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MONTAGE UNITS TRAFFIC IMPACT ANALYSIS  
ALBUQUERQUE, NEW MEXICO



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**EXECUTIVE SUMMARY**

The purpose of this study is to investigate the potential impact of traffic generated on the surrounding roadway network by the proposed Montage Unit developments in Albuquerque, NM. The proposed developments will lie south of Bobby Foster Rd. and west of University Blvd. The proposed developments, which are expected to be built out in 2023, will consist of five single-family residential housing subdivisions (Montage Unit 1, 3-6), a multi-family residential housing subdivision, a commercial development, and a K-12 charter school. The developments will include approximately 200, 150, 200, 175 and 85 single family detached units, 288 multi-family units, 200 student charter school, and 14,000 sf of commercial development. Montage Unit 1 was complete at the time of this study. Due to the close proximity of the developments, the generated trips were reduced since according to the *ITE Trip Generation Manual's* guidelines for internal capture. Internal capture occurs at a site when two or more land uses have a possibility of interacting with each other, particularly where the trip can be made by walking. Assuming a 0.25 mile radius of the charter school, the commercial development, and the Albuquerque studios, trips to these locations were reduced due to walking. The adjusted generated traffic data presented in **Table E1**.

**Table E1 – Adjusted Proposed Developments Generated Trips**

<b>Development</b>	<b>AM Peak Hour (Vehicle Trips)</b>	<b>PM Peak Hour (Vehicle Trips)</b>
Montage Unit 1*	-	-
Montage Unit 3	89	120
Montage Unit 4	140	188
Montage Unit 5	129	174
Montage Unit 6	57	76
Multi-Family Housing	72	91
Charter School	109	24
Commercial Development	111	88

\*No traffic generated since it is built out.

Due to the COVID-19 pandemic, traffic patterns were affected due to the public health emergency orders announced on March 11, 2020 in New Mexico. As a result, traffic counts collected during this time period would need to be adjusted using factors provided by the City of Albuquerque. In order to conduct this TIA, existing turning movement counts and field observations for all existing study intersections were obtained on April 21, 2021. The turning movement data for University Blvd and Fritts Crossing was collected between the hours of 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM. Twelve (12) hour turning movement data for University Blvd and Eastman Crossing and University Blvd and Strand loop was collected between the hours of 7:00 AM to 7:00 PM.

The scope of this study includes an engineering analysis of the traffic impacts at major intersections within a 1-mile radius of the proposed development in the 2023 and 2028 Built-Out years for the AM and PM peak hours and a highway capacity analysis along University Blvd from Crick Ave to Rio Bravo Blvd.

Recommendations for any required mitigations will be proposed. The intersections evaluated in this study are included in **Table E2**.

**Table E2 – Study Intersections**

Intersection Number	Intersection Street Names
1	Bobby Foster Rd and Driveway to Commercial Development (Driveway 1)
2	Bobby Foster Rd and Diebenkorn Dr
3	Bobby Foster Rd and Newhall Dr
4	Bobby Foster Rd and Sagan Loop
5	Bobby Foster Rd Driveway to Multi Family Housing (Driveway 2)
6	Frits Crossing and University Blvd
7	Bobby Foster Rd and University Blvd
8	University Blvd and Strand Loop
9	Stieglitz Ave and Sagan Loop
10	Driveway to Multi Family Housing (Driveway 3) and University Blvd
11	Arbus Dr and University Blvd

The distribution of the generated traffic through the study area intersections was determined by considering factors such as the existing traffic distribution, connectivity, capacity, and congestion of the surrounding roadway network. To evaluate the impact of the proposed development on the study area, the traffic conditions without the development (2023 No-Build and 2028 No-Build) and with the development (2023 Build-Out and 2028 Build-Out) were compared. The 2023 and 2028 No-Build traffic counts consists of the 2021 collected traffic counts projected to 2023 and 2028, with the inclusion of the proposed expansion to the Albuquerque Studios east of the proposed developments in 2028. The Bernalillo County Regional Outdoor Sports Complex trips were also included in the 2028 No-Build traffic. The 2021 Existing, 2023 No-Build, 2028 No-Build, 2023 Build, and 2028 Build conditions, were modeled using Synchro 11, and evaluated using intersection delay and level of service (LOS), which are measures of the driving conditions and congestion at an intersection.

From the Synchro traffic analyses performed at the intersections, it was concluded that the proposed developments impacts are mainly at Intersections 6-8. When comparing the No-Build to the Build scenarios, these intersections had a deteriorated to a LOS D or worse in 2023 or 2028. The following three mitigation alternatives for Intersections 6-8 were modeled in Synchro:

1. Signalizing Intersections 6-8
2. Placing roundabouts at Intersections 6-8
3. Placing All Way Stop Controlled (AWSC) at Intersections 6-8

Although a signal warrant studies will need to be conducted, the Synchro results were modeled to show the best alternatives for all three intersections. The modeling shows that signalizing or placing a roundabout at Intersections 6 and 7 results in a LOS of B or better in both the 2023 and 2028 Build conditions. For Intersection 8, signalization is expected to result in a LOS of C or better in both the 2023 and 2028 Build conditions. Although roundabouts have an acceptable LOS for Intersection 6-8, a roundabout is only recommended for Intersection 6. An AWSC for Intersection 6-8 were not recommended as a permanent control for these intersections, since the LOS F remains in the 2028 PM peak hour when compared to the Build Conditions.

For the highway capacity along University Blvd from Crick Ave to Rio Bravo Blvd, it was noted that the northbound demand volume is lower than the southbound demand volume as expected since University Blvd has one lane northbound and two lanes southbound. Assuming a similar truck percentage and PHF as the data collected in April 28, 2021, the demand volumes for the AM peak northbound, AM peak southbound, PM peak northbound, and PM peak southbound are included in **Table E3**. If the volumes during the peak hour exceeds the demand volume listed below, a LOS F will be experienced along University Blvd. In 2023 and 2028 Build conditions, the roadway is expected to experience a LOS B for 2023 AM and PM peak hours and a LOS D or better for 2028 AM and PM peak hours. In 2035, the LOS F is expected on University Blvd with the full Build-Out traffic of the Albuquerque Studios.

**Table E3 – Demand Volumes for University Blvd**

University Blvd	Demand Volume (veh/hr)
AM Peak Northbound	1097
AM Peak Southbound	2194
PM Peak Northbound	1180
PM Peak Southbound	2360

## SECTION 1 - INTRODUCTION

### 1.1 Purpose

This report analyzes the traffic impacts of the proposed Montage Unit subdivisions in Albuquerque, NM. The subdivisions will consist of five single-family residential housing subdivisions (Montage Unit 1, 3-6), a multi-family residential housing subdivision, a commercial development, and a K-12 charter school. This analysis seeks to determine the traffic impacts of the subdivisions and develop mitigations for intersections that are impacted. Within the study area, one subdivision (Montage Unit 1) is complete, while all other developments were under construction during to the data collection period.

### 1.2 LOS Methodology

To determine the traffic impact, the Level of Service (LOS), delay, and volume to capacity (V/C) ratios were determined.

Intersection LOS is a measure of driving conditions and vehicle delay. The LOS describes the quality of traffic operation on roadway facilities. The traffic capacity of intersections were evaluated to determine the LOS for the AM and PM peak-hours. The Highway Capacity Manual (HCM) defines the LOS and is widely used for traffic engineering studies. LOS range from A (best) to F (poorest). **Table 1** outlines the LOS definitions for signalized and unsignalized intersections.

