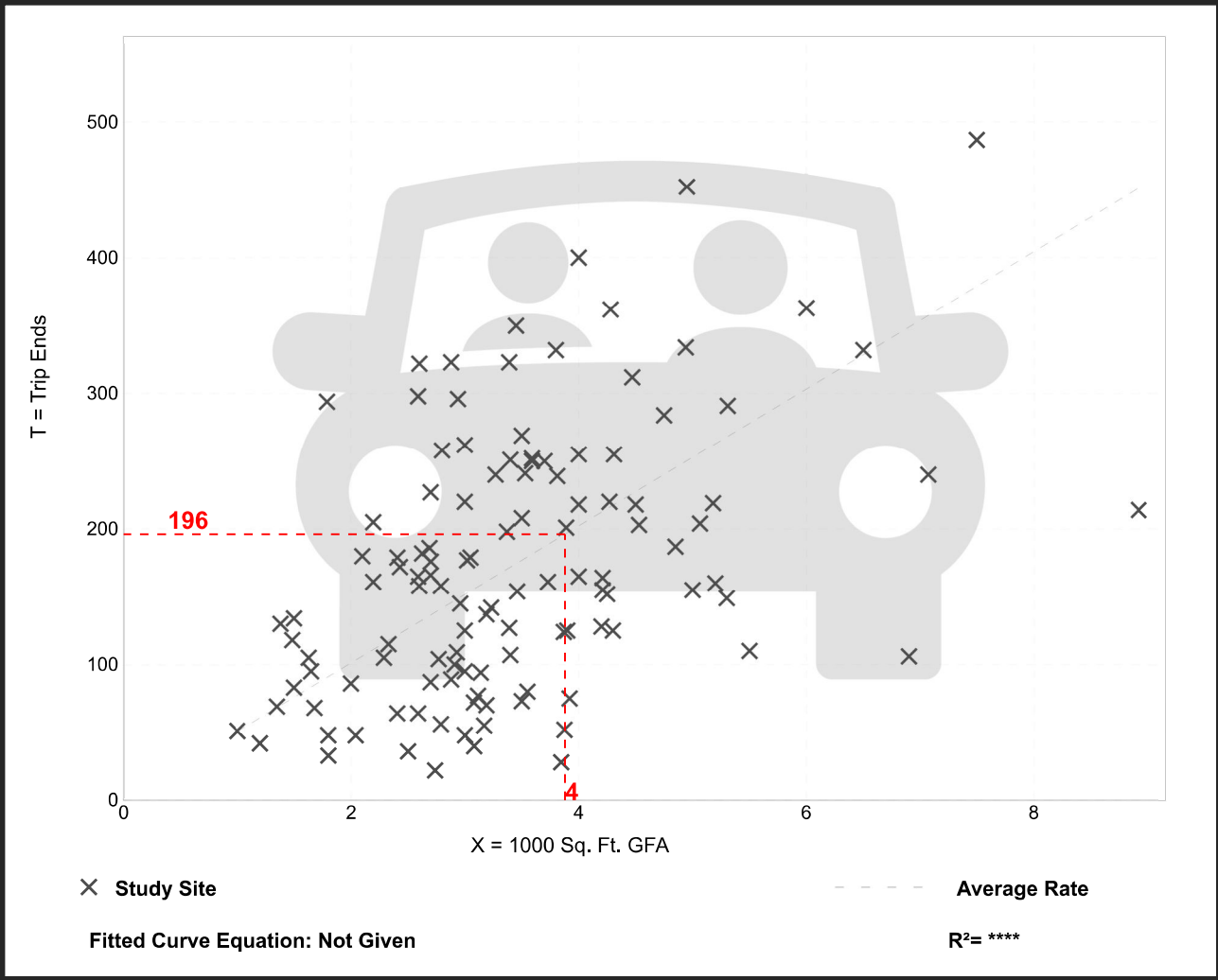
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

### Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
50.57	7.28 - 164.25	25.99

### Data Plot and Equation



# Fast-Food Restaurant with Drive-Through Window (934)

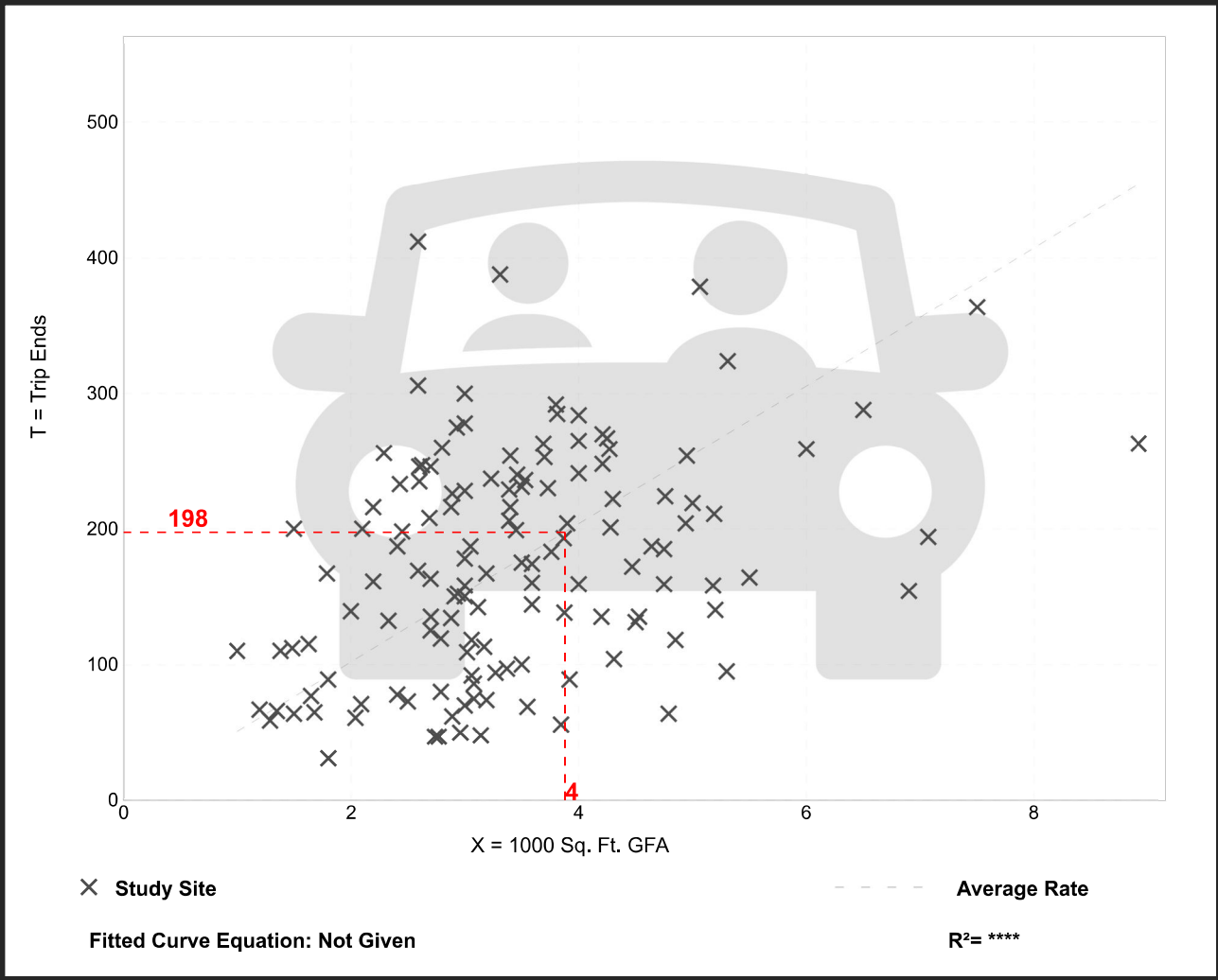
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Weekday,  
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban  
Number of Studies: 135  
Avg. 1000 Sq. Ft. GFA: 3  
Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
50.94	13.36 - 159.07	24.91

## Data Plot and Equation



**Table A1**  
**Weekday Drive Through Queue Survey Summary**

Time	Peak Queue Observed within 15-Minute Increment								
	Corona	Highland	Indio	La Quinta	Long Beach	Los Angeles	Thousand Palms	Average	85th-%ile
LUNCH									
11:00 AM	17	14	5	8	3	6	15	10	15
11:15 AM	17	17	7	7	6	12	16	12	17
11:30 AM	16	16	12	12	7	16	18	14	16
11:45 AM	17	17	12	13	14	19	14	15	17
12:00 PM	23	19	12	21	15	20	17	18	21
12:15 PM	24	21	10	22	15	18	16	18	22
12:30 PM	23	21	9	19	13	21	16	17	21
12:45 PM	17	20	12	18	8	19	20	16	20
1:00 PM	16	19	16	18	12	22	10	16	19
1:15 PM	18	14	12	20	13	21	12	16	20
1:30 PM	17	16	10	18	8	20	13	15	18
1:45 PM	15	18	8	16	7	20	10	13	18
2:00 PM	16	17	7	14	8	21	19	15	19
DINNER									
4:00 PM	17	15	7	15	6	17	7	12	17
4:15 PM	16	19	4	21	5	15	10	13	19
4:30 PM	17	17	7	20	3	12	9	12	17
4:45 PM	16	18	7	20	6	10	11	13	18
5:00 PM	23	19	6	22	5	9	10	13	22
5:15 PM	23	19	12	18	7	14	14	15	19
5:30 PM	23	19	10	21	7	17	13	16	21
5:45 PM	18	21	9	19	5	19	9	14	19
6:00 PM	23	23	10	16	12	20	12	17	23
6:15 PM	24	22	8	22	7	19	16	17	22
6:30 PM	24	19	11	23	10	20	18	18	23
6:45 PM	24	18	10	21	12	18	18	17	21
7:00 PM	23	19	7	21	10	17	19	17	21
7:15 PM	18	21	10	16	11	18	20	16	20
7:30 PM	23	21	12	7	7	19	17	15	21
7:45 PM	24	19	7	17	6	20	16	16	20
8:00 PM	23	18	15	16	8	21	10	16	21
8:15 PM	17	17	12	17	6	19	17	15	17
8:30 PM	16	17	10	15	9	19	15	14	17
<b>PEAK</b>	<b>24</b>	<b>23</b>	<b>16</b>	<b>23</b>	<b>15</b>	<b>22</b>	<b>20</b>	<b>20</b>	<b>23</b>

Source: Queue observations at existing In-N-Out restaurants; see attachments.

**Table A2**  
**Weekend Drive Through Queue Survey Summary**

Time	Peak Queue Observed within 15-Minute Increment								
	Corona	Highland	Indio	La Quinta	Long Beach	Los Angeles	Thousand Palms	Average	85th-%ile
LUNCH									
11:00 AM	9	9	6	8	7	8	8	8	9
11:15 AM	13	14	4	11	8	11	8	10	13
11:30 AM	17	16	7	16	9	12	12	13	16
11:45 AM	19	18	8	11	16	18	14	15	18
12:00 PM	17	18	11	10	16	20	11	15	18
12:15 PM	18	20	8	14	14	16	12	15	18
12:30 PM	23	20	9	18	16	20	18	18	20
12:45 PM	24	21	11	16	10	20	16	17	21
1:00 PM	24	19	16	15	15	23	15	18	23
1:15 PM	23	20	7	14	16	22	15	17	22
1:30 PM	24	20	6	18	10	20	18	17	20
1:45 PM	23	22	8	15	9	20	18	16	22
2:00 PM	22	17	12	16	12	21	14	16	21
DINNER									
4:00 PM	20	14	10	14	8	10	12	13	15
4:15 PM	18	15	15	17	10	14	11	14	17
4:30 PM	17	16	15	17	8	18	12	15	17
4:45 PM	17	18	16	20	5	8	11	14	18
5:00 PM	23	19	20	21	9	8	12	16	21
5:15 PM	24	20	22	18	10	9	11	16	22
5:30 PM	24	22	22	19	10	20	6	18	22
5:45 PM	23	18	24	12	9	19	16	17	23
6:00 PM	24	23	21	11	13	20	19	19	23
6:15 PM	24	21	16	10	9	19	17	17	21
6:30 PM	25	20	10	17	10	20	15	17	21
6:45 PM	25	19	11	18	14	18	20	18	21
7:00 PM	24	21	8	10	12	19	19	16	21
7:15 PM	24	19	7	12	13	20	13	15	20
7:30 PM	23	18	6	11	9	21	12	14	21
7:45 PM	23	19	9	8	9	22	14	15	22
8:00 PM	15	20	12	15	10	21	13	15	20
8:15 PM	16	19	9	16	9	22	17	15	19
8:30 PM	17	21	8	16	11	18	17	15	18
<b>PEAK</b>	<b>25</b>	<b>23</b>	<b>24</b>	<b>21</b>	<b>16</b>	<b>23</b>	<b>20</b>	<b>22</b>	<b>24</b>

Source: Queue observations at existing In-N-Out restaurants; see attachments.

**Corona**  
**(2305 Compton Ave, Corona, CA 92881)**

Time	Corona In-N-Out							Peak
	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
	12/2/2017	12/3/2017	12/4/2017	12/5/2017	12/6/2017	12/7/2017	12/8/2017	
10:30-10:45	7	5	6	5	6	5	6	7
10:45-11:00	14	11	14	7	12	7	8	14
11:00-11:15	7	9	17	11	12	9	10	17
11:15-11:30	9	13	14	15	12	11	17	17
11:30-11:45	9	17	14	15	15	16	16	17
11:45-12:00	11	19	17	10	14	16	15	19
12:00-12:15	13	17	12	13	18	15	23	23
12:15-12:30	16	18	17	13	18	14	24	24
12:30-12:45	20	23	20	13	16	13	23	23
12:45-1:00	22	24	15	17	13	14	17	24
1:00-1:15	22	24	14	11	13	16	14	24
1:15-1:30	23	23	11	14	16	18	15	23
1:30-1:45	24	22	11	11	15	17	16	24
1:45-2:00	23	17	10	10	13	14	15	23
2:00-2:15	22	18	15	11	16	10	15	22
2:15-2:30	23	17	17	16	16	13	13	23
2:30-2:45	24	23	18	15	12	13	13	24
2:45-3:00	20	14	12	14	10	13	15	20
3:00-3:15	20	18	18	23	17	14	16	23
3:15-3:30	17	14	15	19	18	14	18	19
3:30-3:45	17	16	18	17	11	16	17	18
3:45-4:00	15	17	16	12	15	14	15	17
4:00-4:15	18	20	12	9	12	15	17	20
4:15-4:30	16	18	16	10	9	11	11	18
4:30-4:45	16	17	17	14	10	9	11	17
4:45-5:00	16	17	14	12	16	15	13	17
5:00-5:15	23	15	16	13	23	18	13	23
5:15-5:30	24	17	23	12	18	21	16	24
5:30-5:45	24	23	16	13	16	16	23	24
5:45-6:00	23	23	15	13	17	18	15	23
6:00-6:15	18	24	12	12	18	23	19	24
6:15-6:30	23	24	15	17	23	24	17	24
6:30-6:45	23	25	23	23	23	24	18	25
6:45-7:00	20	25	24	17	17	23	15	25
7:00-7:15	23	24	23	18	14	13	17	24
7:15-7:30	15	24	16	15	16	17	18	24
7:30-7:45	14	23	12	14	13	16	23	23
7:45-8:00	16	23	14	12	13	20	24	24
8:00-8:15	15	15	14	12	14	17	23	23
8:15-8:30	16	15	15	13	12	14	17	17
8:30-8:45	17	16	14	14	10	15	16	17
8:45-9:00	14	14	14	10	14	15	13	15
9:00-9:15	17	12	14	12	11	13	15	17
9:15-9:30	12	10	15	9	11	15	15	15
9:30-9:45	16	13	11	8	8	10	16	16
9:45-10:00	12	15	9	8	11	13	11	15
10:00-10:15	13	12	14	7	12	13	12	14
10:15-10:30	12	9	9	6	11	13	15	15
10:30-10:45	14	13	11	6	7	11	15	15
10:45-11:00	19	11	9	7	8	9	14	19
11:00-11:15	20	8	8	6	6	8	13	20
11:15-11:30	16	12	6	5	5	7	11	16
11:30-11:45	14	10	7	4	4	5	11	14
11:45-12:00	12	8	5	4	5	6	11	12
12:00-12:15	11	5	5	3	4	4	11	11
12:15-12:30	11	7	4	3	3	3	11	11
12:30-12:45	13	6	3	3	2	3	11	13
12:45-1:00	13	4	2	2	2	2	11	13
Day Peak	24	25	24	23	23	24	24	25

