

In-N-Out (Gibson)

Traffic Impact Study

Final Report
August 2025

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 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 29th, 2024, with In-N-Out, 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 two driveways 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 16th, 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 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.

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

- Mulberry Street and Gibson Boulevard
 - A “No U-Turn” sign (R-3-4) should be installed on the median at Mulberry Street and Gibson Boulevard, facing westbound traffic.

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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) 7th Edition* and the *Manual on Uniform Traffic Control Devices (MUTCD) 11th 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.

The site's legal descriptions, as shown in the Bernalillo County Assessor Map at the time of this report, are as follows:

TR 1 PLAT OF UNM GIBSON COMMERCIAL DISTRICT (A REPL OF TRSA & B, EVER READY SUBD TRS 4 & 5, GIBSON TRS & TR A, 40/25ASSOCIATES SUBD) CONT 1.1891 AC

TR 4 PLAT OF UNM GIBSON COMMERCIAL DISTRICT (A REPL OF TRSA & B, EVER READY SUBD TRS 4 & 5, GIBSON TRS & TR A, 40/25ASSOCIATES SUBD) CONT .8735 AC

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.

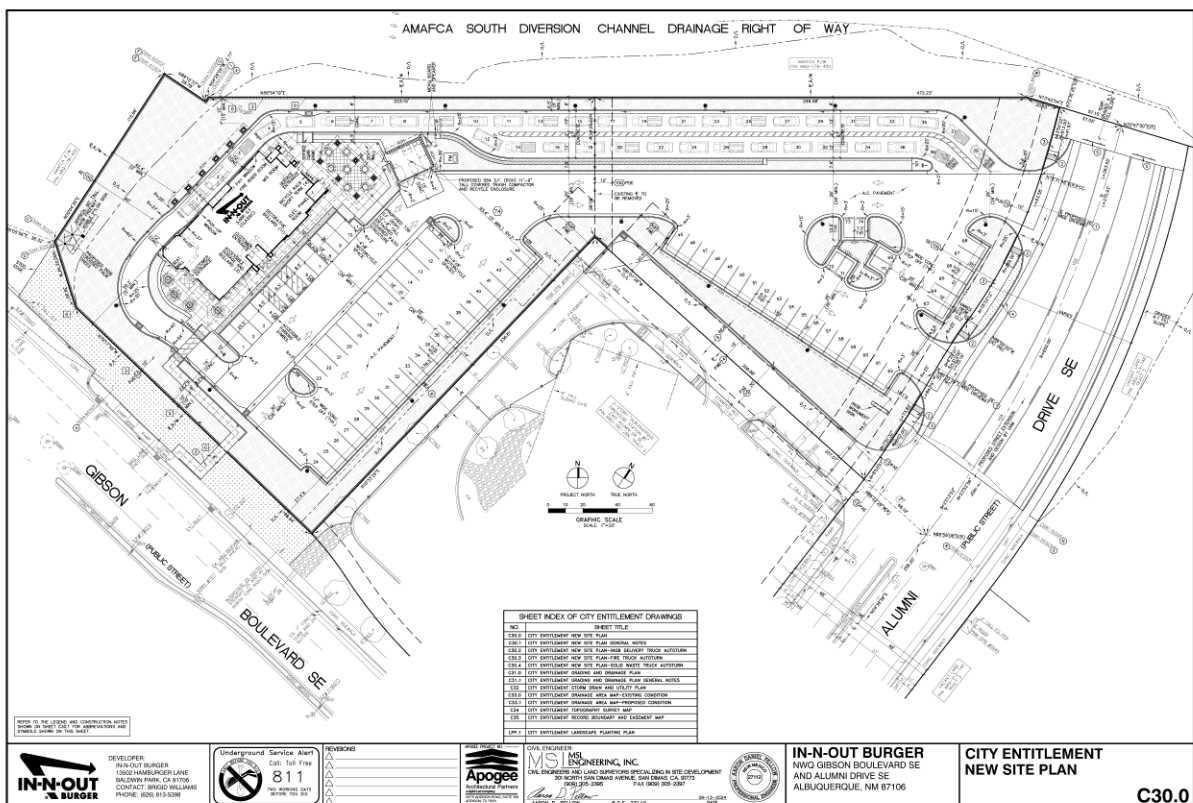


Figure 1: Site Plan



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. Based on conversations with NMDOT, it is noted that future access for this intersection could be limited.

Gibson Boulevard and Alumni Drive 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 sharrow 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 16th, 2024, for each of the study intersections. 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
Network Peak Hours:	12:00 PM	3:30 PM

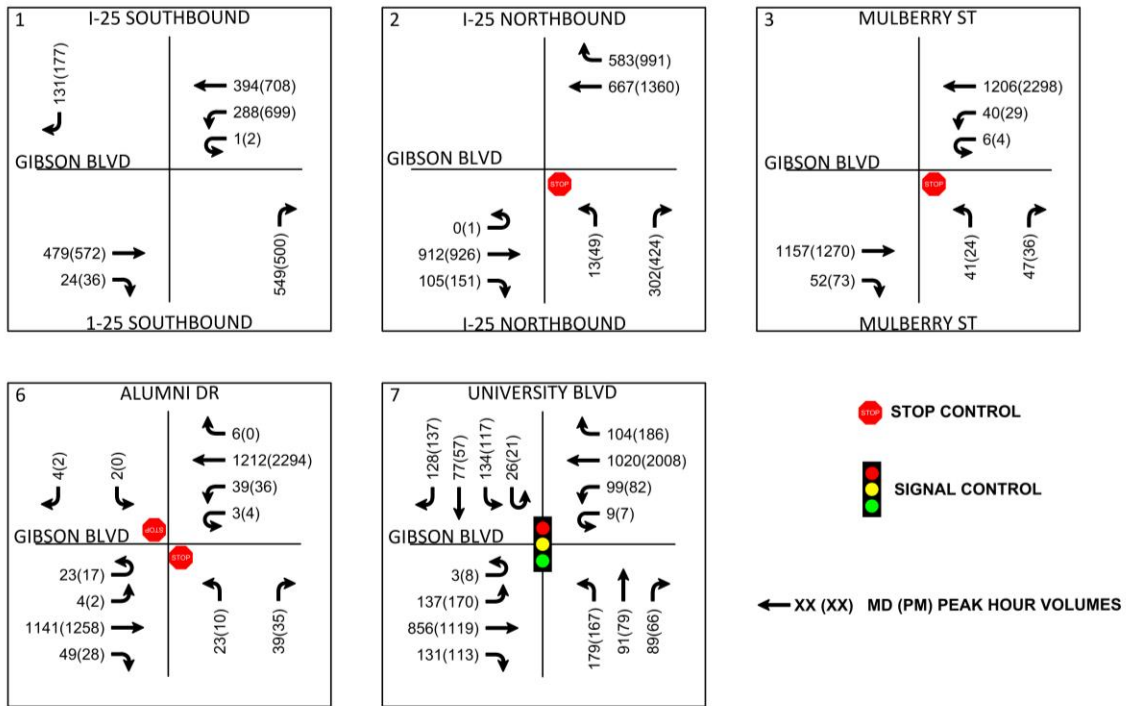


Figure 3: Existing Traffic Counts

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 ¹	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%

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

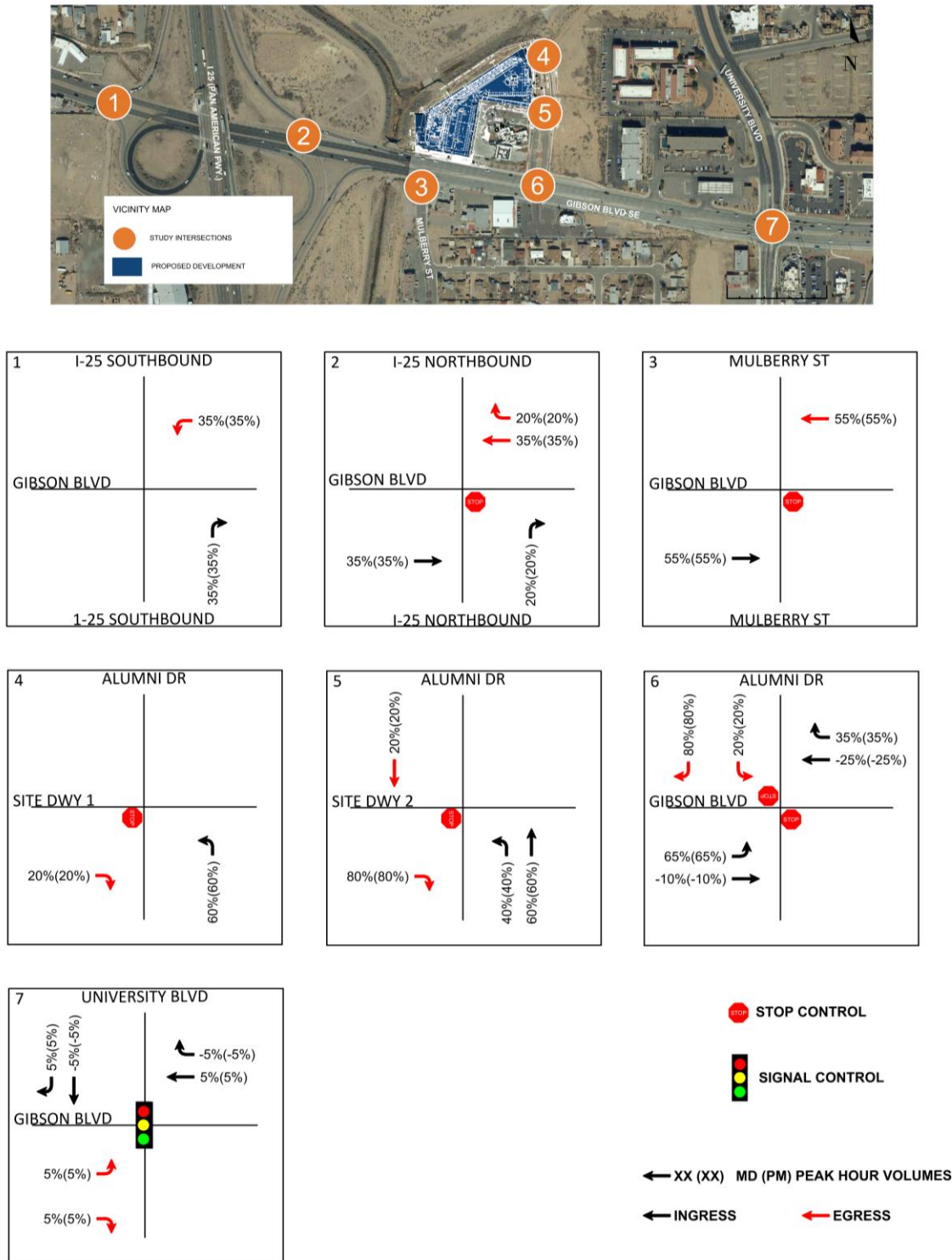


Figure 4: Pass-by Trip Percentages

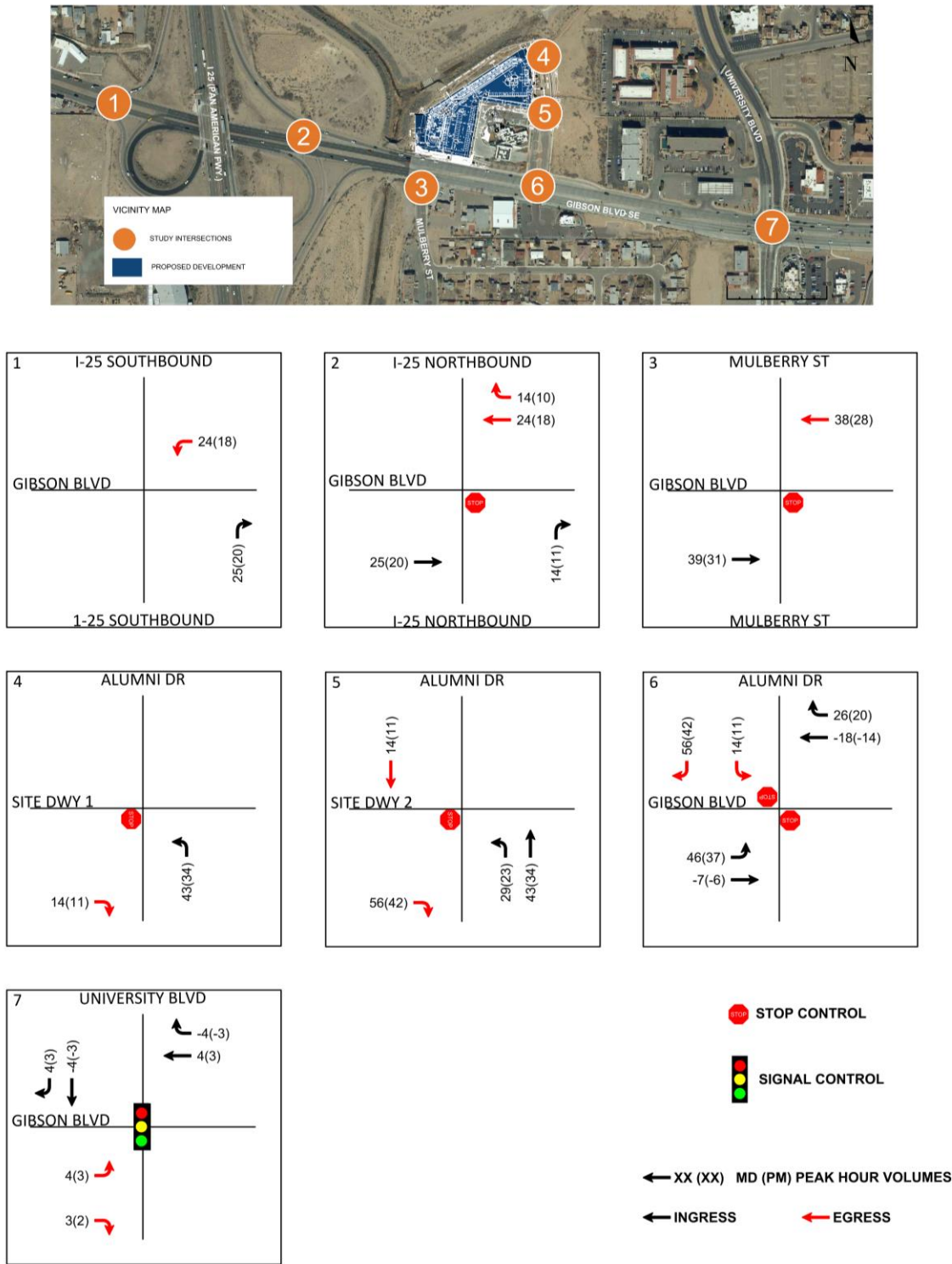


Figure 5: Pass-by Trip Volumes

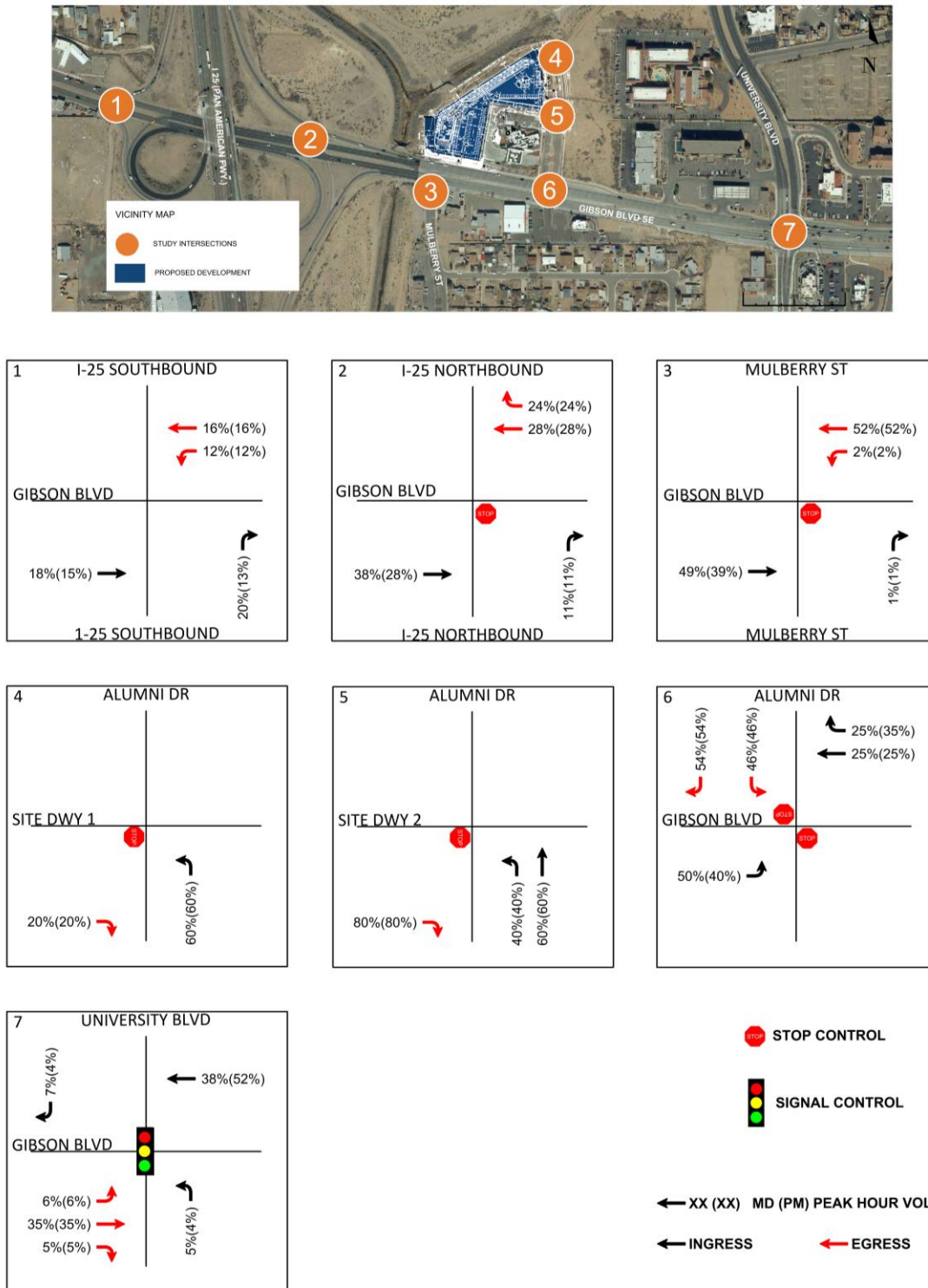


Figure 6: Direct Trip Percentages

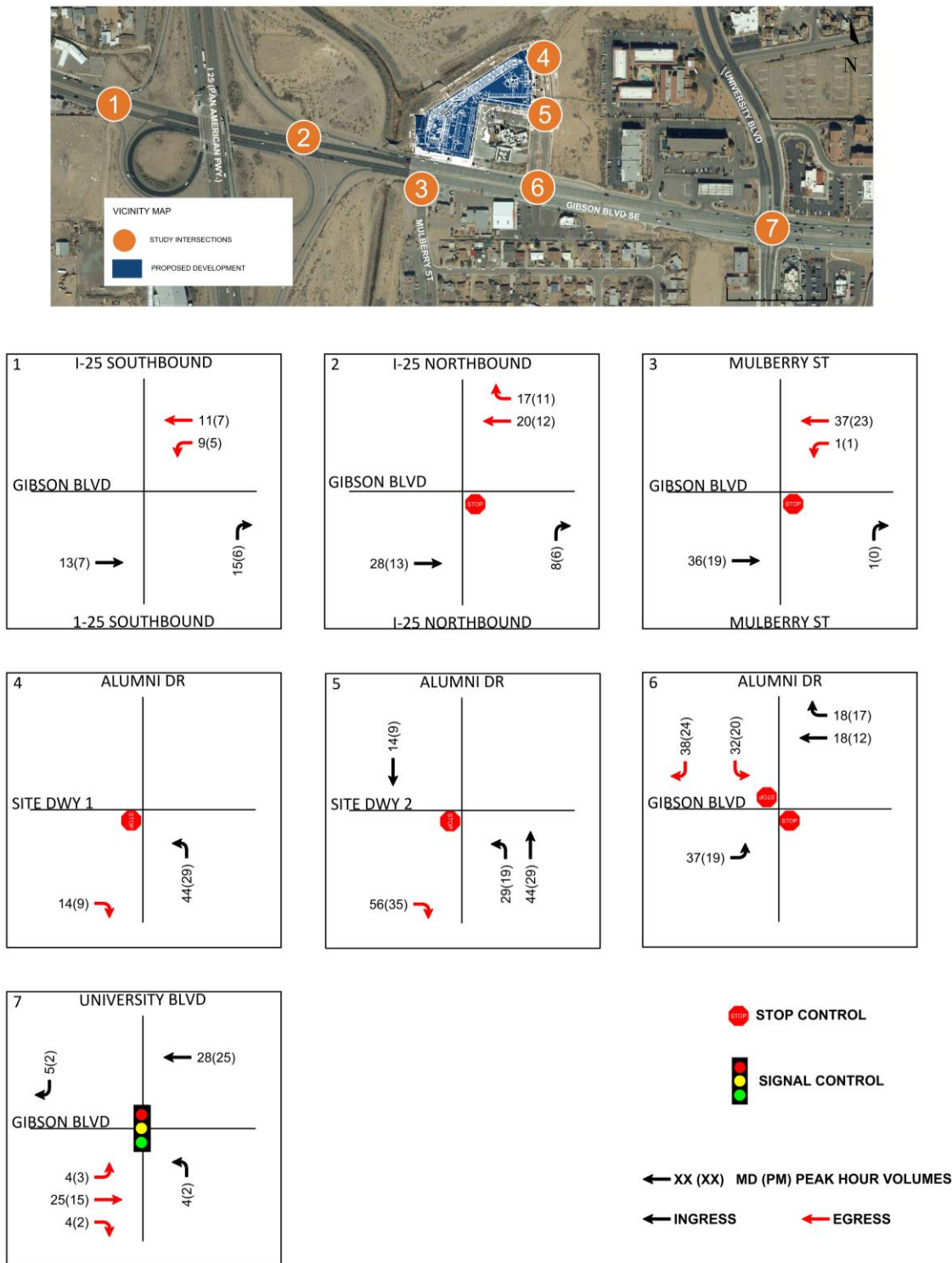


Figure 7: Direct Trip Volumes

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

Pass-by Trip Percentages - Horizon Year 2036		
From	To	Percentage
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%
Total		100%