**Table 1 – Level of Service Intersection Standards (Adapted from the HCM 6<sup>th</sup> Edition)**

LOS	Signalized Intersection Delay (sec)	Unsignalized Intersection Delay (sec)	Traffic Flow Characteristics
A	<10	0-10	Virtually free flow, completely unimpeded
B	>10-20	>10-15	Stable Flow with slight delays, less freedom to maneuver
C	>20-35	>15-25	Stable flow with delays, less freedom to maneuver
D	>35-55	>25-35	High density, but stable flow
E	>55-80	>35-50	Operating conditions at or near capacity, unstable flow
F	>80	>50	Forced flow, breakdown conditions

< = less than

> = greater than

Intersection delay is calculated by taking a weighted average of the total delays for each intersection lane group. Total delay includes queue delay and delay from stopping for signalized intersections. Intersection delay for unsignalized intersections does not include queue delay. According to the HCM, since the major-street at an unsignalized intersection is assumed to experience zero delay, a weighted average will skew

the delay. For unsignalized intersections, the highest delay on the minor movements is used to establish LOS for the intersection. Using the delay criteria in **Table 1**, a LOS value may be assigned to the study intersections.

The v/c ratio indicates the amount of congestion for each lane group. Any v/c ratio greater than or equal to one indicates that the approach is operating at or above capacity. The intersection v/c ratio is the maximum ratio from all the lane groups.

For this study, Synchro 11 software was used to analyze the traffic conditions for the following scenarios:

- Existing Conditions
- 2023 No-Build (Year 2023 without the project)
- 2023 Build Out (Year 2023 with project)
- 2028 No-Build (Year 2028 without the project)
- 2028 Build Out (Year 2028 with the project)

### **1.3 Traffic Count Methodology**

Due to the COVID-19 pandemic, traffic patterns were affected due to the public health emergency orders announced on March 11, 2020 in New Mexico. As a result, traffic counts collected during this time period would need to be adjusted using factors provided by the City of Albuquerque. In order to conduct this TIA, existing turning movement counts and field observations for all existing study intersections were obtained on April 21, 2021. The turning movement data for University Blvd and Fritts Crossing was collected between the hours of 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM. Twelve (12) hour turning movement data for University Blvd and Eastman Crossing and University Blvd and Strand loop was collected between the hours of 7:00 AM to 7:00 PM.

## SECTION 2 - EXISTING AND PROPOSED LAND USE

### 2.1 Site Location / Study Area

The proposed subdivisions will be located on the south side of Bobby Foster Rd. and west of University Blvd. Currently, most of the sites of the proposed developments are vacant. **Figure 1**, shown in **Appendix A**, identifies the project areas in relation to the surrounding roadway network. The proposed developments will tie into two existing roads including University Blvd and Bobby Foster Rd. The proposed subdivisions will connect to Stryker Rd and Frit Crossing. Surrounding streets and subdivisions are also identified **Figure 1**. The proposed development is about 1.8 miles east of Interstate Highway 25 (IH 25) and 8 miles south of Interstate Highway 40 (IH 40). **Appendix B** shows the proposed site plan for the Montage Units Site development.

Major intersections within a 1-mile radius from the development were investigated for this study. **Table 2** lists the intersections investigated, the numbering convention used in this report, and the intersection control type. The study intersections are also identified with corresponding intersection numbers in **Figure 1 (Appendix A)**. It is important to note that Bobby Foster Rd is proposed to be a four-lane divided roadway; however, the time frame for the realignment of Bobby Foster Rd had not been determined at the time of this study. This roadway was analyzed as a two-lane undivided roadway in 2023 and a four-lane divided roadway in 2028 in this study.

**Table 2 – Intersections Identified for Impact Analysis Numbering and Control Type**

Intersection Numbering	Location	Control Type
1	Bobby Foster Rd and Driveway to Commercial Development (Driveway 1)	Unsignalized
2	Bobby Foster Rd and Diebenkorn Dr	Unsignalized
3	Bobby Foster Rd and Newhall Dr	Unsignalized
4	Bobby Foster Rd and Sagan Loop	Unsignalized
5	Bobby Foster Rd Driveway to Multi Family Housing (Driveway 2)	Unsignalized
6	Frits Crossing and University Blvd	Unsignalized
7	Bobby Foster Rd and University Blvd	Unsignalized
8	University Blvd and Strand Loop	Unsignalized
9	Stieglitz Ave and Sagan Loop	Unsignalized
10	Driveway to Multi Family Housing (Driveway 3) and University Blvd	Unsignalized
11	Arbus Dr and University Blvd	Unsignalized

**Figures 2 (Appendix A)** shows the existing configurations for the study intersections listed in **Table 2**. If the intersections do not currently exist, the proposed configurations in 2028 were shown.

Intersection 1 is an unsignalized three-leg intersection at Bobby Foster Rd and Driveway 1 for the proposed commercial development. It was assumed that eastbound Bobby Foster Rd will include one through lane, and one shared through-right turn lane. It was assumed that westbound Bobby Foster Rd will include one through lane, and one shared through-left turn lane.

Intersection 2 will be an unsignalized three-leg intersection at Bobby Foster Rd and Diebenkorn Dr. Northbound Diebenkorn Dr will include one stop controlled shared left-right turn lane. It was assumed that eastbound Bobby Foster Rd will include one through lane, and one shared through-right turn lane. It was assumed that westbound Bobby Foster Rd will include one through lane, and one shared through-left turn lane.

Intersection 3 will be an unsignalized four-leg intersection at Bobby Foster Rd and Newhall Dr. Northbound Newhall Dr will include one stop controlled shared left-through-right turn lane. It was assumed that the southbound leg will include one stop controlled shared left-through-right turn lane from the proposed Bernalillo County Regional Outdoor Sports Complex. It was also assumed that eastbound and westbound Bobby Foster Rd will include one shared through-left turn lane, and one shared through-right turn lane each.

Intersection 4 is an unsignalized four-leg intersection at Bobby Foster Rd and Sagan Loop. It was assumed that the southbound leg will include one stop controlled shared left-through-right turn lane from the proposed Bernalillo County Regional Outdoor Sports Complex. It was also assumed that eastbound and westbound Bobby Foster Rd will include one shared through-left turn lane, and one shared through-right turn lane each. Sagan Loop consists of one stop controlled northbound shared left-through-right lane.

Intersection 5 is an unsignalized three-leg intersection at Bobby Foster Rd and Driveway 2. It was assumed that eastbound Bobby Foster Rd will include one through lane, and one shared through-right turn lane. It was assumed that westbound Bobby Foster Rd will include one through lane, and one shared through-left turn lane. It was assumed that the driveway will consist of an entrance and exiting lane.

Intersection 6 is an unsignalized three-leg intersection at University Blvd and Fritts Crossing. Northbound University Blvd consists of a shared through-right turn lane. Southbound University Blvd consists of one through lane and one left turn lane. Fritts Crossing includes one stop controlled westbound shared left-right turn lane.

Intersection 7 is an unsignalized four-leg intersection at Bobby Foster Rd, University Blvd, and Eastman Crossing. Northbound University Blvd includes two through lanes and one left-turn lane, and southbound University Blvd includes one left-turn lane and two through lanes. Eastbound Bobby Foster Rd was assumed to consist one through lane, one shared through-right turn lane, and a left turn lane. Westbound Eastman Crossing includes one through lane, one shared through-right turn lane, and a left turn lane.

Intersection 8 is an unsignalized four-leg intersection at University Blvd and Strand Loop. University Blvd includes two through lanes and one left-turn lane, and southbound University Blvd includes one left-turn

lane and two through lanes. Eastbound Strand Loop includes one stop controlled shared left-through-right lane and westbound Strand Loop includes one stop controlled shared left-through-right lane.