**Highland**  
**(28009 Greenspot Rd, Highland, CA 92346)**

Time	Highland In-N-Out							Peak
	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
	12/2/2017	12/3/2017	12/4/2017	12/5/2017	12/6/2017	12/7/2017	12/8/2017	
10:30-10:45	4	6	6	5	4	4	6	6
10:45-11:00	5	7	8	7	6	7	11	11
11:00-11:15	6	9	11	9	9	10	14	14
11:15-11:30	14	11	17	10	13	14	15	17
11:30-11:45	12	16	15	14	15	14	16	16
11:45-12:00	13	18	14	14	14	14	17	18
12:00-12:15	16	18	18	17	14	18	19	19
12:15-12:30	20	20	17	17	15	18	21	21
12:30-12:45	20	20	16	19	15	17	21	21
12:45-1:00	21	19	13	18	11	18	20	21
1:00-1:15	18	19	14	17	7	18	19	19
1:15-1:30	20	19	11	13	10	14	14	20
1:30-1:45	20	18	14	13	10	13	16	20
1:45-2:00	22	17	14	18	3	13	18	22
2:00-2:15	17	15	13	15	14	16	17	17
2:15-2:30	17	17	18	16	15	19	18	19
2:30-2:45	14	18	14	13	14	16	15	18
2:45-3:00	17	15	15	12	13	18	15	18
3:00-3:15	16	16	18	14	12	16	18	18
3:15-3:30	18	19	18	12	13	14	18	19
3:30-3:45	14	19	17	10	17	19	19	19
3:45-4:00	12	16	18	11	16	18	17	18
4:00-4:15	14	14	15	14	14	15	13	15
4:15-4:30	15	14	13	16	12	16	19	19
4:30-4:45	14	16	15	14	15	14	17	17
4:45-5:00	15	18	18	15	14	17	16	18
5:00-5:15	15	19	15	14	13	19	15	19
5:15-5:30	18	20	13	13	17	19	19	20
5:30-5:45	22	19	16	19	16	18	19	22
5:45-6:00	17	18	20	19	18	21	20	21
6:00-6:15	23	21	20	18	20	21	23	23
6:15-6:30	19	21	19	17	13	19	22	22
6:30-6:45	19	20	19	17	16	18	17	20
6:45-7:00	19	19	18	15	14	17	18	19
7:00-7:15	21	17	16	14	13	16	19	21
7:15-7:30	19	18	15	15	15	21	20	21
7:30-7:45	17	18	12	16	12	19	21	21
7:45-8:00	15	19	15	17	17	19	19	19
8:00-8:15	18	20	18	13	18	14	18	20
8:15-8:30	19	17	13	16	16	14	17	19
8:30-8:45	21	15	13	13	17	12	17	21
8:45-9:00	19	14	12	13	19	14	15	19
9:00-9:15	20	16	11	14	18	15	18	20
9:15-9:30	20	16	14	15	16	19	17	20
9:30-9:45	18	17	15	12	14	18	16	18
9:45-10:00	17	16	12	11	12	16	16	17
10:00-10:15	20	13	10	10	13	15	14	20
10:15-10:30	19	12	9	10	15	14	14	19
10:30-10:45	18	12	8	8	14	11	14	18
10:45-11:00	18	13	7	7	10	11	14	18
11:00-11:15	15	15	8	7	11	10	11	15
11:15-11:30	17	16	7	8	9	9	12	17
11:30-11:45	19	12	6	6	7	8	10	19
11:45-12:00	16	9	5	5	8	9	9	16
12:00-12:15	16	8	5	6	6	7	8	16
12:15-12:30	15	7	4	4	5	5	7	15
12:30-12:45	9	5	3	3	3	4	3	9
12:45-1:00	8	4	2	2	2	2	5	8
Day Peak	23	21	20	19	20	21	23	23

**Indio**  
**(82043 Highway 111, Indio, CA 92201)**

## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 82043 CA-111

**City:** Indio

**Day:** Thursday

**Date:** 6/27/2019

Time	Queue	Time	Queue
11:00	4	16:00	7
11:05	5	16:05	7
11:10	5	16:10	6
11:15	7	16:15	4
11:20	4	16:20	3
11:25	6	16:25	3
11:30	6	16:30	1
11:35	11	16:35	5
11:40	12	16:40	7
11:45	11	16:45	4
11:50	12	16:50	6
11:55	9	16:55	7
12:00	11	17:00	5
12:05	10	17:05	5
12:10	12	17:10	6
12:15	10	17:15	7
12:20	9	17:20	12
12:25	8	17:25	12
12:30	9	17:30	10
12:35	7	17:35	10
12:40	7	17:40	10
12:45	7	17:45	5
12:50	9	17:50	6
12:55	12	17:55	9
13:00	14	18:00	9
13:05	16	18:05	10
13:10	14	18:10	9
13:15	12	18:15	6
13:20	11	18:20	3
13:25	7	18:25	8
13:30	6	18:30	7
13:35	9	18:35	10
13:40	10	18:40	11
13:45	8	18:45	9
13:50	8	18:50	10
13:55	8	18:55	8
14:00	7	19:00	7
14:05	5	19:05	6
14:10	7	19:10	6
14:15	7	19:15	9
14:20	8	19:20	8
14:25	7	19:25	10
14:30	5	19:30	12
14:35	9	19:35	11
14:40	5	19:40	8
14:45	4	19:45	7
14:50	4	19:50	7
14:55	4	19:55	6
15:00	6	20:00	9
15:05	9	20:05	15
15:10	10	20:10	13
15:15	8	20:15	12
15:20	8	20:20	12
15:25	8	20:25	10
15:30	7	20:30	9
15:35	4	20:35	8
15:40	5	20:40	10
15:45	6	20:45	8
15:50	8	20:50	9
15:55	10	20:55	8

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## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 82043 CA-111

**City:** Indio

**Day:** Saturday

**Date:** 6/22/2019

Time	Queue	Time	Queue
11:00	3	16:00	10
11:05	6	16:05	8
11:10	4	16:10	10
11:15	4	16:15	11
11:20	3	16:20	15
11:25	3	16:25	12
11:30	4	16:30	14
11:35	4	16:35	14
11:40	7	16:40	15
11:45	8	16:45	16
11:50	7	16:50	16
11:55	8	16:55	13
12:00	9	17:00	19
12:05	11	17:05	18
12:10	7	17:10	20
12:15	7	17:15	18
12:20	8	17:20	22
12:25	7	17:25	20
12:30	6	17:30	22
12:35	9	17:35	20
12:40	6	17:40	21
12:45	10	17:45	24
12:50	9	17:50	20
12:55	11	17:55	18
13:00	16	18:00	21
13:05	14	18:05	18
13:10	11	18:10	20
13:15	4	18:15	16
13:20	7	18:20	14
13:25	7	18:25	15
13:30	5	18:30	9
13:35	4	18:35	10
13:40	6	18:40	10
13:45	8	18:45	11
13:50	8	18:50	9
13:55	8	18:55	10
14:00	10	19:00	8
14:05	12	19:05	7
14:10	12	19:10	8
14:15	12	19:15	7
14:20	13	19:20	7
14:25	12	19:25	5
14:30	9	19:30	6
14:35	11	19:35	5
14:40	11	19:40	6
14:45	12	19:45	6
14:50	13	19:50	9
14:55	15	19:55	8
15:00	19	20:00	8
15:05	18	20:05	9
15:10	13	20:10	12
15:15	13	20:15	8
15:20	15	20:20	9
15:25	14	20:25	5
15:30	8	20:30	8
15:35	9	20:35	6
15:40	9	20:40	4
15:45	7	20:45	9
15:50	9	20:50	12
15:55	11	20:55	14

[illegible][illegible]

**La Quinta**  
**(78611 Highway 111, La Quinta, CA 92253)**

## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 78611 CA-111

**City:** La Quinta

**Day:** Thursday

**Date:** 6/27/2019

Time	Queue	Time	Queue
11:00	7	16:00	13
11:05	7	16:05	15
11:10	8	16:10	13
11:15	7	16:15	18
11:20	7	16:20	18
11:25	6	16:25	21
11:30	4	16:30	20
11:35	7	16:35	19
11:40	12	16:40	18
11:45	11	16:45	19
11:50	13	16:50	20
11:55	12	16:55	19
12:00	14	17:00	22
12:05	18	17:05	18
12:10	21	17:10	18
12:15	22	17:15	15
12:20	19	17:20	17
12:25	17	17:25	18
12:30	19	17:30	19
12:35	15	17:35	18
12:40	18	17:40	21
12:45	18	17:45	19
12:50	17	17:50	15
12:55	17	17:55	8
13:00	16	18:00	13
13:05	15	18:05	13
13:10	18	18:10	16
13:15	18	18:15	22
13:20	17	18:20	17
13:25	20	18:25	20
13:30	18	18:30	22
13:35	18	18:35	23
13:40	15	18:40	20
13:45	16	18:45	21
13:50	16	18:50	19
13:55	14	18:55	17
14:00	12	19:00	18
14:05	14	19:05	21
14:10	12	19:10	15
14:15	14	19:15	16
14:20	14	19:20	12
14:25	13	19:25	5
14:30	15	19:30	7
14:35	15	19:35	6
14:40	12	19:40	6
14:45	12	19:45	17
14:50	13	19:50	15
14:55	13	19:55	16
15:00	13	20:00	16
15:05	15	20:05	16
15:10	14	20:10	15
15:15	17	20:15	17
15:20	13	20:20	16
15:25	13	20:25	13
15:30	11	20:30	15
15:35	7	20:35	11
15:40	3	20:40	11
15:45	2	20:45	16
15:50	13	20:50	14
15:55	14	20:55	19

[illegible][illegible]

## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 78611 CA-111

**City:** La Quinta

**Day:** Saturday

**Date:** 6/22/2019

Time	Queue	Time	Queue
11:00	6	16:00	13
11:05	8	16:05	12
11:10	4	16:10	14
11:15	3	16:15	17
11:20	7	16:20	15
11:25	11	16:25	14
11:30	16	16:30	16
11:35	15	16:35	17
11:40	12	16:40	12
11:45	11	16:45	11
11:50	11	16:50	14
11:55	9	16:55	20
12:00	6	17:00	18
12:05	9	17:05	21
12:10	10	17:10	18
12:15	12	17:15	18
12:20	14	17:20	16
12:25	14	17:25	15
12:30	17	17:30	19
12:35	18	17:35	15
12:40	14	17:40	12
12:45	15	17:45	12
12:50	14	17:50	11
12:55	16	17:55	10
13:00	15	18:00	8
13:05	14	18:05	11
13:10	12	18:10	8
13:15	14	18:15	9
13:20	13	18:20	10
13:25	11	18:25	10
13:30	16	18:30	9
13:35	16	18:35	17
13:40	18	18:40	16
13:45	14	18:45	18
13:50	14	18:50	18
13:55	15	18:55	16
14:00	16	19:00	8
14:05	13	19:05	10
14:10	10	19:10	7
14:15	11	19:15	8
14:20	8	19:20	9
14:25	13	19:25	12
14:30	19	19:30	11
14:35	18	19:35	10
14:40	17	19:40	9
14:45	15	19:45	8
14:50	12	19:50	7
14:55	9	19:55	6
15:00	10	20:00	5
15:05	15	20:05	11
15:10	15	20:10	15
15:15	11	20:15	10
15:20	8	20:20	15
15:25	7	20:25	16
15:30	4	20:30	16
15:35	2	20:35	15
15:40	8	20:40	8
15:45	10	20:45	9
15:50	8	20:50	15
15:55	8	20:55	12

[illegible][illegible]

**Long Beach**  
**(6391 E Pacific Coast Highway, Long Beach, CA 90803)**

Wednesday, May 16, 2012

CITY: Long Beach

PROJECT: In N Out Burger

AM Period	IN	OUT	MAXIMUM QUEUE	PM Period	IN	OUT	MAXIMUM QUEUE
00:00				12:00	31	25	15
00:15				12:15	30	15	15
00:30				12:30	52	50	13
00:45				12:45	25	138 29 119	8
01:00				13:00	29	29	12
01:15				13:15	32	27	13
01:30				13:30	18	23	8
01:45				13:45	X	79 X 79	7
02:00				14:00			8
02:15				14:15			7
02:30				14:30			8
02:45				14:45			6
03:00				15:00			6
03:15				15:15			5
03:30				15:30			4
03:45				15:45			5
04:00				16:00	16	19	6
04:15				16:15	12	17	5
04:30				16:30	14	14	3
04:45				16:45	16	58 10 60	6
05:00				17:00	19	14	5
05:15				17:15	20	19	7
05:30				17:30	19	19	7
05:45				17:45	11	69 21 73	5
06:00				18:00	17	20	12
06:15				18:15	X	X	7
06:30				18:30	X	X	10
06:45				18:45	X	17 X 20	12
07:00				19:00			10
07:15				19:15			11
07:30				19:30			7
07:45				19:45			6
08:00				20:00			8
08:15				20:15			6
08:30				20:30			9
08:45				20:45			10
09:00				21:00			12
09:15				21:15			16
09:30				21:30			14
09:45				21:45			15
10:00				22:00			14
10:15			5	22:15			13
10:30			8	22:30			12
10:45			7	22:45			12
11:00			3	23:00			11
11:15			6	23:15			13
11:30	19	25	7	23:30			9
11:45	21 40	27 52	14	23:45			8
<b>Total Vol.</b>					361	351	

Daily Total	
IN	401
OUT	361

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

05.19.2012

Saturday, May 19, 2012

CITY: Long Beach

PROJECT: In N Out Burger

AM Period	IN	OUT	MAXIMUM QUEUE	PM Period	IN	OUT	MAXIMUM QUEUE
00:00				12:00	17	17	16
00:15				12:15	34	20	14
00:30				12:30	22	30	16
00:45				12:45	32	105 37 104	10
01:00				13:00	33	27	15
01:15				13:15	29	23	16
01:30				13:30	29	33	10
01:45				13:45	X 91	X 83	9
02:00				14:00			12
02:15				14:15			13
02:30				14:30			9
02:45				14:45			8
03:00				15:00			9
03:15				15:15			9
03:30				15:30			6
03:45				15:45			9
04:00				16:00	21	25	8
04:15				16:15	22	16	10
04:30				16:30	21	25	8
04:45				16:45	24 88	24 90	5
05:00				17:00	19	19	9
05:15				17:15	19	21	10
05:30				17:30	28	25	10
05:45				17:45	18 84	19 84	9
06:00				18:00	23	18	13
06:15				18:15			9
06:30				18:30			10
06:45				18:45	X 23	X 18	14
07:00				19:00			12
07:15				19:15			13
07:30				19:30			9
07:45				19:45			9
08:00				20:00			10
08:15				20:15			9
08:30				20:30			11
08:45				20:45			12
09:00				21:00			13
09:15				21:15			17
09:30				21:30			15
09:45				21:45			10
10:00				22:00			12
10:15			4	22:15			14
10:30			7	22:30			13
10:45			9	22:45			11
11:00			7	23:00			9
11:15			8	23:15			10
11:30	25	16	9	23:30			8
11:45	27 52	18 34	16	23:45			6
<b>Total Vol.</b>					391	379	

Daily Total	
IN	443
OUT	391

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

**Los Angeles**  
**(9149 S Sepulveda Blvd, Los Angeles, CA 90045)**

05.16.2012

Wednesday, May 16th, 2012

CITY: Los Angeles

PROJECT: In-N-Out Burger

AM Period	IN	OUT	MAXIMUM QUEUE	PM Period	IN	OUT	MAXIMUM QUEUE
00:00				12:00	39	35	20
00:15				12:15	48	36	18
00:30				12:30	52	37	21
00:45				12:45	57	196 41 149	19
01:00				13:00	39	45	22
01:15				13:15	36	46	21
01:30				13:30	35	41	20
01:45				13:45	X 110	X 132	20
02:00				14:00			21
02:15				14:15			21
02:30				14:30			22
02:45				14:45			21
03:00				15:00			18
03:15				15:15			17
03:30				15:30			16
03:45				15:45			18
04:00				16:00	31	24	17
04:15				16:15	18	18	15
04:30				16:30	27	28	12
04:45				16:45	33	109 22 92	10
05:00				17:00	34	30	9
05:15				17:15	25	33	14
05:30				17:30	36	23	17
05:45				17:45	32	127 25 111	19
06:00				18:00	30	36	20
06:15				18:15			19
06:30				18:30			20
06:45				18:45			18
07:00				19:00			17
07:15				19:15			18
07:30				19:30			19
07:45				19:45			20
08:00				20:00			21
08:15				20:15			19
08:30				20:30			19
08:45				20:45			20
09:00				21:00			18
09:15				21:15			19
09:30				21:30			20
09:45				21:45			19
10:00			0	22:00			21
10:15			2	22:15			17
10:30			5	22:30			16
10:45			6	22:45			14
11:00			6	23:00			16
11:15			12	23:15			17
11:30	28	32	16	23:30			15
11:45	31	59 29 61	120	23:45			13
<b>Total Vol.</b>	<b>59</b>	<b>61</b>			<b>542</b>	<b>484</b>	

Daily Totals		
IN		OUT
601		545

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

05/19/12				CITY: Los Angeles				PROJECT: In-N-Out Burger			
AM Period	IN	OUT		MAXIMUM QUEUE	PM Period	IN	OUT		MAXIMUM QUEUE		
00:00					12:00	49		38	20		
00:15					12:15	49		41	16		
00:30					12:30	51		43	20		
00:45					12:45	66	215	57 179	20		
01:00					13:00	53		49	23		
01:15					13:15	54		51	22		
01:30					13:30	49		54	20		
01:45					13:45	X	156	X 154	20		
02:00					14:00				21		
02:15					14:15				26		
02:30					14:30				22		
02:45					14:45				21		
03:00					15:00				18		
03:15					15:15				17		
03:30					15:30				17		
03:45					15:45				9		
04:00					16:00	28		24	10		
04:15					16:15	37		20	14		
04:30					16:30	38		25	18		
04:45					16:45	25	128	34 103	8		
05:00					17:00	15		26	8		
05:15					17:15	28		30	9		
05:30					17:30	43		24	20		
05:45					17:45	33	119	33 113	19		
06:00					18:00	35		38	20		
06:15					18:15	X		X	19		
06:30					18:30	X		X	20		
06:45					18:45	X	35	X 38	18		
07:00					19:00				19		
07:15					19:15				20		
07:30					19:30				21		
07:45					19:45				22		
08:00					20:00				21		
08:15					20:15				22		
08:30					20:30				18		
08:45					20:45				17		
09:00					21:00				16		
09:15					21:15				19		
09:30					21:30				18		
09:45					21:45				20		
10:00					22:00				19		
10:15				3	22:15				18		
10:30				4	22:30				19		
10:45				6	22:45				18		
11:00				8	23:00				21		
11:15				11	23:15				17		
11:30	31		46	12	23:30				16		
11:45	42	73	35 81	18	23:45				14		
Total Vol.		73	81			653		587			

Daily Totals	
IN	OUT
726	668

**Thousand Palms**  
**(72265 Varner Rd, Thousand Palms, CA 92276)**

## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 72265 Varner Road  
**City:** Thousand Palms

**Day:** Thursday  
**Date:** 6/27/2019

Time	Queue	Time	Queue
11:00	12	16:00	7
11:05	14	16:05	6
11:10	15	16:10	4
11:15	15	16:15	9
11:20	16	16:20	8
11:25	14	16:25	10
11:30	18	16:30	9
11:35	17	16:35	7
11:40	17	16:40	5
11:45	13	16:45	10
11:50	12	16:50	11
11:55	14	16:55	10
12:00	17	17:00	10
12:05	15	17:05	9
12:10	14	17:10	10
12:15	13	17:15	14
12:20	16	17:20	11
12:25	15	17:25	12
12:30	14	17:30	11
12:35	14	17:35	13
12:40	16	17:40	12
12:45	18	17:45	9
12:50	20	17:50	6
12:55	15	17:55	7
13:00	10	18:00	11
13:05	9	18:05	12
13:10	9	18:10	11
13:15	12	18:15	12
13:20	9	18:20	16
13:25	8	18:25	12
13:30	11	18:30	17
13:35	12	18:35	18
13:40	13	18:40	16
13:45	10	18:45	15
13:50	7	18:50	18
13:55	10	18:55	15
14:00	14	19:00	16
14:05	13	19:05	18
14:10	19	19:10	19
14:15	21	19:15	20
14:20	18	19:20	17
14:25	17	19:25	17
14:30	14	19:30	17
14:35	14	19:35	14
14:40	6	19:40	15
14:45	7	19:45	16
14:50	9	19:50	16
14:55	12	19:55	12
15:00	12	20:00	10
15:05	13	20:05	6
15:10	7	20:10	6
15:15	8	20:15	12
15:20	10	20:20	13
15:25	9	20:25	17
15:30	11	20:30	15
15:35	13	20:35	13
15:40	14	20:40	15
15:45	13	20:45	11
15:50	11	20:50	8
15:55	9	20:55	9