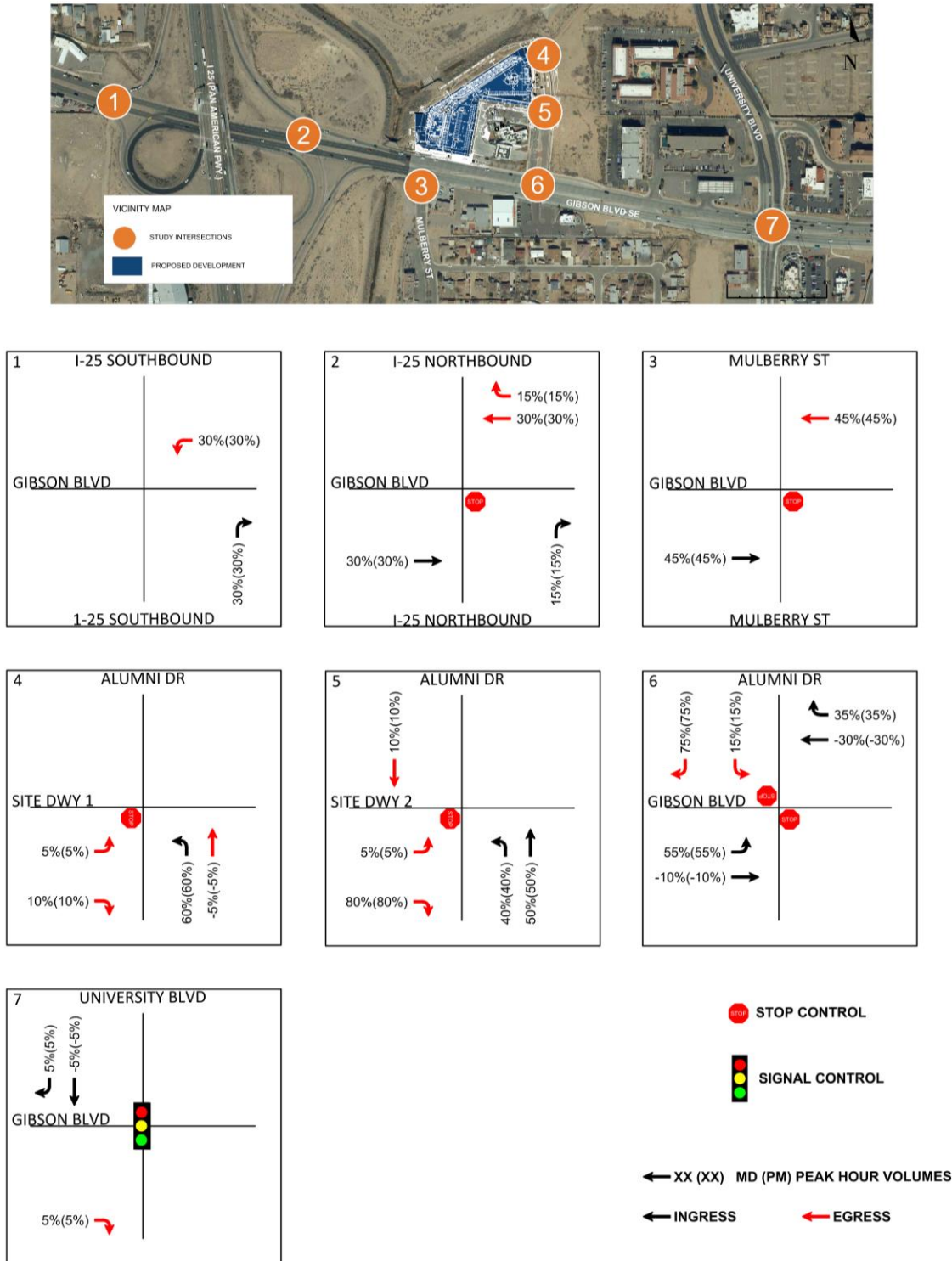


Figure 8: Horizon Year Pass-By Trip %

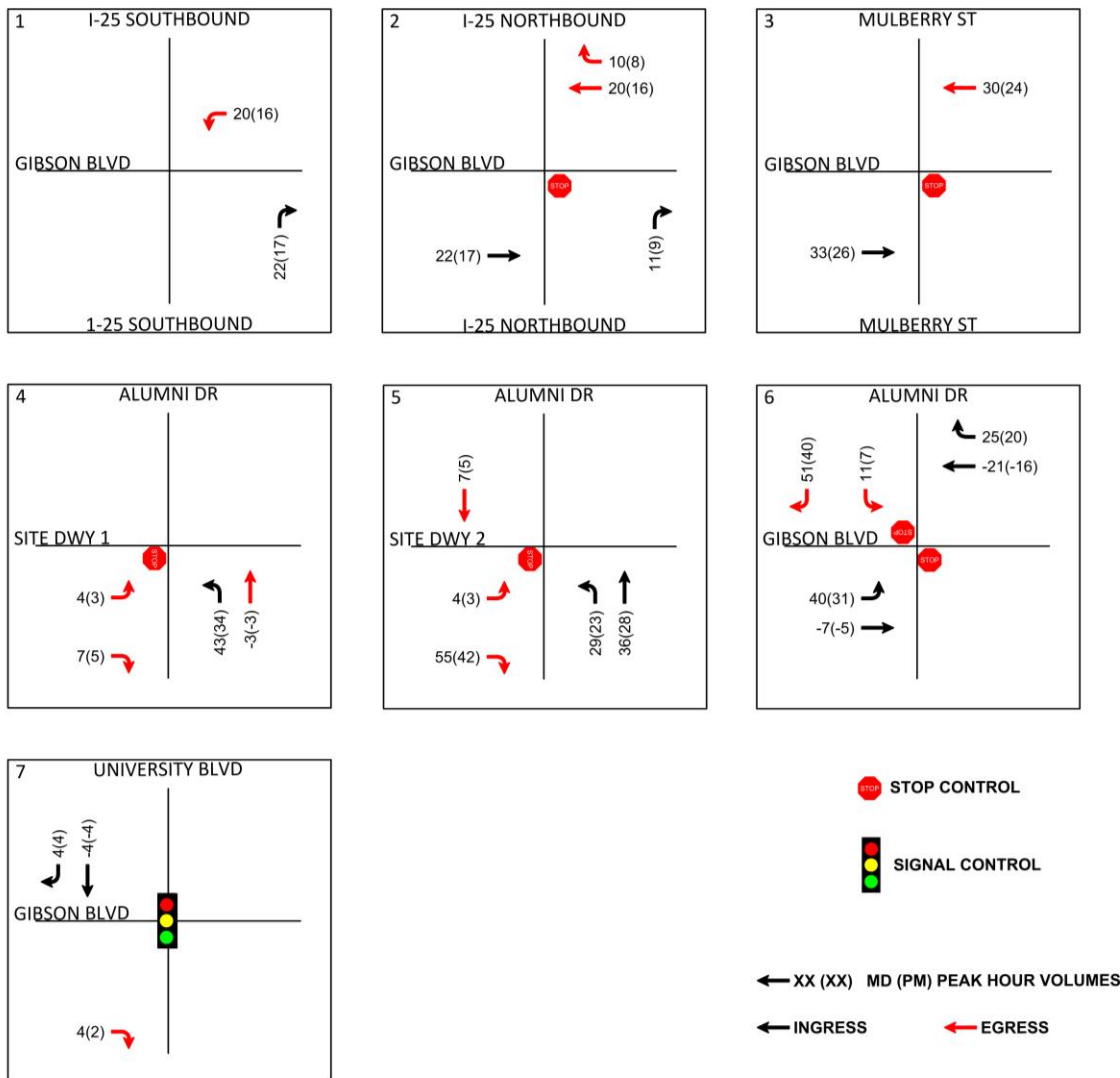


Figure 9: Horizon Year Pass-By Trip Volumes

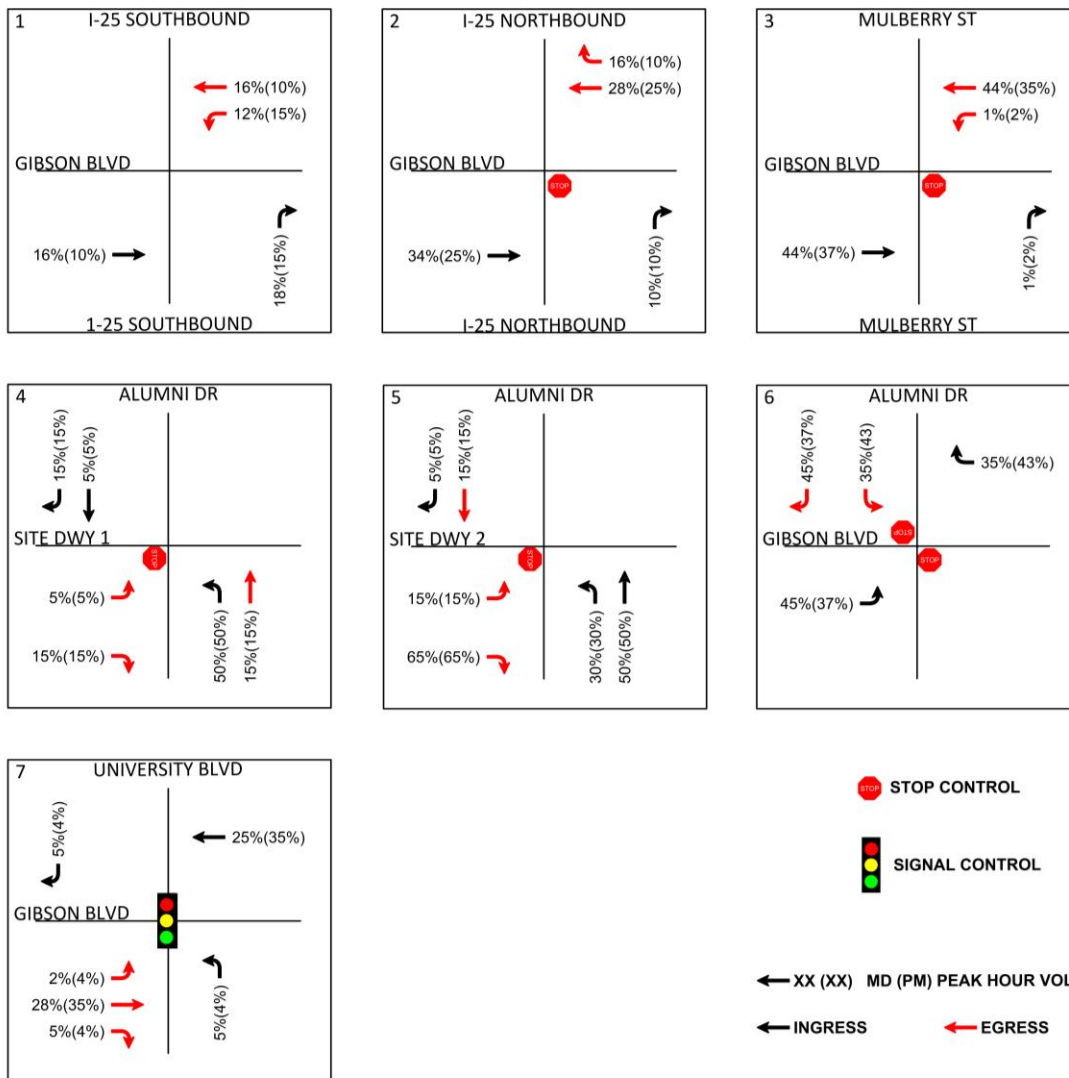


Figure 10: Horizon Year Direct Trip %

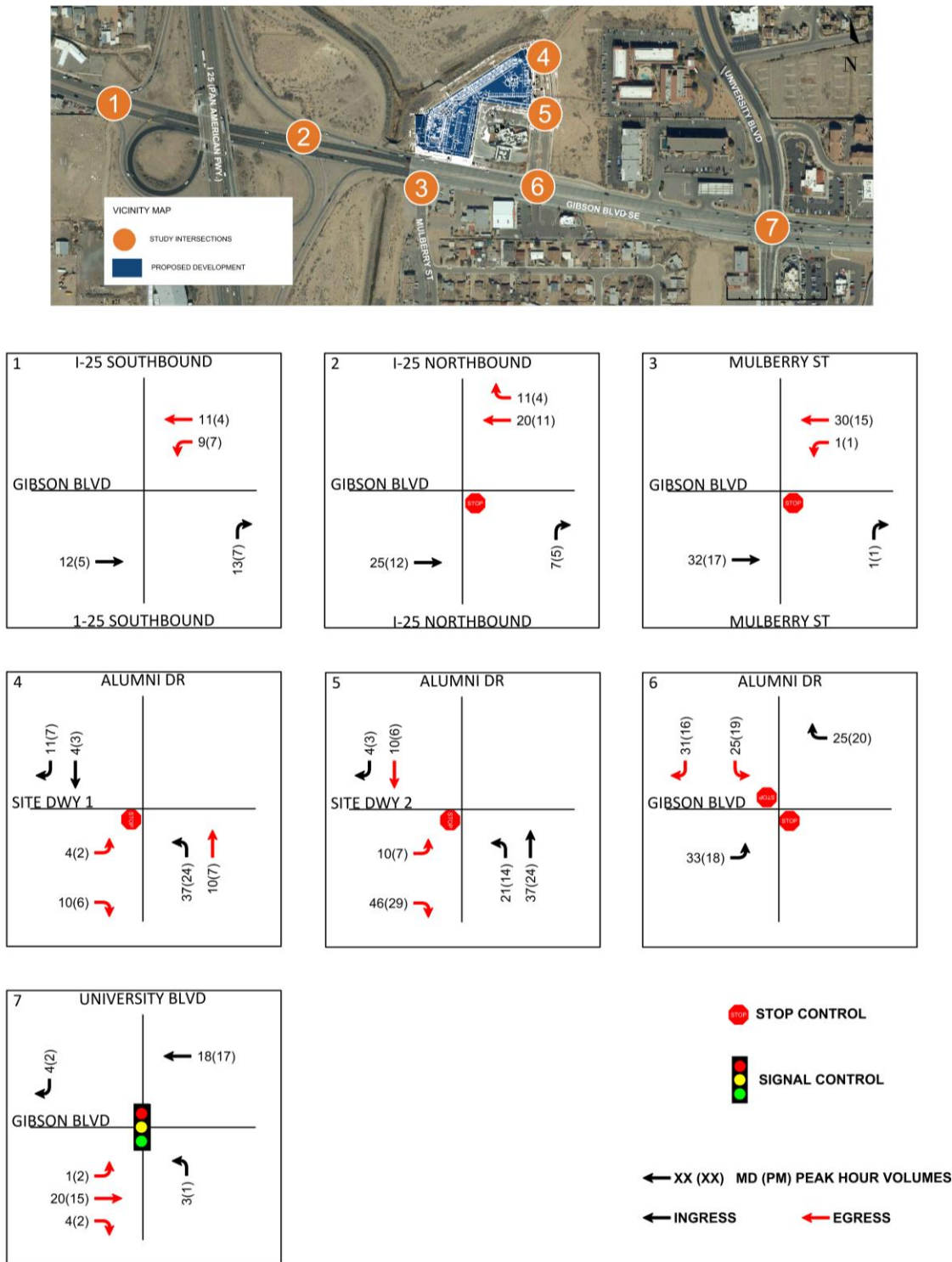


Figure 11: Horizon Year Direct Trip Volumes

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.