Intersection 9 is an unsignalized four-leg intersection at Stieglitz Ave and Sagan Loop. It includes one stop controlled westbound shared left-through-right-turn lane on Stieglitz Ave. Northbound Sagan Loop includes one shared through-left-turn lane. Southbound Sagan Loop includes one shared through-right-turn lane.

Intersection 10 is an unsignalized three-leg intersection at University Blvd and Driveway 3. The driveway is expected to be a right-in right-out. Northbound University Blvd includes two through lanes, and southbound University Blvd includes one through-right turn lane and one through lane. The northbound and southbound lanes are divided by a median; therefore, the northbound traffic cannot access the multi-family development through driveway 3.

Intersection 11 is an unsignalized three-leg intersection at University Blvd and Arbus Dr. Northbound University Blvd includes one left-turn lane and two through lanes. Southbound University Blvd includes one through-right turn lane and one through lane. Eastbound Arbus Dr includes one stop controlled shared left-through-right lane.

## **2.2 Existing Zoning**

The proposed developments are classified as PC according to the City of Albuquerque Zoning Map, which is provided in **Appendix C**. Zoning PC represents a Planned Community zone. The proposed developments are approximately 234 acres. The developments include Montage Unit 1, 3, 4, 5 and 6 and consists of 200, 150, 200, 175 and 85 single family detached units, respectively. It also includes a K-12 Charter School with 200 students, a Multi-Family housing development with 288 multi-family units, and a Commercial Development with 14,000 SF. To the south, east, and west of the proposed development are also classified as PC zones. To the north of the proposed development is a park and open space zone.

## **2.3 Existing Development**

Surrounding the proposed developments are mainly undeveloped lots and vacant land. However, to the east of the proposed developments is the Albuquerque Studio and to the north is a recreational park and an Amphitheatre. Since only Montage Unit 1 was completed at the time of the study, the generated trips from the Montage Units 3-6, K-12 Charter School, Multi-Family Homes, and Commercial Development will need to be added in order to conduct the traffic analysis.

## **2.4 Planned Developments**

As of August 2021, there are two planned developments in close proximity to the Montage Units that need to be considered in the analyses. These developments include the expansion to the Albuquerque Studios east of the proposed developments and the construction of the Bernalillo County Regional Outdoor Sports Complex to the north of the proposed developments. Since both developments are within the project area, the developments will need to be considered under the No-Build conditions. According

to the Albuquerque Studios Master Plan Development TIS provided in **Appendix D**, part of the studio is expected to be completed in 2026 and a future expansion is expected by 2035. As for the Bernalillo County Regional Outdoor Sports Complex, the traffic study had not been conducted at the time of this study. A site plan of the proposed Sports Complex is provided in **Appendix E**. Since the expected completion date was not provided for the sports complex, the full build-out of the traffic for the complex was included in the 2028 analyses for this study.

## **SECTION 3 - EXISTING AND PROPOSED TRANSPORTATION SYSTEMS**

### **3.1 Thoroughfare Systems**

For the proposed developments, access to and from IH-25 will be provided via University Blvd, which is the main roadway to all of the developments and is classified as a Major Collector according to the NMDOT Roadway Functional Class Map provided in **Appendix F**.

The streets that are included in the intersection analysis of this project can be classified as Principal Arterial, Minor Arterial, Major Collector, Minor Collector, and Residential according to the NMDOT Roadway Functional Class Map. These streets range in size from 2 to 5 lanes, and with a speed limit from 30 to 35 MPH. These streets are identified in **Figure 1 (Appendix A)**. The characteristics of the roadways analyzed in this study are shown in **Table 3**.

**Table 3 – Analyzed Roadway Characteristics**

Roadway	Number of Lanes	Classification	Speed Limit
University Blvd	2-5	Major Collector	35
Bobby Foster Rd	2	Minor Collector	30
Diebenkorn Dr	2	Residential	30
Newhall Dr	2	Residential	30
Sagan Loop	2	Residential	30
Stieglitz Ave	1	Residential	30
Driveway 1	2	Residential	30
Driveway 2	2	Residential	30
Driveway 3	2	Residential	30
Arbus Dr	2	Residential	30
Fritts Crossing	2	Residential	30
Eastman Crossing	2	Residential	30
Strand Loop	2	Residential	30

### **3.2 Other Transportation Facilities**

At the time of this study, only Montage Unit 1 was complete. All other developments in the project area were planned or under construction. To analyze the pedestrian facilities, the completed development and the site plan of the developments was used to describe the facilities. Sidewalks and crosswalks are proposed for all roadways within the project area. Bike lanes are proposed along Bobby Foster Rd, Strand Loop, and Sagan Loop. Along University Blvd, there are bike lanes south of Arbus Dr. Sidewalks are proposed on the south side of Bobby Foster Rd and between Fritts Crossing and Arbus Dr along University Blvd.

### 3.3 Existing Traffic Volumes

Traffic volumes were analyzed to determine the AM and PM peak hour volumes (PHV) and peak hour factors (PHF). The data was analyzed between the hours of 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM. Turning movement count data for the existing intersections is included in the **Appendix G**. PHVs were calculated by taking the highest four-consecutive 15-minute volumes for each turning movement at each approach over the two hour data collection period. The PHVs were adjusted using factors provided by the City of Albuquerque for COVID-19. Using this calculated peak hour, corresponding peak hour factors were calculated for each turning movement.

Peak hour factor is a traffic parameter used to describe the relationship between the peak 15-minute flow rate within the peak hour and the total peak hour volume. A high PHF (closer to 1) indicates that traffic is spread out relatively evenly throughout the peak hour. A low PHF (closer to 0) indicates that traffic is concentrated within the peak 15 minutes. **Table 4** shows the peak hour turning movement counts and peak hour factors for the AM and PM periods. **Figure 3 (Appendix A)** shows the existing adjusted AM and PM turning movements for the study intersections.

By using this method, the PHVs and PHFs show the “worst case scenario” for each turning movement. High traffic generators, such schools near the development, can have effects on left-turn and right-turn intersection movements that do not necessarily align with the highest through movement volumes. Calculating PHVs and PHFs by this method account for these differences and better show the impacts of high turning volumes.

Table 4 – Existing Peak Hour Movements

No.	Intersection	Intersection Peak Hours	Peak Hour	2021 Existing Peak Hour Movements								
				Southbound		Westbound		Northbound		Eastbound		
				Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1*	Bobby Foster Rd & Driveway 1		AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
			AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-
			PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-
2*	Bobby Foster Rd & Dikkenborn Dr		AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
			AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-
			PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-
3*	Bobby Foster Rd & Newhall Dr		AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
			AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-
			PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-
4*	Bobby Foster Rd & Sagan Loop		AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
			AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-
			PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-

\* Data not available at these locations due to the intersections not yet constructed.

\*\* PHVs adjusted due to COVID-19

\*\*\* Estimated turning movements by balancing traffic between intersections. PHF estimated at 0.92.