[illegible][illegible]

## MAX Queue Study

### In-N-Out, Rancho Mirage

**Location:** 72265 Varner Road  
**City:** Thousand Palms

**Day:** Saturday  
**Date:** 6/22/2019

Time	Queue	Time	Queue
11:00	6	16:00	12
11:05	6	16:05	7
11:10	8	16:10	7
11:15	7	16:15	6
11:20	8	16:20	7
11:25	7	16:25	11
11:30	10	16:30	12
11:35	9	16:35	9
11:40	12	16:40	12
11:45	12	16:45	11
11:50	11	16:50	10
11:55	14	16:55	11
12:00	9	17:00	12
12:05	9	17:05	12
12:10	11	17:10	11
12:15	9	17:15	11
12:20	11	17:20	8
12:25	12	17:25	5
12:30	12	17:30	2
12:35	12	17:35	3
12:40	18	17:40	6
12:45	14	17:45	10
12:50	15	17:50	16
12:55	16	17:55	16
13:00	15	18:00	19
13:05	13	18:05	16
13:10	15	18:10	12
13:15	15	18:15	11
13:20	13	18:20	13
13:25	14	18:25	17
13:30	17	18:30	14
13:35	18	18:35	15
13:40	17	18:40	15
13:45	15	18:45	15
13:50	17	18:50	18
13:55	18	18:55	20
14:00	14	19:00	19
14:05	14	19:05	15
14:10	14	19:10	16
14:15	10	19:15	13
14:20	14	19:20	12
14:25	16	19:25	11
14:30	18	19:30	12
14:35	16	19:35	12
14:40	17	19:40	12
14:45	15	19:45	12
14:50	14	19:50	14
14:55	15	19:55	10
15:00	15	20:00	10
15:05	15	20:05	10
15:10	11	20:10	13
15:15	16	20:15	13
15:20	17	20:20	17
15:25	16	20:25	15
15:30	15	20:30	12
15:35	13	20:35	16
15:40	15	20:40	17
15:45	11	20:45	19
15:50	14	20:50	17
15:55	14	20:55	16

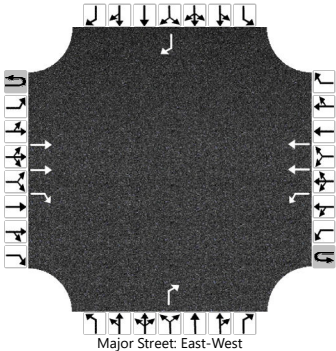
[illegible][illegible]

## Appendix D: HCM Analysis Output Sheets

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	I 25 SB
Time Analyzed	Existing MD	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			479	24	1	288	394					549				131
Percent Heavy Vehicles (%)					1	1						1				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.42	4.12						6.92				6.93
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.51	2.21						3.31				3.32

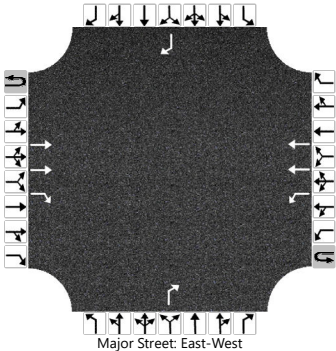
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					301							572				136
Capacity, c (veh/h)					1027							753				802
v/c Ratio					0.29							0.76				0.17
95% Queue Length, Q <sub>95</sub> (veh)					1.2							7.2				0.6
95% Queue Length, Q <sub>95</sub> (ft)					30.2							181.4				15.2
Control Delay (s/veh)					10.0							23.2				10.4
Level of Service (LOS)					A							C				B
Approach Delay (s/veh)					4.2				23.2				10.4			
Approach LOS					A				C				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	I 25 SB
Time Analyzed	Existing PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			572	36	0	699	708					500				177
Percent Heavy Vehicles (%)					0	0						0				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1						6.9				6.9
Critical Headway (sec)						4.10						6.90				6.96
Base Follow-Up Headway (sec)						2.2						3.3				3.3
Follow-Up Headway (sec)						2.20						3.30				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						736						526				186
Capacity, c (veh/h)						954						701				622
v/c Ratio						0.77						0.75				0.30
95% Queue Length, Q <sub>95</sub> (veh)						7.9						6.9				1.3
95% Queue Length, Q <sub>95</sub> (ft)						197.5						172.5				33.3
Control Delay (s/veh)						20.2						23.9				13.2
Level of Service (LOS)						C						C				B
Approach Delay (s/veh)					10.1				23.9				13.2			
Approach LOS					B				C				B			

HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2024

Time Analyzed

Existing MD

Intersection Orientation

East-West

Project Description

Gibson In-N-Out

Site Information

Intersection

Gibson I 25 NB

Jurisdiction

COA

East/West Street

Gibson Boulevard

North/South Street

I 25 NB

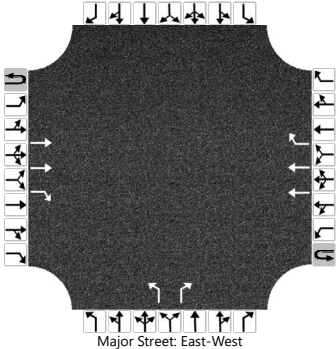
Peak Hour Factor

0.98

Analysis Time Period (hrs)

0.25

Lanes



Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			912	105			667	583		13		302				
Percent Heavy Vehicles (%)										1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.52		6.92				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.51		3.31				

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)										13		308				
Capacity, c (veh/h)										126		547				
v/c Ratio										0.11		0.56				
95% Queue Length, Q <sub>95</sub> (veh)										0.3		3.5				
95% Queue Length, Q <sub>95</sub> (ft)										7.6		88.1				
Control Delay (s/veh)										37.0		19.7				
Level of Service (LOS)										E		C				
Approach Delay (s/veh)									20.5							
Approach LOS									C							

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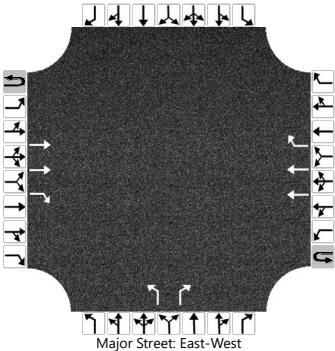
HCS™ TWSC Version 2024  
2 Gibson I25 NB Existing MD.xtw

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HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	I 25 NB
Time Analyzed	Existing PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			926	151			1360	991		49		424				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

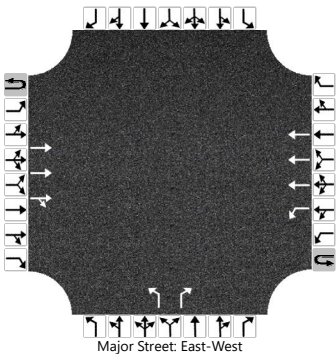
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										52		446				
Capacity, c (veh/h)										62		532				
v/c Ratio										0.83		0.84				
95% Queue Length, Q <sub>95</sub> (veh)										3.8		8.7				
95% Queue Length, Q <sub>95</sub> (ft)										95.0		217.5				
Control Delay (s/veh)										178.0		37.8				
Level of Service (LOS)										F		E				
Approach Delay (s/veh)									52.4							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	Mulberry Street
Time Analyzed	Existing MD	Peak Hour Factor	0.99
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1157	52	6	40	1206			41		47				
Percent Heavy Vehicles (%)					0	1				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.11				3.80		3.90				

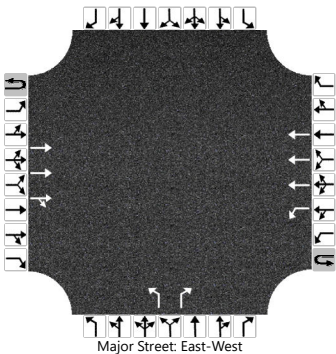
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					46				41		47					
Capacity, c (veh/h)					321				155		378					
v/c Ratio					0.14				0.27		0.13					
95% Queue Length, Q <sub>95</sub> (veh)					0.5				1.0		0.4					
95% Queue Length, Q <sub>95</sub> (ft)					12.6				25.0		10.0					
Control Delay (s/veh)					18.1	2.4			36.4		15.9					
Level of Service (LOS)					C	A			E		C					
Approach Delay (s/veh)					2.9				25.5							
Approach LOS					A				D							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	Mulberry Street
Time Analyzed	Existing PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1270	73	4	29	2298			24		36				
Percent Heavy Vehicles (%)					0	0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.30				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.10				3.80		3.90				

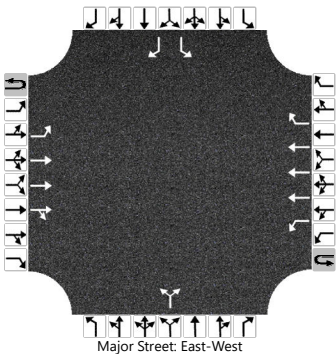
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					35				25		38					
Capacity, c (veh/h)					261				103		328					
v/c Ratio					0.13				0.25		0.12					
95% Queue Length, Q <sub>95</sub> (veh)					0.5				0.9		0.4					
95% Queue Length, Q <sub>95</sub> (ft)					12.5				22.5		10.0					
Control Delay (s/veh)					20.9	2.7			50.9		17.4					
Level of Service (LOS)					C	A			F		C					
Approach Delay (s/veh)					3.0				30.8							
Approach LOS					A				D							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	Alumni Drive
Time Analyzed	Existing MD	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	23	4	1141	49	3	39	1212	6		23		39		2		4
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.10		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.90		3.80		3.90

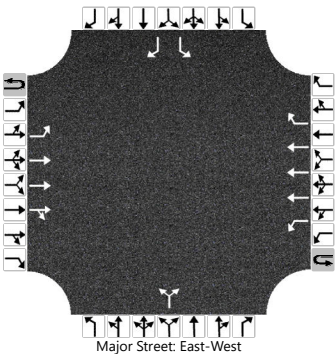
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		28				43					64			2		4
Capacity, c (veh/h)		450				311					188			86		369
v/c Ratio		0.06				0.14					0.34			0.02		0.01
95% Queue Length, Q <sub>95</sub> (veh)		0.2				0.5					1.4			0.1		0.0
95% Queue Length, Q <sub>95</sub> (ft)		5.0				12.5					35.0			2.5		0.0
Control Delay (s/veh)		13.5				18.4					33.7			47.9		14.9
Level of Service (LOS)		B				C					D			E		B
Approach Delay (s/veh)	0.3				0.6				33.7				25.9			
Approach LOS	A				A				D				D			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2024	North/South Street	Alumni Drive
Time Analyzed	Existing PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	17	2	1258	28	4	36	2294	0		10		35		0		2
Percent Heavy Vehicles (%)	0	0			0	0				0		3		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

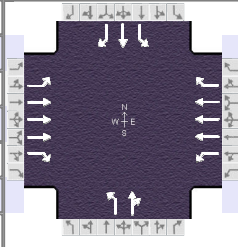
Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.16		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.93		3.80		3.90

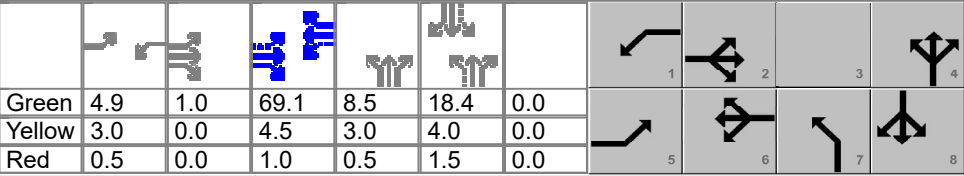
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20			42					47			0			2
Capacity, c (veh/h)		149			273					173			13			153
v/c Ratio		0.13			0.15					0.27			0.00			0.01
95% Queue Length, Q <sub>95</sub> (veh)		0.5			0.5					1.1			0.0			0.0
95% Queue Length, Q <sub>95</sub> (ft)		12.5			12.5					28.0						0.0
Control Delay (s/veh)		33.0			20.6					33.5			282.2			28.9
Level of Service (LOS)		D			C					D			F			D
Approach Delay (s/veh)	0.5				0.4				33.5				28.9			
Approach LOS	A				A				D				D			

# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Existing MD	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2024	Analysis Period	1> 7:00	
Intersection	University and Gibson	File Name	5 University-Gibson Existing MD.xus			
Project Description	Gibson In-N-Out Existing MD					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	140	856	131	108	1020	104	179	91	89	160	77	128

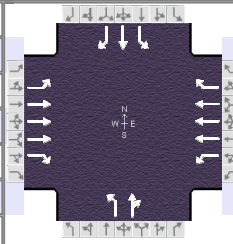
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	4.9	1.0	69.1	8.5	18.4	0.0	
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0	
				Red	0.5	0.0	1.0	0.5	1.5	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	9.4	75.6	8.4	74.6	12.0	35.9		23.9
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	5.8		4.9		10.5	12.3		17.3
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.2	0.0	0.0	1.2		1.2
Phase Call Probability	0.99		0.97		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.00

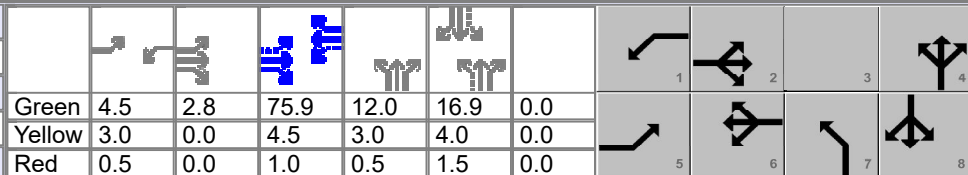
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	140	856	131	108	1020	104	179	180		160	77	128
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1745		1223	1900	1610
Queue Service Time ( $g_s$ ), s	3.8	9.9	4.5	2.9	12.6	3.5	8.5	10.3		15.3	4.3	8.8
Cycle Queue Clearance Time ( $g_c$ ), s	3.8	9.9	4.5	2.9	12.6	3.5	8.5	10.3		15.3	4.3	8.8
Green Ratio ( $g/C$ )	0.63	0.58	0.58	0.62	0.58	0.58	0.24	0.25		0.15	0.15	0.15
Capacity ( $c$ ), veh/h	414	3025	934	452	2958	927	347	443		248	292	247
Volume-to-Capacity Ratio ( $X$ )	0.338	0.283	0.140	0.239	0.345	0.112	0.516	0.407		0.645	0.264	0.517
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	62	161	70	48	203	56	23	194		209	93	162
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	2.5	6.5	2.8	1.9	8.1	2.2	0.9	7.8		8.4	3.7	6.5
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	10.0	12.4	11.3	9.9	13.5	11.5	39.4	37.3		49.4	44.8	46.7
Incremental Delay ( $d_2$ ), s/veh	0.2	0.2	0.3	0.1	0.3	0.2	0.6	0.2		1.1	0.2	0.6
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	10.2	12.7	11.6	10.0	13.8	11.8	40.0	37.5		50.5	45.0	47.3
Level of Service (LOS)	B	B	B	B	B	B	D	D		D	D	D
Approach Delay, s/veh / LOS	12.2	B		13.3	B		38.7	D		48.2	D	
Intersection Delay, s/veh / LOS	20.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.89	B	2.08	B	2.72	C	2.73	C
Bicycle LOS Score / LOS	1.11	A	1.17	A	1.08	A	1.09	A

# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Existing PM	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2024	Analysis Period	1> 7:00	
Intersection	University and Gibson	File Name	5 University-Gibson Existing PM.xus			
Project Description	Gibson In-N-Out Existing PM					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	178	1119	113	89	2008	186	167	79	66	138	57	137

Signal Information											
Cycle, s	130.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	4.5	2.8	75.9	12.0	16.9	0.0	
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0	
				Red	0.5	0.0	1.0	0.5	1.5	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	10.7	84.1	8.0	81.4	15.5	37.9		22.4
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.3		3.3
Queue Clearance Time ( $g_s$ ), s	7.0		4.6		12.1	10.8		15.9
Green Extension Time ( $g_e$ ), s	0.3	0.0	0.1	0.0	0.0	1.0		1.0
Phase Call Probability	1.00		0.96		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.00

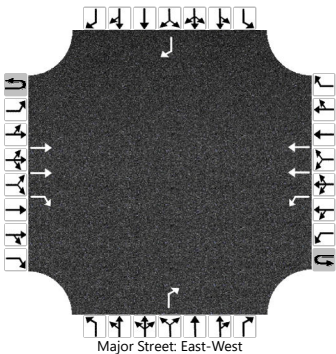
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	178	1119	113	89	2008	186	167	145		138	57	137
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1756		1263	1900	1610
Queue Service Time ( $g_s$ ), s	5.0	14.2	3.9	2.6	34.8	7.1	10.1	8.8		13.9	3.5	10.5
Cycle Queue Clearance Time ( $g_c$ ), s	5.0	14.2	3.9	2.6	34.8	7.1	10.1	8.8		13.9	3.5	10.5
Green Ratio ( $g/C$ )	0.65	0.60	0.60	0.62	0.58	0.58	0.24	0.25		0.13	0.13	0.13
Capacity ( $c$ ), veh/h	225	3130	966	363	2996	940	364	438		219	246	209
Volume-to-Capacity Ratio ( $X$ )	0.792	0.358	0.117	0.245	0.670	0.198	0.459	0.331		0.630	0.231	0.656
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	150	223	62	44	475	114	199	170		200	77	195
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	6.0	8.9	2.5	1.7	18.9	4.6	7.9	6.8		8.0	3.1	7.8
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	23.8	13.0	10.9	10.8	18.5	12.7	41.7	39.9		55.3	50.8	53.8
Incremental Delay ( $d_2$ ), s/veh	2.4	0.3	0.2	0.1	1.2	0.5	0.3	0.2		1.1	0.2	1.3
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	26.3	13.3	11.2	10.9	19.7	13.2	42.1	40.1		56.4	50.9	55.1
Level of Service (LOS)	C	B	B	B	B	B	D	D		E	D	E
Approach Delay, s/veh / LOS	14.8	B		18.9	B		41.2	D		54.9	D	
Intersection Delay, s/veh / LOS	21.9						C					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.89	B		2.09	B		2.73	C		2.74	C	
Bicycle LOS Score / LOS	1.26	A		1.74	B		1.00	A		1.04	A	