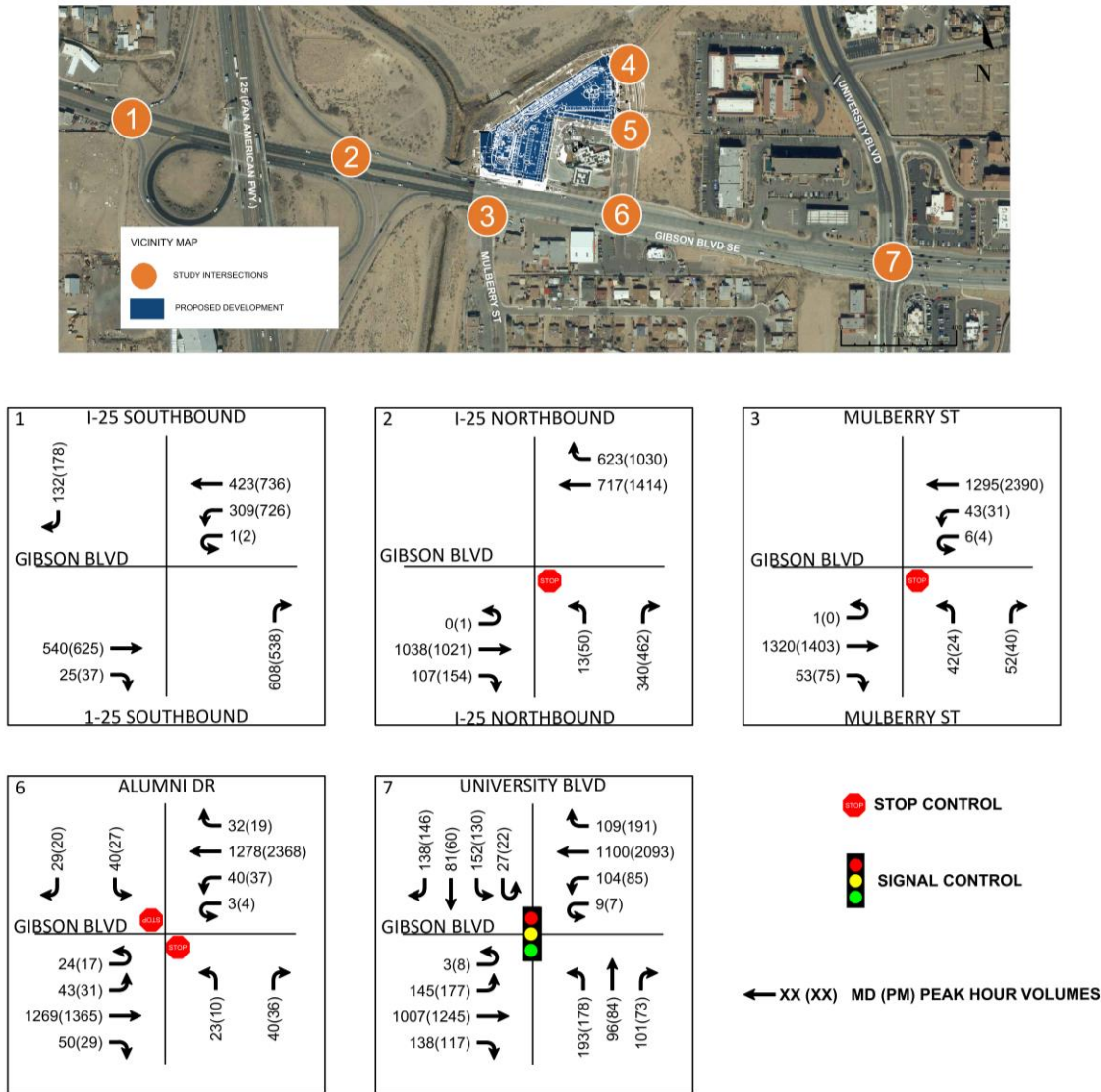


Figure 12: Build Out Year 2026 Background Volumes

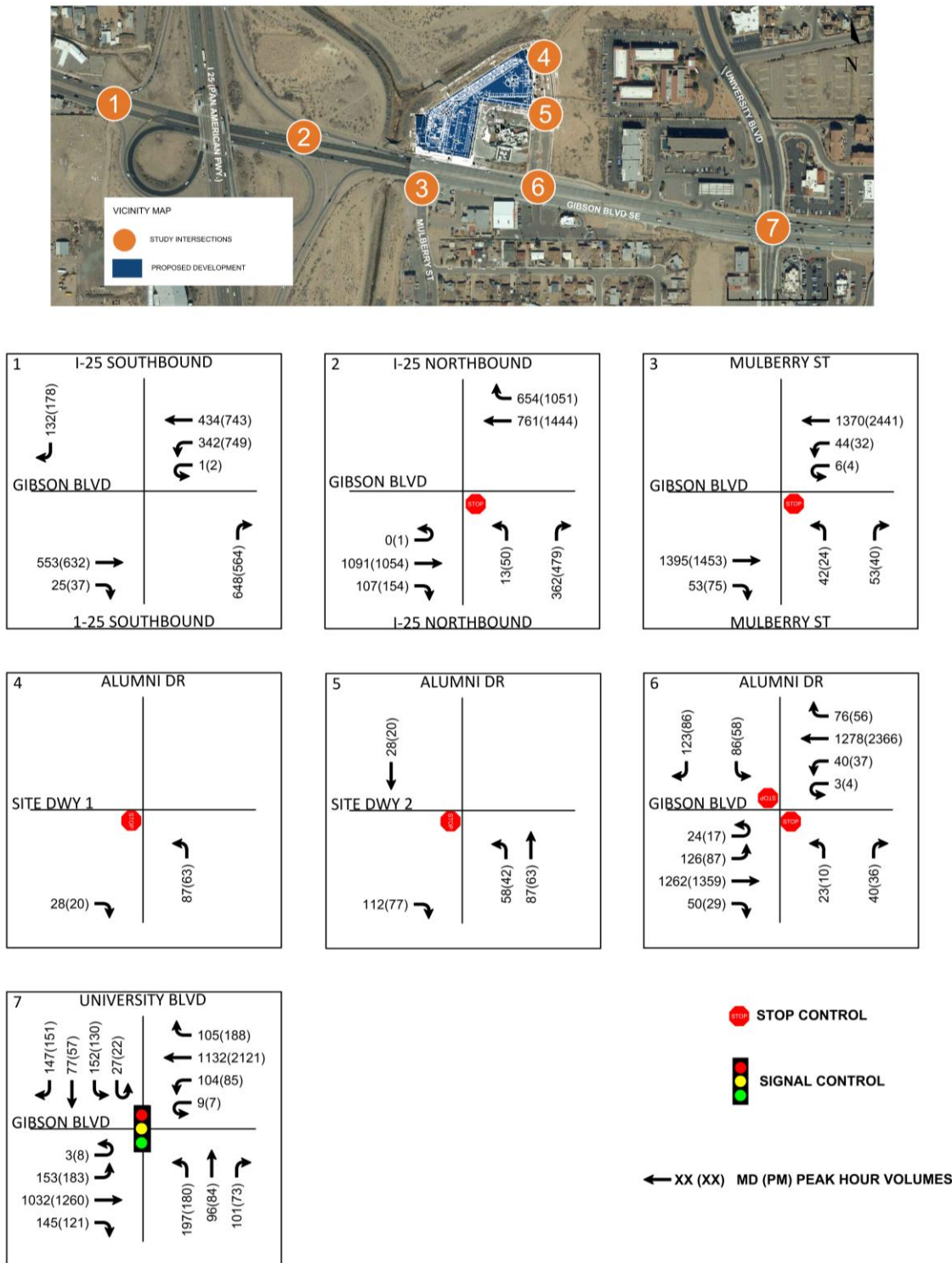


Figure 13: Build Out Year 2026 Full-Build Volumes

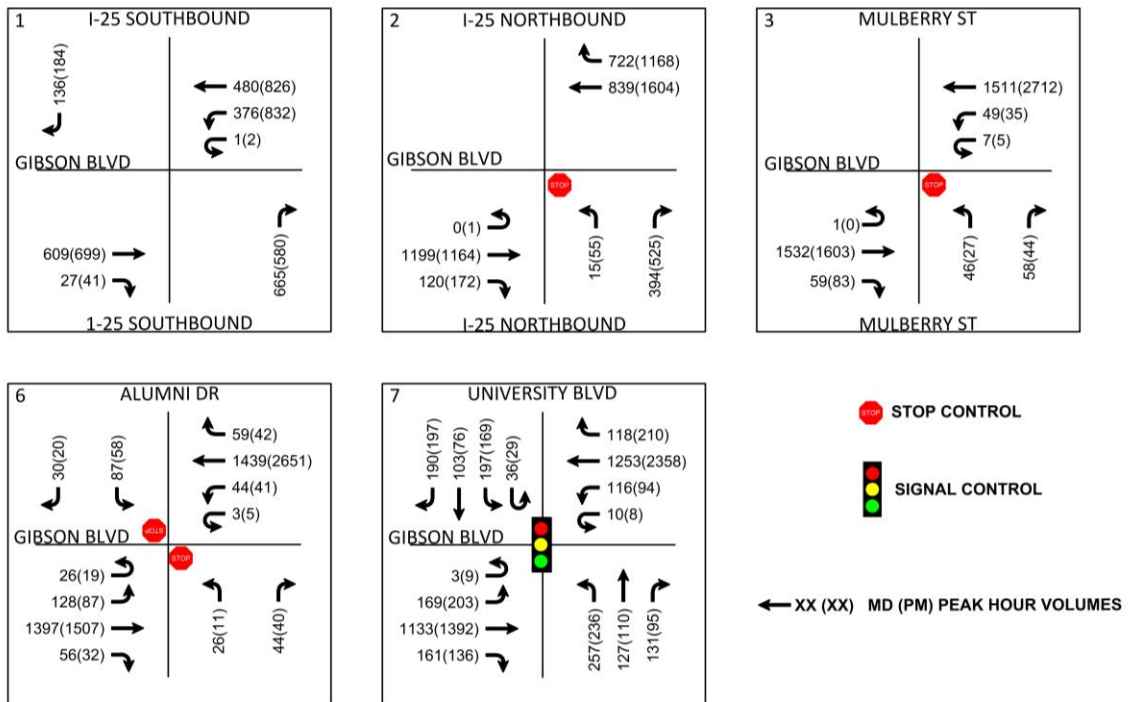


Figure 14: Horizon Year 2036 Background Volumes

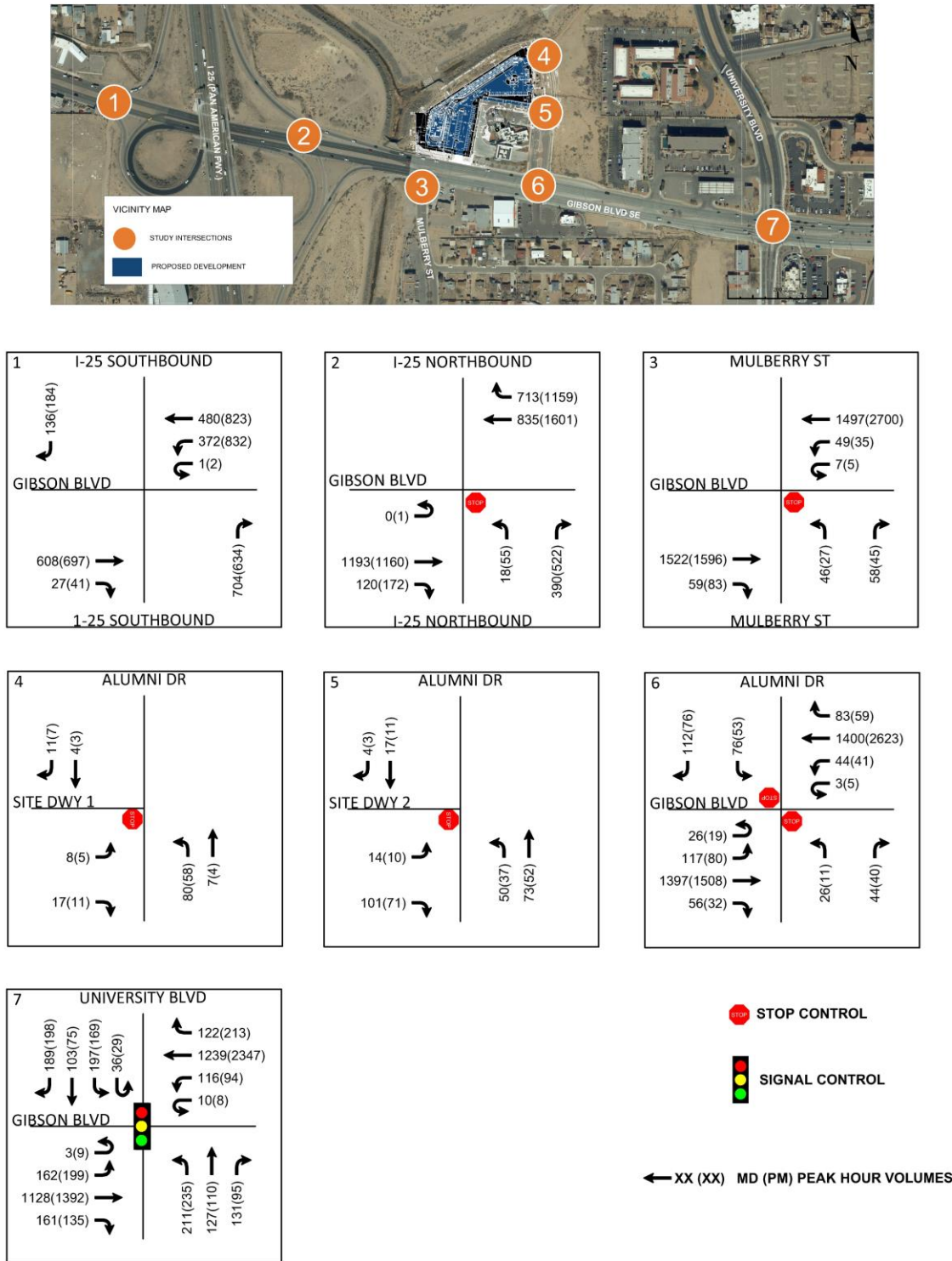


Figure 15: Horizon Year 2036 Full-Build Volumes

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 two 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 95th 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 95th 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 95th 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 95th percentile. It should be noted that 95th 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 95th percentile queue lengths except:

- At the signalized intersection of Gibson Boulevard and University Boulevard
 - The SBR lane is not expected to accommodate the 95th 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	207.5	8.30	21.3	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	178.6	F	178.6	F
	NBR	87.5	0.56	19.7	C				NBR	217.5	0.84	37.9	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	161.8	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 95th 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	279.2	F	279.2	F
	NBR	135.0	0.70	27.4	D				NBR	327.5	0.99	66.3	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	49.2	E	49.2	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	21.7	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	37.3	0.52	38.9	D	20.9	C		NBL	206.8	0.47	40.9	D	23.4	C
	NBT/R	205.7	0.42	36.1	D				NBT/R	181.7	0.34	39.0	D		
	SBL	227.6	0.67	49.4	D				SBL	215.7	0.65	55.6	E		
	SBT	95.5	0.25	43.1	D				SBT	79.4	0.22	49.5	D		
	SBR	171.2	0.50	45.5	D				SBR	203.4	0.64	53.7	D		
	EBL	70.1	0.39	11.6	B				EBL	155.3	0.86	30.2	C		
	EBT	205.2	0.35	14.5	B				EBT	258.7	0.41	14.8	B		
	EBR	79.2	0.15	12.9	B				EBR	67.3	0.12	12.1	B		
	WBL	54.0	0.29	11.5	B				WBL	47.5	0.29	12.2	B		
	WBT	231.5	0.39	15.6	B				WBT	526.8	0.72	22.1	C		
	WBR	62.5	0.12	13.1	B				WBR	124.3	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 95th 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	327.5	F	327.5	F
	NBR	170.0	0.77	34.0	D				NBR	382.5	1.05	84.3	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	57.2	F	57.2	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	85.0	0.63	64.8	F		
	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	---	---	---	---		
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	42.3	0.53	39.1	D	21.0	C		NBL	208.8	0.47	41.0	D	23.9	C
	NBT/R	205.7	0.42	36.1	D				NBT/R	181.7	0.34	39.0	D		
	SBL	227.6	0.67	49.4	D				SBL	215.7	0.65	55.6	E		
	SBT	90.6	0.24	43.0	D				SBT	75.3	0.21	49.4	D		
	SBR	183.5	0.53	45.9	D				SBR	209.5	0.66	54.0	D		
	EBL	74.2	0.42	11.8	B				EBL	160.5	0.87	32.6	C		
	EBT	210.2	0.35	14.6	B				EBT	262.8	0.41	14.9	B		
	EBR	83.6	0.16	13.0	B				EBR	70.1	0.13	12.1	B		
	WBL	54.3	0.30	11.6	B				WBL	48.1	0.29	12.4	B		
	WBT	239.0	0.40	15.9	B				WBT	543.8	0.73	22.9	C		
	WBR	60.5	0.12	13.2	B				WBR	122.9	0.21	14.6	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	0.08	8.4	A	9.0	A		NBL	<1 Veh	0.06	8.3	A	9.0	A
	EBR	<1 Veh	0.03	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	0.04	7.4	A	10.1	B		NBL	<1 Veh	0.03	7.3	A	9.6	A
	NBT	---	---	---	---				NBT	---	---	---	---		
	SBT	---	---	---	---				SBT	---	---	---	---		
	EBL	<1 Veh	0.00	10.1	B				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 95th 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	420.0	1.02	63.3	F	63.3	F		NBR	342.5	0.96	52.3	F	101.0	F
	SBR	<1 Veh	0.19	10.9	B				SBR	37.5	0.34	14.6	B		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	---	---	---	---				WBL	657.5	1.14	101.0	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	0.23	75.9	F	75.9	F		NBL	165.0	1.81	653.1	F	653.1	F
	NBR	255.0	0.92	55.4	F				NBR	575.0	1.26	159.5	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	0.53	85.1	F	85.1	F		NBL	45.0	0.47	109.1	F	109.1	F
	NBR	<1 Veh	0.21	21.0	C				NBR	<1 Veh	0.19	22.7	C		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.27	28.7	D				WBL	<1 Veh	0.24	32.3	D		
	WBT	---	---	6.9	A				WBT	---	---	7.6	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	205.0	2.17	796.0	F	2340.6	F		NBL/R	---	---	---	---	4508.4	F
	SBL	297.5	5.21	2340.6	F				SBL	230.0	8.73	4508.4	F		
	SBR	<1 Veh	0.10	17.9	C				SBR	<1 Veh	0.18	43.5	E		
	EBL	110.0	0.69	49.0	E				EBL	277.5	2.12	685.9	F		
	EBT	---	---	---	---				EBT	---	---	---	---		
	EBR	---	---	---	---				EBR	---	---	---	---		
	WBL	<1 Veh	0.21	24.9	C				WBL	<1 Veh	0.24	28.2	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	103.7	0.57	35.3	D	25.6	C		NBL	253.6	0.55	38.9	D	35.9	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	95.7	0.21	44.9	D		
	SBR	213.4	0.49	39.5	D				SBR	252.6	0.66	49.9	D		
	EBL	102.8	0.55	17.5	B				EBL	301.7	0.89	54.0	D		
	EBT	274.1	0.45	21.0	C				EBT	331.0	0.50	19.6	B		
	EBR	116.3	0.21	18.3	B				EBR	92.3	0.16	15.5	B		
	WBL	76.2	0.40	16.7	B				WBL	66.7	0.37	17.2	B		
	WBT	317.3	0.52	23.0	C				WBT	827.5	0.95	44.0	D		
	WBR	85.0	0.16	18.6	B				WBR	172.4	0.27	20.8	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 95th 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	83.1	F	83.1	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	215.0	2.56	1001.4	F	1694.7	F		NBL/R	----	----	----	----	3907.9	F				
	SBL	255.0	3.90	1694.7	F				SBL	212.5	7.52	3907.9	F						
	SBR	40.0	0.36	22.6	C				SBR	90.0	0.68	85.3	F						
	EBL	25.0	0.65	46.4	E				EBL	272.5	2.26	766.4	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	34.7	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	52.1	D						
	EBT	272.4	0.45	20.9	C				EBT	331.0	0.50	19.6	B						
	EBR	116.1	0.21	18.3	B				EBR	91.7	0.16	15.5	B						
	WBL	75.5	0.39	16.6	B				WBL	66.2	0.37	17.1	B						
	WBT	312.1	0.51	22.7	C				WBT	804.9	0.94	41.6	D						
	WBR	87.4	0.16	18.5	B				WBR	174.0	0.27	20.6	C						
	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				EBL	<1 Veh	0.01	9.5	A						
	EBR	<1 Veh	0.10	8.8	A				EBR	<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 intersection of Gibson Boulevard and Mulberry Street is too close to the interchange to be signalized. At Mulberry Street, capacity and queuing 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 queuing 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 queuing 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 95th Percentile queue lengths in every scenario; therefore, the delay for this movement is not anticipated to affect operations for through traffic on Gibson Boulevard. Since egress trips making the southbound left movement at Alumni Drive and Gibson Boulevard might instead turn right and execute a U-turn at Mulberry Street, a No U-Turn sign should be installed on the median on Gibson Boulevard facing westbound traffic.

At the request of NMDOT District 3 in August 2025, a cursory signal warrant analysis was completed for the intersection of Gibson & Alumni using buildout traffic volumes to determine if trips associated with In-N-Out (Gibson) require the installation of a traffic signal.

It is noted that available traffic data was used in the analysis and off-peak hours were not included in the data set. However, as In-N-Out (Gibson) is not open during the AM peak hour, it is understood that collecting additional hours of data is unlikely to change the outcome. Additionally, Warrant 3 was excluded from the analysis as per the MUTCD:

“This signal warrant should be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.”

The land use served by this intersection does not meet the applicability requirements of Warrant 3.

Based on the analysis:

- Only one hour met the criteria for Warrant 1A,
- Five hours met the criteria for Warrant 1B, and
- Three meet the criteria for Warrant 2.

Therefore, a traffic signal is not warranted at the intersection of Gibson Blvd & Alumni for the conditions analyzed in this study. Signal warrant sheets and correspondence with NMDOT is included in appendix

It is also understood that future development north of this site could significantly change conditions at Gibson & Alumni and warrant the installation of a traffic signal in future years.

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
Total Crashes		151	50	9	57	162
	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
Crash Type	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 1st, 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 8th, 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 1st, 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 9th, 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 5th, 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 11th, 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 6th, 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 vehicles 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

- Mulberry Street and Gibson Boulevard
 - A “No U-Turn” sign (R-3-4) should be installed on the median at Mulberry Street and Gibson Boulevard, facing westbound traffic.

Appendix F: Site Plan

Appendix A: Scoping Meeting Notes

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 (11th 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 6th 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

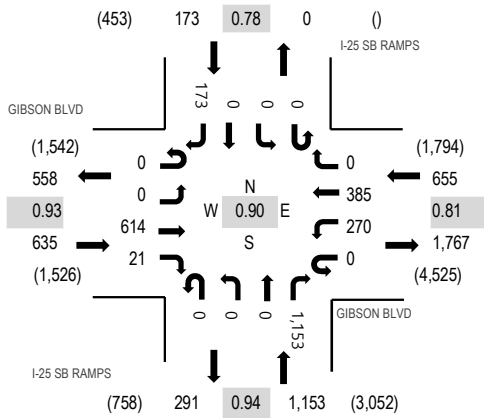
Location: 1 I-25 SB RAMPS & GIBSON BLVD AM

Date: Thursday, May 16, 2024

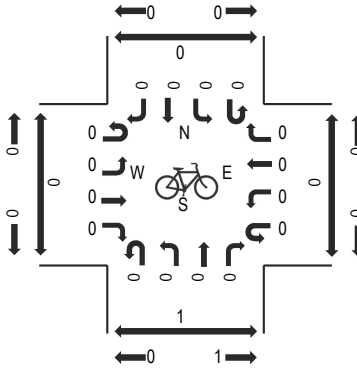
Peak Hour: 07:15 AM - 08:15 AM

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

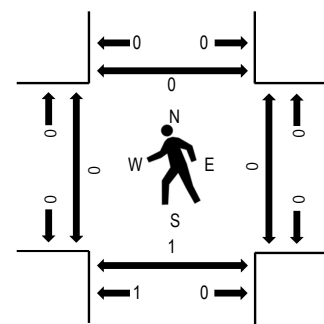
Peak Hour - Motorized Vehicles



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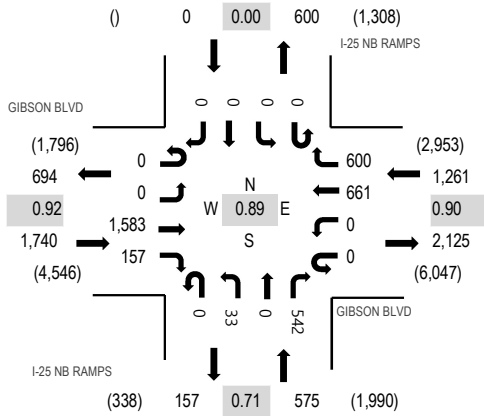
Location: 2 I-25 NB RAMPS & GIBSON BLVD AM

Date: Thursday, May 16, 2024

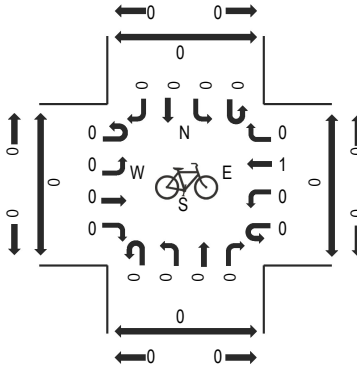
Peak Hour: 07:30 AM - 08:30 AM

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

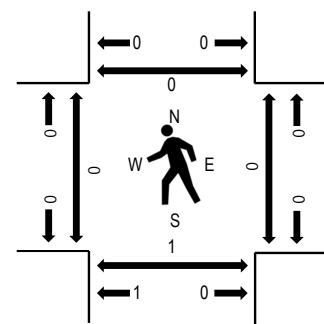
Peak Hour - Motorized Vehicles



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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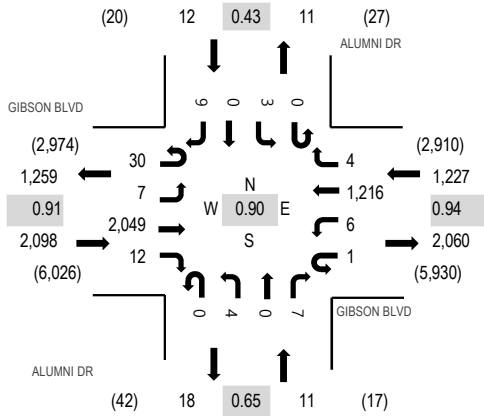
Location: 4 ALUMNI DR & GIBSON BLVD AM

Date: Thursday, May 16, 2024

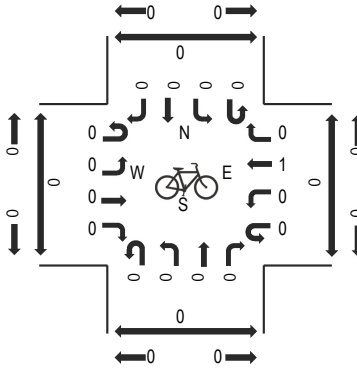
Peak Hour: 07:30 AM - 08:30 AM

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

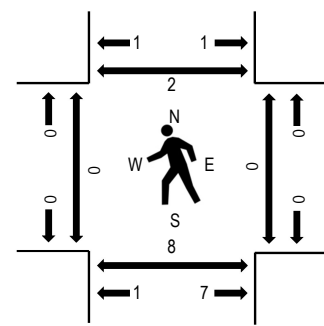
Peak Hour - Motorized Vehicles



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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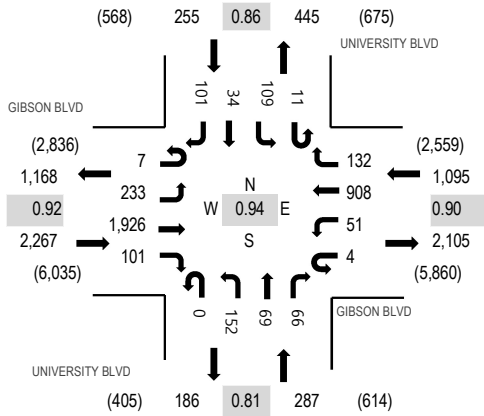
Location: 5 UNIVERSITY BLVD & GIBSON BLVD AM

Date: Thursday, May 16, 2024

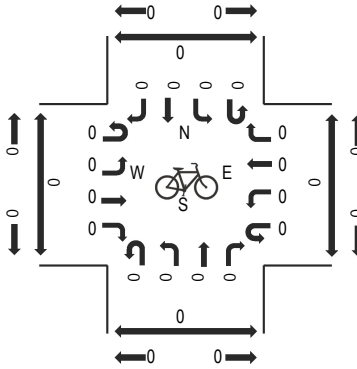
Peak Hour: 07:30 AM - 08:30 AM

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

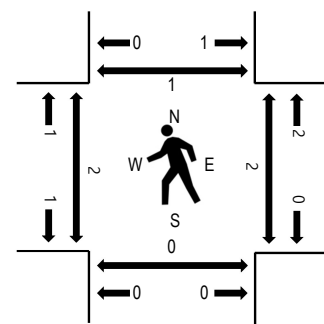
Peak Hour - Motorized Vehicles



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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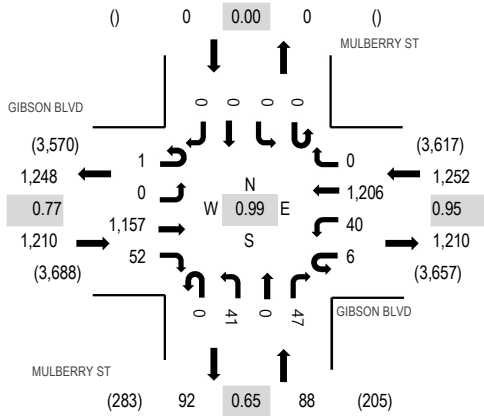
Location: 3 MULBERRY ST & GIBSON BLVD Noon

Date: Thursday, May 16, 2024

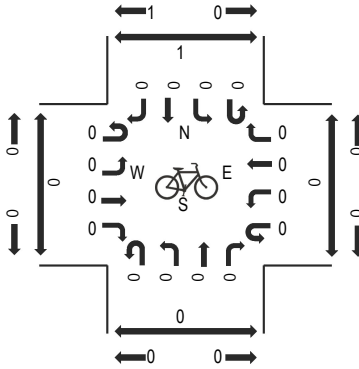
Peak Hour: 12:00 PM - 01:00 PM

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

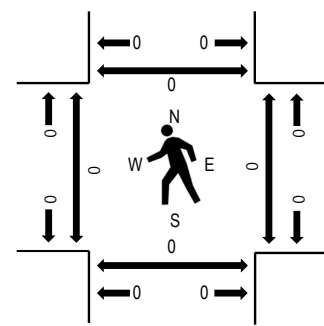
Peak Hour - Motorized Vehicles



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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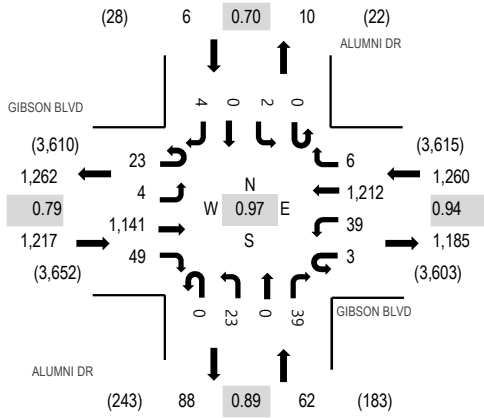
Location: 4 ALUMNI DR & GIBSON BLVD Noon

Date: Thursday, May 16, 2024

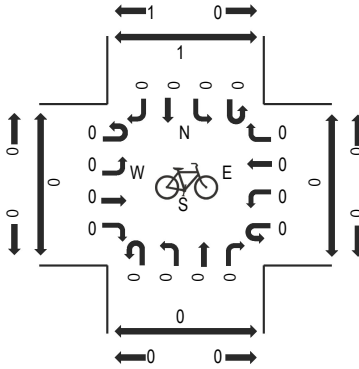
Peak Hour: 12:00 PM - 01:00 PM

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

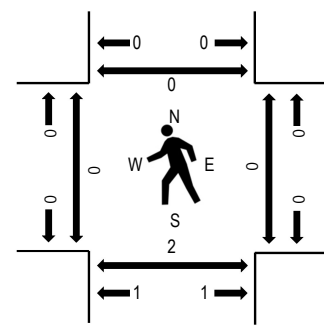
Peak Hour - Motorized Vehicles



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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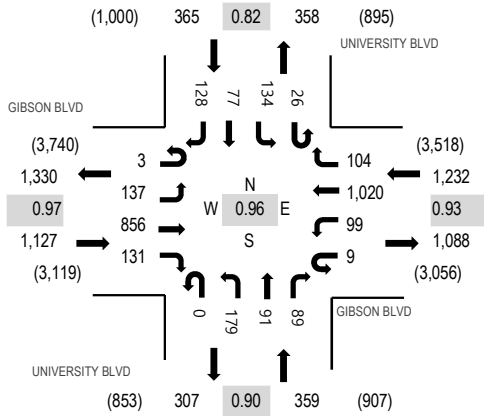
Location: 5 UNIVERSITY BLVD & GIBSON BLVD Noon