**Table 4 – Existing Peak Hour Movements (Continued)**

		2021 Existing Peak Hour Movements													
No.	Intersection	Intersection Peak Hours	Peak Hour	Southbound			Westbound			Northbound			Eastbound		
				Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5*	Bobby Foster Rd & Driveway 2		AM PH Start	-	-	-	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-	-	-	-
			AM PHF	-	-	-	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-	-	-	-
			PM PHV	-	-	-	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-	-	-	-
6**	University Blvd & Fritts Crossing		AM PH Start	8:30	7:30	7:00	7:45	7:30							
			AM PHV	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
			AM PHF	0.75	0.84	0.25	0.42	0.42	0.42	0.78	0.50	0.50	0.50	0.50	0.50
			PM PH Start	5:00	3:00	3:00	3:00	3:00	3:00	3:00	3:00	3:00	3:00	3:00	3:00
			PM PHV	8	183	2	25	25	25	213	2	213	2	213	2
			PM PHF	0.50	0.83	0.50	0.55	0.55	0.55	0.82	0.50	0.82	0.50	0.82	0.50
7**	University Blvd & Eastman Crossing		AM PH Start	7:30	7:30	7:30	8:00	8:00	8:00	7:45	7:30	7:45	7:30	7:30	7:30
			AM PHV	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
			AM PHF	99	171	0	41	41	41	68	8	68	8	68	8
			PM PH Start	3:00	4:00	3:30	3:30	3:30	3:30	4:15	3:00	4:15	3:00	4:15	3:00
			PM PHV	36	102	5	49	49	49	114	2	114	2	114	2
			PM PHF	0.56	0.90	0.30	0.57	0.57	0.57	0.81	0.35	0.81	0.35	0.81	0.35
8**	University Blvd & Strand Loop		AM PH Start	7:30	7:30	8:15	8:15	8:15	8:15	8:00	8:45	8:00	8:45	7:45	7:45
			AM PHV	84	34	21	0	24	24	16	1	1	1	1	1
			AM PHF	0.89	0.78	0.63	0.31	0.66	0.66	0.72	0.63	0.69	0.69	0.69	0.69
			PM PH Start	3:00	4:00	4:45	3:15	5:00	4:15	3:00	5:00	3:00	5:00	3:00	4:00
			PM PHV	34	42	33	1	75	2	53	1	43	1	43	5
			PM PHF	0.66	0.53	0.85	0.35	0.25	0.74	0.50	0.81	0.31	0.69	0.31	0.75

\* Data not available at these locations due to the intersections not yet constructed.

\*\* PHVs adjusted due to COVID-19

\*\*\* Estimated turning movements by balancing traffic between intersections. PHF estimated at 0.92.

Table 4 – Existing Peak Hour Movements (Continued)

No.	Intersection	Intersection Peak Hours	Peak Hour	2021 Existing Peak Hour Movements								
				Southbound		Westbound		Northbound		Eastbound		
				Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
9*	Stieglitz Ave & Sagan Loop	-	AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
		-	AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-
	10 *	University Blvd & Driveway 3	PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-
		-	AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
11 ***	University Blvd & Airbus Dr	-	AM PHF	-	-	-	-	-	-	-	-	-
			AM PH Start	-	-	-	-	-	-	-	-	-
		-	PM PHV	-	-	-	-	-	-	-	-	-
			PM PHF	-	-	-	-	-	-	-	-	-
	-	-	AM PH Start	-	-	-	-	-	-	-	-	-
			AM PHV	-	-	-	-	-	-	-	-	-
		-	AM PHF	-	-	-	-	-	-	-	-	-
			PM PH Start	-	-	-	-	-	-	-	-	-

\* Data not available at these locations due to the intersections not yet constructed.

\*\* PHVs adjusted due to COVID-19

\*\*\* Estimated turning movements by balancing traffic between intersections. PHF estimated at 0.92.

From **Table 4**, it is observed that AM peak hours occurred during 7:15 AM to 7:30 AM, with the most common peak hour at 7:30 AM. PHFs during the AM period range from 0.25 to 0.92. During the PM period, the movement peak hours varied between 3:00 PM to 3:30 PM, with the most common peak hour at 3:00 PM. PHFs during the PM period range from 0.25 to 0.92.

### 3.4 Background Growth

The study area population and corresponding traffic volume will continue to grow in future years. To account for future traffic growth, existing traffic counts were projected using a growth rate (GR) and a growth factor (GF). The growth rate is expressed as a percentage of growth over a year. For this study, a four percent (4.0%) growth rate was used to forecast future background traffic to the Build-Out year 2023 and 2028. This growth rate was developed from historical, existing, and projected traffic volumes collected from the Mid-Region Council of Governments' (MRCOG) Traffic Flows.

In the Synchro traffic modeling software, future traffic forecasts are determined using a growth factor, which is dependent on the growth rate. This growth factor is calculated using the equation  $GF=(1+GR)^n$ , where n is time in years. The calculated growth factor for 2023 and 2028 is 1.08 and 1.26 respectively. The existing 2021 AM and PM turning movements in the study area were multiplied by the growth factor to determine the forecasted turning movements for the No-Build 2023 and No-Build 2028.

In addition to considering traffic growth expected to occur by population growth, the generated traffic for the planned developments in the project area were included in the 2028 analyses. Consequently, the Albuquerque Studios Master Plan Development and the Bernalillo County Regional Outdoor Sports Complex's generated traffic was added to the No-Build 2028 traffic. To be conservative, it was assumed that the full build-out traffic for the sports complex expansion would occur in 2028. The Albuquerque Studios Master Plan Development TIS estimated that the studio build-out would generate 1,384 trips (1,071 entering, 313 exiting) in the AM peak hour, and 2,020 trips (750 entering, 1,270 exiting) in the PM peak hour. For the Bernalillo County Regional Outdoor Sports Complex, the trips were calculated using the *ITE Trip Generation Manual, 10<sup>th</sup> Edition* fitted curve equations for Land Use Code 488 and 490 based on the proposed site plan provided by Bernalillo County. The generated trips for the AM and PM peak hour are shown in **Table 5**. The trip calculations were presented to the City of Albuquerque and Bernalillo County for review and concurrence with the trips and the assumptions made for the distributions.

**Table 5 – Bernalillo County Regional Outdoor Sports Complex Peak Hour Generated Trips, Land Use Codes 488 and 490**

Development		Fields/Courts	Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Public Parks/Fields (Code 488)	AM Peak	24	24	61%	15	39%	9
	PM Peak		369	66%	243	34%	126
Indoor Practice Facility (Code 488)	AM Peak	1	1	61%	1	39%	0
	PM Peak		49	66%	32	34%	17
Sports Lifestyle Center (Code 490)	AM Peak	6*	0	61%**	0	39%**	0
	PM Peak		26	66%**	17	34%**	9
<b>TOTAL</b>		AM Peak	25	61%	16	39%	9
		PM Peak	444	66%	292	34%	152

\*Converted SF of Sports Lifestyle Center to # of Courts.

\*\* Assumed directional distribution similar to Land Use Code 488.

To estimate the 2023 No-Build traffic, the 2021 existing traffic counts were projected to 2023. To estimate the 2028 No-Build Traffic, the 2021 existing traffic counts were first projected to 2028 and then the generated traffic from both the Albuquerque Studios Master Plan Development TIA and the Bernalillo County Regional Outdoor Sports Complex was added to the projected 2028 traffic volumes.

For the Albuquerque Studios, the trip distributions presented in the TIS shown in **Appendix D** were followed. For the Bernalillo County Regional Outdoor Sports Complex, the following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes all driveways shown in the site plan (**Appendix E**) and the realignment of Bobby Foster Rd.
2. It was assumed that traffic entering and exiting to the sports complex were routed through the shortest path moved.
3. It was assumed that 90% of traffic entering the sports complex originated from north of the sports complex through University Blvd and 10% from the Montage Unit developments.
4. It was assumed that 60% of the traffic would enter through the two driveways on University Blvd and the remaining would enter through the driveways on Bobby Foster Rd.
5. It was assumed that the exiting traffic would return to the place of origin.
6. In the PM peak hour, it was assumed that the trips would follow the AM peak trip distribution percentage.

Considering the factors stated in above, the generated trips for the sports complex were distributed through the study intersections, and the turning movement volumes were calculated. **Figures 4 and 5**, shown in **Appendix A**, summarize the trip distribution for the sports complex and number of generated trips for the study intersections for the AM and PM peak hours, respectively. **Figure 6 and 7 (Appendix A)** show the AM and PM peak hour 2023 and 2028 No-Build turning movements for the study intersections, respectively.