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 SB
Time Analyzed	2026 Background MD	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			540	25	1	309	423					608				132
Percent Heavy Vehicles (%)					1	1						1				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.42	4.12						6.92				6.93
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.51	2.21						3.31				3.32

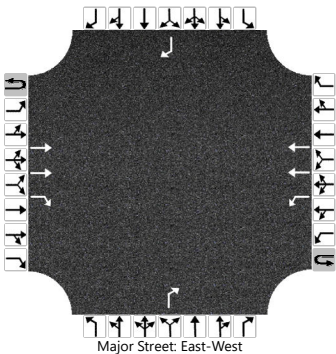
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					323							633				138
Capacity, c (veh/h)					953							719				785
v/c Ratio					0.34							0.88				0.18
95% Queue Length, Q <sub>95</sub> (veh)					1.5							11.0				0.6
95% Queue Length, Q <sub>95</sub> (ft)					37.8							277.2				15.2
Control Delay (s/veh)					10.7							35.2				10.6
Level of Service (LOS)					B							E				B
Approach Delay (s/veh)					4.5				35.2				10.6			
Approach LOS					A				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 SB
Time Analyzed	Background PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			625	37	2	726	736					538				178
Percent Heavy Vehicles (%)					0	0						0				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.40	4.10						6.90				6.96
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.50	2.20						3.30				3.33

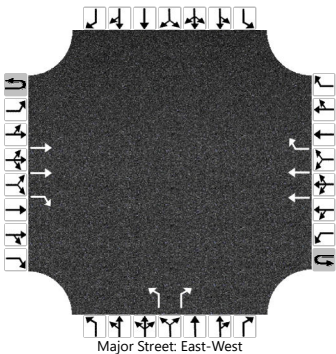
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					766							566				187
Capacity, c (veh/h)					886							673				608
v/c Ratio					0.86							0.84				0.31
95% Queue Length, Q <sub>95</sub> (veh)					11.0							9.4				1.3
95% Queue Length, Q <sub>95</sub> (ft)					275.0							235.0				33.3
Control Delay (s/veh)					28.7							32.2				13.5
Level of Service (LOS)					D							D				B
Approach Delay (s/veh)					14.3				32.2				13.5			
Approach LOS					B				D				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 NB
Time Analyzed	Background MD	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1038	107			717	623		13		340				
Percent Heavy Vehicles (%)										1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.52		6.92				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.51		3.31				

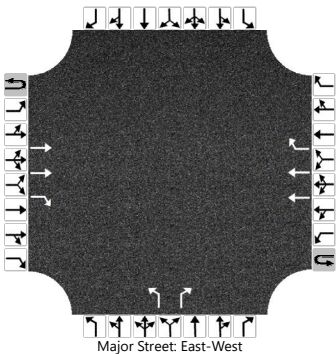
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										13		347				
Capacity, c (veh/h)										97		497				
v/c Ratio										0.14		0.70				
95% Queue Length, Q <sub>95</sub> (veh)										0.5		5.4				
95% Queue Length, Q <sub>95</sub> (ft)										12.6		136.0				
Control Delay (s/veh)										48.0		27.4				
Level of Service (LOS)										E		D				
Approach Delay (s/veh)									28.1							
Approach LOS									D							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 NB
Time Analyzed	Background PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1021	154			1414	1030		50		462				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

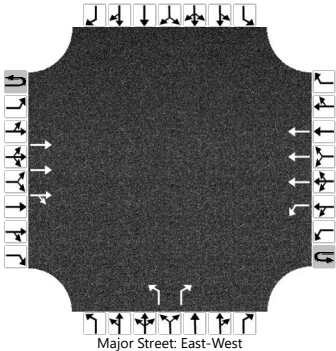
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										53		486				
Capacity, c (veh/h)										50		493				
v/c Ratio										1.06		0.99				
95% Queue Length, Q <sub>95</sub> (veh)										4.6		13.1				
95% Queue Length, Q <sub>95</sub> (ft)										115.0		327.5				
Control Delay (s/veh)										278.2		66.1				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									86.8							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Mulberry Street
Time Analyzed	BO Background MD	Peak Hour Factor	0.99
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1320	53	6	43	1295			42		52				
Percent Heavy Vehicles (%)					0	1				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.11				3.80		3.90				

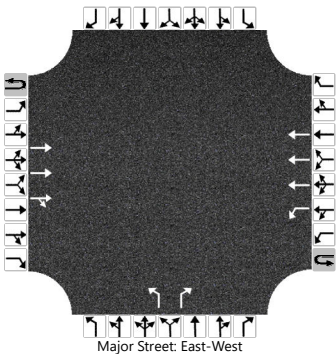
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					49				42		53					
Capacity, c (veh/h)					265				123		334					
v/c Ratio					0.19				0.35		0.16					
95% Queue Length, Q <sub>95</sub> (veh)					0.7				1.4		0.6					
95% Queue Length, Q <sub>95</sub> (ft)					17.6				35.0		15.0					
Control Delay (s/veh)					21.6	3.6			49.1		17.8					
Level of Service (LOS)					C	A			E		C					
Approach Delay (s/veh)					4.3				31.8							
Approach LOS					A				D							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Mulberry Street
Time Analyzed	BO Background PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1403	75	4	31	2390			24		40				
Percent Heavy Vehicles (%)					0	0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.30				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.10				3.80		3.90				

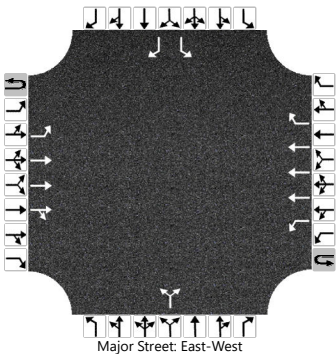
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					37				25		42					
Capacity, c (veh/h)					222				85		295					
v/c Ratio					0.17				0.30		0.14					
95% Queue Length, Q <sub>95</sub> (veh)					0.6				1.1		0.5					
95% Queue Length, Q <sub>95</sub> (ft)					15.0				27.5		12.5					
Control Delay (s/veh)					24.4	4.0			64.2		19.2					
Level of Service (LOS)					C	A			F		C					
Approach Delay (s/veh)					4.2				36.1							
Approach LOS					A				E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Background MD	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	24	43	1269	50	3	40	1278	32		23		40		40		29
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.10		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.90		3.80		3.90

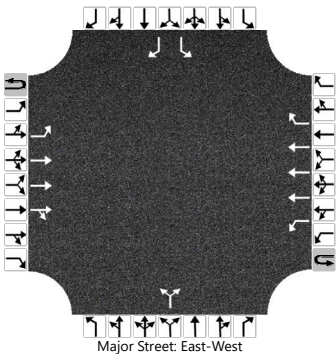
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		69			44					65			41			30
Capacity, c (veh/h)		310			268					125			68			350
v/c Ratio		0.22			0.17					0.52			0.61			0.09
95% Queue Length, Q <sub>95</sub> (veh)		0.8			0.6					2.4			2.6			0.3
95% Queue Length, Q <sub>95</sub> (ft)		20.0			15.0					60.0			65.0			7.5
Control Delay (s/veh)		19.9			21.1					61.4			119.7			16.2
Level of Service (LOS)		C			C					F			F			C
Approach Delay (s/veh)	1.0				0.7				61.4				76.2			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Background PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	17	31	1365	29	4	37	2368	19		10		36		27		20
Percent Heavy Vehicles (%)	0	0			0	0				0		3		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

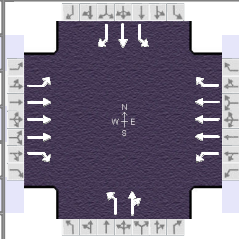
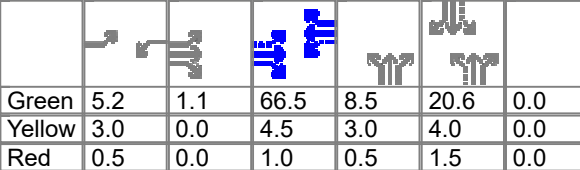
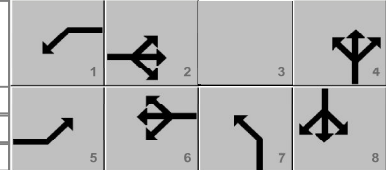
Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.16		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.93		3.80		3.90

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		51				43					48			28		21
Capacity, c (veh/h)		84				240					87			10		144
v/c Ratio		0.60				0.18					0.55			2.93		0.15
95% Queue Length, Q <sub>95</sub> (veh)		2.7				0.6					2.5			4.6		0.5
95% Queue Length, Q <sub>95</sub> (ft)		67.5				15.0					63.6			115.0		12.5
Control Delay (s/veh)		97.5				23.2					88.7			1632.4		34.2
Level of Service (LOS)		F				C					F			F		D
Approach Delay (s/veh)	3.2				0.4				88.7				952.3			
Approach LOS	A				A				F				F			

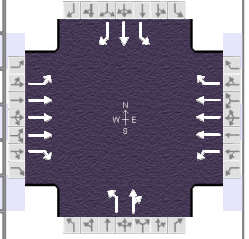
# HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency						Duration, h		1.000											
Analyst			Analysis Date		5/21/2024		Area Type		Other										
Jurisdiction		CABQ		Time Period		Background MD		PHF		1.00									
Urban Street		Gibson Boulevard		Analysis Year		2026		Analysis Period		1> 7:00									
Intersection		University and Gibson		File Name		5 University-Gibson BO Background MD.xus													
Project Description		Gibson In-N-Out BO Background MD																	
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand ( $\nu$ ), veh/h				148	1007	138	113	1100	109	193	96	101	179	81	138				
Signal Information																			
Cycle, s	120.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On			Green	5.2	1.1	66.5	8.5	20.6	0.0							
Force Mode	Fixed	Simult. Gap N/S	On			Yellow	3.0	0.0	4.5	3.0	4.0	0.0							
					Red	0.5	0.0	1.0	0.5	1.5	0.0								
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase				5		2		1		6		7		4				8	
Case Number				1.1		3.0		1.1		3.0		1.0		4.0				5.3	
Phase Duration, s				9.9		73.1		8.7		72.0		12.0		38.1				26.1	
Change Period, ( $Y+R_c$ ), s				3.5		5.5		3.5		5.5		3.5		5.5				5.5	
Max Allow Headway ( $MAH$ ), s				3.0		0.0		3.0		0.0		3.1		3.4				3.4	
Queue Clearance Time ( $g_s$ ), s				6.2				5.2				10.5		13.2				19.3	
Green Extension Time ( $g_e$ ), s				0.2		0.0		0.2		0.0		0.0		1.3				1.3	
Phase Call Probability				0.99				0.98				1.00		1.00				1.00	
Max Out Probability				0.00				0.00				1.00		0.00				0.00	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				5	2	12	1	6	16	7	4	14	3	8	18				
Adjusted Flow Rate ( $\nu$ ), veh/h				148	1007	138	113	1100	109	193	197		179	81	138				
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln				1810	1725	1598	1810	1712	1610	1810	1739		1204	1900	1610				
Queue Service Time ( $g_s$ ), s				4.2	12.6	5.0	3.2	14.6	3.9	8.5	11.2		17.3	4.4	9.3				
Cycle Queue Clearance Time ( $g_c$ ), s				4.2	12.6	5.0	3.2	14.6	3.9	8.5	11.2		17.3	4.4	9.3				
Green Ratio ( $g/C$ )				0.61	0.56	0.56	0.60	0.55	0.55	0.26	0.27		0.17	0.17	0.17				
Capacity ( $c$ ), veh/h				381	2917	900	390	2846	892	369	473		267	326	277				
Volume-to-Capacity Ratio ( $X$ )				0.388	0.345	0.153	0.290	0.387	0.122	0.523	0.417		0.671	0.248	0.499				
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)				70	205	79	54	232	62	37	206		228	96	171				
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)				2.8	8.2	3.1	2.2	9.2	2.5	1.5	8.2		9.1	3.8	6.8				
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00				
Uniform Delay ( $d_1$ ), s/veh				11.3	14.2	12.5	11.3	15.2	12.8	38.2	35.9		48.3	43.0	45.0				
Incremental Delay ( $d_2$ ), s/veh				0.2	0.3	0.4	0.2	0.4	0.3	0.7	0.2		1.1	0.1	0.5				
Initial Queue Delay ( $d_3$ ), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0				
Control Delay ( $d$ ), s/veh				11.6	14.5	12.9	11.5	15.6	13.1	38.9	36.1		49.4	43.1	45.5				
Level of Service (LOS)				B	B	B	B	B	B	D	D		D	D	D				
Approach Delay, s/veh / LOS				14.0		B		15.0		B		37.5		D		46.8		D	
Intersection Delay, s/veh / LOS				20.9						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				1.90		B		2.09		B		2.72		C		2.73		C	
Bicycle LOS Score / LOS				1.20		A		1.21		A		1.13		A		1.14		A	

# HCS Signalized Intersection Results Summary

## General Information

Agency			
Analyst		Analysis Date	5/21/2024
Jurisdiction	CABQ	Time Period	Background PM
Urban Street	Gibson Boulevard	Analysis Year	2026
Intersection	University and Gibson	File Name	5 University-Gibson
Project Description	Gibson In-N-Out BO Background PM		



## Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	185	1245	117	92	2093	191	178	84	73	152	60	146

## Signal Information

Cycle, s	130.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Green	4.7	2.9	73.8	12.1	18.5	0.0	
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0	
				Red	0.5	0.0	1.0	0.5	1.5	0.0	

## Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	11.1	82.2	8.2	79.3	15.6	39.6		24.0
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	7.4		4.8		12.6	11.4		17.4
Green Extension Time ( $g_e$ ), s	0.3	0.0	0.1	0.0	0.0	1.1		1.1
Phase Call Probability	1.00		0.96		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.00

## Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R			
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18			
Adjusted Flow Rate ( $v$ ), veh/h	185	1245	117	92	2093	191	178	157		152	60	146			
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1753		1249	1900	1610			
Queue Service Time ( $g_s$ ), s	5.4	16.9	4.2	2.8	38.7	7.6	10.6	9.4		15.4	3.6	11.1			
Cycle Queue Clearance Time ( $g_c$ ), s	5.4	16.9	4.2	2.8	38.7	7.6	10.6	9.4		15.4	3.6	11.1			
Green Ratio ( $g/C$ )	0.64	0.59	0.59	0.60	0.57	0.57	0.25	0.26		0.14	0.14	0.14			
Capacity ( $c$ ), veh/h	216	3054	943	322	2914	914	380	460		233	270	229			
Volume-to-Capacity Ratio ( $X$ )	0.858	0.408	0.124	0.285	0.718	0.209	0.469	0.341		0.652	0.222	0.637			
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	155	259	67	48	527	123	207	182		216	79	203			
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	6.2	10.3	2.7	1.9	20.9	4.9	8.3	7.3		8.6	3.2	8.1			
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00			
Uniform Delay ( $d_1$ ), s/veh	26.2	14.4	11.8	12.0	20.5	13.8	40.6	38.9		54.4	49.4	52.6			
Incremental Delay ( $d_2$ ), s/veh	4.0	0.4	0.3	0.2	1.6	0.5	0.3	0.2		1.2	0.2	1.1			
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			
Control Delay ( $d$ ), s/veh	30.2	14.8	12.1	12.2	22.1	14.3	40.9	39.0		55.6	49.5	53.7			
Level of Service (LOS)	C	B	B	B	C	B	D	D		E	D	D			
Approach Delay, s/veh / LOS	16.4	B		21.1		C		40.0		D		53.8		D	
Intersection Delay, s/veh / LOS	23.4						C								

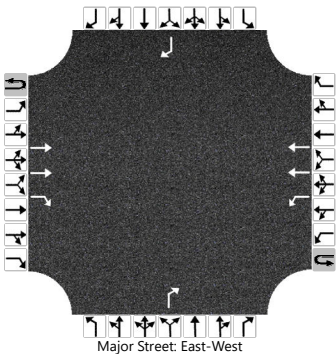
## Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.89	B		2.09	B		2.73	C		2.74	C	
Bicycle LOS Score / LOS	1.34	A		1.79	B		1.04	A		1.08	A	

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 SB
Time Analyzed	Full Build MD	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			554	25	1	344	435					650				132
Percent Heavy Vehicles (%)					1	1						1				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.42	4.12						6.92				6.93
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.51	2.21						3.31				3.32

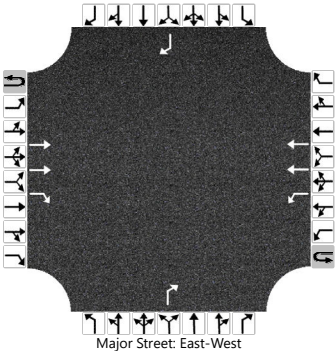
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					359							677				138
Capacity, c (veh/h)					895							711				777
v/c Ratio					0.40							0.95				0.18
95% Queue Length, Q <sub>95</sub> (veh)					2.0							13.9				0.6
95% Queue Length, Q <sub>95</sub> (ft)					50.4							350.3				15.2
Control Delay (s/veh)					11.7							47.1				10.6
Level of Service (LOS)					B							E				B
Approach Delay (s/veh)					5.2				47.1				10.6			
Approach LOS					A				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 SB
Time Analyzed	Full Build PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			634	37	2	759	746					572				178
Percent Heavy Vehicles (%)					0	0						0				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.40	4.10						6.90				6.96
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.50	2.20						3.30				3.33