Date: Thursday, May 16, 2024

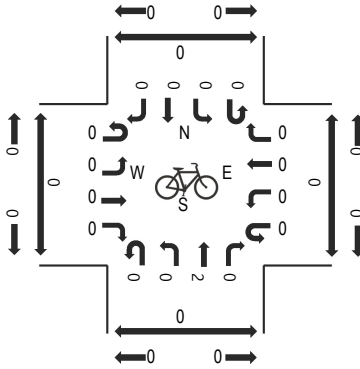
Peak Hour: 12:00 PM - 01:00 PM

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

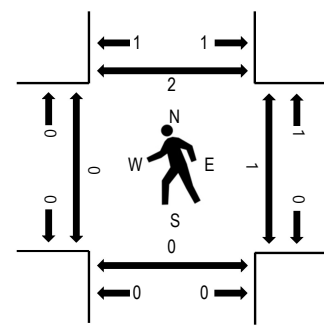
Peak Hour - Motorized Vehicles



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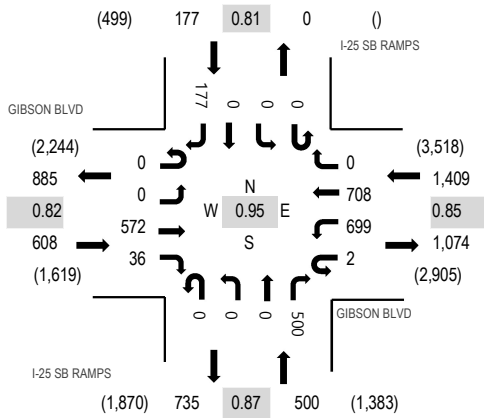
Location: 1 I-25 SB RAMPS & GIBSON BLVD PM

Date: Thursday, May 16, 2024

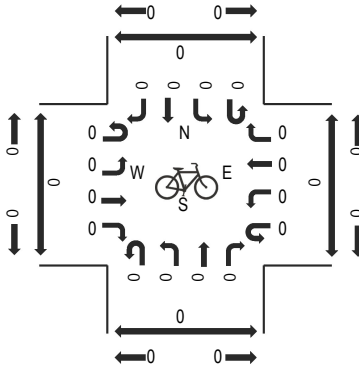
Peak Hour: 03:30 PM - 04:30 PM

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

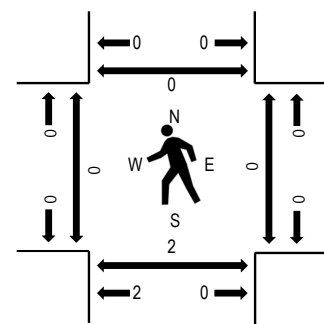
Peak Hour - Motorized Vehicles



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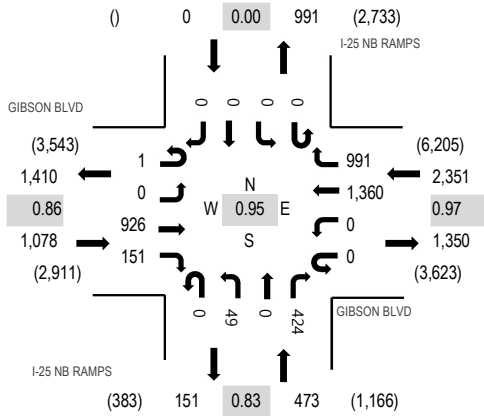
Location: 2 I-25 NB RAMPS & GIBSON BLVD PM

Date: Thursday, May 16, 2024

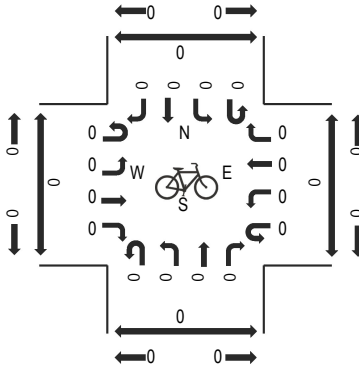
Peak Hour: 03:30 PM - 04:30 PM

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

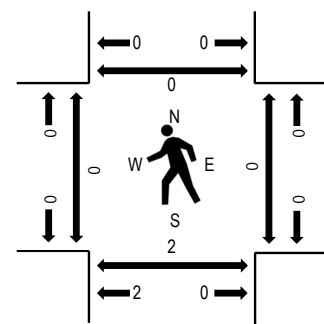
Peak Hour - Motorized Vehicles



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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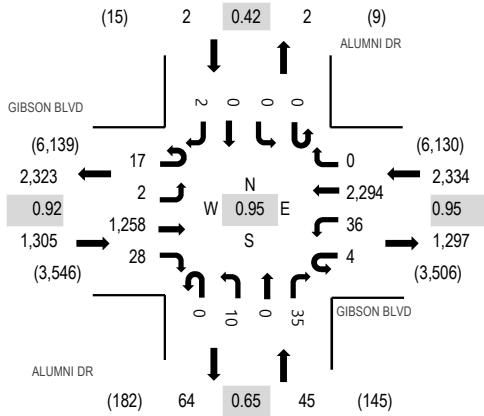
Location: 4 ALUMNI DR & GIBSON BLVD PM

Date: Thursday, May 16, 2024

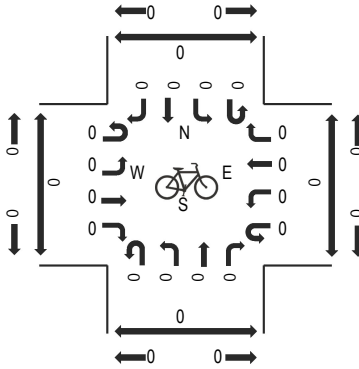
Peak Hour: 03:30 PM - 04:30 PM

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

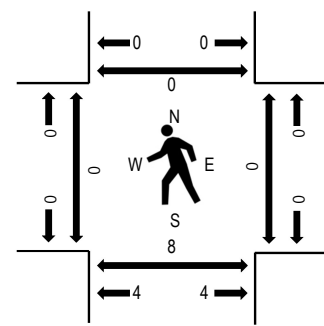
Peak Hour - Motorized Vehicles



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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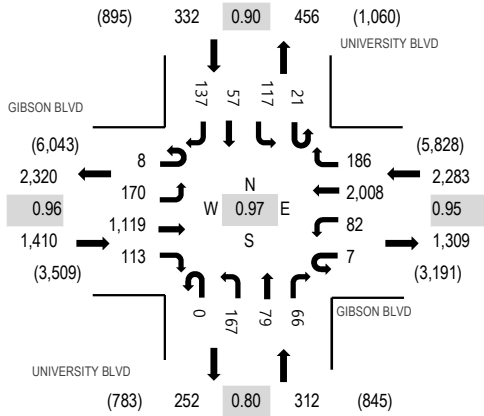
Location: 5 UNIVERSITY BLVD & GIBSON BLVD PM

Date: Thursday, May 16, 2024

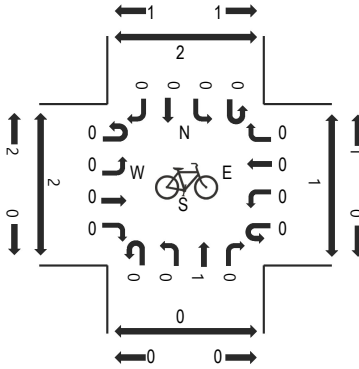
Peak Hour: 03:30 PM - 04:30 PM

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

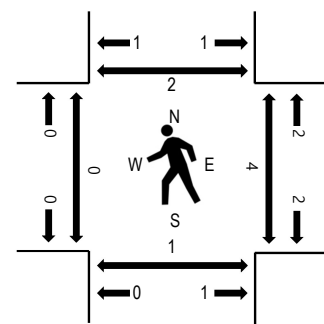
Peak Hour - Motorized Vehicles



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 Burger 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

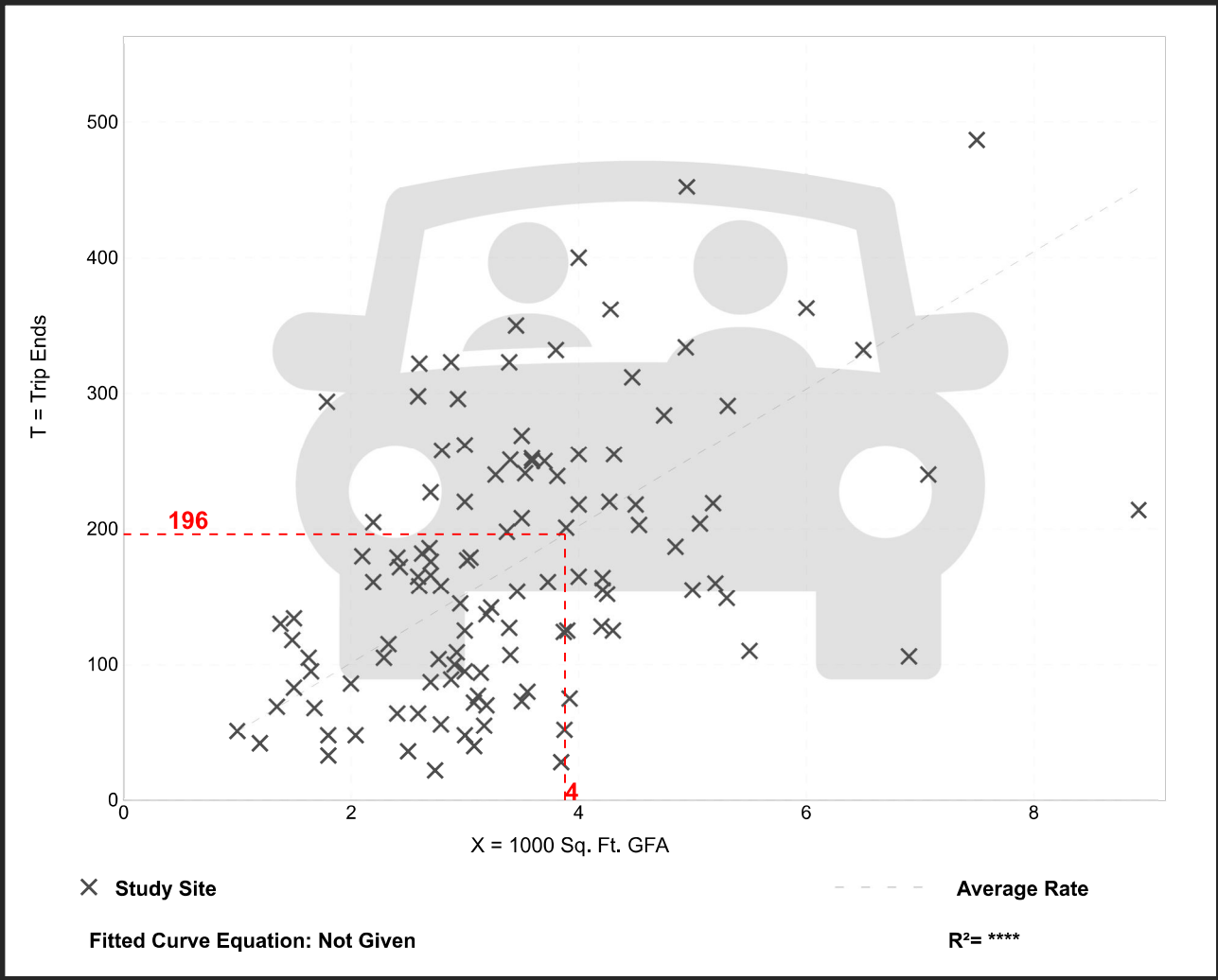
Avg. 1000 Sq. Ft. GFA: 3

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

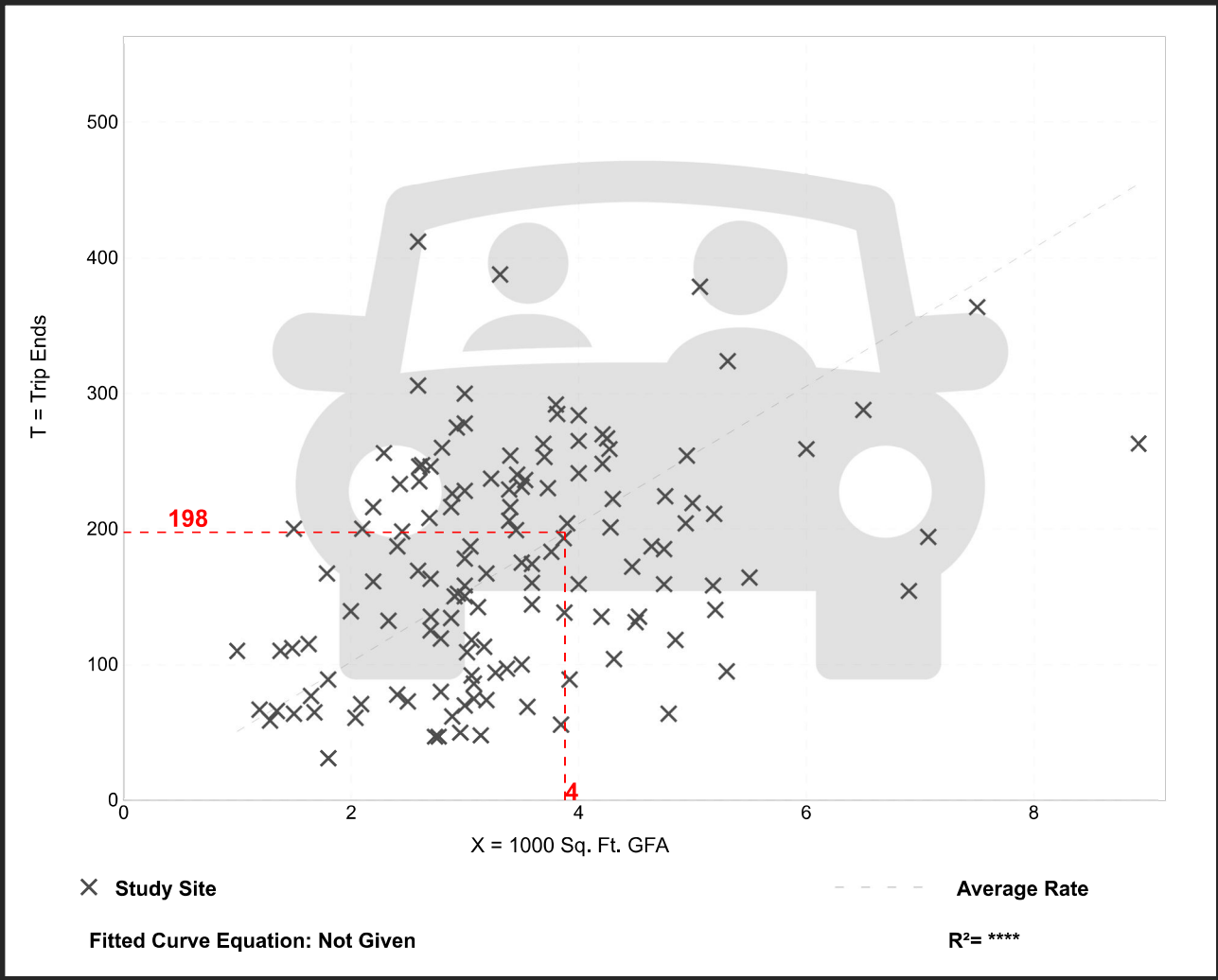


Table A1
Weekday Drive Through Queue Survey Summary

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
PEAK	24	23	16	23	15	22	20	20	23

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
PEAK	25	23	24	21	16	23	20	22	24

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

[illegible][illegible]

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
Total Vol.					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
Total Vol.					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
Total Vol.					542	484	

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

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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

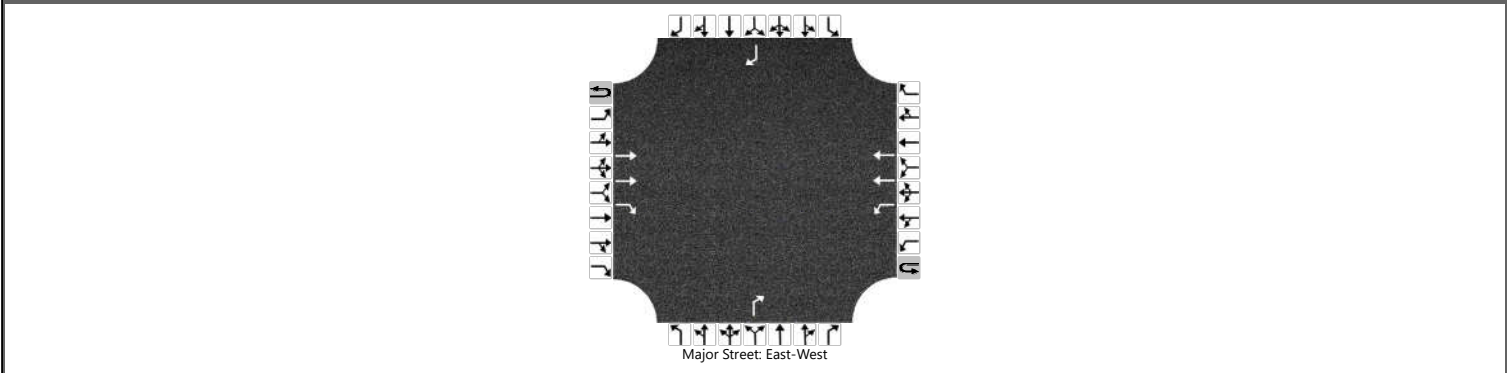
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Appendix D: HCM Analysis Output Sheets

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

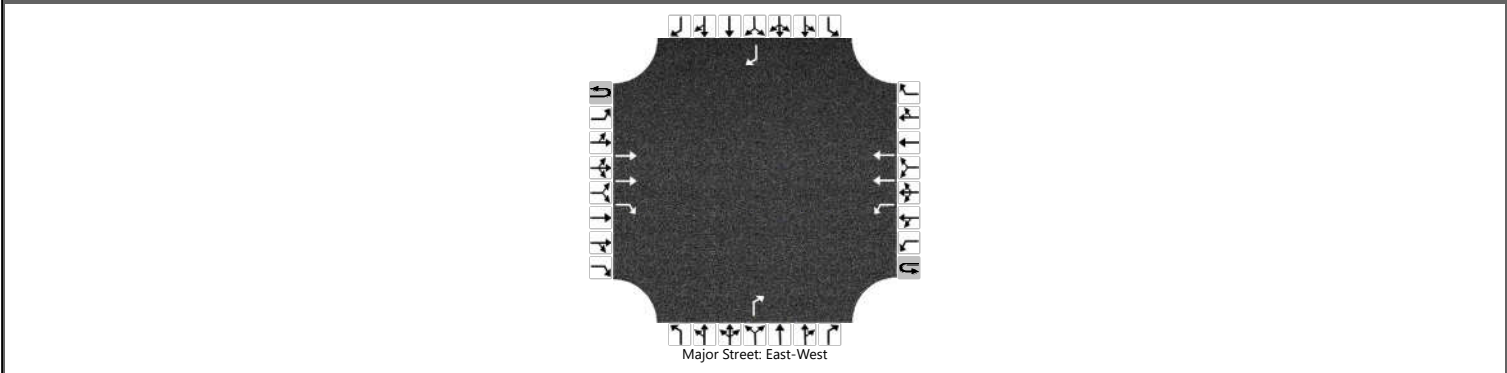
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					1.2							7.2				0.6
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	2	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)					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)						738						526				186
Capacity, c (veh/h)						940						701				622
v/c Ratio						0.79						0.75				0.30
95% Queue Length, Q ₉₅ (veh)						8.3						6.9				1.3
Control Delay (s/veh)						21.3						23.9				13.2
Level of Service (LOS)						C						C				B
Approach Delay (s/veh)					10.6				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

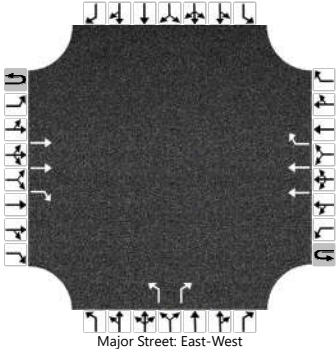
Peak Hour Factor

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 ₉₅ (veh)										0.3		3.5				
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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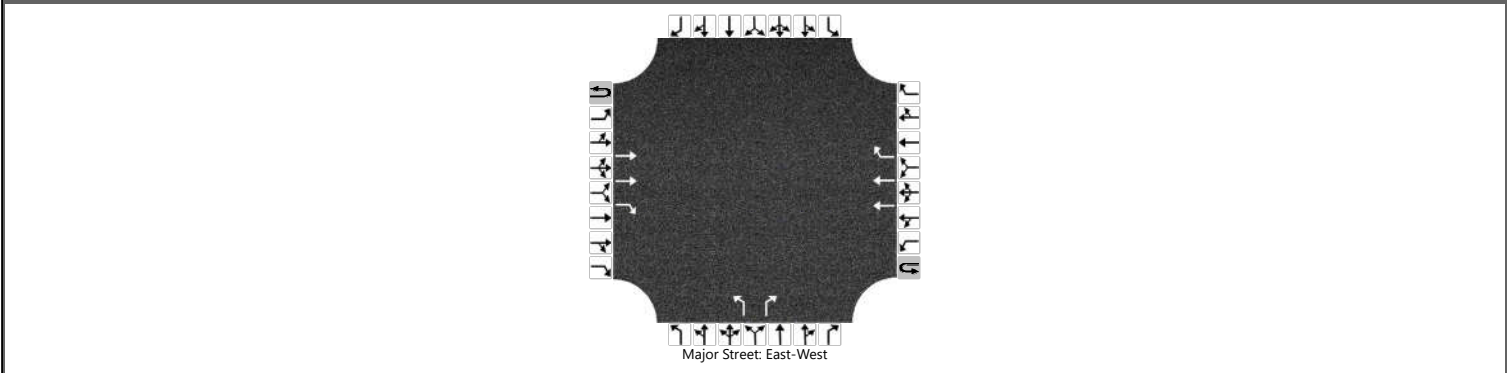
HCS  TWSC Version 2023
2 Gibson I25 NB Existing MD.xtw

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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)			927	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				