### 3.5 Vehicle Trip Generation

The number of trips generated for the proposed developments were calculated using the *ITE Trip Generation Manual, 10<sup>th</sup> Edition*. The average trip rates for the peak hour of the adjacent street traffic were used for this study. These trips represent the highest peak hour vehicle trip generated by the development for the peak hour between 7 to 9 AM and the peak hour between 4 to 6 PM. A peak hour factor (PHF) of 0.59 was used in this study for all turning movements near the proposed charter school (Intersections 1-4, & 9) and a PHF of 0.92 was used for all remaining intersections. The PHF of 0.59 was used as determined in the NIA conducted for the proposed charter school in **Appendix H**.

#### 3.5.1 Charter School

The proposed charter school development is expected to be a K-12 charter school. The applicable Land Use Code 536 was used to generate trips for this development. The number of students used to determine the number of generated trips, was 200 students. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 536. The generated trips for the AM and PM peak hour are shown in **Table 6**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 6**.

**Table 6 – Proposed Development Peak Hour Generated Trips, Land Use Code 536**

<b>Development</b>		<b>Total Generated Trips</b>	<b>% Entering</b>	<b>Trips Entering</b>	<b>% Exiting</b>	<b>Exiting Trips</b>
Charter School	AM Peak	156	61%	95	39%	61
	PM Peak	34	43%	15	57%	19

#### 3.5.2 Montage Units 3, 4, 5, and 6

The proposed Montage Units 3, 4, 5, and 6 residential development are categorized as single family (Land Use Code 210). The number of dwelling units used to determine the number of generated trips, was 200, 150, 200, 175, and 85 units, respectively. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 210. The generated trips for the AM and PM peak hour are shown in **Table 7**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 7**.

**Table 7 – Proposed Development Peak Hour Generated Trips, Land Use Code 210**

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Montage Unit 3	AM Peak	111	25%	28	75%	83
	PM Peak	150	63%	95	37%	55
Montage Unit 4	AM Peak	147	25%	37	75%	110
	PM Peak	198	63%	125	37%	73
Montage Unit 5	AM Peak	129	25%	32	75%	97
	PM Peak	174	63%	110	37%	64
Montage Unit 6	AM Peak	85	25%	16	75%	49
	PM Peak	87	63%	55	37%	32

### 3.5.3 Multi-Family Homes

For the Multi-Family housing development, the applicable Land Use Code 221 was used. The number of units used to determine the number of generated trips was 288 units. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 221. The generated trips for the AM and PM peak hour are shown in **Table 8**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 8**.

**Table 8 – Proposed Development Peak Hour Generated Trips, Land Use Code 221**

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Multi-Family Housing	AM Peak	96	26%	25	74%	71
	PM Peak	122	61%	74	39%	48

### 3.5.4 Commercial Development

For the commercial development, the applicable Land Use Code 820 was used. The area used to determine the number of generated trips was 14,000 sf. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 820. The generated trips for the AM and PM peak hour are shown in **Table 9**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 9**.

Table 9 – Proposed Development Peak Hour Generated Trips, Land Use Code 820

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Commercial Development	AM Peak	159	62%	99	38%	60
	PM Peak	127	48%	61	52%	66

### 3.6 Trip Adjustments

According to the *ITE Trip Generation Manual*, internal capture occurs at a site when two or more land uses have a possibility of interacting with each other, particularly where the trip can be made by walking. This can result in the total generation of trips being reduced. Assuming that within a 0.25 mile radius of the charter school, the commercial development, and the Albuquerque studios trips to these locations can be reduced due to walking, the generated trips in Section 4.2 were reduced. **Figure 8** shows the 0.25 mile radius in the project area from the charter school, the commercial development, and the Albuquerque studios.

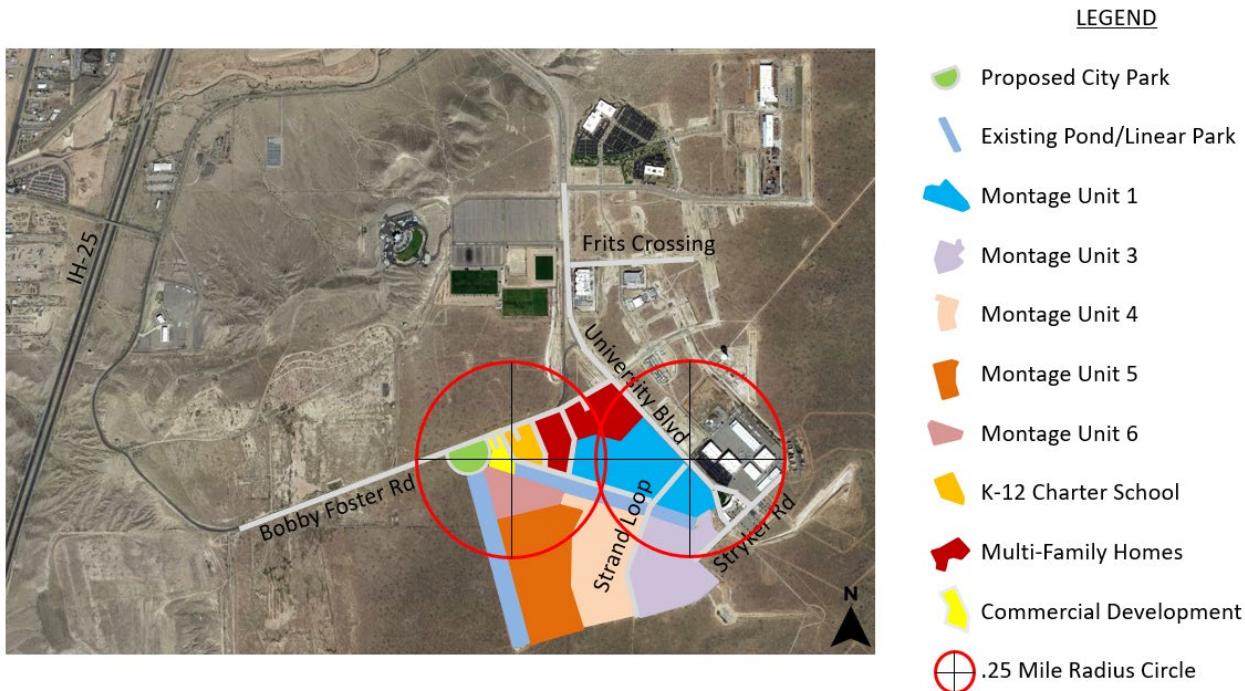


Figure 8 – 0.25 Mile Radius Site Map

The following assumptions were used to adjust the generated trips for internal capture near the charter school and commercial development:

1. 20% of Montage Unit 1 is within the 0.25 mile radius.
2. 10% of Montage Unit 4 is within the 0.25 mile radius.

3. 25% of Montage Unit 5 is within the 0.25 mile radius.
4. 100% of Montage Unit 6 is within the 0.25 mile radius.
5. 50% of the Multi-Family Housing are within the 0.25 mile radius.

The following assumptions were used to adjust the generated trips for internal capture near the Albuquerque studios:

6. 90% of Montage Unit 1 is within the 0.25 mile radius.
7. 40% of Montage Unit 3 is within the 0.25 mile radius.
8. 10% of Montage Unit 4 is within the 0.25 mile radius.
9. 25% of the Multi-Family Housing are within the 0.25 mile radius.
10. Assume 50% of people working at Albuquerque Studios live in the project area.