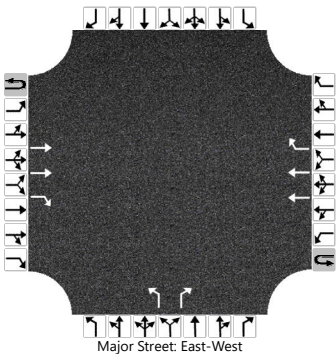
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						801						602				187
Capacity, c (veh/h)						866						668				603
v/c Ratio						0.93						0.90				0.31
95% Queue Length, Q <sub>95</sub> (veh)						13.8						11.5				1.3
95% Queue Length, Q <sub>95</sub> (ft)						345.0						287.5				33.3
Control Delay (s/veh)						37.2						40.0				13.6
Level of Service (LOS)						E						E				B
Approach Delay (s/veh)					18.8				40.0				13.6			
Approach LOS					C				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 NB
Time Analyzed	Full Build MD	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1094	107			764	656		13		363				
Percent Heavy Vehicles (%)										1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.52		6.92				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.51		3.31				

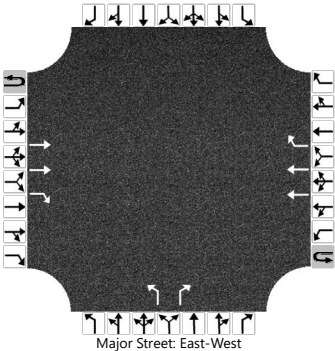
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										13		370				
Capacity, c (veh/h)										84		476				
v/c Ratio										0.16		0.78				
95% Queue Length, Q <sub>95</sub> (veh)										0.5		6.9				
95% Queue Length, Q <sub>95</sub> (ft)										12.6		173.7				
Control Delay (s/veh)										55.6		34.4				
Level of Service (LOS)										F		D				
Approach Delay (s/veh)									35.1							
Approach LOS									E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	I 25 NB
Time Analyzed	Full Build PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1064	154			1457	1059		50		484				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

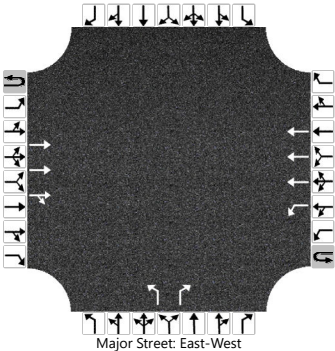
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										53		509				
Capacity, c (veh/h)										44		477				
v/c Ratio										1.19		1.07				
95% Queue Length, Q <sub>95</sub> (veh)										5.0		16.0				
95% Queue Length, Q <sub>95</sub> (ft)										125.0		400.0				
Control Delay (s/veh)										344.5		90.1				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									114.0							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Mulberry Street
Time Analyzed	Full Build MD	Peak Hour Factor	0.99
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1400	53	6	45	1375			42		53				
Percent Heavy Vehicles (%)					0	1				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.11				3.80		3.90				

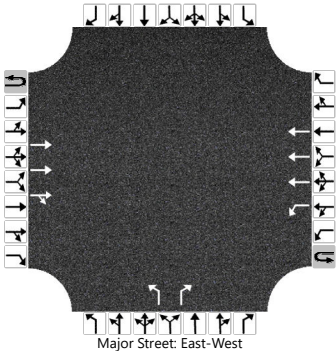
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					52				42		54					
Capacity, c (veh/h)					242				109		314					
v/c Ratio					0.21				0.39		0.17					
95% Queue Length, Q <sub>95</sub> (veh)					0.8				1.6		0.6					
95% Queue Length, Q <sub>95</sub> (ft)					20.1				40.0		15.0					
Control Delay (s/veh)					23.9	4.6			58.0		18.8					
Level of Service (LOS)					C	A			F		C					
Approach Delay (s/veh)					5.2				36.1							
Approach LOS					A				E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Mulberry Street
Time Analyzed	Full Build PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1468	75	4	32	2461			24		41				
Percent Heavy Vehicles (%)					0	0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.30				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.10				3.80		3.90				

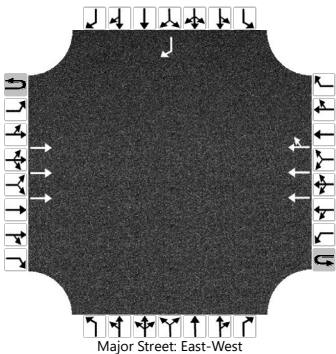
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					38				25		43					
Capacity, c (veh/h)					205				77		280					
v/c Ratio					0.18				0.33		0.15					
95% Queue Length, Q <sub>95</sub> (veh)					0.7				1.2		0.5					
95% Queue Length, Q <sub>95</sub> (ft)					17.5				30.0		12.5					
Control Delay (s/veh)					26.5	4.8			72.9		20.2					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					5.1				39.7							
Approach LOS					A				E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Site DWY 1
Time Analyzed	Full Build MD	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1460				1335	0								101
Percent Heavy Vehicles (%)																2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.13
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.92

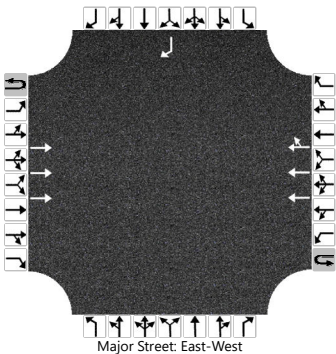
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																110
Capacity, c (veh/h)																316
v/c Ratio																0.35
95% Queue Length, Q <sub>95</sub> (veh)																1.5
95% Queue Length, Q <sub>95</sub> (ft)																38.0
Control Delay (s/veh)																22.4
Level of Service (LOS)																C
Approach Delay (s/veh)													22.4			
Approach LOS													C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Site DWY 1
Time Analyzed	Full Build PM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1513				2397	0								90
Percent Heavy Vehicles (%)																2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.13
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.92

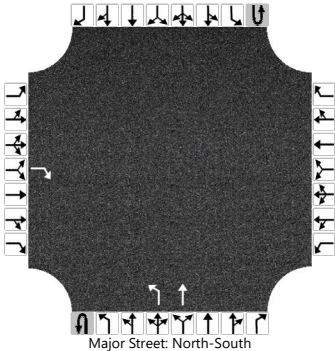
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																98
Capacity, c (veh/h)																130
v/c Ratio																0.75
95% Queue Length, Q <sub>95</sub> (veh)																4.4
95% Queue Length, Q <sub>95</sub> (ft)																111.5
Control Delay (s/veh)																88.6
Level of Service (LOS)																F
Approach Delay (s/veh)													88.6			
Approach LOS													F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 2
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 2
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	1	0	0	0	0	0
Configuration				R						L	T					
Volume (veh/h)				12						66	0					
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.13						5.33						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.93						3.13						

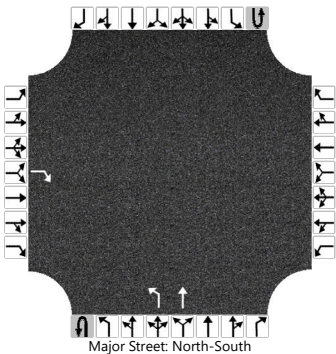
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				13						72						
Capacity, c (veh/h)				917						1151						
v/c Ratio				0.01						0.06						
95% Queue Length, Q <sub>95</sub> (veh)				0.0						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				0.0						5.1						
Control Delay (s/veh)				9.0						8.3						
Level of Service (LOS)				A						A						
Approach Delay (s/veh)	9.0								8.3							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 2
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 2
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	1	0	0	0	0	0
Configuration				R						L	T					
Volume (veh/h)				10						51	0					
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.13						5.33						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.93						3.13						

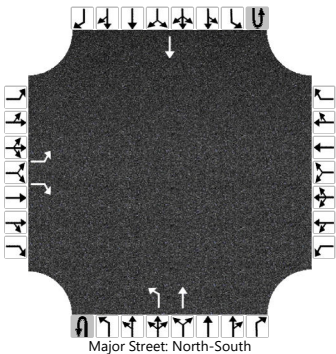
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				11						55						
Capacity, c (veh/h)				917						1151						
v/c Ratio				0.01						0.05						
95% Queue Length, Q <sub>95</sub> (veh)				0.0						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				0.0						5.1						
Control Delay (s/veh)				9.0						8.3						
Level of Service (LOS)				A						A						
Approach Delay (s/veh)	9.0								8.3							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 3
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 3
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		38						89	66				4	
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

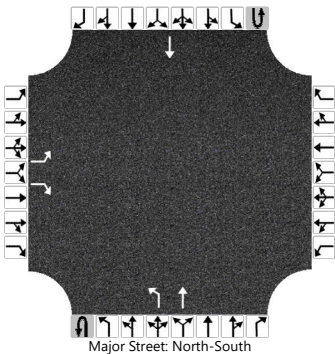
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		41						97						
Capacity, c (veh/h)		674		1076						1611						
v/c Ratio		0.00		0.04						0.06						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.1						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				2.6						5.1						
Control Delay (s/veh)		10.3		8.5						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.5								4.2							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 3
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 3
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		33						86	51				10	
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

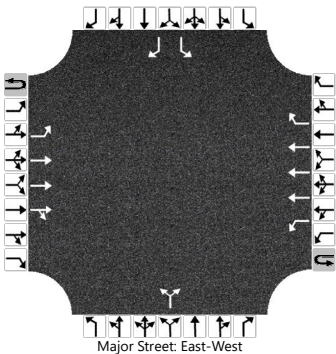
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		36						93						
Capacity, c (veh/h)		690		1067						1602						
v/c Ratio		0.00		0.03						0.06						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.1						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				2.6						5.1						
Control Delay (s/veh)		10.2		8.5						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.5								4.6							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	17	105	1357	29	4	37	2349	82		10		36		70		20
Percent Heavy Vehicles (%)	0	0			0	0				0		3		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.16		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.93		3.80		3.90

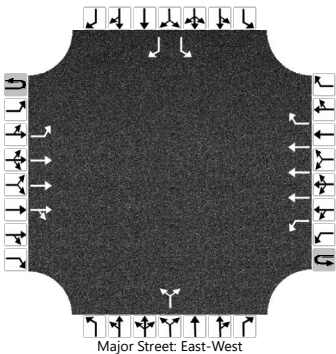
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		128				43					48			74		21
Capacity, c (veh/h)		72				242					0			16		146
v/c Ratio		1.79				0.18								4.55		0.14
95% Queue Length, Q <sub>95</sub> (veh)		11.3				0.6								10.0		0.5
95% Queue Length, Q <sub>95</sub> (ft)		282.5				15.0								250.0		12.5
Control Delay (s/veh)		503.1				23.0								2070.6		33.7
Level of Service (LOS)		F				C								F		D
Approach Delay (s/veh)	40.7				0.4								1618.0			
Approach LOS	F				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2026	North/South Street	Alumni Drive
Time Analyzed	Full Build MD	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	24	132	1261	50	3	40	1259	97		23		40		90		29
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

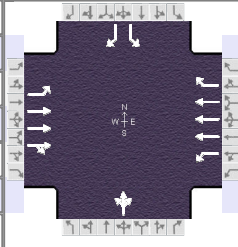
Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.10		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.90		3.80		3.90

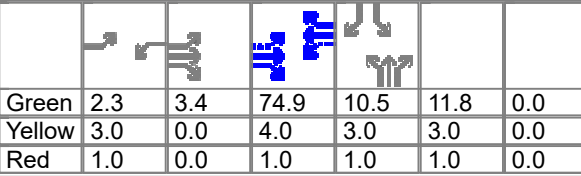
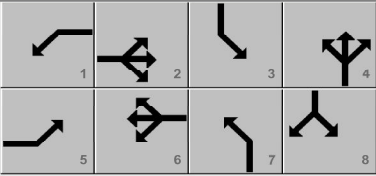
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		161			44					65			93			30
Capacity, c (veh/h)		272			271					59			32			356
v/c Ratio		0.59			0.16					1.10			2.86			0.08
95% Queue Length, Q <sub>95</sub> (veh)		3.5			0.6					5.3			10.8			0.3
95% Queue Length, Q <sub>95</sub> (ft)		87.5			15.0					132.5			270.0			7.5
Control Delay (s/veh)		35.8			20.9					264.0			1098.4			16.0
Level of Service (LOS)		E			C					F			F			C
Approach Delay (s/veh)	3.8				0.6				264.0				834.6			
Approach LOS	A				A				F				F			

# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Mitigated MD	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Gibson & Alumni	File Name	Mitigated Gibson Alumni BO TOTAL MD.xus			
Project Description	Gibson In-N-Out (Mitigated) BO Full Build MD					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	156	1261	50	43	1259	97	23	0	40	90		29

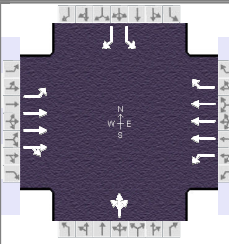
Signal Information											
Cycle, s	120.0	Reference Phase	2			1	2	3	4	5	6
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
Green	2.3	3.4	74.9	10.5	11.8	0.0					
Yellow	3.0	0.0	4.0	3.0	3.0	0.0					
Red	1.0	0.0	1.0	1.0	1.0	0.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		4		8
Case Number	1.1	4.0	1.1	3.0		12.0		9.0
Phase Duration, s	9.8	83.4	6.3	79.9		14.5		15.8
Change Period, ( $Y+R_c$ ), s	4.0	5.0	4.0	5.0		4.0		4.0
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0		3.2		3.3
Queue Clearance Time ( $g_s$ ), s	5.6		3.0			6.3		7.7
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.0	0.0		0.1		0.2
Phase Call Probability	0.99		0.76			0.88		0.98
Max Out Probability	0.00		0.00			0.00		0.00

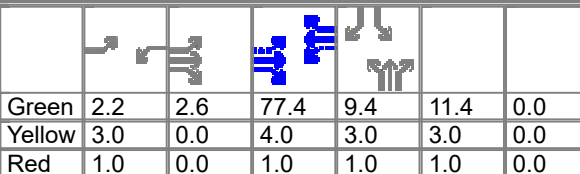
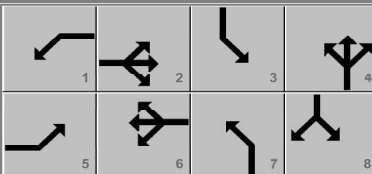
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3		18
Adjusted Flow Rate ( $v$ ), veh/h	156	880	431	43	1259	97		63		90		29
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1900	1861	1810	1712	1610		1678		1810		1610
Queue Service Time ( $g_s$ ), s	3.6	12.6	12.6	1.0	14.6	2.9		4.3		5.7		2.0
Cycle Queue Clearance Time ( $g_c$ ), s	3.6	12.6	12.6	1.0	14.6	2.9		4.3		5.7		2.0
Green Ratio ( $g/C$ )	0.68	0.65	0.65	0.64	0.62	0.62		0.09		0.10		0.10
Capacity ( $c$ ), veh/h	372	2481	1215	322	3206	1005		147		178		158
Volume-to-Capacity Ratio ( $X$ )	0.419	0.355	0.355	0.134	0.393	0.096		0.428		0.507		0.184
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	54	208	211	17	221	44		81		119		37
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	2.2	8.3	8.4	0.7	8.8	1.8		3.2		4.7		1.5
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.24	0.00	0.00	0.09	0.00	0.00		0.00		0.52		0.16
Uniform Delay ( $d_1$ ), s/veh	8.2	9.4	9.4	8.4	11.2	9.0		51.9		51.4		49.7
Incremental Delay ( $d_2$ ), s/veh	0.3	0.4	0.8	0.1	0.4	0.2		0.7		0.8		0.2
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0
Control Delay ( $d$ ), s/veh	8.5	9.8	10.2	8.4	11.6	9.2		52.6		52.2		49.9
Level of Service (LOS)	A	A	B	A	B	A		D		D		D
Approach Delay, s/veh / LOS	9.8		A	11.3		B	52.6		D	51.6		D
Intersection Delay, s/veh / LOS	13.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.65	B	1.88	B	2.74	C	2.62	C
Bicycle LOS Score / LOS	1.29	A	1.26	A	0.59	A		F

# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Full Build PM	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Gibson & Alumni	File Name	Mitigated Gibson Alumni BO TOTAL PM.xus			
Project Description	Gibson In-N-Out (Mitigated) BO Full Build PM					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	122	1357	29	41	2349	82	10	0	36	70		20

Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	2.2	2.6	77.4	9.4	11.4	0.0		
				Yellow	3.0	0.0	4.0	3.0	3.0	0.0		
				Red	1.0	0.0	1.0	1.0	1.0	0.0		

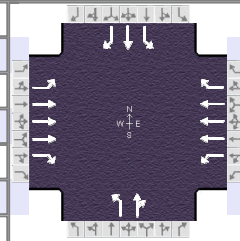
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		4		8
Case Number	1.1	4.0	1.1	3.0		12.0		9.0
Phase Duration, s	8.8	85.0	6.2	82.4		13.4		15.4
Change Period, ( $Y+R_c$ ), s	4.0	5.0	4.0	5.0		4.0		4.0
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0		3.3		3.3
Queue Clearance Time ( $g_s$ ), s	4.7		2.9			5.2		6.4
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.0	0.0		0.0		0.1
Phase Call Probability	0.98		0.75			0.78		0.95
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3		18
Adjusted Flow Rate ( $v$ ), veh/h	122	927	459	41	2349	82		46		70		20
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1900	1879	1810	1712	1610		1650		1810		1610
Queue Service Time ( $g_s$ ), s	2.7	12.9	12.9	0.9	35.9	2.3		3.2		4.4		1.4
Cycle Queue Clearance Time ( $g_c$ ), s	2.7	12.9	12.9	0.9	35.9	2.3		3.2		4.4		1.4
Green Ratio ( $g/C$ )	0.69	0.67	0.67	0.66	0.64	0.64		0.08		0.10		0.10
Capacity ( $c$ ), veh/h	186	2532	1252	309	3312	1039		129		172		153
Volume-to-Capacity Ratio ( $X$ )	0.657	0.366	0.366	0.133	0.709	0.079		0.356		0.407		0.131
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	103	210	214	15	458	34		59		91		25
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	4.1	8.4	8.5	0.6	18.2	1.4		2.4		3.7		1.0
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.45	0.00	0.00	0.08	0.00	0.00		0.00		0.40		0.11
Uniform Delay ( $d_1$ ), s/veh	22.4	8.8	8.8	7.7	13.9	8.0		52.4		51.1		49.8
Incremental Delay ( $d_2$ ), s/veh	1.5	0.4	0.8	0.1	1.3	0.1		0.6		0.6		0.1
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0
Control Delay ( $d$ ), s/veh	23.9	9.3	9.7	7.7	15.3	8.1		53.0		51.7		49.9
Level of Service (LOS)	C	A	A	A	B	A		D		D		D
Approach Delay, s/veh / LOS	10.6		B	14.9		B	53.0		D	51.3		D
Intersection Delay, s/veh / LOS	14.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.65	B	1.88	B	2.74	C	2.62	C
Bicycle LOS Score / LOS	1.32	A	1.85	B	0.56	A		F

# HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	1.000
Analyst		Analysis Date	5/21/2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Full Build MD	PHF	1.00
Urban Street	Gibson Boulevard	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	University and Gibson	File Name	8 University-Gibson BO TOTAL MD.xus		
Project Description	Gibson In-N-Out BO Total MD				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	156	1033	146	113	1133	105	197	96	101	179	77	147

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	10.2	73.1	8.8	71.7	12.0	38.1		26.1
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	6.4		5.2		10.5	13.2		19.3
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.2	0.0	0.0	1.4		1.3
Phase Call Probability	0.99		0.98		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.00

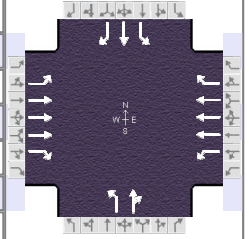
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	156	1033	146	113	1133	105	197	197		179	77	147
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1739		1204	1900	1610
Queue Service Time ( $g_s$ ), s	4.4	13.1	5.3	3.2	15.2	3.8	8.5	11.2		17.3	4.2	10.0
Cycle Queue Clearance Time ( $g_c$ ), s	4.4	13.1	5.3	3.2	15.2	3.8	8.5	11.2		17.3	4.2	10.0
Green Ratio ( $g/C$ )	0.61	0.56	0.56	0.60	0.55	0.55	0.26	0.27		0.17	0.17	0.17
Capacity ( $c$ ), veh/h	375	2916	900	382	2833	888	372	473		267	327	277
Volume-to-Capacity Ratio ( $X$ )	0.416	0.354	0.162	0.296	0.400	0.118	0.529	0.416		0.670	0.236	0.531
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	74	210	84	54	240	60	42	206		228	91	184
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	3.0	8.4	3.3	2.2	9.5	2.4	1.7	8.2		9.1	3.6	7.3
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	11.5	14.3	12.6	11.4	15.5	12.9	38.4	35.9		48.3	42.9	45.3
Incremental Delay ( $d_2$ ), s/veh	0.3	0.3	0.4	0.2	0.4	0.3	0.7	0.2		1.1	0.1	0.6
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	11.8	14.6	13.0	11.6	15.9	13.2	39.1	36.1		49.4	43.0	45.9
Level of Service (LOS)	B	B	B	B	B	B	D	D		D	D	D
Approach Delay, s/veh / LOS	14.1	B		15.3	B		37.6	D		46.9	D	
Intersection Delay, s/veh / LOS	21.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.09	B	2.72	C	2.73	C
Bicycle LOS Score / LOS	1.22	A	1.23	A	1.14	A	1.15	A

# HCS Signalized Intersection Results Summary

## General Information































































Agency			
Analyst		Analysis Date	5/21/2024
Jurisdiction	CABQ	Time Period	Full Build PM
Urban Street	Gibson Boulevard	Analysis Year	2026
Intersection	University and Gibson	File Name	8 University-Gibson
Project Description	Gibson In-N-Out BO Total PM		



## Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	192	1266	124	92	2129	187	180	84	73	152	56	152

## Signal Information

Cycle, s	130.0	Reference Phase	2																																																															
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## Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	11.9	82.2	8.2	78.5	15.6	39.6		24.0
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	8.1		4.8		12.8	11.4		17.4
Green Extension Time ( $g_e$ ), s	0.3	0.0	0.1	0.0	0.0	1.1		1.1
Phase Call Probability	1.00		0.96		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.00

## Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	192	1266	124	92	2129	187	180	157		152	56	152
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1753		1249	1900	1610
Queue Service Time ( $g_s$ ), s	6.1	17.3	4.5	2.8	40.4	7.5	10.8	9.4		15.4	3.4	11.6
Cycle Queue Clearance Time ( $g_c$ ), s	6.1	17.3	4.5	2.8	40.4	7.5	10.8	9.4		15.4	3.4	11.6
Green Ratio ( $g/C$ )	0.64	0.59	0.59	0.60	0.56	0.56	0.25	0.26		0.14	0.14	0.14
Capacity ( $c$ ), veh/h	221	3052	942	318	2883	904	383	460		233	270	229
Volume-to-Capacity Ratio ( $X$ )	0.870	0.415	0.132	0.290	0.739	0.207	0.470	0.341		0.652	0.207	0.663
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	161	264	72	48	549	123	209	182		216	74	211
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	6.4	10.6	2.9	1.9	21.8	4.9	8.4	7.3		8.6	3.0	8.4
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	28.9	14.5	11.9	12.3	21.4	14.2	40.6	38.8		54.4	49.3	52.8
Incremental Delay ( $d_2$ ), s/veh	4.3	0.4	0.3	0.2	1.8	0.5	0.3	0.2		1.2	0.1	1.2
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	33.2	14.9	12.2	12.4	23.1	14.7	41.0	39.0		55.6	49.4	54.0
Level of Service (LOS)	C	B	B	B	C	B	D	D		E	D	D
Approach Delay, s/veh / LOS	16.9		B	22.1		C	40.1		D	54.0		D
Intersection Delay, s/veh / LOS	24.1						C					

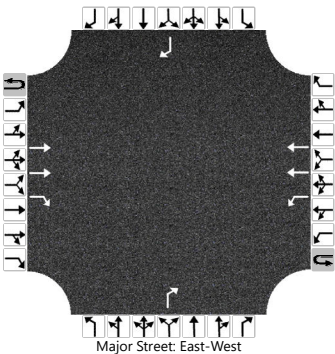
## Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.89		B	2.09		B	2.73		C	2.74		C
Bicycle LOS Score / LOS	1.36		A	1.81		B	1.04		A	1.08		A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 SB
Time Analyzed	Horizon BG MD	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			596	27	1	343	469					625				136
Percent Heavy Vehicles (%)					1	1						1				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.42	4.12						6.92				6.93
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.51	2.21						3.31				3.32

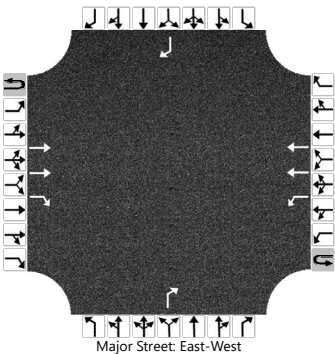
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					358							651				142
Capacity, c (veh/h)					867							688				757
v/c Ratio					0.41							0.95				0.19
95% Queue Length, Q <sub>95</sub> (veh)					2.0							13.5				0.7
95% Queue Length, Q <sub>95</sub> (ft)					50.4							340.2				17.7
Control Delay (s/veh)					12.0							46.8				10.8
Level of Service (LOS)					B							E				B
Approach Delay (s/veh)					5.1				46.8				10.8			
Approach LOS					A				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 SB
Time Analyzed	Horizon BG PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			692	41	2	809	819					554				184
Percent Heavy Vehicles (%)					0	0						0				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.40	4.10						6.90				6.96
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.50	2.20						3.30				3.33

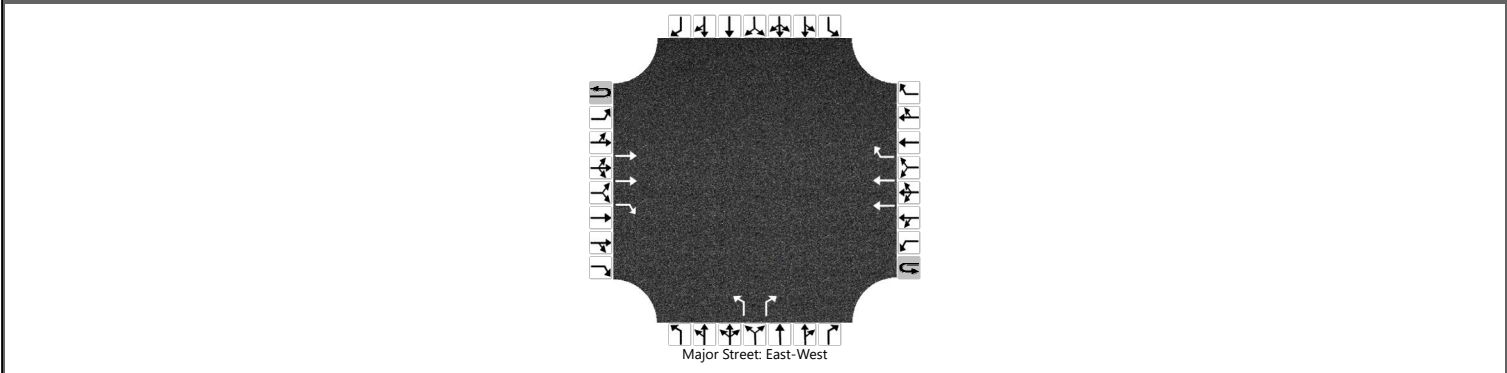
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					854							583				194
Capacity, c (veh/h)					815							638				570
v/c Ratio					1.05							0.91				0.34
95% Queue Length, Q <sub>95</sub> (veh)					20.5							11.7				1.5
95% Queue Length, Q <sub>95</sub> (ft)					512.5							292.5				38.4
Control Delay (s/veh)					67.0							43.1				14.5
Level of Service (LOS)					F							E				B
Approach Delay (s/veh)					33.3				43.1				14.5			
Approach LOS					F				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 NB
Time Analyzed	Horizon BG MD	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1146	120			795	692		15		372				
Percent Heavy Vehicles (%)										1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.52		6.92				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.51		3.31				

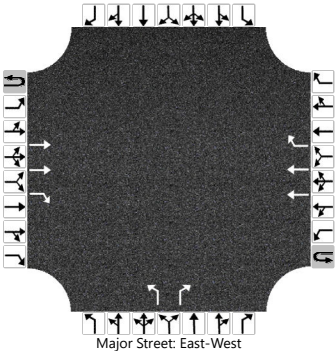
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										15		380				
Capacity, c (veh/h)										75		457				
v/c Ratio										0.20		0.83				
95% Queue Length, Q <sub>95</sub> (veh)										0.7		8.0				
95% Queue Length, Q <sub>95</sub> (ft)										17.6		201.4				
Control Delay (s/veh)										65.1		41.0				
Level of Service (LOS)										F		E				
Approach Delay (s/veh)									41.9							
Approach LOS									E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 NB
Time Analyzed	Horizon BG PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1131	172			1574	1147		55		508				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

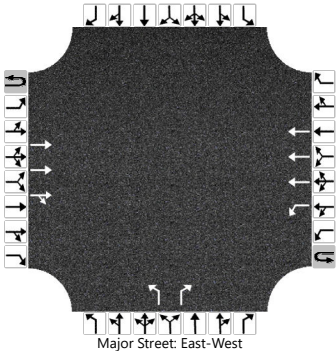
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										58		535				
Capacity, c (veh/h)										35		452				
v/c Ratio										1.65		1.18				
95% Queue Length, Q <sub>95</sub> (veh)										6.3		20.2				
95% Queue Length, Q <sub>95</sub> (ft)										157.5		505.0				
Control Delay (s/veh)										568.3		130.9				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									173.6							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Mulberry Street
Time Analyzed	Horizon BG MD	Peak Hour Factor	0.99
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1457	59	7	48	1437			46		57				
Percent Heavy Vehicles (%)					0	1				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.11				3.80		3.90				

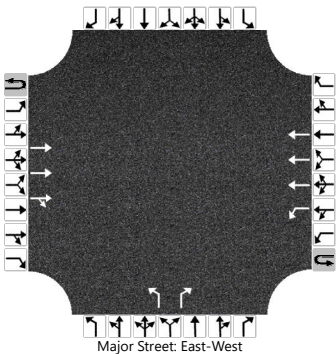
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					56				46		58					
Capacity, c (veh/h)					225				98		299					
v/c Ratio					0.25				0.47		0.19					
95% Queue Length, Q <sub>95</sub> (veh)					0.9				2.0		0.7					
95% Queue Length, Q <sub>95</sub> (ft)					22.7				50.0		17.5					
Control Delay (s/veh)					26.1	5.7			70.8		19.9					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					6.5				42.6							
Approach LOS					A				E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Mulberry Street
Time Analyzed	Horizon BG PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1553	83	5	34	2661			27		44				
Percent Heavy Vehicles (%)					0	0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.30				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.10				3.80		3.90				

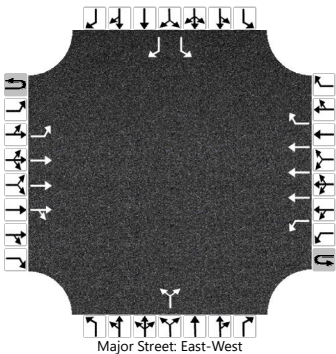
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					41				28		46					
Capacity, c (veh/h)					184				65		260					
v/c Ratio					0.22				0.43		0.18					
95% Queue Length, Q <sub>95</sub> (veh)					0.8				1.7		0.6					
95% Queue Length, Q <sub>95</sub> (ft)					20.0				42.5		15.0					
Control Delay (s/veh)					30.0	6.5			97.0		21.8					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					6.9				50.4							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon BG MD	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	26	44	1404	56	3	44	1421	33		26		44		40		30
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.10		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.90		3.80		3.90

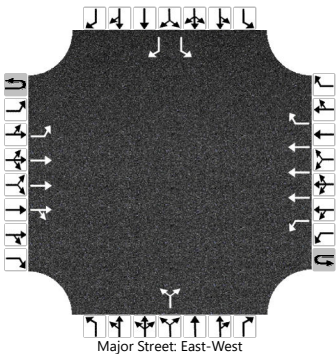
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		72			48					72				41		31
Capacity, c (veh/h)		265			227					94				49		314
v/c Ratio		0.27			0.21					0.77				0.85		0.10
95% Queue Length, Q <sub>95</sub> (veh)		1.1			0.8					4.0				3.5		0.3
95% Queue Length, Q <sub>95</sub> (ft)		27.5			20.0					100.0				87.5		7.5
Control Delay (s/veh)		23.6			25.1					117.7				215.6		17.7
Level of Service (LOS)		C			D					F				F		C
Approach Delay (s/veh)	1.1				0.8				117.7				130.8			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon BG PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	19	31	1513	32	5	41	2639	19		11		40		27		20
Percent Heavy Vehicles (%)	0	0			0	0				0		3		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

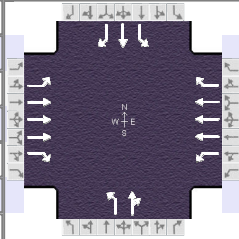
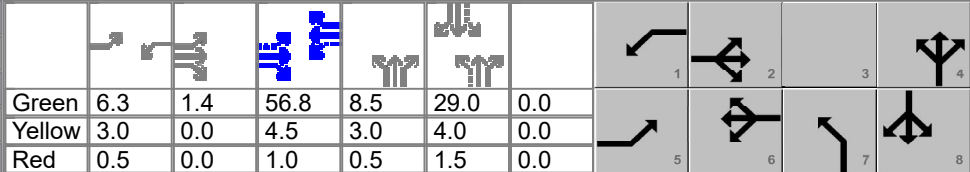
Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.16		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.93		3.80		3.90

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		53				48					54			28		21
Capacity, c (veh/h)		61				201					31			19		115
v/c Ratio		0.86				0.24					1.76			1.46		0.18
95% Queue Length, Q <sub>95</sub> (veh)		3.9				0.9					6.2			3.9		0.6
95% Queue Length, Q <sub>95</sub> (ft)		97.5				22.5					157.8			97.5		15.0
Control Delay (s/veh)		185.7				28.5					643.4			656.2		43.0
Level of Service (LOS)		F				D					F			F		E
Approach Delay (s/veh)	5.8				0.5				643.4				395.3			
Approach LOS	A				A				F				F			

# HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency						Duration, h		1.000											
Analyst				Analysis Date		5/21/2024		Area Type		Other									
Jurisdiction		CABQ		Time Period		Horizon BG MD		PHF		1.00									
Urban Street		Gibson Boulevard		Analysis Year		2036		Analysis Period		1> 7:00									
Intersection		University and Gibson		File Name		5 University-Gibson Horizon Background MD.xus													
Project Description		Gibson In-N-Out Horizon BG MD																	
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand ( v ), veh/h				164	1108	153	126	1221	122	253	127	131	233	107	181				
Signal Information																			
Cycle, s	120.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	6.3	1.4	56.8	8.5	29.0	0.0									
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0									
				Red	0.5	0.0	1.0	0.5	1.5	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase				5		2		1		6		7		4				8	
Case Number				1.1		3.0		1.1		3.0		1.0		4.0				5.3	
Phase Duration, s				11.2		63.7		9.8		62.3		12.0		46.5				34.5	
Change Period, ( Y+R c ), s				3.5		5.5		3.5		5.5		3.5		5.5				5.5	
Max Allow Headway ( MAH ), s				3.0		0.0		3.0		0.0		3.1		3.4				3.4	
Queue Clearance Time ( g s ), s				7.5				6.3				10.5		15.7				27.5	
Green Extension Time ( g e ), s				0.2		0.0		0.1		0.0		0.0		1.9				1.5	
Phase Call Probability				1.00				0.99				1.00		1.00				1.00	
Max Out Probability				0.00				0.00				1.00		0.00				0.13	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				5	2	12	1	6	16	7	4	14	3	8	18				
Adjusted Flow Rate ( v ), veh/h				164	1108	153	126	1221	122	253	258		233	107	181				
Adjusted Saturation Flow Rate ( s ), veh/h/ln				1810	1725	1598	1810	1712	1610	1810	1741		1139	1900	1610				
Queue Service Time ( g s ), s				5.5	16.8	6.5	4.3	19.7	5.2	8.5	13.7		23.8	5.4	11.5				
Cycle Queue Clearance Time ( g c ), s				5.5	16.8	6.5	4.3	19.7	5.2	8.5	13.7		25.5	5.4	11.5				
Green Ratio ( g/C )				0.54	0.49	0.49	0.53	0.47	0.47	0.33	0.34		0.24	0.24	0.24				
Capacity ( c ), veh/h				320	2511	775	324	2430	762	445	594		319	459	389				
Volume-to-Capacity Ratio ( X )				0.513	0.441	0.197	0.388	0.502	0.160	0.568	0.434		0.730	0.233	0.466				
Back of Queue ( Q ), ft/ln ( 95 th percentile)				98	268	110	76	307	87	99	239		287	116	205				
Back of Queue ( Q ), veh/ln ( 95 th percentile)				3.9	10.7	4.4	3.0	12.2	3.5	3.9	9.6		11.5	4.6	8.2				
Queue Storage Ratio ( RQ ) ( 95 th percentile)				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00				
Uniform Delay ( d 1 ), s/veh				16.6	20.2	17.6	16.2	21.8	18.0	34.1	30.6		45.0	36.6	38.9				
Incremental Delay ( d 2 ), s/veh				0.5	0.6	0.6	0.3	0.7	0.5	1.1	0.2		3.9	0.1	0.3				
Initial Queue Delay ( d 3 ), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0				
Control Delay ( d ), s/veh				17.1	20.8	18.2	16.5	22.6	18.5	35.2	30.7		48.9	36.7	39.2				
Level of Service (LOS)				B	C	B	B	C	B	D	C		D	D	D				
Approach Delay, s/veh / LOS				20.1		C	21.7		C	32.9		C	43.0		D				
Intersection Delay, s/veh / LOS				25.4						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				1.91		B	2.10		B	2.71		C	2.72		C				
Bicycle LOS Score / LOS				1.27		A	1.30		A	1.33		A	1.35		A				