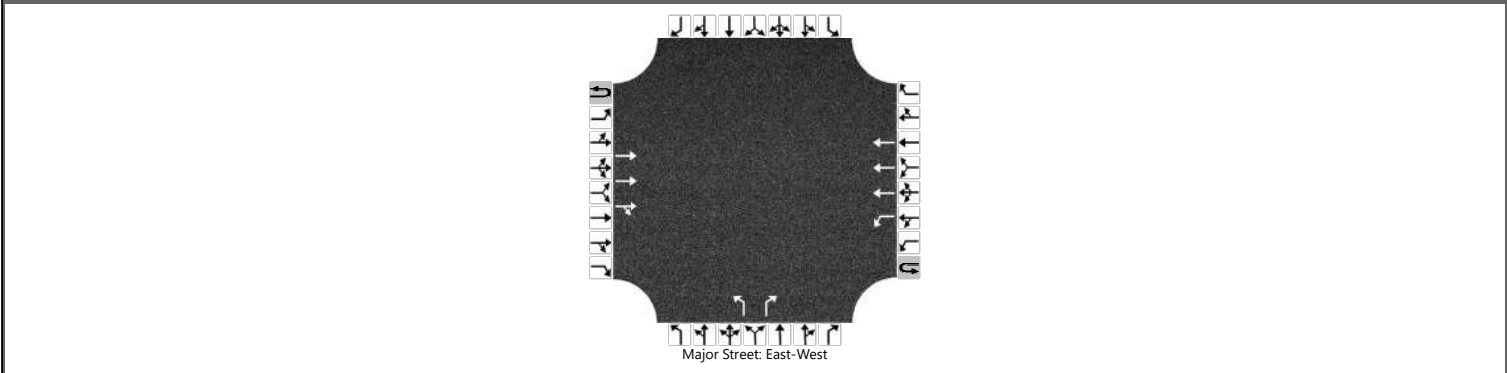
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										52		446				
Capacity, c (veh/h)										62		531				
v/c Ratio										0.83		0.84				
95% Queue Length, Q ₉₅ (veh)										3.8		8.7				
Control Delay (s/veh)										178.6		37.9				
Level of Service (LOS)										F		E				
Approach Delay (s/veh)									52.5							
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				

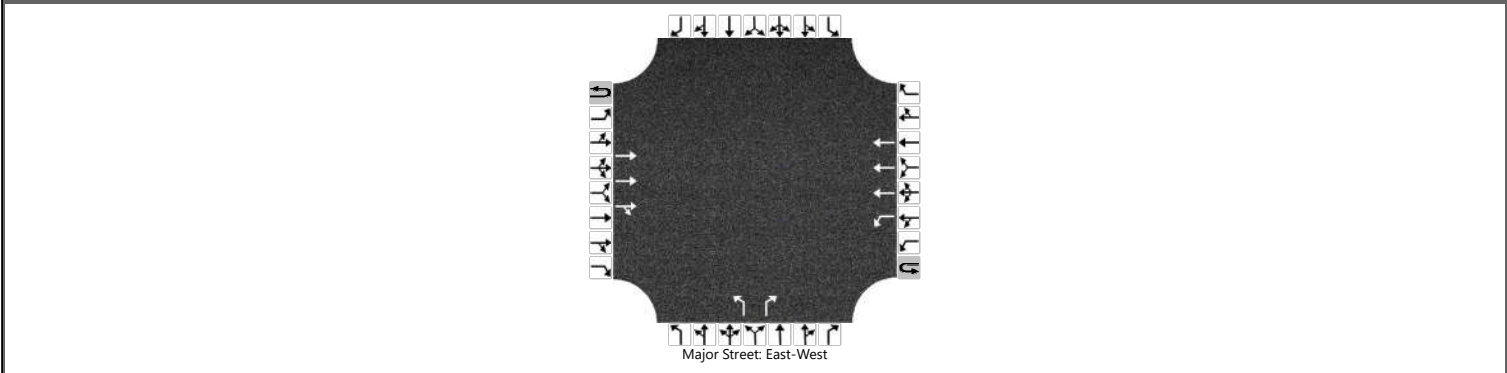
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					0.5				1.0		0.4					
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				

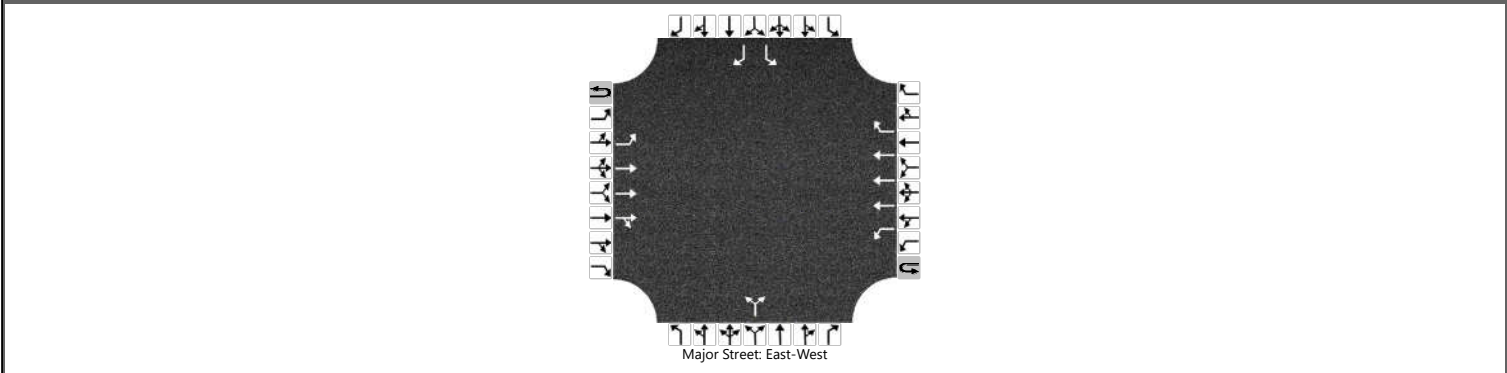
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					0.5				0.9		0.4					
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

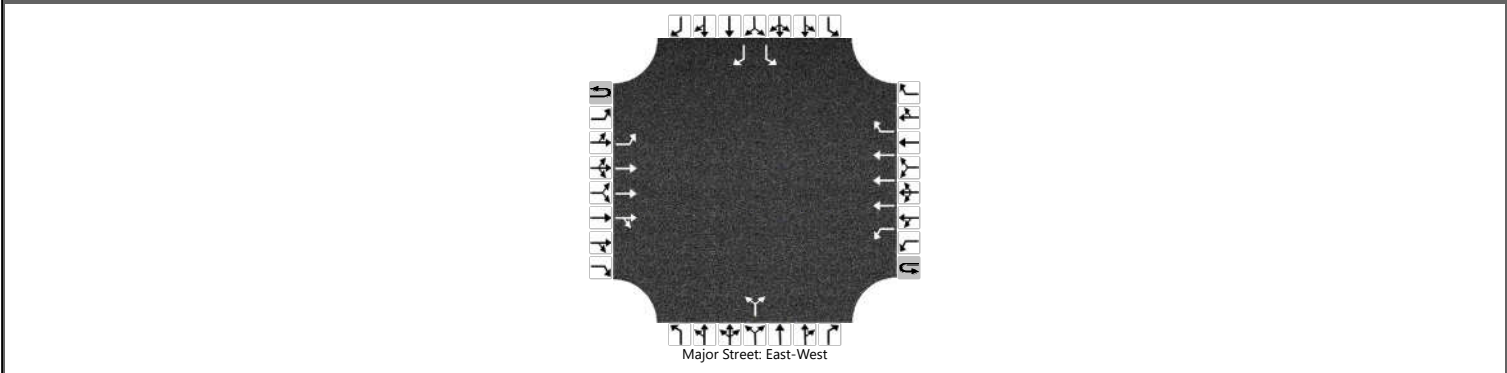
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)		0.2				0.5					1.4			0.1		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							

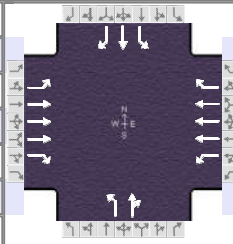
Critical and Follow-up Headways

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

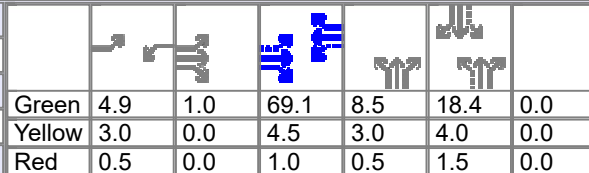
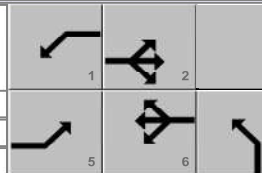
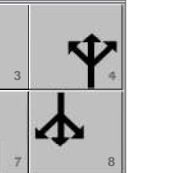
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)		0.5			0.5					1.1				0.0		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	OR	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

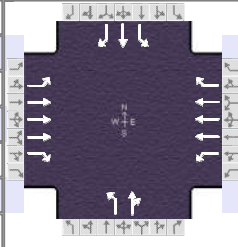
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
Green	4.9	1.0	69.1	8.5	18.4	0.0					
Yellow	3.0	0.0	4.5	3.0	4.0	0.0					
Red	0.5	0.0	1.0	0.5	1.5	0.0					

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

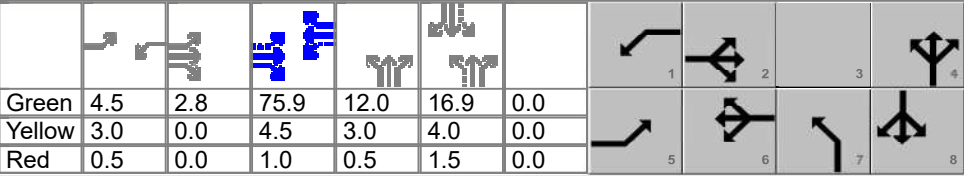
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	140	856	131	108	1020	104	179	180		160	77	128
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1745		1223	1900	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)	61.5	161.3	70.2	47.8	203.3	55.6	23.1	194.3		209	92.9	161.7
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	OR	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

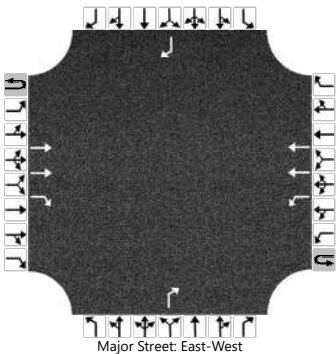
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	178	1119	113	89	2008	186	167	145		138	57	137
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1756		1263	1900	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)	150.1	222.8	61.9	43.6	475.4	114.4	198.7	170		200.4	76.6	195.4
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

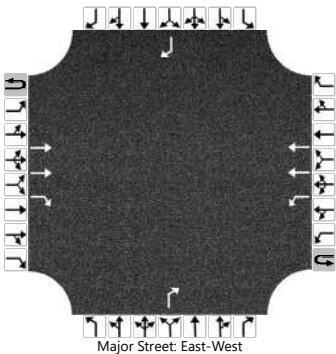
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					1.5							11.0				0.6
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

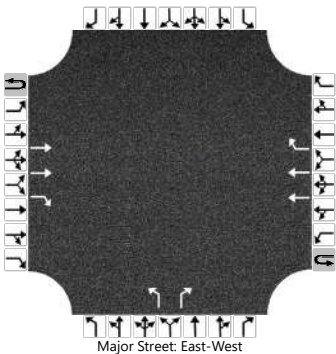
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					11.0							9.4				1.3
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				

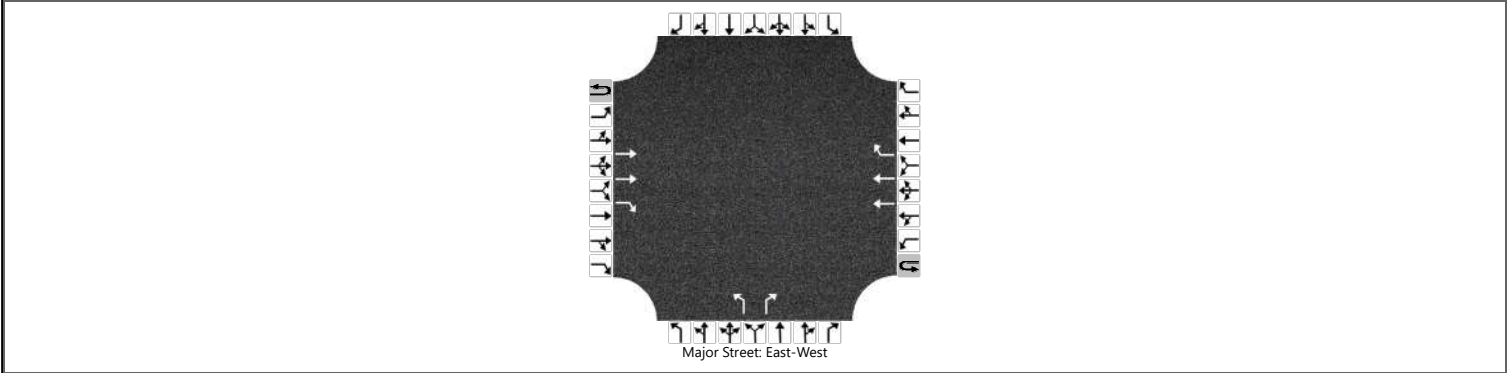
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										13		347				
Capacity, c (veh/h)										97		497				
v/c Ratio										0.14		0.70				
95% Queue Length, Q ₉₅ (veh)										0.5		5.4				
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)			1022	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				

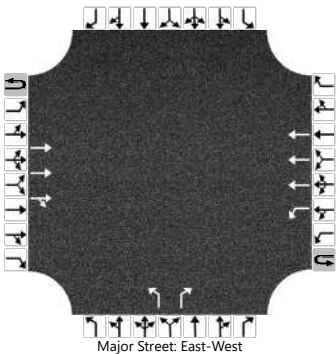
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										53		486				
Capacity, c (veh/h)										49		493				
v/c Ratio										1.06		0.99				
95% Queue Length, Q ₉₅ (veh)										4.6		13.1				
Control Delay (s/veh)										279.2		66.3				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									87.1							
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)			1321	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				

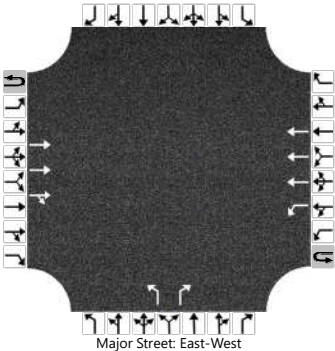
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					49				42		53					
Capacity, c (veh/h)					265				123		333					
v/c Ratio					0.19				0.35		0.16					
95% Queue Length, Q ₉₅ (veh)					0.7				1.4		0.6					
Control Delay (s/veh)					21.7	3.6			49.2		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				

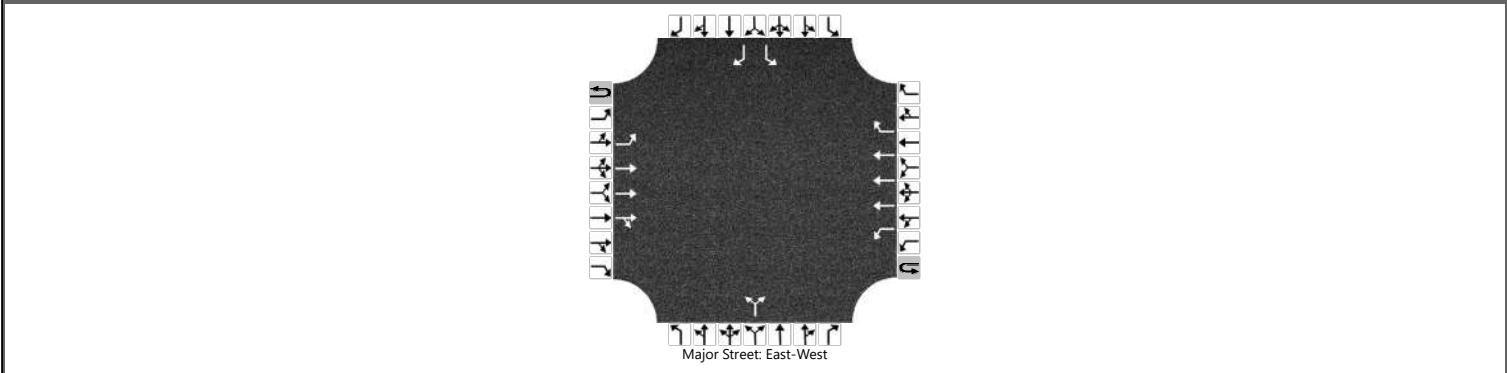
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)					0.6				1.1		0.5					
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

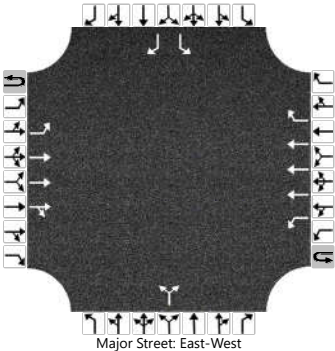
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)		0.8				0.6					2.4			2.6		0.3
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							

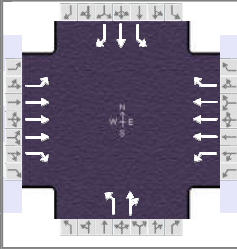
Critical and Follow-up Headways

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

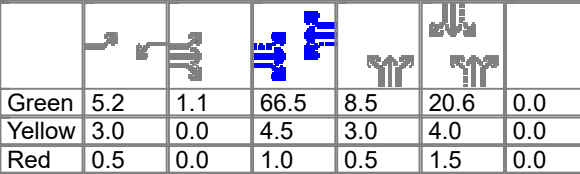
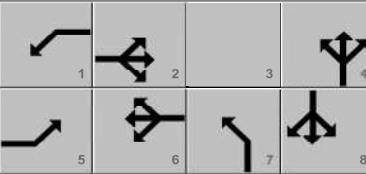
Delay, Queue Length, and Level of Service

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 ₉₅ (veh)		2.7			0.6					2.5			4.6			0.5
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	OR	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	7 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 (v), veh/h	148	1007	138	113	1100	109	193	96	101	179	81	138

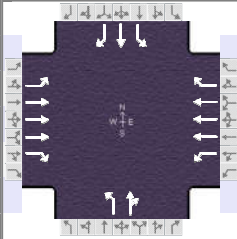
Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
Green	5.2	1.1	66.5	8.5	20.6	0.0							
Yellow	3.0	0.0	4.5	3.0	4.0	0.0							
Red	0.5	0.0	1.0	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	9.9	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

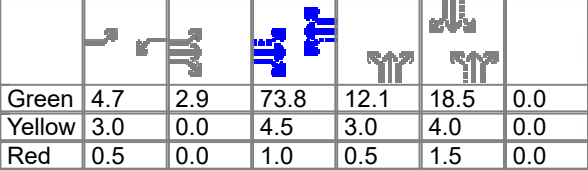
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	148	1007	138	113	1100	109	193	197		179	81	138
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1739		1204	1900	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)	70.1	205.2	79.2	54	231.5	62.5	37.3	205.7		227.6	95.5	171.2
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					Intersection Information		
Agency					Duration, h	1.000	
Analyst	OR	Analysis Date	5/21/2024	Area Type	Other		
Jurisdiction	CABQ	Time Period	Background PM	PHF	1.00		
Urban Street	Gibson Boulevard	Analysis Year	2026	Analysis Period	1> 7:00		
Intersection	University and Gibson	File Name	7 University-Gibson BO Background PM.xus				
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								1	2	3	4
Offset, s	0	Reference Point	End	Green	4.7	2.9	73.8	12.1	18.5	0.0	5	6	7	8
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.0	0.0	4.5	3.0	4.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	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

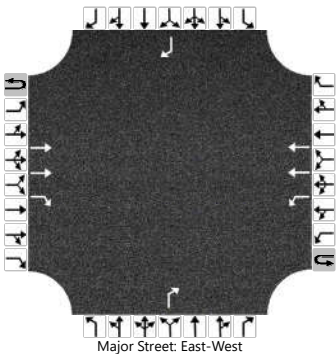
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	185	1245	117	92	2093	191	178	157		152	60	146
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1753		1249	1900	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)	155.3	258.7	67.3	47.5	526.7	123.4	206.8	181.7		215.7	79.4	203.4
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)			553	25	1	342	434					648				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

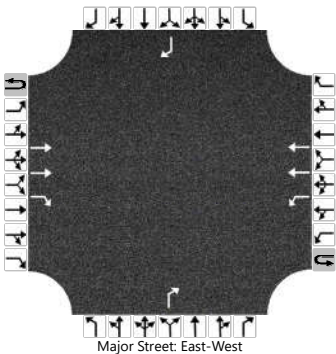
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						357						675				138
Capacity, c (veh/h)						901						712				778
v/c Ratio						0.40						0.95				0.18
95% Queue Length, Q ₉₅ (veh)						1.9						13.8				0.6
Control Delay (s/veh)						11.6						46.4				10.6
Level of Service (LOS)						B						E				B
Approach Delay (s/veh)					5.1				46.4				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)			632	37	2	749	743					564				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

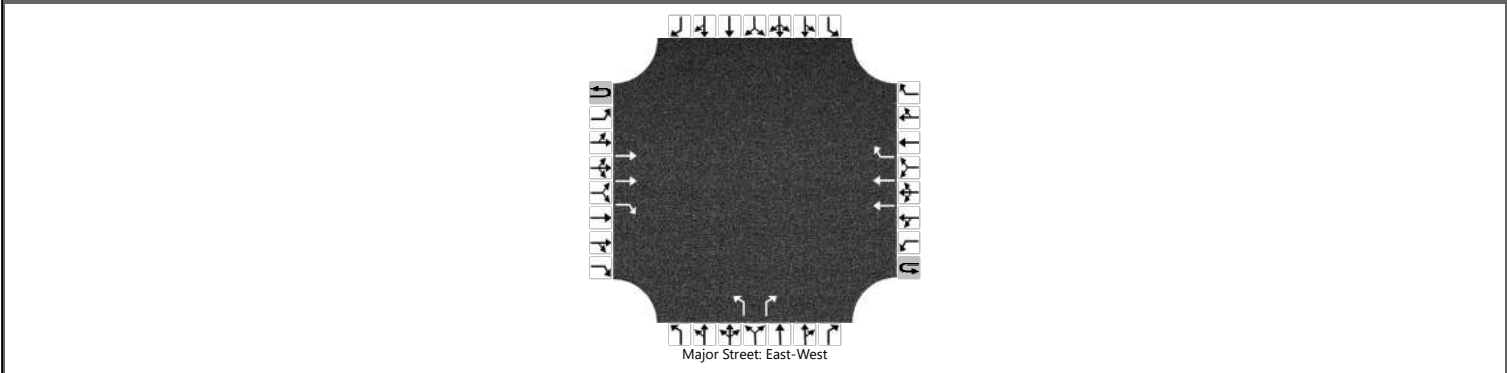
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						791						594				187
Capacity, c (veh/h)						872						669				605
v/c Ratio						0.91						0.89				0.31
95% Queue Length, Q ₉₅ (veh)						12.9						10.9				1.3
Control Delay (s/veh)						34.3						37.9				13.6
Level of Service (LOS)						D						E				B
Approach Delay (s/veh)					17.2				37.9				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)			1091	107			761	654		13		362				
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				

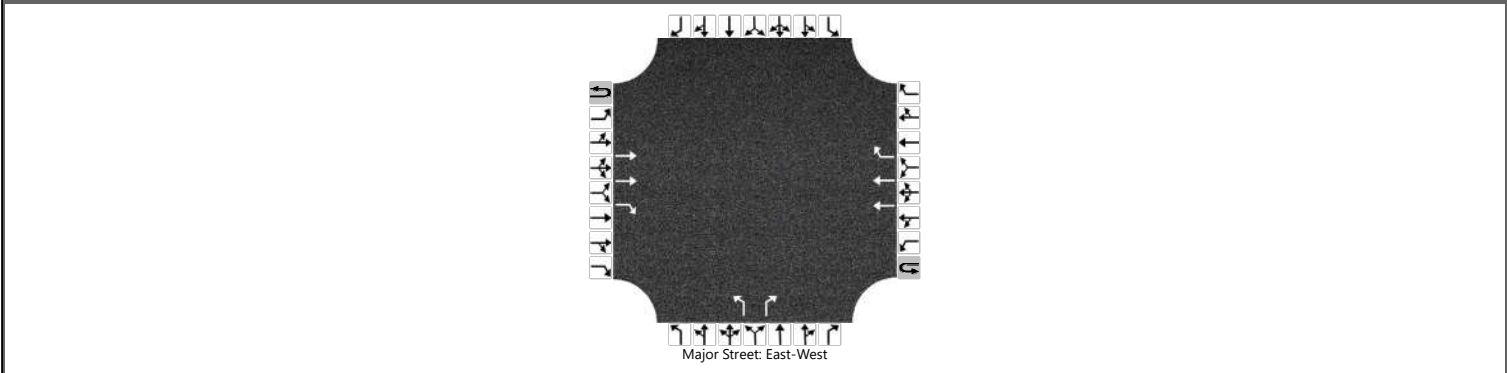
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										13		369				
Capacity, c (veh/h)										85		477				
v/c Ratio										0.16		0.77				
95% Queue Length, Q ₉₅ (veh)										0.5		6.8				
Control Delay (s/veh)										55.1		34.0				
Level of Service (LOS)										F		D				
Approach Delay (s/veh)									34.7							
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	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)			1055	154			1444	1051		50		479				
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				