Following the assumptions, a 30% trip reduction was applied to the proposed charter school and commercial development. For the Montage Unit 1, 3, 4, 5, 6, and Multi-Family housing, a reduction of 45%, 20%, 5%, 0%, 13%, and 25% were used, respectively. **Table 10** shows the adjusted trip generation for the Montage Units, the multi-family housing, the charter school, and the commercial development.

**Table 10 – Proposed Development Peak Hour Generated Trips, Land Use Code 210**

<b>Development</b>		<b>Adjusted Generated Trips</b>	<b>% Entering</b>	<b>Trips Entering</b>	<b>% Exiting</b>	<b>Exiting Trips</b>
Montage Unit 3	AM Peak	89	25%	22	75%	67
	PM Peak	120	63%	76	37%	44
Montage Unit 4	AM Peak	140	25%	35	75%	105
	PM Peak	188	63%	119	37%	69
Montage Unit 5	AM Peak	129	25%	32	75%	97
	PM Peak	174	63%	110	37%	64
Montage Unit 6	AM Peak	57	25%	14	75%	43
	PM Peak	76	63%	48	37%	28
Multi-Family Housing	AM Peak	72	26%	19	74%	54
	PM Peak	91	61%	56	39%	35
Charter School	AM Peak	109	61%	67	39%	43
	PM Peak	24	43%	10	57%	14
Commercial Development	AM Peak	111	62%	69	38%	42
	PM Peak	88	48%	42	52%	46

### **3.7 Proposed Developments Trip Distribution**

Traffic generated by the proposed developments were distributed and assigned to the study area intersections so that the Build scenarios could be established. The distribution of the generated traffic through the study area intersections was determined by considering factors such as the existing traffic

distribution, connectivity, capacity, and congestion of the surrounding roadway network. Engineering judgment was also applied to these factors when developing assumptions for the analysis.

### *3.7.1 Charter School*

The following factors affected the trip distribution:

7. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
8. It was assumed that traffic entering and exiting to the charter school were routed through the shortest path moved.
9. For the charter school development trips, it was assumed that the remaining adjusted trips will be proportionate to the number of residential units outside of the 0.25 mile radius.
  - a. 21% will originate from Montage Unit 1
  - b. 20% will originate from Montage Unit 3
  - c. 23% will originate from Montage Unit 4
  - d. 17% will originate from Montage Unit 5
  - e. 0% will originate from Montage Unit 6
  - f. 19% will originate from the Multi-Family Housing
10. In the PM peak hour, it was assumed that the trips would follow the AM peak trip distribution percentage.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 9 and 10**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### *3.7.2 Commercial Development*

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. It was assumed that the entrance to the commercial development was located on Intersection 1.
3. It was assumed that traffic entering and exiting to the commercial development were routed through the shortest path.
4. For the commercial development trips, it was assume that the remaining adjusted trips will be proportionate to the residential units outside of the 0.25 mile radius.
  - a. 21% will originate from Montage Unit 1
  - b. 20% will originate from Montage Unit 3
  - c. 23% will originate from Montage Unit 4

- d. 17% will originate from Montage Unit 5
  - e. 0% will originate from Montage Unit 6
  - f. 19% will originate from the Multi-Family Housing
5. In the PM peak hour, it was assumed that the trips would follow the AM peak trip distribution percentage.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 11 and 12**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### *3.7.3 Montage Unit 3*

The following factors affected the trip distribution:

- 1. In the AM peak it was assumed remaining adjusted traffic will exit through University Blvd through the shortest path.
- 2. It was assumed that 30% of trips to Albuquerque studios remain.
- 3. It was assumed that 20% of trips would turn right on Fritts Crossing and 50% will continue north on Fritts Crossing.
- 4. It was assumed that 85% of trips to exit through Intersection 8 and 15% through Stryker Road.
- 5. It was assumed that 50% of trips entering would enter through Intersection 8 and 50% through Stryker Road.
- 6. In PM peak, it is assumed that outbound traffic would return to its place of origin.
- 7. It was assumed that 50% will exit through Intersection 8 and 50% will exit through Stryker Road in the PM Peak.
- 8. It is assumed that 100% of traffic exiting in the PM Peak would exit North through University.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 13 and 14**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### *3.7.4 Montage Unit 4*

The following factors affected the trip distribution:

- 1. In the AM peak it was assumed remaining adjusted traffic will exit through University Blvd through the shortest path.
- 2. It was assumed that 45% of trips to Albuquerque studios remain.
- 3. It was assumed that 10% of trips would turn right on Fritts Crossing and 45% will continue north on Fritts Crossing .
- 4. It was assumed that 77% of trips to exit through Intersection 8 and 23% through Stryker Road.

5. It was assumed that 90% of trips entering would enter through Intersection 8 and 10% through Stryker Road.
6. In PM peak, it is assumed that outbound traffic would return to its place of origin.
7. It was assumed that 90% will exit through Intersection 8 and 10% will exit through Stryker Road in the PM Peak.
8. It is assumed that 100% of traffic exiting in the PM Peak would exit North through University.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 15 and 16**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### *3.7.5 Montage Unit 5*

The following factors affected the trip distribution:

1. In the AM peak it was assumed remaining adjusted traffic will exit through University Blvd through the shortest path.
2. It was assumed that 50% of trips to Albuquerque studios remain.
3. It was assumed that 5% of trips would turn right on Fritts Crossing and 45% will continue north on Fritts Crossing .
4. It was assumed that 25% of trips to exit through Intersection 8, 25% through Stryker Road, and 50% west of Intersection 1.
5. It was assumed that 50% of trips entering would enter through Intersection 8, 25% through Intersection 2, and 25% west of Intersection 1.
6. In PM peak, it is assumed that outbound traffic would return to its place of origin.
7. It was assumed that 25% will exit through Intersection 8, 25% will exit through Stryker Road, 25% will exit through Intersection 2, and 25% will exit west of Intersection 1 in the PM Peak.
8. It is assumed that 100% of traffic exiting in the PM Peak would exit North through University.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 17 and 18**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### *3.7.6 Montage Unit 6*

The following factors affected the trip distribution:

1. In the AM peak it was assumed remaining adjusted traffic will exit through University Blvd through the shortest path.
2. It was assumed that 40% of trips to Albuquerque studios remain.
3. It was assumed that 10% of trips would turn right on Fritts Crossing and 50% will continue north on Fritts Crossing .

4. It was assumed that 40% of trips to exit through Intersection 8, and 60% west of Intersection 1.
5. It was assumed that 100% of trips entering would enter west of Intersection 1.
6. In PM peak, it is assumed that outbound traffic would return to its place of origin.
7. It was assumed that 50% will exit through Intersection 2, and 50% west of Intersection 1.
8. It was assumed that 30% would enter through Intersection 2 and 30% would enter west of Intersection 1 in the PM Peak.
9. It is assumed that 100% of traffic exiting in the PM Peak would exit North through University.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 19 and 20**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

### 3.7.7 Multi-Family Housing

The following factors affected the trip distribution:

1. In the AM peak it was assumed remaining adjusted traffic will exit through University Blvd through the shortest path.
2. It was assumed that 25% of trips to Albuquerque studios remain.
3. It was assumed that 15% of trips would turn right on Fritts Crossing and 60% will continue north on Fritts Crossing.
4. It was assumed that 6% would exit through Intersection 10, 6% would exit through Intersection 11, 13% of trips to exit through Intersection 8, 38% through Intersection 4, and 37% through Intersection 5.
5. It was assumed that 50% of trips entering would enter through Intersection 4, 25% through Intersection 5, and 25% enter through Intersection 10.
6. In PM peak, it is assumed that outbound traffic would return to its place of origin.
7. It was assumed that 50% will exit through Intersection 4, and 50% exit through Intersection 5.
8. It was assumed that 13% of trips to enter through Intersection 8, 25% would enter through Intersection 10, 31% through Intersection 4, and 31% through Intersection 5.
9. It is assumed that 100% of traffic exiting in the PM Peak would exit North through University.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 21 and 22**, shown in **Appendix A**, summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively. **Figure 23 and 24 (Appendix A)** show the AM and PM peak hour 2023 and 2028 Build turning movements for the study intersections.