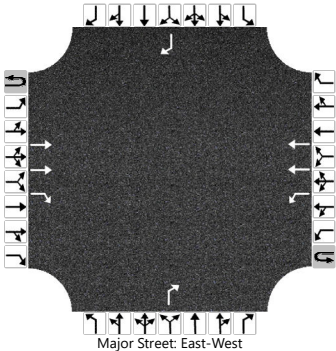
# HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency						Duration, h		1.000											
Analyst				Analysis Date		5/21/2024		Area Type		Other									
Jurisdiction		CABQ		Time Period		Horizon BG PM		PHF		1.00									
Urban Street		Gibson Boulevard		Analysis Year		2036		Analysis Period		1> 7:00									
Intersection		University and Gibson		File Name		5 University-Gibson Horizon Background PM.xus													
Project Description		Gibson In-N-Out Horizon BG PM																	
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand ( v ), veh/h				206	1377	131	102	2330	213	234	110	95	198	79	192				
Signal Information																			
Cycle, s	130.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	5.6	3.0	63.6	12.1	24.3	0.0									
				Yellow	3.0	3.0	4.5	3.0	4.0	0.0									
				Red	0.5	0.5	1.0	0.5	1.5	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase				5		2		1		6		7		4				8	
Case Number				1.1		3.0		1.1		3.0		1.0		4.0				5.3	
Phase Duration, s				15.6		75.5		9.1		69.1		15.6		45.4				29.8	
Change Period, ( Y+R c ), s				3.5		5.5		3.5		5.5		3.5		5.5				5.5	
Max Allow Headway ( MAH ), s				3.0		0.0		3.0		0.0		3.1		3.4				3.4	
Queue Clearance Time ( g s ), s				11.8				5.6				14.1		13.9				23.0	
Green Extension Time ( g e ), s				0.2		0.0		0.1		0.0		0.0		1.6				1.3	
Phase Call Probability				1.00				0.97				1.00		1.00				1.00	
Max Out Probability				0.00				0.00				1.00		0.00				0.05	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				5	2	12	1	6	16	7	4	14	3	8	18				
Adjusted Flow Rate ( v ), veh/h				206	1377	131	102	2330	213	234	205		198	79	192				
Adjusted Saturation Flow Rate ( s ), veh/h/ln				1810	1725	1598	1810	1712	1610	1810	1754		1196	1900	1610				
Queue Service Time ( g s ), s				9.8	21.7	5.4	3.6	55.2	10.1	12.1	11.9		21.0	4.6	14.3				
Cycle Queue Clearance Time ( g c ), s				9.8	21.7	5.4	3.6	55.2	10.1	12.1	11.9		21.0	4.6	14.3				
Green Ratio ( g/C )				0.60	0.54	0.54	0.53	0.49	0.49	0.30	0.31		0.19	0.19	0.19				
Capacity ( c ), veh/h				234	2789	861	276	2510	787	427	538		279	355	301				
Volume-to-Capacity Ratio ( X )				0.882	0.494	0.152	0.370	0.928	0.271	0.548	0.381		0.711	0.223	0.639				
Back of Queue ( Q ), ft/ln ( 95 th percentile)				291	328	89	66	784	173	252	219		268	100	247				
Back of Queue ( Q ), veh/ln ( 95 th percentile)				11.6	13.1	3.5	2.6	31.1	6.9	10.1	8.8		10.7	4.0	9.9				
Queue Storage Ratio ( RQ ) ( 95 th percentile)				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00				
Uniform Delay ( d 1 ), s/veh				39.5	18.8	15.1	16.6	31.1	19.6	37.9	35.4		51.5	44.9	48.8				
Incremental Delay ( d 2 ), s/veh				11.3	0.6	0.4	0.3	8.7	0.8	0.9	0.2		2.6	0.1	0.8				
Initial Queue Delay ( d 3 ), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0				
Control Delay ( d ), s/veh				50.8	19.5	15.4	16.9	39.8	20.4	38.8	35.5		54.1	45.0	49.7				
Level of Service (LOS)				D	B	B	B	D	C	D	D		D	D	D				
Approach Delay, s/veh / LOS				22.9		C	37.3		D	37.3		D	50.7		D				
Intersection Delay, s/veh / LOS				33.8						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				1.90		B	2.10		B	2.72		C	2.73		C				
Bicycle LOS Score / LOS				1.43		A	1.94		B	1.21		A	1.26		A				

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 SB
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			610	27	1	378	481					667				136
Percent Heavy Vehicles (%)					1	1						1				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.42	4.12						6.92				6.93
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.51	2.21						3.31				3.32

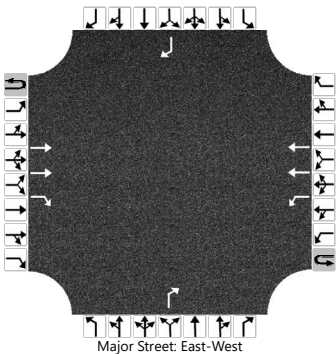
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					395							695				142
Capacity, c (veh/h)					0							681				750
v/c Ratio												1.02				0.19
95% Queue Length, Q <sub>95</sub> (veh)												17.0				0.7
95% Queue Length, Q <sub>95</sub> (ft)												428.4				17.7
Control Delay (s/veh)												64.3				10.9
Level of Service (LOS)												F				B
Approach Delay (s/veh)									64.3				10.9			
Approach LOS									F				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 SB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 SB
Time Analyzed	Horizon Total PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	1	2	0		0	0	1		0	0	1
Configuration			T	R		L	T					R				R
Volume (veh/h)			701	41	2	842	829					588				184
Percent Heavy Vehicles (%)					0	0						0				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								Yes				Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.40	4.10						6.90				6.96
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.50	2.20						3.30				3.33

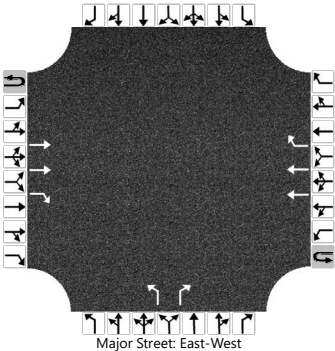
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					888							619				194
Capacity, c (veh/h)					724							634				565
v/c Ratio					1.23							0.98				0.34
95% Queue Length, Q <sub>95</sub> (veh)					31.3							14.3				1.5
95% Queue Length, Q <sub>95</sub> (ft)					782.5							357.5				38.4
Control Delay (s/veh)					134.6							55.6				14.7
Level of Service (LOS)					F							F				B
Approach Delay (s/veh)					67.9				55.6				14.7			
Approach LOS					F				F				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 NB
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1202	120			842	725		15		395				
Percent Heavy Vehicles (%)										1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.52		6.92				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.51		3.31				

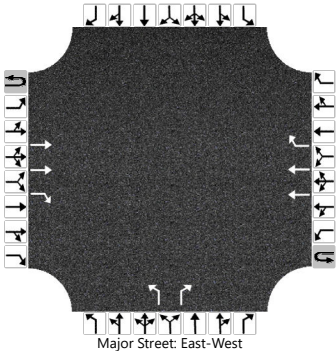
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										15		403				
Capacity, c (veh/h)										65		438				
v/c Ratio										0.24		0.92				
95% Queue Length, Q <sub>95</sub> (veh)										0.8		10.3				
95% Queue Length, Q <sub>95</sub> (ft)										20.2		259.4				
Control Delay (s/veh)										76.7		56.3				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									57.1							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson I 25 NB
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	I 25 NB
Time Analyzed	Horizon Total PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		1	0	1		0	0	0
Configuration			T	R			T	R		L		R				
Volume (veh/h)			1174	172			1617	1176		55		530				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

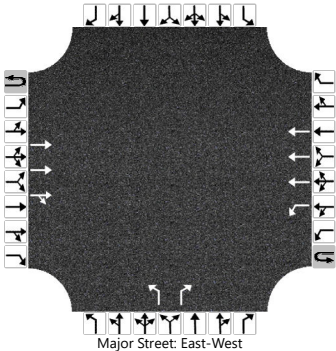
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										58		558				
Capacity, c (veh/h)										31		437				
v/c Ratio										1.86		1.28				
95% Queue Length, Q <sub>95</sub> (veh)										6.6		23.9				
95% Queue Length, Q <sub>95</sub> (ft)										165.0		597.5				
Control Delay (s/veh)										681.8		168.0				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									216.3							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Mulberry Street
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.99
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1537	59	7	50	1517			46		58				
Percent Heavy Vehicles (%)					0	1				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.11				3.80		3.90				

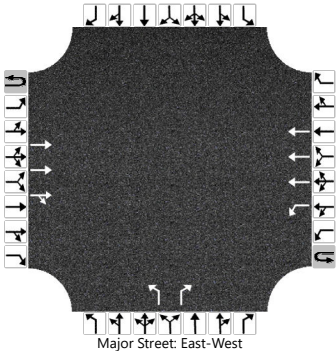
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					58				46		59					
Capacity, c (veh/h)					205				87		282					
v/c Ratio					0.28				0.54		0.21					
95% Queue Length, Q <sub>95</sub> (veh)					1.1				2.4		0.8					
95% Queue Length, Q <sub>95</sub> (ft)					27.7				60.0		20.0					
Control Delay (s/veh)					29.2	7.3			86.7		21.1					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					8.1				50.1							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Mulberry
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Mulberry Street
Time Analyzed	Horizon Total PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1618	83	5	35	2732			27		45				
Percent Heavy Vehicles (%)					0	0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					5.6	5.3				6.4		7.1				
Critical Headway (sec)					5.60	5.30				5.70		7.10				
Base Follow-Up Headway (sec)					2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)					2.30	3.10				3.80		3.90				

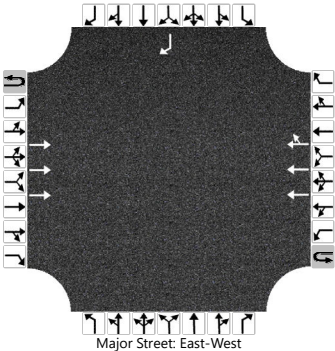
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					42				28		47					
Capacity, c (veh/h)					170				59		247					
v/c Ratio					0.25				0.48		0.19					
95% Queue Length, Q <sub>95</sub> (veh)					0.9				1.9		0.7					
95% Queue Length, Q <sub>95</sub> (ft)					22.5				47.5		17.5					
Control Delay (s/veh)					33.0	7.9			113.0		23.0					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					8.3				56.8							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Site DWY 1
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1602				1484	0								101
Percent Heavy Vehicles (%)																2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													Yes			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.13
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.92

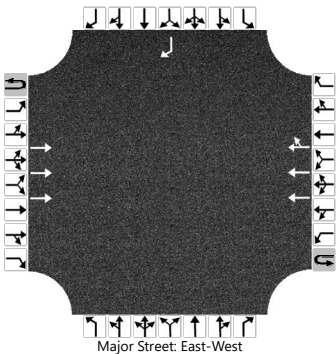
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																110
Capacity, c (veh/h)																279
v/c Ratio																0.39
95% Queue Length, Q <sub>95</sub> (veh)																1.8
95% Queue Length, Q <sub>95</sub> (ft)																45.6
Control Delay (s/veh)																26.0
Level of Service (LOS)																D
Approach Delay (s/veh)													26.0			
Approach LOS													D			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Site DWY 1
Time Analyzed	Horizon Total PM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1667				2671	0								90
Percent Heavy Vehicles (%)																2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.13
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.92

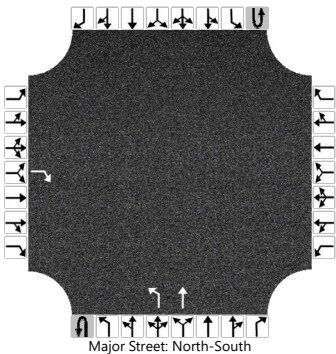
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																98
Capacity, c (veh/h)																103
v/c Ratio																0.95
95% Queue Length, Q <sub>95</sub> (veh)																5.7
95% Queue Length, Q <sub>95</sub> (ft)																144.4
Control Delay (s/veh)																151.4
Level of Service (LOS)																F
Approach Delay (s/veh)													151.4			
Approach LOS													F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 2
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 2
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	1	0	0	0	0	0
Configuration				R						L	T					
Volume (veh/h)				10						51	0					
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.13						5.33						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.93						3.13						

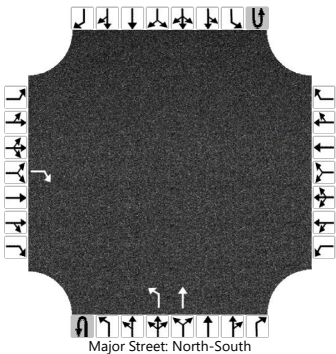
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				11						55						
Capacity, c (veh/h)				917						1151						
v/c Ratio				0.01						0.05						
95% Queue Length, Q <sub>95</sub> (veh)				0.0						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				0.0						5.1						
Control Delay (s/veh)				9.0						8.3						
Level of Service (LOS)				A						A						
Approach Delay (s/veh)	9.0								8.3							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 2
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 2
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	1	0	0	0	0	0
Configuration				R						L	T					
Volume (veh/h)				12						66	0					
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.13						5.33						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.93						3.13						

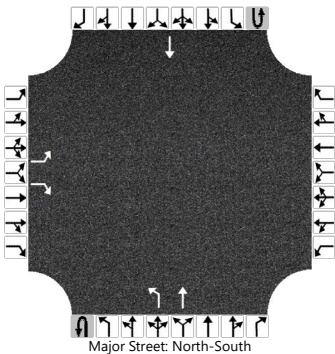
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				13						72						
Capacity, c (veh/h)				917						1151						
v/c Ratio				0.01						0.06						
95% Queue Length, Q <sub>95</sub> (veh)				0.0						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				0.0						5.1						
Control Delay (s/veh)				9.0						8.3						
Level of Service (LOS)				A						A						
Approach Delay (s/veh)	9.0								8.3							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 3
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 3
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		38						89	66				4	
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

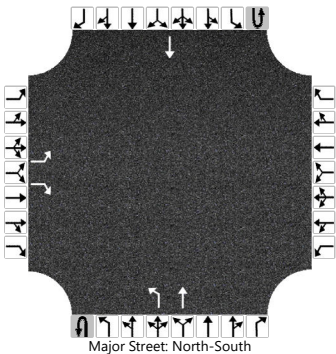
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		41						97						
Capacity, c (veh/h)		674		1076						1611						
v/c Ratio		0.00		0.04						0.06						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.1						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				2.6						5.1						
Control Delay (s/veh)		10.3		8.5						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.5								4.2							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 3
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 3
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		33						86	51				10	
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type   Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

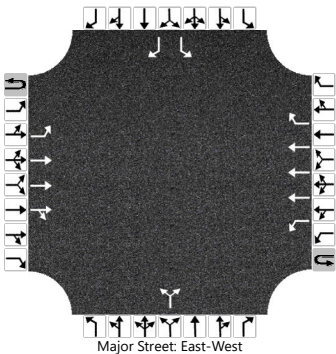
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		36						93						
Capacity, c (veh/h)		690		1067						1602						
v/c Ratio		0.00		0.03						0.06						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.1						0.2						
95% Queue Length, Q <sub>95</sub> (ft)				2.6						5.1						
Control Delay (s/veh)		10.2		8.5						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.5								4.6							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total MD	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	26	133	1396	56	3	44	1402	98		26		44		90		30
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.10		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.90		3.80		3.90

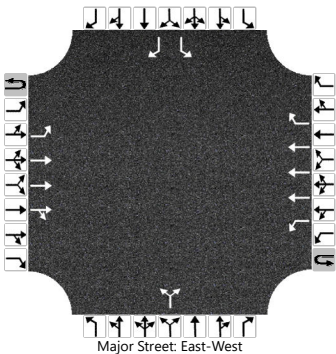
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		164				48					72				93		31
Capacity, c (veh/h)		231				229					31				14		318
v/c Ratio		0.71				0.21					2.36				6.83		0.10
95% Queue Length, Q <sub>95</sub> (veh)		4.7				0.8					8.4				12.6		0.3
95% Queue Length, Q <sub>95</sub> (ft)		117.5				20.0					210.0				315.0		7.5
Control Delay (s/veh)		51.4				24.9					893.9				3171.9		17.5
Level of Service (LOS)		F				C					F				F		C
Approach Delay (s/veh)	5.1				0.8				893.9				2383.3				
Approach LOS	A				A				F				F				

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Gibson and Alumni
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/21/2024	East/West Street	Gibson Boulevard
Analysis Year	2036	North/South Street	Alumni Drive
Time Analyzed	Horizon Total PM	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Gibson In-N-Out		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	1		0	1	0		1	0	1
Configuration		L	T	TR		L	T	R			LR			L		R
Volume (veh/h)	19	105	1505	32	5	41	2620	82		11		40		70		20
Percent Heavy Vehicles (%)	0	0			0	0				0		3		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No								No			
Median Type   Storage	Left + Thru								1							