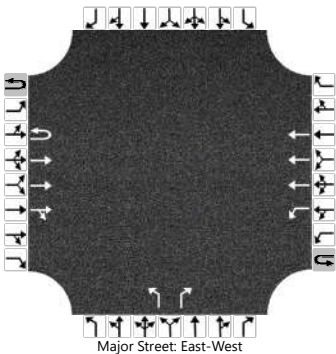
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										53		504				
Capacity, c (veh/h)										45		480				
v/c Ratio										1.16		1.05				
95% Queue Length, Q ₉₅ (veh)										4.9		15.3				
Control Delay (s/veh)										327.5		84.3				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									107.3							
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	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	1	0	3	0	0	1	3	0		1	0	1		0	0	0
Configuration	U		T	TR		L	T			L		R				
Volume (veh/h)	0		1395	53	6	44	1370			42		53				
Percent Heavy Vehicles (%)	3				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				5.6	5.3				6.4		7.1				
Critical Headway (sec)	5.66				5.60	5.32				5.70		7.10				
Base Follow-Up Headway (sec)	2.3				2.3	3.1				3.8		3.9				
Follow-Up Headway (sec)	2.33				2.30	3.11				3.80		3.90				

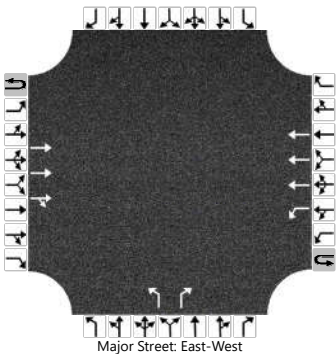
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	0				51				42		54					
Capacity, c (veh/h)	430				243				110		315					
v/c Ratio	0.00				0.21				0.39		0.17					
95% Queue Length, Q ₉₅ (veh)	0.0				0.8				1.6		0.6					
Control Delay (s/veh)	13.4				23.6	4.4			57.2		18.7					
Level of Service (LOS)	B				C	A			F		C					
Approach Delay (s/veh)	0.0				5.1				35.8							
Approach LOS	A				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)			1453	75	4	32	2441			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				

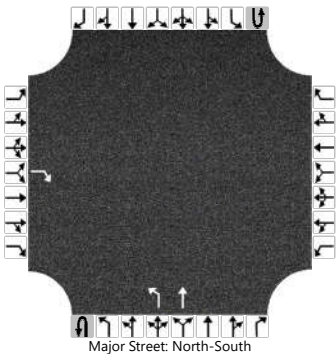
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					38				25		42					
Capacity, c (veh/h)					209				79		283					
v/c Ratio					0.18				0.32		0.15					
95% Queue Length, Q ₉₅ (veh)					0.6				1.2		0.5					
Control Delay (s/veh)					26.0	4.6			70.8		19.9					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					4.9				39.0							
Approach LOS					A				E							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 1
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)				28						87	0					
Percent Heavy Vehicles (%)				0						0						
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)				7.10						5.30						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.90						3.10						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				30						95						
Capacity, c (veh/h)				923						1161						
v/c Ratio				0.03						0.08						
95% Queue Length, Q ₉₅ (veh)				0.1						0.3						
Control Delay (s/veh)				9.0						8.4						
Level of Service (LOS)				A						A						
Approach Delay (s/veh)	9.0								8.4							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2026

Time Analyzed

Full Build PM

Intersection Orientation

North-South

Project Description

Gibson In-N-Out

Site Information

Intersection

Alumni Site DWY 1

Jurisdiction

COA

East/West Street

Site DWY 1

North/South Street

Alumni Drive

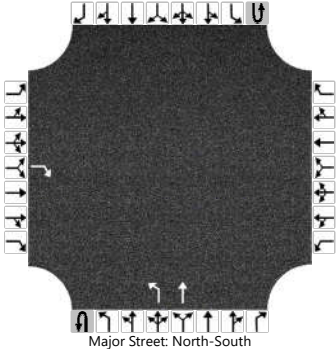
Peak Hour Factor

0.92

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		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)				20						63	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)				22						68						
Capacity, c (veh/h)				917						1151						
v/c Ratio				0.02						0.06						
95% Queue Length, Q ₉₅ (veh)				0.1						0.2						
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							

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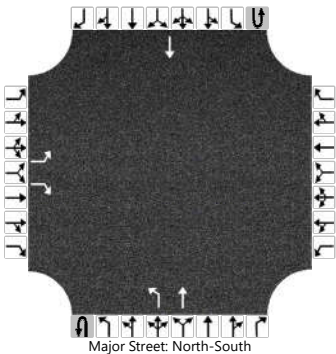
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HCS Two-Way Stop-Control Report

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		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		112						58	87				28	
Percent Heavy Vehicles (%)		2		2						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		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

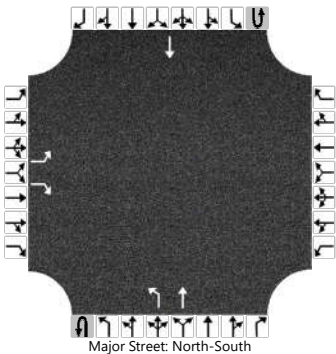
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		122						63						
Capacity, c (veh/h)		708		1044						1582						
v/c Ratio		0.00		0.12						0.04						
95% Queue Length, Q ₉₅ (veh)		0.0		0.4						0.1						
Control Delay (s/veh)		10.1		8.9						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.9								2.9							
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		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T				T	
Volume (veh/h)		0		77						42	63				20	
Percent Heavy Vehicles (%)		2		2						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		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

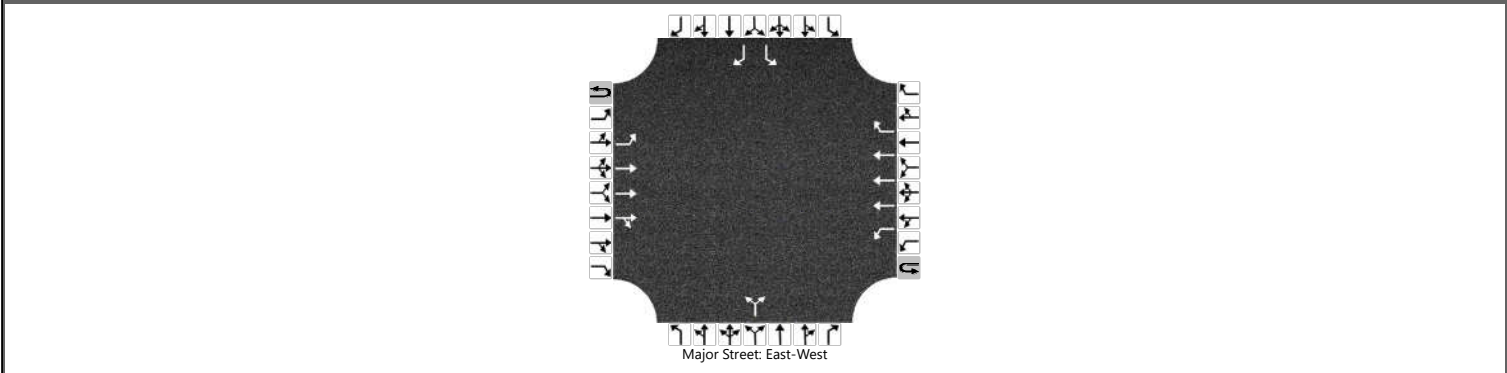
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		84						46						
Capacity, c (veh/h)		785		1055						1594						
v/c Ratio		0.00		0.08						0.03						
95% Queue Length, Q ₉₅ (veh)		0.0		0.3						0.1						
Control Delay (s/veh)		9.6		8.7						7.3						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	8.7								2.9							
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 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	126	1262	50	3	40	1278	76		23		40		86		123
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

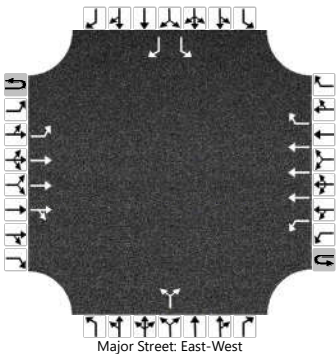
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		155				44					65			89		127
Capacity, c (veh/h)		261				270					51			33		350
v/c Ratio		0.59				0.16					1.27			2.72		0.36
95% Queue Length, Q ₉₅ (veh)		3.5				0.6					5.9			10.3		1.6
Control Delay (s/veh)		37.1				20.9					345.4			1038.4		21.0
Level of Service (LOS)		E				C					F			F		C
Approach Delay (s/veh)	3.8				0.6				345.4				439.6			
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	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	87	1359	29	4	37	2366	56		10		36		58		86
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							

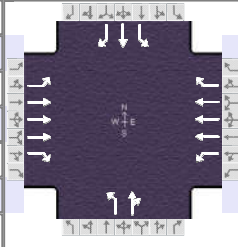
Critical and Follow-up Headways

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

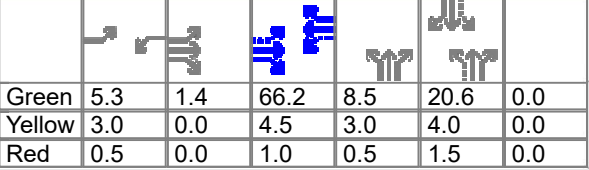
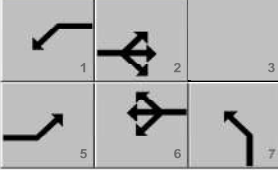



Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		109				43					48			61		91
Capacity, c (veh/h)		66				242					0			16		144
v/c Ratio		1.67				0.18								3.94		0.63
95% Queue Length, Q ₉₅ (veh)		9.7				0.6								8.4		3.4
Control Delay (s/veh)		463.2				23.1								1818.8		64.8
Level of Service (LOS)		F				C								F		F
Approach Delay (s/veh)	32.3				0.4								771.3			
Approach LOS	F				A								F			

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	1.000	
Analyst	OR	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	7 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	1032	145	113	1132	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								
Green	5.3	1.4	66.2	8.5	20.6	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					

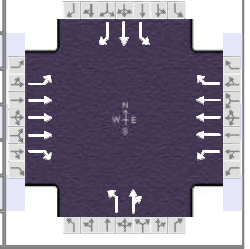
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4		8
Case Number	1.1	3.0	1.1	3.0	1.0	4.0		5.3
Phase Duration, s	10.2	73.1	8.8	71.7	12.0	38.1		26.1
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	5.5		5.5
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.1	3.4		3.4
Queue Clearance Time (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	1032	145	113	1132	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	13.0	5.2	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	13.0	5.2	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	383	2833	888	372	473		267	327	277
Volume-to-Capacity Ratio (X)	0.416	0.354	0.161	0.295	0.400	0.118	0.529	0.416		0.670	0.236	0.531
Back of Queue (Q), ft/ln (95 th percentile)	74.2	210.2	83.6	54.3	239	60.5	42.3	205.7		227.6	90.6	183.5
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				Intersection Information	
Agency				Duration, h	1.000
Analyst	OR	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	University and Gibson	File Name	7 University-Gibson BO TOTAL PM.xus		
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	191	1260	121	92	2121	188	180	84	73	152	57	151

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								

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	11.8	82.2	8.2	78.6	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	8.0		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

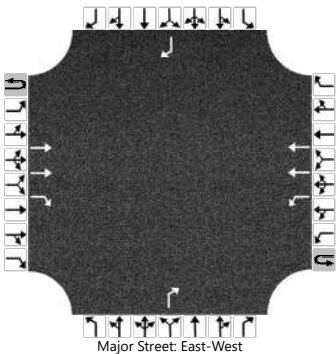
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	191	1260	121	92	2121	188	180	157		152	57	151
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1753		1249	1900	1610
Queue Service Time (g_s), s	6.0	17.2	4.4	2.8	40.0	7.5	10.8	9.4		15.4	3.4	11.5
Cycle Queue Clearance Time (g_c), s	6.0	17.2	4.4	2.8	40.0	7.5	10.8	9.4		15.4	3.4	11.5
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	220	3052	942	319	2889	906	382	460		233	270	229
Volume-to-Capacity Ratio (X)	0.869	0.413	0.128	0.288	0.734	0.208	0.471	0.341		0.652	0.211	0.659
Back of Queue (Q), ft/ln (95 th percentile)	160.5	262.7	70.1	48.1	543.8	122.9	208.8	181.7		215.7	75.3	209.5
Back of Queue (Q), veh/ln (95 th percentile)	6.4	10.5	2.8	1.9	21.6	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	28.4	14.5	11.8	12.2	21.2	14.1	40.6	38.8		54.4	49.3	52.8
Incremental Delay (d_2), s/veh	4.3	0.4	0.3	0.2	1.7	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	32.6	14.9	12.1	12.4	22.9	14.6	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	16.8	B		21.9	C		40.1	D		53.9	D	
Intersection Delay, s/veh / LOS	23.9						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	1.35	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)			609	27	1	376	480					665				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

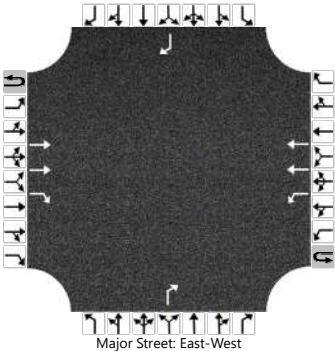
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						393						693				142	
Capacity, c (veh/h)						0						682				751	
v/c Ratio												1.02				0.19	
95% Queue Length, Q ₉₅ (veh)												16.8				0.7	
Control Delay (s/veh)												63.3				10.9	
Level of Service (LOS)												F				B	
Approach Delay (s/veh)										63.3				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 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)			699	41	2	832	826					580				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

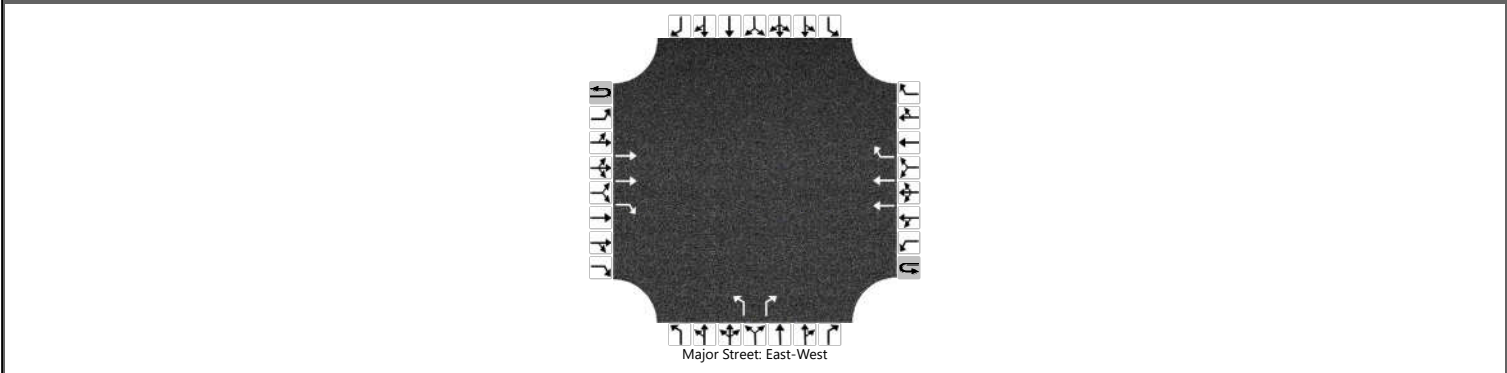
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					878							611				194
Capacity, c (veh/h)					767							635				567
v/c Ratio					1.14							0.96				0.34
95% Queue Length, Q ₉₅ (veh)					26.3							13.7				1.5
Control Delay (s/veh)					101.0							52.3				14.6
Level of Service (LOS)					F							F				B
Approach Delay (s/veh)					50.8				52.3				14.6			
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 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)			1199	120			839	722		15		394				
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		402				
Capacity, c (veh/h)										66		439				
v/c Ratio										0.23		0.92				
95% Queue Length, Q ₉₅ (veh)										0.8		10.2				
Control Delay (s/veh)										75.9		55.4				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									56.2							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2036

Time Analyzed

Horizon BG PM

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

0.95

Analysis Time Period (hrs)

0.25

Lanes

Major Street: East-West

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)			1165	172			1604	1168		55		525				
Percent Heavy Vehicles (%)										0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				Yes				Yes							
Median Type Storage	Undivided															

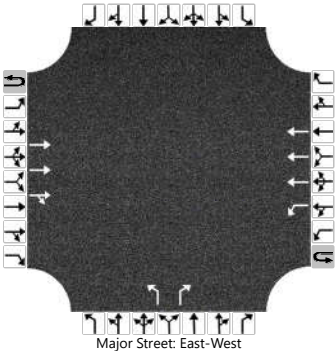
Critical and Follow-up Headways																
Base Critical Headway (sec)										7.5		6.9				
Critical Headway (sec)										7.50		6.90				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.50		3.30				

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)										58		553				
Capacity, c (veh/h)										32		440				
v/c Ratio										1.81		1.26				
95% Queue Length, Q ₉₅ (veh)										6.6		23.0				
Control Delay (s/veh)										653.1		159.5				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									206.3							
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 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)			1533	59	7	48	1511			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				

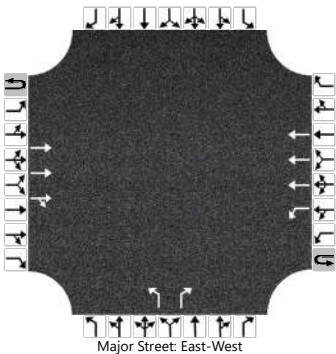
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					56				46		59					
Capacity, c (veh/h)					206				88		282					
v/c Ratio					0.27				0.53		0.21					
95% Queue Length, Q ₉₅ (veh)					1.0				2.3		0.8					
Control Delay (s/veh)					28.7	6.9			85.1		21.0					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					7.7				49.4							
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)			1603	83	5	35	2712			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				

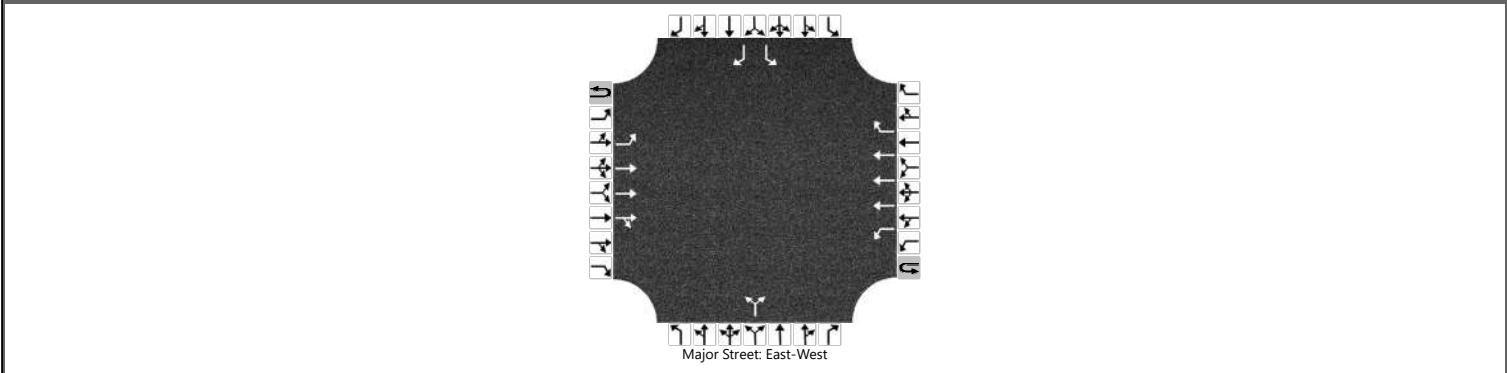
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					42				28		46					
Capacity, c (veh/h)					173				60		250					
v/c Ratio					0.24				0.47		0.19					
95% Queue Length, Q ₉₅ (veh)					0.9				1.8		0.7					
Control Delay (s/veh)					32.3	7.6			109.1		22.7					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					8.0				55.5							
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	128	1397	56	3	44	1439	59		26		44		87		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

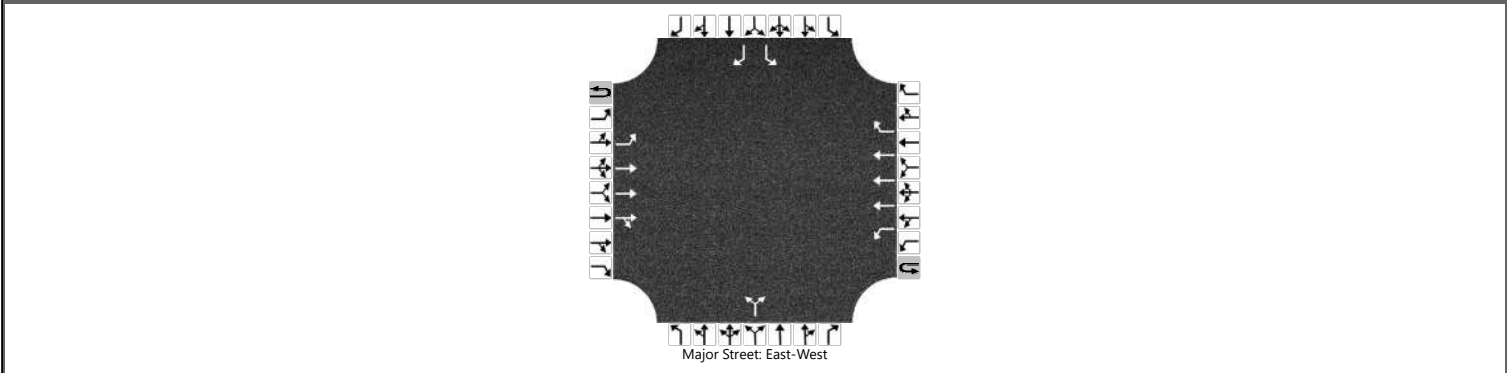
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		159				48					72				90		31
Capacity, c (veh/h)		231				229					33				17		309
v/c Ratio		0.69				0.21					2.17				5.21		0.10
95% Queue Length, Q ₉₅ (veh)		4.4				0.8					8.2				11.9		0.3
Control Delay (s/veh)		49.0				24.9					796.0				2340.6		17.9
Level of Service (LOS)		E				C					F				F		C
Approach Delay (s/veh)	4.7					0.8				796.0				1745.0			
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	87	1507	32	5	41	2651	42		11		40		58		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							