### 3.8 Redistribution 2028 Build Traffic

The traffic distributions for 2028 Build are expected to redistribute due to proposed development and connectivity. The 2028 traffic volumes are expected to decrease on University Blvd and will re-distribute to IH 25 and Bobby Foster Rd. The 2028 Build traffic was redistributed considering future connectivity, capacity, congestion of the surrounding roadway network. **Figures 25**, shown in **Appendix A**, summarizes the changes from the 2028 Build trips to the 2028 Build Redistribution trips through the study intersections for the AM and PM peak hours. **Figure 26 (Appendix A)** shows the AM and PM peak hour for the 2028 Build Redistribution turning movements for the study intersections.

## SECTION 4 – TURN LANE ANALYSIS

Turn lane warrants were considered and analyzed for the 11 study intersections using the City of Albuquerque's Development Process Manual (DPM). **Table 11**, shows the Turn Lane Warrant Criteria from the DPM.

**Table 11 – Turn Lane Warrants, Adapted from the Albuquerque DPM**

Left Turn		Right Turn	
Design Speed (MPH)	Turning Volume per Hour	Design Speed (MPH)	Turning Volume per Hour
25	50	25	60
30-40	40	30-40	50
45	30	45	45

Intersections 1-6, and 8-10 do not warrant turn lanes. For intersection 7, it is recommended that the turn lane warrants be analyzed once the realignment of Bobby Foster Rd is being designed. For Intersection 11, an eastbound left turn and a southbound right turn is warranted. Using the Albuquerque DPM, the eastbound left and southbound right storage lengths were calculated. **Table 12** shows the calculated storage length for these movements.

**Table 12 – Storage Length Calculations for Intersection 11**

Intersection Number	Movement	Storage Length	Transition Length	Total Length
11	SBR*	240	150	390
	EBL**	100	150	250

\* Calculated using City of Albuquerque DPM

\*\* Calculated using the NMDOT Access Management Manual and the City of Albuquerque DPM.

## SECTION 5 - TRAFFIC ANALYSIS

A traffic analysis was performed for the 2021 Existing conditions, and the 2023 Build-Out year and 2028 Future Year for the No-Build and Build conditions to determine the traffic impacts of the proposed improvements. The following sections describe the Synchro results for the Existing, No-Build, and Build scenarios.

### 5.1 Existing 2021

**Table 13** summarizes the Synchro traffic analysis results for the eleven study intersections for the 2021 Existing Conditions AM and PM peak hours. All intersections perform at a LOS B or better, in the AM Peak and PM Peak. **Appendix I** includes the Synchro results for the intersection analyses of the 2021 Existing Conditions.

**Table 13 – Existing Condition (2021) Operational Measures**

Intersection Number	Location	AM Peak Hour			PM Peak Hour		
		Delay (sec)	LOS	V/C	Delay (sec)	LOS	V/C
1*	Bobby Foster Rd & Driveway 1	-	-	-	-	-	-
2*	Bobby Foster Rd & Diebenkorn Dr	-	-	-	-	-	-
3*	Bobby Foster Rd & Newhall Dr	-	-	-	-	-	-
4*	Bobby Foster Rd & Sagan Loop	-	-	-	-	-	-
5*	Bobby Foster Rd & Driveway 2	-	-	-	-	-	-
6	University Blvd & Fritts Crossing	9.8 (WB)	A	0.20	10.2 (WB)	B	0.16
7	University Blvd & Eastman Crossing/Bobby Foster	8.9 (WB)	A	0.16	13.4 (WB)	B	0.35
8	University Blvd & Strand Loop	11.3 (EB)	B	0.06	11.9 (EB)	B	0.12
9*	Stieglitz Ave & Sagan Loop	-	-	-	-	-	-
10*	University Blvd & Driveway 3	-	-	-	-	-	-
11	University Blvd & Arbus Dr	10.6 (EB)	B	0.13	10.1 (EB)	B	0.07

\*-Intersections are not yet constructed.

### 5.2 No-Build

The No-Build conditions were evaluated for the eleven intersections in the project area, for the 2023 Base Year and 2028 Future Year to determine whether the existing roadway network can support future traffic demand.

**Table 14** summarizes the intersection Synchro results for the 2023 and 2028 AM and PM peak hour No-Build conditions. All intersections experience an increase in delay in 2023 and 2028 as expected with an increase in traffic. In 2023, all intersections perform at a LOS B or better in the AM peak hour and PM peak hour. In 2028 during the AM peak hour, all intersections perform at a LOS C or better except for

Intersection 7 which experiences a LOS F. In the 2028 PM peak hour, all intersections perform at a LOS C or better except for Intersection 7 and 8 which experiences a LOS E or F. The Synchro results for the AM and PM peak hour analyses of the 2023 and 2028 No-Build Conditions are included in **Appendix J**.

**Table 14 – Operational Measures for No-Build Scenarios**

Intersection Number	Location	Alternative	AM Peak Hour			PM Peak Hour		
			Delay (sec)	LOS	V/C	Delay (sec)	LOS	V/C
1	Bobby Foster Rd & Driveway 1	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		*2028 No-Build	-	-	-	-	-	-
2	Bobby Foster Rd & Diebenkorn Dr	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		*2028 No-Build	-	-	-	-	-	-
3	Bobby Foster Rd & Newhall Dr	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		2028 No-Build	12.3 (SB)	B	0.16	15.0 (SB)	B	0.11
4	Bobby Foster Rd & Sagan Loop	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		2028 No-Build	10.6 (SB)	B	0.04	12.4 (SB)	B	0.11
5	Bobby Foster Rd & Driveway 2	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		*2028 No-Build	-	-	-	-	-	-
6	University Blvd & Fritts Crossing	Existing 2021	9.8 (WB)	A	0.20	10.2 (WB)	B	0.16
		2023 No-Build	9.9 (WB)	A	0.21	10.3 (WB)	B	0.17
		2028 No-Build	11.1 (WB)	B	0.49	19.6 (WB)	C	0.41
7	University Blvd & Eastman Crossing/Bobby Foster	Existing 2021	8.9 (WB)	A	0.16	13.4 (WB)	B	0.35
		2023 No-Build	8.9 (WB)	A	0.44	14.4 (WB)	B	0.40
		2028 No-Build	** (WBL)	F	1.68	** (WBL)	F	1.35
8	University Blvd & Strand Loop	Existing 2021	11.3 (EB)	B	0.06	11.9 (EB)	B	0.12
		2023 No-Build	11.6 (EB)	B	0.06	12.3 (EB)	B	0.13
		2028 No-Build	21.4 (EB)	C	0.21	48.5 (EB)	E	0.61
9	Stieglitz Ave & Sagan Loop	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		*2028 No-Build	-	-	-	-	-	-
10	University Blvd & Driveway 3	*Existing 2021	-	-	-	-	-	-
		*2023 No-Build	-	-	-	-	-	-
		*2028 No-Build	-	-	-	-	-	-
11	University Blvd & Arbus Dr	Existing 2021	10.6 (EB)	B	0.13	10.1 (EB)	B	0.07
		2023 No-Build	10.8 (EB)	B	0.14	10.2 (EB)	B	0.08
		2028 No-Build	18.6 (EB)	C	0.21	16.6 (EB)	C	0.24

\*- Intersections are not yet constructed.