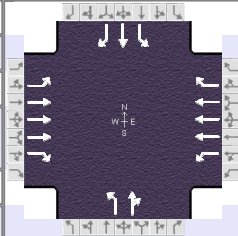
Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3			5.6	5.3				6.4		7.1		6.4		7.1
Critical Headway (sec)	5.60	5.30			5.60	5.30				6.40		7.16		6.40		7.10
Base Follow-Up Headway (sec)	2.3	3.1			2.3	3.1				3.8		3.9		3.8		3.9
Follow-Up Headway (sec)	2.30	3.10			2.30	3.10				3.80		3.93		3.80		3.90

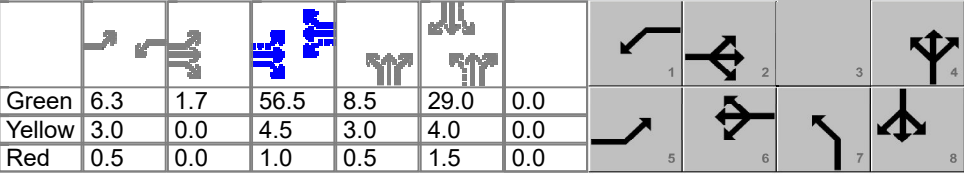
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		131			48					54				74		21
Capacity, c (veh/h)		51			203					0				7		117
v/c Ratio		2.54			0.24									9.86		0.18
95% Queue Length, Q <sub>95</sub> (veh)		13.5			0.9									10.8		0.6
95% Queue Length, Q <sub>95</sub> (ft)		337.5			22.5									270.0		15.0
Control Delay (s/veh)		868.2			28.2									4953.6		42.3
Level of Service (LOS)		F			D									F		E
Approach Delay (s/veh)	64.8				0.5								3862.2			
Approach LOS	F				A								F			

# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Horizon Full Build MD	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	University and Gibson	File Name	8 University-Gibson Horizon TOTAL MD.xus			
Project Description	Gibson In-N-Out Horizon Total MD					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	172	1134	161	126	1254	118	257	127	131	233	103	190

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	6.3	1.7	56.5	8.5	29.0	0.0	
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0	
				Red	0.5	0.0	1.0	0.5	1.5	0.0	

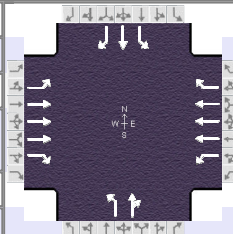
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	11.5	63.7	9.8	62.0	12.0	46.5		34.5
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	7.8		6.3		10.5	15.7		27.5
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.1	0.0	0.0	1.9		1.5
Phase Call Probability	1.00		0.99		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.13

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	172	1134	161	126	1254	118	257	258		233	103	190
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1741		1139	1900	1610
Queue Service Time ( $g_s$ ), s	5.8	17.3	6.9	4.3	20.5	5.0	8.5	13.7		23.8	5.2	12.2
Cycle Queue Clearance Time ( $g_c$ ), s	5.8	17.3	6.9	4.3	20.5	5.0	8.5	13.7		25.5	5.2	12.2
Green Ratio ( $g/C$ )	0.54	0.48	0.48	0.52	0.47	0.47	0.33	0.34		0.24	0.24	0.24
Capacity ( $c$ ), veh/h	316	2510	775	318	2417	758	449	595		319	459	389
Volume-to-Capacity Ratio ( $X$ )	0.545	0.452	0.208	0.396	0.519	0.156	0.573	0.434		0.730	0.224	0.489
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	103	275	116	76	318	85	104	239		287	111	213
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	4.1	11.0	4.6	3.0	12.6	3.4	4.1	9.6		11.5	4.5	8.5
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	17.0	20.4	17.7	16.4	22.2	18.1	34.2	30.5		45.0	36.5	39.1
Incremental Delay ( $d_2$ ), s/veh	0.5	0.6	0.6	0.3	0.8	0.4	1.2	0.2		3.9	0.1	0.4
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	17.5	21.0	18.3	16.7	23.0	18.6	35.3	30.7		48.9	36.6	39.5
Level of Service (LOS)	B	C	B	B	C	B	D	C		D	D	D
Approach Delay, s/veh / LOS	20.3		C	22.2		C	33.0		C	43.1		D
Intersection Delay, s/veh / LOS	25.6						C					

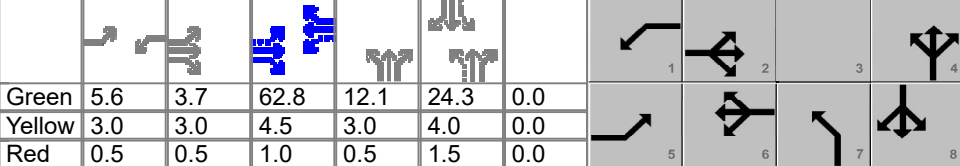
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	2.10	B	2.71	C	2.72	C
Bicycle LOS Score / LOS	1.29	A	1.31	A	1.34	A	1.36	A



# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Horizon Full Build PM	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	University and Gibson	File Name	8 University-Gibson Horizon TOTAL PM.xus			
Project Description	Gibson In-N-Out Horizon Total PM					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	213	1398	138	102	2366	209	236	110	95	198	75	198

Signal Information											
Cycle, s	130.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	5.6	3.7	62.8	12.1	24.3	0.0	
				Yellow	3.0	3.0	4.5	3.0	4.0	0.0	
				Red	0.5	0.5	1.0	0.5	1.5	0.0	

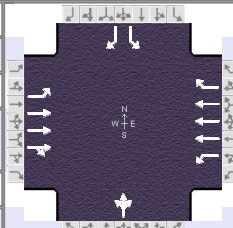
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	16.3	75.5	9.1	68.3	15.6	45.4		29.8
Change Period, ( $Y+R_c$ ), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time ( $g_s$ ), s	12.6		5.7		14.1	13.9		23.0
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.1	0.0	0.0	1.6		1.3
Phase Call Probability	1.00		0.97		1.00	1.00		1.00
Max Out Probability	0.00		0.00		1.00	0.00		0.05

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate ( $v$ ), veh/h	213	1398	138	102	2366	209	236	205		198	75	198
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1754		1196	1900	1610
Queue Service Time ( $g_s$ ), s	10.6	22.2	5.7	3.7	57.4	10.0	12.1	11.9		21.0	4.3	14.8
Cycle Queue Clearance Time ( $g_c$ ), s	10.6	22.2	5.7	3.7	57.4	10.0	12.1	11.9		21.0	4.3	14.8
Green Ratio ( $g/C$ )	0.60	0.54	0.54	0.53	0.48	0.48	0.30	0.31		0.19	0.19	0.19
Capacity ( $c$ ), veh/h	240	2787	860	272	2480	778	430	538		279	355	301
Volume-to-Capacity Ratio ( $X$ )	0.886	0.502	0.160	0.375	0.954	0.269	0.549	0.381		0.710	0.211	0.658
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	304	334	94	67	840	172	254	219		268	94	254
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	12.2	13.4	3.7	2.7	33.3	6.9	10.1	8.8		10.7	3.8	10.2
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Uniform Delay ( $d_1$ ), s/veh	40.8	19.0	15.2	17.0	32.2	20.0	38.0	35.4		51.5	44.8	49.0
Incremental Delay ( $d_2$ ), s/veh	13.8	0.6	0.4	0.3	13.0	0.9	0.9	0.2		2.6	0.1	0.9
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay ( $d$ ), s/veh	54.6	19.6	15.6	17.3	45.3	20.8	38.9	35.5		54.1	44.9	49.9
Level of Service (LOS)	D	B	B	B	D	C	D	D		D	D	D
Approach Delay, s/veh / LOS	23.6		C	42.3		D	37.3		D	50.9		D
Intersection Delay, s/veh / LOS	36.5						D					

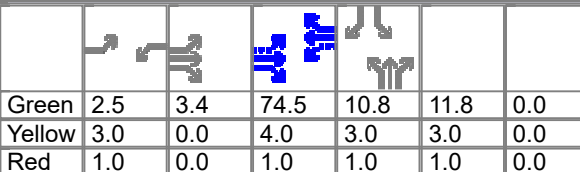




Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.10	B	2.72	C	2.73	C
Bicycle LOS Score / LOS	1.45	A	1.96	B	1.22	A	1.26	A



# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Mitigated Horizon Full Build MD	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Gibson & Alumni	File Name	Mitigated Gibson Alumni Horizon TOTAL MD.xus			
Project Description	Gibson In-N-Out (Mitigated) Horizon Full Build MD					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	159	1396	56	47	1402	98	26	0	44	90		30

Signal Information															
Cycle, s	120.0	Reference Phase	2												
Offset, s	0	Reference Point	End									1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On									5	6	7	8
Force Mode	Fixed	Simult. Gap N/S	On												
				Green	2.5	3.4	74.5	10.8	11.8	0.0					
				Yellow	3.0	0.0	4.0	3.0	3.0	0.0					
				Red	1.0	0.0	1.0	1.0	1.0	0.0					

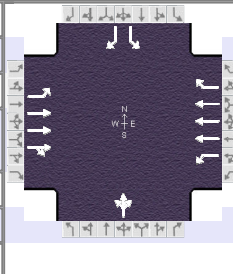
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		4		8
Case Number	1.1	4.0	1.1	3.0		12.0		9.0
Phase Duration, s	9.9	82.9	6.5	79.5		14.8		15.8
Change Period, ( $Y+R_c$ ), s	4.0	5.0	4.0	5.0		4.0		4.0
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0		3.2		3.3
Queue Clearance Time ( $g_s$ ), s	5.7		3.1			6.7		7.7
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.0	0.0		0.1		0.2
Phase Call Probability	1.00		0.79			0.90		0.98
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3		18
Adjusted Flow Rate ( $v$ ), veh/h	159	975	477	47	1402	98		70		90		30
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1900	1861	1810	1712	1610		1679		1810		1610
Queue Service Time ( $g_s$ ), s	3.7	14.5	14.5	1.1	17.1	2.9		4.7		5.7		2.1
Cycle Queue Clearance Time ( $g_c$ ), s	3.7	14.5	14.5	1.1	17.1	2.9		4.7		5.7		2.1
Green Ratio ( $g/C$ )	0.68	0.65	0.65	0.64	0.62	0.62		0.09		0.10		0.10
Capacity ( $c$ ), veh/h	336	2466	1207	288	3188	1000		152		178		158
Volume-to-Capacity Ratio ( $X$ )	0.474	0.395	0.395	0.163	0.440	0.098		0.462		0.507		0.190
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	57	234	238	18	252	45		90		119		38
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	2.3	9.4	9.4	0.7	10.0	1.8		3.6		4.7		1.5
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.25	0.00	0.00	0.10	0.00	0.00		0.00		0.52		0.17
Uniform Delay ( $d_1$ ), s/veh	9.1	10.0	10.0	8.7	11.9	9.2		51.8		51.4		49.7
Incremental Delay ( $d_2$ ), s/veh	0.4	0.5	1.0	0.1	0.4	0.2		0.8		0.8		0.2
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0
Control Delay ( $d$ ), s/veh	9.5	10.4	10.9	8.8	12.3	9.4		52.6		52.2		49.9
Level of Service (LOS)	A	B	B	A	B	A		D		D		D
Approach Delay, s/veh / LOS	10.5		B	12.0		B	52.6		D	51.6		D
Intersection Delay, s/veh / LOS	13.5						B					

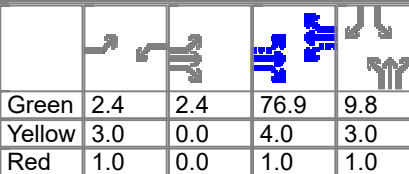
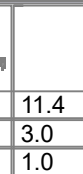
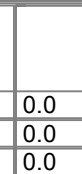
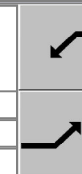



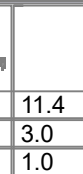
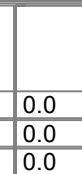
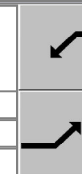


Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.65	B	1.88	B	2.74	C	2.62	C
Bicycle LOS Score / LOS	1.37	A	1.34	A	0.60	A		F



# HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst		Analysis Date	5/21/2024	Area Type	Other	
Jurisdiction	CABQ	Time Period	Mitigated Horizon Full Build PM	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Gibson & Alumni	File Name	Mitigated Gibson Alumni Horizon TOTAL PM.xus			
Project Description	Gibson In-N-Out (Mitigated) Horizon Full Build PM					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( $v$ ), veh/h	124	1505	32	46	2620	82	11	0	40	70		20

Signal Information																																			
Cycle, s	120.0	Reference Phase	2																																
Offset, s	0	Reference Point	End																																
Uncoordinated	No	Simult. Gap E/W	On																																
Force Mode	Fixed	Simult. Gap N/S	On																																
Green	2.4	2.4	76.9	9.8	11.4	0.0																													
Yellow	3.0	0.0	4.0	3.0	3.0	0.0																													
Red	1.0	0.0	1.0	1.0	1.0	0.0																													

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		4		8
Case Number	1.1	4.0	1.1	3.0		12.0		9.0
Phase Duration, s	8.9	84.4	6.4	81.9		13.8		15.4
Change Period, ( $Y+R_c$ ), s	4.0	5.0	4.0	5.0		4.0		4.0
Max Allow Headway ( $MAH$ ), s	3.0	0.0	3.0	0.0		3.3		3.3
Queue Clearance Time ( $g_s$ ), s	4.8		3.1			5.5		6.4
Green Extension Time ( $g_e$ ), s	0.2	0.0	0.0	0.0		0.0		0.1
Phase Call Probability	0.98		0.78			0.82		0.95
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3		18
Adjusted Flow Rate ( $v$ ), veh/h	124	1028	509	46	2620	82		51		70		20
Adjusted Saturation Flow Rate ( $s$ ), veh/h/ln	1810	1900	1879	1810	1712	1610		1649		1810		1610
Queue Service Time ( $g_s$ ), s	2.8	15.1	15.1	1.1	44.9	2.3		3.5		4.4		1.4
Cycle Queue Clearance Time ( $g_c$ ), s	2.8	15.1	15.1	1.1	44.9	2.3		3.5		4.4		1.4
Green Ratio ( $g/C$ )	0.69	0.66	0.66	0.66	0.64	0.64		0.08		0.10		0.10
Capacity ( $c$ ), veh/h	165	2513	1242	275	3291	1032		135		172		153
Volume-to-Capacity Ratio ( $X$ )	0.751	0.409	0.409	0.167	0.796	0.079		0.378		0.407		0.131
Back of Queue ( $Q$ ), ft/ln ( 95 th percentile)	105	238	244	17	558	34		66		91		25
Back of Queue ( $Q$ ), veh/ln ( 95 th percentile)	4.2	9.5	9.7	0.7	22.1	1.4		2.6		3.7		1.0
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)	0.46	0.00	0.00	0.09	0.00	0.00		0.00		0.40		0.11
Uniform Delay ( $d_1$ ), s/veh	27.2	9.4	9.4	8.1	15.8	8.2		52.2		51.1		49.8
Incremental Delay ( $d_2$ ), s/veh	2.6	0.5	1.0	0.1	2.1	0.2		0.7		0.6		0.1
Initial Queue Delay ( $d_3$ ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0
Control Delay ( $d$ ), s/veh	29.9	9.9	10.4	8.2	17.9	8.3		52.9		51.7		49.9
Level of Service (LOS)	C	A	B	A	B	A		D		D		D
Approach Delay, s/veh / LOS	11.6		B	17.5		B	52.9		D	51.3		D
Intersection Delay, s/veh / LOS	16.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.65	B	1.88	B	2.74	C	2.62	C
Bicycle LOS Score / LOS	1.40	A	2.00	B	0.57	A		F



## Appendix E: AASHTO Green Book Intersection Sight Distance Calculations

Scenario:  
Type of Vehicle:  
# Lanes Crossing:  
  
Speed Limit (mph):  
Median?

Right Turn from the Minor Road  
Passenger Car  
1  
  
45  
No  
12  
  
Base Time Gap:  
Additional Lanes to Cross:  
Additional Time:  
Final Time Gap:

6.5  
0  
0  
6.5

SIGHT DISTANCE REQUIRED  
SIGHT DISTANCE REQUIRED (Rounded)

429.98  
430

$$ISD = 1.47 (\bar{V}_{major}) t_g$$

t <sub>g</sub> Values				
	CASE	Passenger Car	Single-Unit Truck	Combination Truck
B1	Left Turn from the Minor Road	7.5	9.5	11.5
B2	Right Turn from the Minor Road	6.5	8.5	10.5
B3	Crossing Maneuver from the Minor Road			
F	Left Turn from the Major Road	5.5	6.5	7.5

**CASE B1 - For a stopped vehicle to turn left onto a 2-lane highway with no median and grades 3 percent or less**

For left turns onto two-way highways with more than 2 lanes:  
+0.5 seconds for passenger cars  
+0.7 seconds for trucks  
for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.

For minor road approach grades:  
+0.2 seconds for each percent grade  
if the approach grade is an upgrade that exceeds 3 percent.

**CASE B2 + B3 - For a stopped vehicle to turn right onto or cross a 2-lane highway with no median and grades 3 percent or less**

For crossing a major road with more than 2 lanes:  
+0.5 seconds for passenger cars  
+0.7 seconds for trucks  
for each additional lane to be crossed and narrow medians that cannot store the design vehicle.

For minor road approach grades:  
+0.1 seconds for each percent grade  
if the approach grade is an upgrade that exceeds 3 percent.

**CASE F - For a stopped vehicle to turn across one lane of opposing traffic**

For left-turning vehicles that cross more than 1 opposing lane:  
+0.5 seconds for passenger cars  
+0.7 seconds for trucks  
for each additional lane to be crossed.

Scenario:	Left Turn from the Minor Road
Type of Vehicle:	Passenger Car
# Lanes Crossing:	1
Speed Limit (mph):	30
Median?	Yes
Enter Median Width:	12
Base Time Gap:	7.5
Additional Lanes to Cross:	1
Additional Time:	0.5
Final Time Gap:	8
SIGHT DISTANCE REQUIRED	352.80
SIGHT DISTANCE REQUIRED (Rounded)	355

Scenario:	Right Turn from the Minor Road
Type of Vehicle:	Passenger Car
# Lanes Crossing:	1
Speed Limit (mph):	30
Median?	Yes
Enter Median Width:	12
Base Time Gap:	6.5
Additional Lanes to Cross:	0
Additional Time:	0
Final Time Gap:	6.5
SIGHT DISTANCE REQUIRED	286.65
SIGHT DISTANCE REQUIRED (Rounded)	290