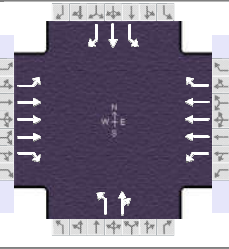
Critical and Follow-up Headways

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

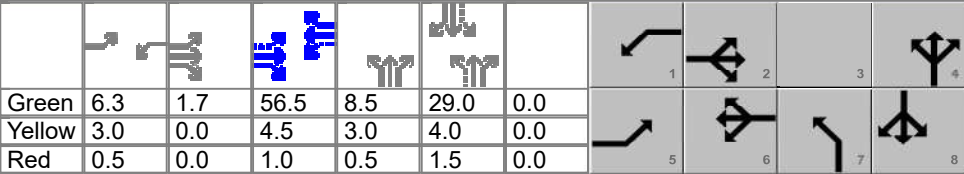
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		112			48					54				61		21
Capacity, c (veh/h)		53			203					0				7		114
v/c Ratio		2.12			0.24									8.73		0.18
95% Queue Length, Q ₉₅ (veh)		11.1			0.9									9.2		0.6
Control Delay (s/veh)		685.9			28.2									4508.4		43.5
Level of Service (LOS)		F			D									F		E
Approach Delay (s/veh)	44.2				0.5								3363.6			
Approach LOS	F				A								F			

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	1.000	
Analyst	OR	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	7 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	172	1133	161	126	1253	118	257	127	131	233	103	190

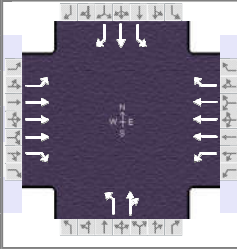
Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Green	6.3	1.7	56.5	8.5	29.0	0.0			
				Yellow	3.0	0.0	4.5	3.0	4.0	0.0			
				Red	0.5	0.0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

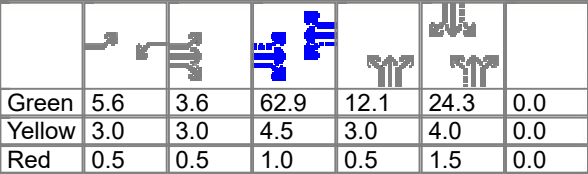




Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	172	1133	161	126	1253	118	257	258		233	103	190
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1741		1139	1900	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	319	2417	758	449	595		319	459	389
Volume-to-Capacity Ratio (X)	0.545	0.451	0.208	0.396	0.518	0.156	0.573	0.434		0.730	0.224	0.489
Back of Queue (Q), ft/ln (95 th percentile)	102.8	274.1	116.3	76.2	317.3	85	103.7	239.4		287.1	111.4	213.4
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		22.1	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	OR	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	7 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	212	1392	136	102	2358	210	236	110	95	198	76	197

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	3.6	62.9	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	16.2	75.5	9.1	68.4	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	12.5		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

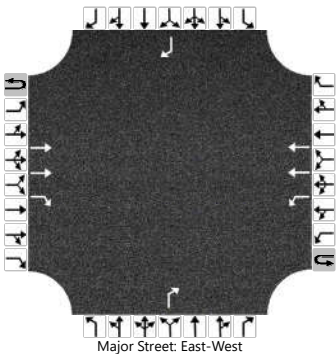
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	212	1392	136	102	2358	210	236	205		198	76	197
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1754		1196	1900	1610
Queue Service Time (g_s), s	10.5	22.1	5.6	3.7	57.0	10.1	12.1	11.9		21.0	4.4	14.7
Cycle Queue Clearance Time (g_c), s	10.5	22.1	5.6	3.7	57.0	10.1	12.1	11.9		21.0	4.4	14.7
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	239	2787	860	273	2485	779	429	538		279	355	301
Volume-to-Capacity Ratio (X)	0.885	0.499	0.158	0.374	0.949	0.270	0.550	0.381		0.710	0.214	0.655
Back of Queue (Q), ft/ln (95 th percentile)	301.7	331	92.3	66.7	827.5	172.4	253.6	218.9		268.2	95.7	252.6
Back of Queue (Q), veh/ln (95 th percentile)	12.1	13.2	3.7	2.7	32.8	6.9	10.1	8.8		10.7	3.8	10.1
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	40.6	18.9	15.1	16.9	32.0	19.9	38.0	35.4		51.5	44.8	49.0
Incremental Delay (d_2), s/veh	13.4	0.6	0.4	0.3	11.9	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	54.0	19.6	15.5	17.2	44.0	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	23.5	C		41.1	D		37.3	D		50.8	D	
Intersection Delay, s/veh / LOS	35.9						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	1.44	A	1.96	B	1.22	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)			608	27	1	372	480					704				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

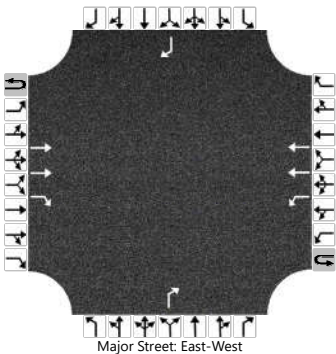
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					389							733				142
Capacity, c (veh/h)					0							682				751
v/c Ratio												1.08				0.19
95% Queue Length, Q ₉₅ (veh)												20.1				0.7
Control Delay (s/veh)												80.5				10.9
Level of Service (LOS)												F				B
Approach Delay (s/veh)									80.5				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)			697	41	2	832	823					634				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

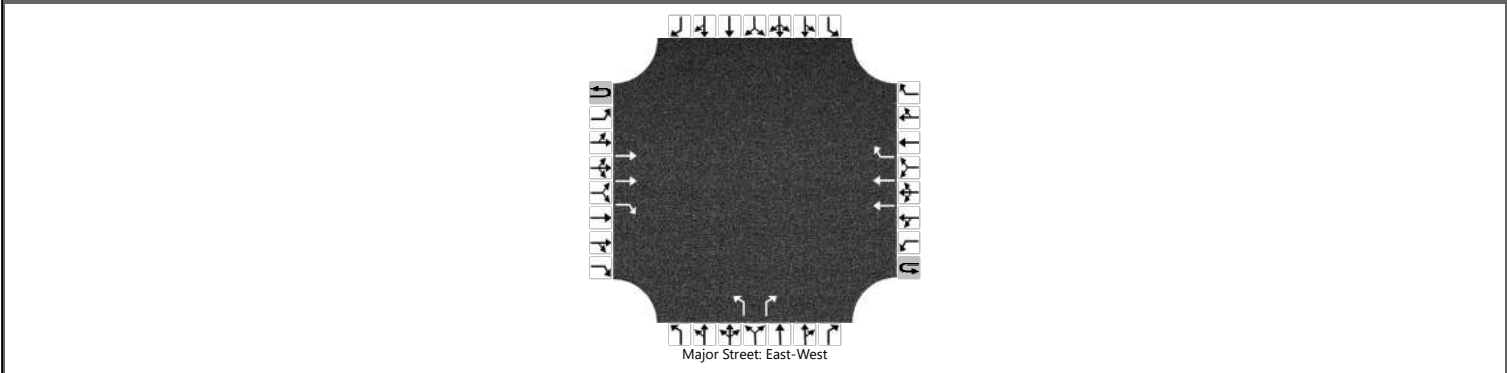
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						878						667				194
Capacity, c (veh/h)						0						636				568
v/c Ratio												1.05				0.34
95% Queue Length, Q ₉₅ (veh)												17.9				1.5
Control Delay (s/veh)												74.7				14.6
Level of Service (LOS)												F				B
Approach Delay (s/veh)									74.7				14.6			
Approach LOS									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)			1193	120			835	713		18		390				
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)										18		398				
Capacity, c (veh/h)										66		441				
v/c Ratio										0.28		0.90				
95% Queue Length, Q ₉₅ (veh)										1.0		9.8				
Control Delay (s/veh)										78.7		52.8				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									54.0							
Approach LOS									F							

HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2036

Time Analyzed

Horizon Total PM

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

0.95

Analysis Time Period (hrs)

0.25

Lanes

Major Street: East-West

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)			1160	172			1601	1159		55		522				
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		549				
Capacity, c (veh/h)										32		442				
v/c Ratio										1.79		1.24				
95% Queue Length, Q ₉₅ (veh)										6.5		22.6				
Control Delay (s/veh)										641.4		154.7				
Level of Service (LOS)										F		F				
Approach Delay (s/veh)									201.1							
Approach LOS									F							

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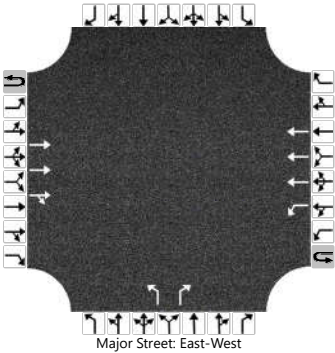
HCS™ TWSC Version 2023
2 Gibson I25 NB Horizon TOTAL PM.xtw

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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)			1522	59	7	49	1497			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				

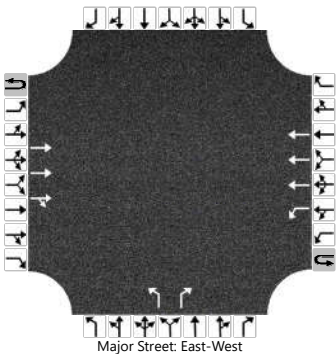
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					57				46		59					
Capacity, c (veh/h)					209				89		285					
v/c Ratio					0.27				0.52		0.21					
95% Queue Length, Q ₉₅ (veh)					1.1				2.3		0.8					
Control Delay (s/veh)					28.5	6.9			83.1		20.9					
Level of Service (LOS)					D	A			F		C					
Approach Delay (s/veh)					7.6				48.4							
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 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)			1596	83	5	35	2700			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				

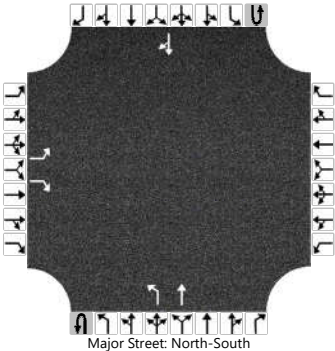
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						42				28		47				
Capacity, c (veh/h)						175				61		251				
v/c Ratio						0.24				0.46		0.19				
95% Queue Length, Q ₉₅ (veh)						0.9				1.8		0.7				
Control Delay (s/veh)						32.0	7.5			107.2		22.6				
Level of Service (LOS)						D	A			F		C				
Approach Delay (s/veh)					7.9				54.4							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AY	Intersection	Alumni Site DWY 1
Agency/Co.	Lee	Jurisdiction	COA
Date Performed	5/31/2024	East/West Street	Site DWY 1
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					TR
Volume (veh/h)		8		17						80	7				4	11
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						

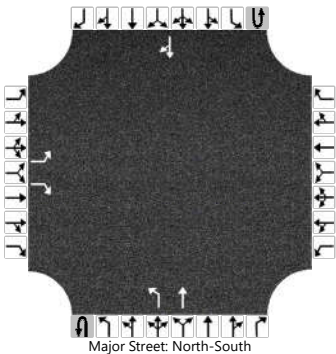
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9		18						87						
Capacity, c (veh/h)		751		1068						1595						
v/c Ratio		0.01		0.02						0.05						
95% Queue Length, Q ₉₅ (veh)		0.0		0.1						0.2						
Control Delay (s/veh)		9.8		8.4						7.4						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	8.9								6.8							
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 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					TR
Volume (veh/h)		5		11						58	4				3	7
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)		5		12						63						
Capacity, c (veh/h)		820		1072						1602						
v/c Ratio		0.01		0.01						0.04						
95% Queue Length, Q ₉₅ (veh)		0.0		0.0						0.1						
Control Delay (s/veh)		9.4		8.4						7.3						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	8.7								6.9							
Approach LOS	A								A							

HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2036

Time Analyzed

Horizon Total MD

Intersection Orientation

North-South

Project Description

Gibson In-N-Out

Site Information

Intersection

Alumni Site DWY 3

Jurisdiction

COA

East/West Street

Site DWY 3

North/South Street

Alumni Drive

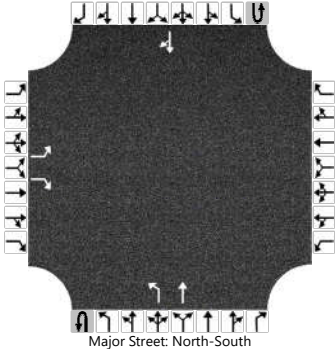
Peak Hour Factor

0.92

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		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					TR
Volume (veh/h)		14		101						50	73				17	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)		15		110						54						
Capacity, c (veh/h)		751		1054						1586						
v/c Ratio		0.02		0.10						0.03						
95% Queue Length, Q ₉₅ (veh)		0.1		0.3						0.1						
Control Delay (s/veh)		9.9		8.8						7.4						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	8.9								3.0							
Approach LOS	A								A							

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5 Alumni Site DWY 2 Horizon TOTAL MD.xtw

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HCS Two-Way Stop-Control Report

General Information

Analyst

AY

Agency/Co.

Lee

Date Performed

5/31/2024

Analysis Year

2036

Time Analyzed

Horizon Total PM

Intersection Orientation

North-South

Project Description

Gibson In-N-Out

Site Information

Intersection

Alumni Site DWY 3

Jurisdiction

COA

East/West Street

Site DWY 3

North/South Street

Alumni Drive

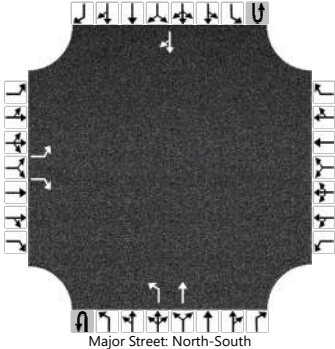
Peak Hour Factor

0.92

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		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					TR
Volume (veh/h)		10		71						37	52				11	3
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)		11		77						40						
Capacity, c (veh/h)		818		1064						1596						
v/c Ratio		0.01		0.07						0.03						
95% Queue Length, Q ₉₅ (veh)		0.0		0.2						0.1						
Control Delay (s/veh)		9.5		8.6						7.3						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)	8.7								3.0							
Approach LOS	A								A							

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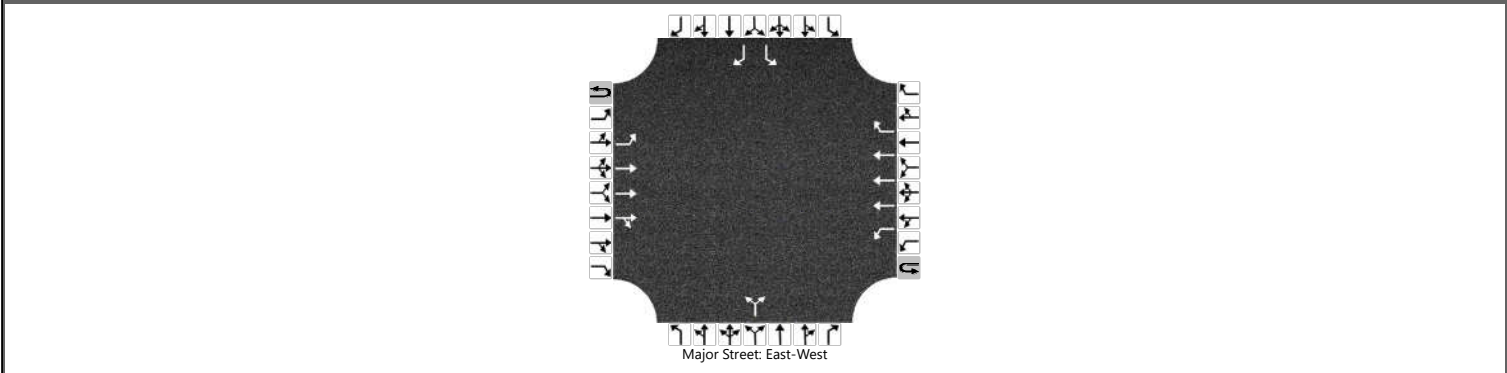
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HCS Two-Way Stop-Control Report

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	117	1397	56	3	44	1400	83		26		44		76		112
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

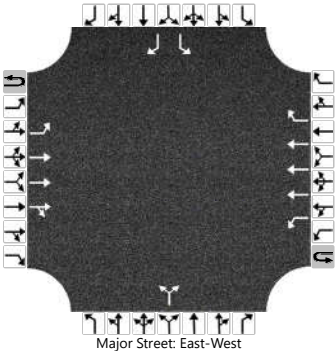
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		147				48					72			78		115
Capacity, c (veh/h)		226				229					28			20		319
v/c Ratio		0.65				0.21					2.56			3.90		0.36
95% Queue Length, Q ₉₅ (veh)		4.0				0.8					8.6			10.2		1.6
Control Delay (s/veh)		46.4				24.9					1001.4			1694.7		22.6
Level of Service (LOS)		E				C					F			F		C
Approach Delay (s/veh)	4.2				0.8				1001.4				698.5			
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	80	1508	32	5	41	2623	59		11		40		53		76
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							

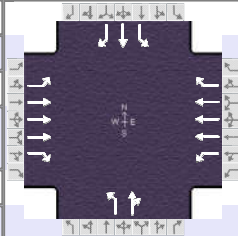
Critical and Follow-up Headways

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

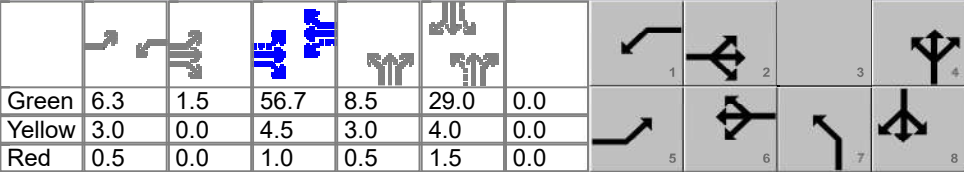






















Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		104			48					54				56		80
Capacity, c (veh/h)		46			202					0				7		117
v/c Ratio		2.26			0.24									7.52		0.68
95% Queue Length, Q ₉₅ (veh)		10.9			0.9									8.5		3.6
Control Delay (s/veh)		766.4			28.3									3907.9		85.3
Level of Service (LOS)		F			D									F		F
Approach Delay (s/veh)	46.3				0.5								1655.8			
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	7 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	165	1128	161	126	1239	122	211	127	131	233	103	189

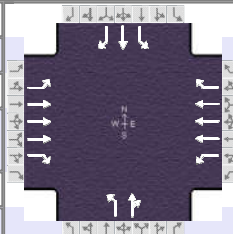
Signal Information															
Cycle, s	120.0	Reference Phase	2												
Offset, s	0	Reference Point	End	Green	6.3	1.5	56.7	8.5	29.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.0	0.0	4.5	3.0	4.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.0	0.5	1.5	0.0					

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	11.3	63.7	9.8	62.2	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	7.6		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

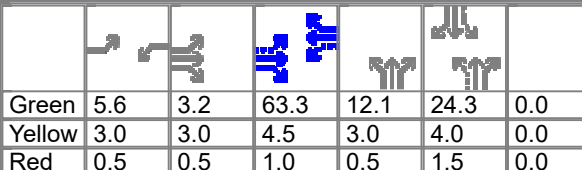
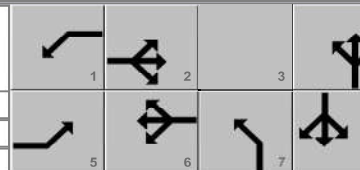
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	165	1128	161	126	1239	122	211	258		233	103	189
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1741		1139	1900	1610
Queue Service Time (g_s), s	5.6	17.2	6.9	4.3	20.1	5.2	8.5	13.7		23.8	5.2	12.1
Cycle Queue Clearance Time (g_c), s	5.6	17.2	6.9	4.3	20.1	5.2	8.5	13.7		25.5	5.2	12.1
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	316	2511	775	320	2428	761	449	594		319	459	389
Volume-to-Capacity Ratio (X)	0.522	0.449	0.208	0.394	0.510	0.160	0.470	0.434		0.730	0.224	0.486
Back of Queue (Q), ft/ln (95 th percentile)	98.5	272.4	116.1	75.5	312.1	87.4	37	239.4		287.1	111.4	212.6
Back of Queue (Q), veh/ln (95 th percentile)	3.9	10.9	4.6	3.0	12.4	3.5	1.5	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	16.8	20.3	17.7	16.3	22.0	18.0	32.0	30.5		45.0	36.5	39.1
Incremental Delay (d_2), s/veh	0.5	0.6	0.6	0.3	0.8	0.5	0.3	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	17.3	20.9	18.3	16.6	22.7	18.5	32.3	30.7		48.9	36.6	39.5
Level of Service (LOS)	B	C	B	B	C	B	C	C		D	D	D
Approach Delay, s/veh / LOS	20.2	C		21.9	C		31.5	C		43.1	D	
Intersection Delay, s/veh / LOS	25.2						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	1.26	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 Full Build PM	PHF	1.00	
Urban Street	Gibson Boulevard	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	University and Gibson	File Name	7 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	208	1392	135	102	2347	213	235	110	95	198	75	198

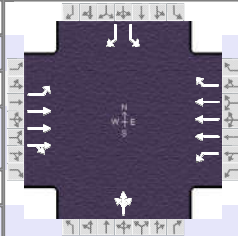
Signal Information														
Cycle, s	130.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On											
				Green	5.6	3.2	63.3	12.1	24.3	0.0				
				Yellow	3.0	3.0	4.5	3.0	4.0	0.0				
				Red	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	15.8	75.5	9.1	68.8	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	12.1		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

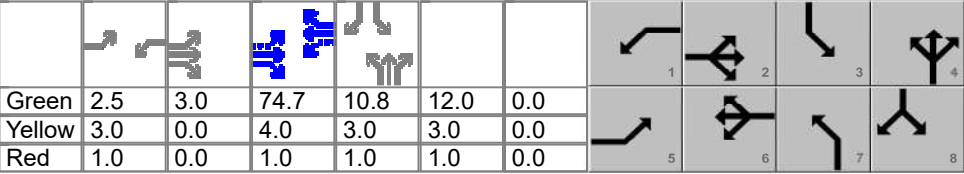
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	208	1392	135	102	2347	213	235	205		198	75	198
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1725	1598	1810	1712	1610	1810	1754		1196	1900	1610
Queue Service Time (g_s), s	10.1	22.1	5.5	3.7	56.2	10.2	12.1	11.9		21.0	4.3	14.8
Cycle Queue Clearance Time (g_c), s	10.1	22.1	5.5	3.7	56.2	10.2	12.1	11.9		21.0	4.3	14.8
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	236	2788	861	273	2500	784	430	538		279	355	301
Volume-to-Capacity Ratio (X)	0.883	0.499	0.157	0.374	0.939	0.272	0.546	0.381		0.710	0.211	0.658
Back of Queue (Q), ft/ln (95 th percentile)	294.3	331	91.7	66.2	804.9	174	252.4	218.9		268.2	94.3	253.8
Back of Queue (Q), veh/ln (95 th percentile)	11.8	13.2	3.6	2.6	31.9	7.0	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	40.0	18.9	15.1	16.8	31.5	19.7	37.9	35.4		51.5	44.8	49.0
Incremental Delay (d_2), s/veh	12.1	0.6	0.4	0.3	10.1	0.9	0.8	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	52.1	19.6	15.5	17.1	41.6	20.6	38.8	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	23.2		C	39.0		D	37.3		D	50.9		D
Intersection Delay, s/veh / LOS	34.7						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	1.44	A	1.95	B	1.21	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	143	1397	56	47	1400	83	26	0	44	76		112

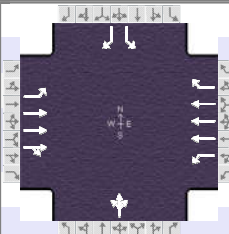
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	2.5	3.0	74.7	10.8	12.0	0.0	
				Yellow	3.0	0.0	4.0	3.0	3.0	0.0	
				Red	1.0	0.0	1.0	1.0	1.0	0.0	

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	9.5	82.7	6.5	79.7		14.8		16.0
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		3.4
Queue Clearance Time (g_s), s	5.3		3.1			6.7		10.1
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0		0.1		0.3
Phase Call Probability	0.99		0.79			0.90		1.00
Max Out Probability	0.00		0.00			0.00		0.00

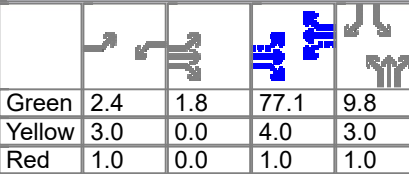
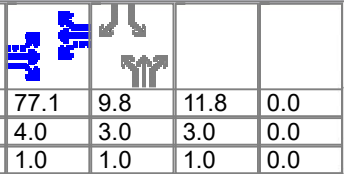
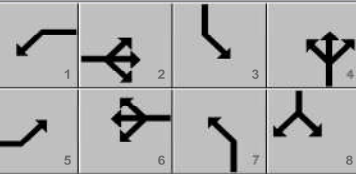
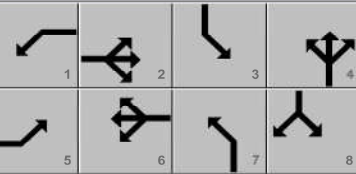
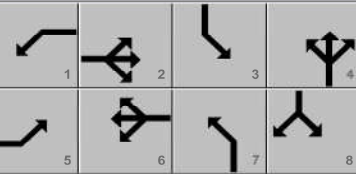
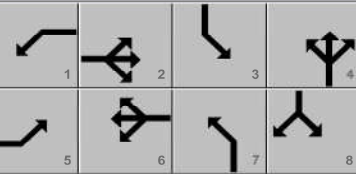
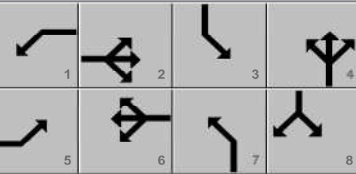
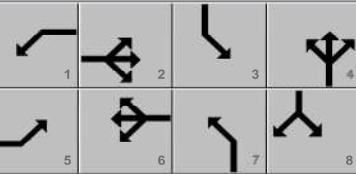
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3		18
Adjusted Flow Rate (v), veh/h	143	975	478	47	1400	83		70		76		112
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1861	1810	1712	1610		1679		1810		1610
Queue Service Time (g_s), s	3.3	14.6	14.6	1.1	17.0	2.5		4.7		4.7		8.1
Cycle Queue Clearance Time (g_c), s	3.3	14.6	14.6	1.1	17.0	2.5		4.7		4.7		8.1
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	331	2459	1204	287	3196	1002		152		181		161
Volume-to-Capacity Ratio (X)	0.432	0.397	0.397	0.164	0.438	0.083		0.462		0.421		0.697
Back of Queue (Q), ft/ln (95 th percentile)	51.8	235.5	239.2	18.3	249.9	37.5		90.3		99		152.1
Back of Queue (Q), veh/ln (95 th percentile)	2.1	9.4	9.5	0.7	9.9	1.5		3.6		4.0		6.1
Queue Storage Ratio (RQ) (95 th percentile)	0.23	0.00	0.00	0.10	0.00	0.00		0.00		0.43		0.66
Uniform Delay (d_1), s/veh	8.9	10.0	10.0	8.7	11.8	9.0		51.8		50.8		52.3
Incremental Delay (d_2), s/veh	0.3	0.5	1.0	0.1	0.4	0.2		0.8		0.6		2.1
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	9.3	10.5	11.0	8.8	12.2	9.2		52.6		51.3		54.3
Level of Service (LOS)	A	B	B	A	B	A		D		D		D
Approach Delay, s/veh / LOS	10.6		B	11.9		B	52.6		D	53.1		D
Intersection Delay, s/veh / LOS	14.4						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	1.37	A	1.33	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	99	1508	32	46	2623	59	11	0	40	53		76

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	1.8	77.1	9.8	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	8.2	83.9	6.4	82.1		13.8		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		3.3		3.4
Queue Clearance Time (g_s), s	4.2		3.1			5.5		7.4
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.2
Phase Call Probability	0.96		0.78			0.82		0.99
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	99	1030	510	46	2623	59		51		53		76
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1879	1810	1712	1610		1649		1810		1610
Queue Service Time (g_s), s	2.2	15.3	15.3	1.1	44.7	1.6		3.5		3.3		5.4
Cycle Queue Clearance Time (g_c), s	2.2	15.3	15.3	1.1	44.7	1.6		3.5		3.3		5.4
Green Ratio (g/C)	0.68	0.66	0.66	0.66	0.64	0.64		0.08		0.10		0.10
Capacity (c), veh/h	155	2499	1236	272	3301	1035		135		179		159
Volume-to-Capacity Ratio (X)	0.637	0.412	0.412	0.169	0.795	0.057		0.378		0.297		0.478
Back of Queue (Q), ft/ln (95 th percentile)	82.7	240.9	247.1	16.6	555.7	24.3		65.7		68		1.7
Back of Queue (Q), veh/ln (95 th percentile)	3.3	9.6	9.8	0.7	22.1	1.0		2.6		2.7		0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.36	0.00	0.00	0.09	0.00	0.00		0.00		0.30		0.01
Uniform Delay (d_1), s/veh	26.2	9.6	9.6	8.1	15.6	7.9		52.2		50.2		51.2
Incremental Delay (d_2), s/veh	1.6	0.5	1.0	0.1	2.1	0.1		0.7		0.3		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
Control Delay (d), s/veh	27.8	10.2	10.7	8.3	17.7	8.1		52.9		50.6		52.0
Level of Service (LOS)	C	B	B	A	B	A		D		D		D
Approach Delay, s/veh / LOS	11.4		B	17.4		B	52.9		D	51.4		D
Intersection Delay, s/veh / LOS	16.6						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	1.39	A	1.99	B	0.57	A		F

Appendix E: AASHTO Green Book Intersection Sight Distance Calculations

Scenario:
Type of Vehicle:
Lanes Crossing:

Speed Limit (mph):
Median?

Base Time Gap:
Additional Lanes to Cross:
Additional Time:
Final Time Gap:

Right Turn from the Minor Road
Passenger Car
1

45
No
12

6.5
0
0
6.5

SIGHT DISTANCE REQUIRED
SIGHT DISTANCE REQUIRED (Rounded)

429.98
430

$$ISD = 1.47 (V_{major}) t_g$$

t _g 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

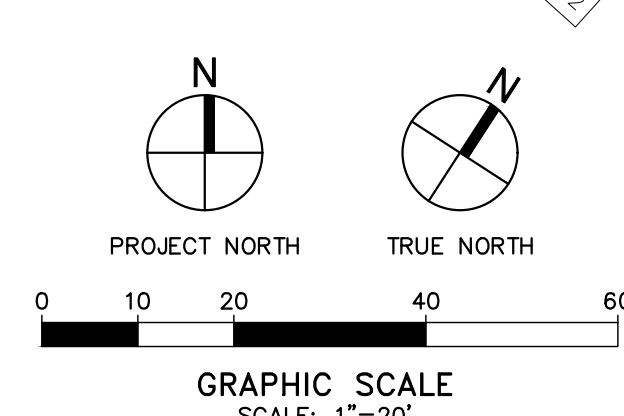
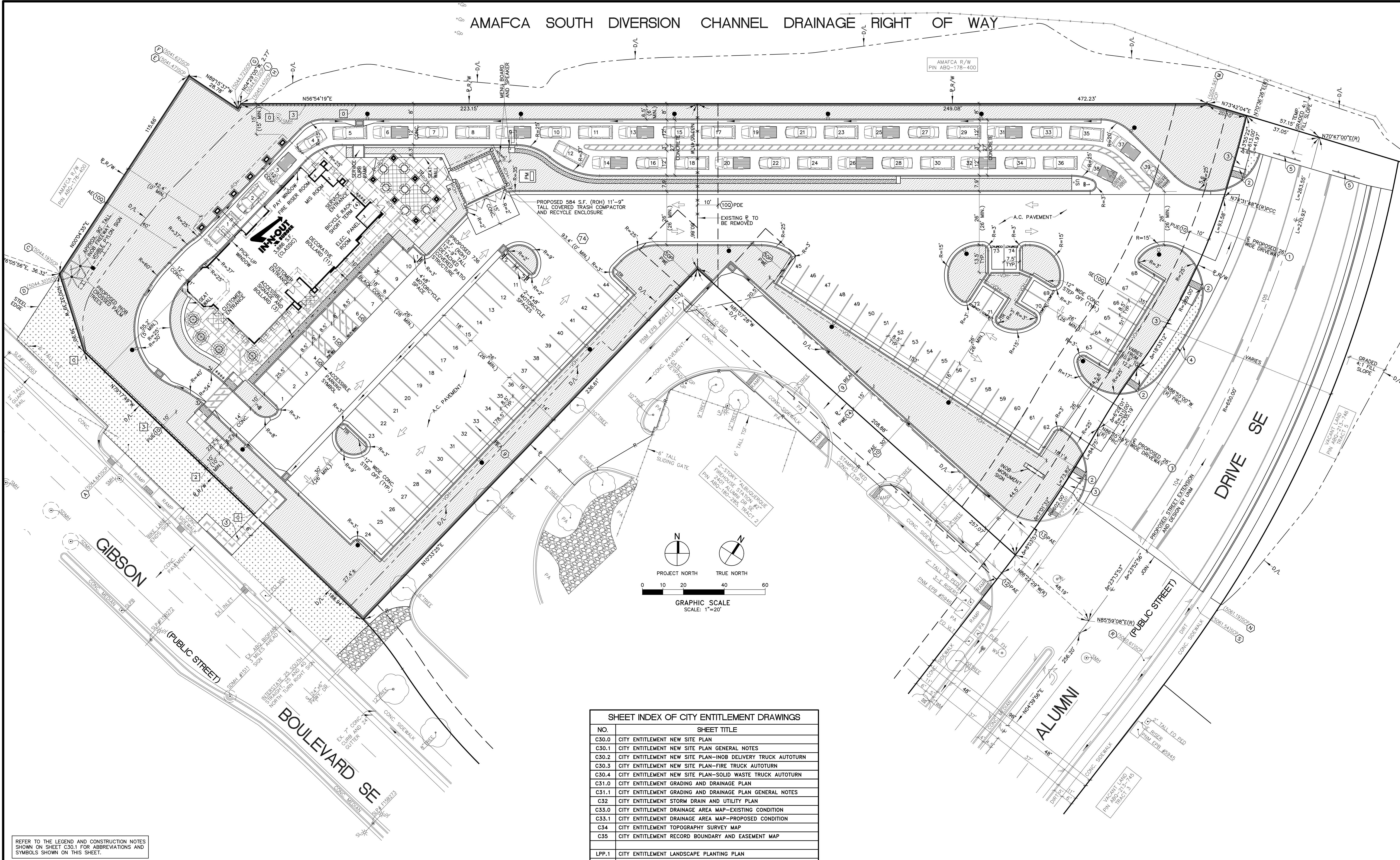
For left-turning vehicles that cross more than 1 opposing lane:
 +0.5 seconds for passenger cars
 +0.7 seconds for trucks
 for each additional lane to be crossed.

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

Appendix F: Site Plan

AMAFCA SOUTH DIVERSION CHANNEL DRAINAGE RIGHT OF WAY



SHEET INDEX OF CITY ENTITLEMENT DRAWINGS	
NO.	SHEET TITLE
C30.0	CITY ENTITLEMENT NEW SITE PLAN
C30.1	CITY ENTITLEMENT NEW SITE PLAN GENERAL NOTES
C30.2	CITY ENTITLEMENT NEW SITE PLAN-INOB DELIVERY TRUCK AUTOTURN
C30.3	CITY ENTITLEMENT NEW SITE PLAN-FIRE TRUCK AUTOTURN
C30.4	CITY ENTITLEMENT NEW SITE PLAN-SOLID WASTE TRUCK AUTOTURN
C31.0	CITY ENTITLEMENT GRADING AND DRAINAGE PLAN
C31.1	CITY ENTITLEMENT GRADING AND DRAINAGE PLAN GENERAL NOTES
C32	CITY ENTITLEMENT STORM DRAIN AND UTILITY PLAN
C33.0	CITY ENTITLEMENT DRAINAGE AREA MAP-EXISTING CONDITION
C33.1	CITY ENTITLEMENT DRAINAGE AREA MAP-PROPOSED CONDITION
C34	CITY ENTITLEMENT TOPOGRAPHY SURVEY MAP
C35	CITY ENTITLEMENT RECORD BOUNDARY AND EASEMENT MAP
LPP.1	CITY ENTITLEMENT LANDSCAPE PLANTING PLAN

REFER TO THE LEGEND AND CONSTRUCTION NOTES SHOWN ON SHEET C30.1 FOR ABBREVIATIONS AND SYMBOLS SHOWN ON THIS SHEET.



DEVELOPER:
IN-N-OUT BURGER
13502 HAMBURGER LANE
BALDWIN PARK, CA 91706
CONTACT: BRIGID WILLIAMS
PHONE: (626) 813-5398

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REVISIONS

PROJECT NO. 09-13-2030
Apogee
Architectural Partners
16775 ADDISON ROAD, SUITE 350
ADDISON, TX 75001
PH: (469) 980-2322

CIVIL ENGINEER:
MSI ENGINEERING, INC.
CIVIL ENGINEERS AND LAND SURVEYORS SPECIALIZING IN SITE DEVELOPMENT
301 NORTH SAN DIMAS AVENUE, SAN DIMAS, CA 91773
(909) 305-2395 FAX (909) 305-2397
Aaron D. Pellow
AARON D. PELLOW R.C.E. 27112



IN-N-OUT BURGER
NWQ GIBSON BOULEVARD SE
AND ALUMNI DRIVE SE
ALBUQUERQUE, NM 87106

**CITY ENTITLEMENT
NEW SITE PLAN**

C30.0

Appendix G Signal Warrant Analysis

Jonathon Kruse

Subject: FW: [EXTERNAL] Re: Alumni & Gibson traffic signal

From: Jonathon Kruse

Sent: Tuesday, July 29, 2025 5:06 PM

To: Petra Morris <pmorris1@unm.edu>; Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Cc: Thomas Neale <tneale@unm.edu>; Keelie Garcia <keelie@unm.edu>; Armijo, Ernest M. <earmijo@cabq.gov>; Perea, Nancy, DOT <Nancy.Perea@dot.nm.gov>; Carl Vermillion <cvermillion@bhinc.com>; Michael Balaskovits <mbalaskovits@bhinc.com>; Todd Smith <TSmith@innout.com>; Daniel Pocius <DPocius@innout.com>

Subject: [Pending]RE: [EXTERNAL] Re: Alumni & Gibson traffic signal

Hello Margaret and UNM Team,

I've done a very cursory signal warrant analysis based on our TIS for In-N-Out (Gibson), and in short, the trips generated by In-N-Out do not warrant a traffic signal.

Based on the analysis:

- Only one hour met the criteria for Warrant 1A,
- Five hours met the criteria for Warrant 1B, and
- Three meet the criteria for Warrant 2.

A few notes on the data: we only have 9-hour turning movement counts from the start of the study, not a full 12-hour dataset. However, the collected hours cover the AM, midday, and PM commuter peaks. Since In-N-Out isn't open during the AM peak and off-peak hours rarely satisfy signal warrants when peak periods do not, collecting additional hours of data is unlikely to change the outcome.

Regarding Warrant 3 (Peak Hour), I've excluded it from consideration. As noted in the MUTCD:

"This signal warrant should be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time."

This situation doesn't meet those conditions.

Let me know if you have any questions or if you'd like to discuss further.

Jon

From: Petra Morris <pmorris1@unm.edu>

Sent: Friday, July 25, 2025 11:23 AM

To: Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Cc: Thomas Neale <tneale@unm.edu>; Keelie Garcia <keelie@unm.edu>; Jonathon Kruse <jkruse@lee-eng.com>; Armijo, Ernest M. <earmijo@cabq.gov>; Perea, Nancy, DOT <Nancy.Perea@dot.nm.gov>; Carl Vermillion <cvermillion@bhinc.com>; Michael Balaskovits <mbalaskovits@bhinc.com>

Subject: Re: [EXTERNAL] Re: Alumni & Gibson traffic signal

Good morning Margaret,

I will defer to the consultant on whether the In-N-Out development warrants a signal. However, outside of the In-N-Out TIS, we have an active application for the signal. We hope to get this signal installed as soon as possible. Our consultant, BHI is currently working on the warrant analysis and design. I have added Carl to the email chain so he is aware of your concerns.

Kind regards,

Petra Morris, AICP

Planning Director

Lobo Development Corporation

801 University Blvd SE, Suite 207

Albuquerque, NM 87106

Ph: 505-925-1610

Cell: 505-908-1737



LOBODEVELOPMENT
CORPORATION

From: Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Sent: Friday, July 25, 2025 10:55 AM

To: Petra Morris <pmorris1@unm.edu>

Cc: Thomas Neale <tneale@unm.edu>; Keelie Garcia <keelie@unm.edu>; Jonathon Kruse <jkruse@lee-eng.com>; Armijo, Ernest M. <earmijo@cabq.gov>; Perea, Nancy, DOT <Nancy.Perea@dot.nm.gov>; Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Subject: RE: [EXTERNAL] Re: Alumni & Gibson traffic signal

[EXTERNAL]

Hi Petra,

My concern is that the signal may be warranted with In-N-Out trips. I have asked the consultant to check. If their trips warrant it, then the signal needs to come in before In-N-Out opens. Signals get installed and energized when they are warranted.

Thank you,

Margaret

Margaret L. Haynes, P.E.

District 3 Assistant Traffic Engineer

New Mexico Department of Transportation

7500 Pan American Freeway N.E.

Albuquerque, NM 87109

505-288-2086 cell (VOICE ONLY)

From: Petra Morris <pmorris1@unm.edu>

Sent: Friday, July 25, 2025 10:52 AM

To: Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Cc: Thomas Neale <tneale@unm.edu>; Keelie Garcia <keelie@unm.edu>

Subject: [EXTERNAL] Re: Alumni & Gibson traffic signal

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good morning Margaret,

Just checking in to make sure you don't have any additional questions on the timing of the installation of the Alumni Drive and Gibson signal.

Feel free to reach out with any concerns.

Kind regards,

Petra Morris, AICP

Planning Director

Lobo Development Corporation

801 University Blvd SE, Suite 207

Albuquerque, NM 87106

Ph: 505-925-1610

Cell: 505-908-1737



LOBODEVELOPMENT
CORPORATION

From: Petra Morris <pmorris1@unm.edu>

Sent: Friday, July 18, 2025 2:24 PM

To: Haynes, Margaret, DOT <margaret.haynes@dot.nm.gov>

Cc: Thomas Neale <tneale@unm.edu>; Keelie Garcia <keelie@unm.edu>

Subject: Alumni & Gibson traffic signal

Good afternoon Margaret,

I hope this email finds you well and enjoying the summer.

We recently heard that you have some questions about the timing of the installation of the traffic signal at Alumni Drive and Gibson Blvd. UNM and LDC have an application pending with the City for this signal. BHI are our consultants and they are currently working on the warrant analysis and design. We have the application in at this time because AFR have expressed concerns about the challenges of getting on to Gibson Blvd. in a timely manner. The present volumes and speed of traffic can make this challenging, especially when AFR don't have their lights aren't flashing. We will also need this traffic signal in the long term when the larger commercial site develops. Because of the current health safety need, we hope to get the signal installed as quickly as possible.

Kind regards,

Petra Morris, AICP

Planning Director

Lobo Development Corporation

801 University Blvd SE, Suite 207

Albuquerque, NM 87106

Ph: 505-925-1610

HCS Warrants Report

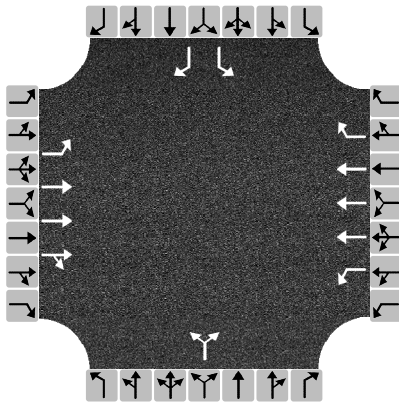
Project Information

Analyst	EG	Date	7/25/2025
Agency	Lee Engineering	Analysis Year	2025
Jurisdiction	NMDOT	Time Period Analyzed	
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	In-N-Out Burger (Gibson)		

General

Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	6:00	Coordinated Signal System	Yes
Major Street Speed (mi/h)	45	Nearest Signal (ft)	900
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	1	3	0	1	3	1	0	0	0	1	0	1
Lane Usage	L	TR		L	T	R		LR		L		R
Vehicle Volumes Averages (veh/h)	24	987	18	17	889	14	7	0	18	13	0	28
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			3			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	41.7			3.7			28.8			166.7		
Delay Averages (veh-hrs)	1.1			0.6			0.5			3.4		

School Crossing and Roadway Network

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

Railroad Crossing

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

Volume Summary														
Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (56%)	4A (70%)	4B (70%)
6:00 - 7:00	2624	1	2625	6	0	No	No	No	No	No	N/A		No	No
7:00 - 8:00	3216	11	3230	13	0	No	No	No	No	No			No	No
8:00 - 9:00	3195	13	3217	8	0	No	No	No	No	No			No	No
9:00 - 10:00	0	0	0	0	0	No	No	No	No	No			No	No
10:00 - 11:00	0	0	0	0	0	No	No	No	No	No			No	No
11:00 - 12:00	2490	84	2632	10	0	No	No	Yes	Yes	Yes			No	No
12:00 - 13:00	2620	146	2829	2	0	Yes	Yes	Yes	Yes	Yes			No	No
13:00 - 14:00	2473	78	2616	6	0	No	No	Yes	Yes	No			No	No
14:00 - 15:00	0	0	0	0	0	No	No	No	No	No			No	No
15:00 - 16:00	0	0	0	0	0	No	No	No	No	No			No	No
16:00 - 17:00	3571	107	3738	4	0	No	No	Yes	Yes	Yes			No	No
17:00 - 18:00	3218	70	3332	5	0	No	No	Yes	Yes	No			No	No
Total	23407	510	24219	54	0	1	1	5	5	3			0	0

Pedestrian Volume								
15th % pedestrian speed < 3.5 ft/s				Pedestrian refuge present?			EB	WB
Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A (70%)	4B (70%)
	EB	WB	Total	EB	WB	Total		
6:00 - 7:00	1839	785	2624	0	0	0	No	No
7:00 - 8:00	2163	1053	3216	0	0	0	No	No
8:00 - 9:00	2070	1125	3195	0	1	1	No	No
9:00 - 10:00	0	0	0	0	0	0	No	No
10:00 - 11:00	0	0	0	0	0	0	No	No
11:00 - 12:00	1427	1063	2490	1	0	1	No	No
12:00 - 13:00	1294	1326	2620	0	0	0	No	No
13:00 - 14:00	1098	1375	2473	0	0	0	No	No
14:00 - 15:00	0	0	0	0	0	0	No	No
15:00 - 16:00	0	0	0	0	0	0	No	No
16:00 - 17:00	1258	2313	3571	0	0	0	No	No
17:00 - 18:00	1214	2004	3218	0	1	1	No	No
Totals	12363	11044	23407	1	2	3	0	0

Warrants	
Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
56% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	N/A

A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	N/A
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	✓
Degree of Platooning (Predominant direction or both directions)	✓
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 56% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	