\*\*-Intersection delay calculated in Synchro was too high. As a result, Synchro reports delay as "Err".

**5.3 Build**

The Build conditions were also evaluated for the eleven intersections in the project area for the 2023 Base Year and 2028 Future Year to determine whether the existing roadway network can support future traffic demand.

**Table 15** summarizes the intersection results for the 2023 and 2028 AM and PM peak hour Build and No-Build conditions for comparison. All existing intersections experience an increase in delay from the No-Build to the Build scenarios as expected with an increase in traffic. In 2023 and 2028, all new intersections (Intersections 1-5, and 9-10) experience a LOS D or better for both the AM and PM peak hours.

Of the four existing intersections, Intersection 6 experiences a LOS B during the AM Peak for both 2023 and 2028. In the PM Peak, the LOS deteriorates to LOS D and LOS F in 2023 and 2028, respectively. For Intersection 7, the intersection experiences a LOS D during the 2023 PM Peak and a LOS F during the AM Peak. In the Build 2028 scenario, the LOS remains at a LOS F in both the AM and PM Peak similar to the 2028 No-Build conditions. Intersection 8 experiences a LOS C during the 2023 AM Peak and a LOS F during the PM Peak. In the Build 2028 scenario, the LOS remains at a LOS F in the PM Peak similar to the 2028 No-Build conditions. Intersection 11 experiences a LOS C or better during the AM and PM Peak for both 2023 and 2028. The Synchro results for the AM and PM peak hour analyses of the 2023 and 2028 Build Conditions are included in **Appendix K**. For an unsignalized intersections, the LOS used to determine the delay is based on the movement with the highest delay, not an overall LOS for the entire intersection. Therefore, for Intersections 6-8, the failing LOS is seen for the minor street's left turn movement onto University Blvd. The high volume of traffic from the Albuquerque Studios on University causes insufficient gaps for the left turns from the minor streets.

Table 15 – Operational Measures for Build Scenarios

Intersection Number	Location	Alternative	AM Peak Hour			PM Peak Hour		
			Delay (sec)	LOS	V/C	Delay (sec)	LOS	V/C
1	Bobby Foster Rd & Driveway 1	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	8.9 (NB)	A	0.07	8.6 (NB)	A	0.03
		2028 Build	10.9 (NB)	B	0.29	10.0 (NB)	A	0.21
2	Bobby Foster Rd & Diebenkorn Dr	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	9.0 (NB)	A	0.08	8.7 (NB)	A	0.05
		2028 Build	16.8 (NB)	C	0.29	15.9 (NB)	C	0.24
3	Bobby Foster Rd & Newhall Dr	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	12.3 (SB)	B	0.16	15.0 (SB)	B	0.11
		2023 Build	0.0	A	0.00	0.0	A	0.00
		2028 Build	21.7 (NB)	C	0.23	27.0 (SB)	D	0.23
4	Bobby Foster Rd & Sagan Loop	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	10.6 (SB)	B	0.04	12.4 (SB)	B	0.11
		2023 Build	8.9 (NB)	A	0.06	8.7 (NB)	A	0.05
		2028 Build	13.8 (SB)	B	0.14	18.8 (SB)	C	0.16
5	Bobby Foster Rd & Driveway 2	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	9.4 (NB)	A	0.07	9.2 (NB)	A	0.05
		2028 Build	12.6 (NB)	B	0.20	11.5 (NB)	B	0.23
6	University Blvd & Fritts Crossing	2023 No-Build	9.9 (WB)	A	0.21	10.3 (WB)	B	0.17
		2028 No-Build	11.1 (WB)	B	0.49	19.6 (WB)	C	0.41
		2023 Build	12.2 (WB)	B	0.32	29.6 (WB)	D	0.50
		2028 Build	12.8 (WB)	B	0.53	342.7 (WB)	F	1.50
7	University Blvd & Eastman Crossing/Bobby Foster	2023 No-Build	8.9 (WB)	A	0.44	14.4 (WB)	B	0.40
		2028 No-Build	** (WBL)	F	1.68	** (WBL)	F	1.35
		2023 Build	93.9 (EBL)	F	0.83	26.6 (EBL)	D	0.58
		2028 Build	** (WBL)	F	8.18	** (WBL)	F	2.72
8	University Blvd & Strand Loop	2023 No-Build	11.6 (EB)	B	0.06	12.3 (EB)	B	0.13
		2028 No-Build	21.4 (EB)	C	0.21	48.5 (EB)	E	0.61
		2023 Build	21.0 (EB)	C	0.57	184.5 (EB)	F	1.21
		2028 Build	14.5 (EB)	B	0.24	65.1 (WBL)	F	0.80
9	Stieglitz Ave & Sagan Loop	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	10.5 (WB)	B	0.07	9.3 (WB)	A	0.02
		2028 Build	10.7 (WB)	B	0.07	9.4 (WB)	A	0.02
10	University Blvd & Driveway 3	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	9.5 (EB)	A	0.16	0.0	A	0.14
		2028 Build	11.5 (EB)	B	0.35	0.0	A	0.29

\*\*-Intersection delay calculated in Synchro was too high. As a result, Synchro reports delay as "Err".

**Table 15 – Operational Measures for Build Scenarios (Cont'd)**

Intersection Number	Location	Alternative	AM Peak Hour			PM Peak Hour		
			Delay (sec)	LOS	V/C	Delay (sec)	LOS	V/C
11	University Blvd & Arbus Dr	2023 No-Build	10.8 (EB)	B	0.14	10.2 (EB)	B	0.08
		2028 No-Build	18.6 (EB)	C	0.21	16.6 (EB)	C	0.24
		2023 Build	11.6 (EB)	B	0.18	11.4 (EB)	B	0.16
		2028 Build	17.6 (EB)	C	0.35	17.4 (EB)	C	0.25

\*\* -Intersection delay calculated in Synchro was too high. As a result, Synchro reports delay as "Err".

## SECTION 6 – Highway Capacity Analysis

Since the main access to and from the IH 25 from the proposed developments is through University Blvd, the highway capacity along this multilane highway segment was analyzed from Crick Ave to Rio Bravo Blvd using Highway Capacity Manual. University Blvd has one 12 ft lane northbound and two 12 ft lanes southbound. Since the posted speed limit along this section of University Blvd is 40 mph, the total lateral clearance is greater than 12 ft, a median is present, and there are zero access points along the segment, the free flow speed is calculated to be 45 mph. A heavy vehicle adjustment factor was also calculated for the AM and PM peak hours along University Ave using the percent trucks provided in the traffic data collected at the intersection of University Blvd and Rio Bravo Blvd on April 28, 2021 provided in **Appendix L**. The PHF was also provided in the turning movement data collected. **Table 16** summarizes the PHF and heavy vehicle adjustment factor for University Blvd.

**Table 16 – Heavy Vehicle Adjustment Factor and PHF for University Blvd**

Peak Hour	PHF	Heavy Vehicle Adjustment Factor
AM Peak	0.64	0.91
PM Peak	0.71	0.88

According to the Highway Capacity Manual, a LOS F occurs when the demand flow rate exceeds the capacity or the density exceeds 45 passenger cars per mile per lane. The capacity is calculated using the equation  $c=1900+20(FFS-45)$ , where FFS is the free flow speed. The calculated capacity for University Blvd is 1900 passenger cars per hour per lane (pcphpl).

To determine the demand volume for the roadway segment to achieve a LOS F, the equation  $V=V_p \cdot PHF \cdot N \cdot F_{hv}$  can be used where V is the demand volume in vehicles per hour, PHF is the peak hour factor, N is the number of lanes,  $V_p$  is the demand flow rate, and  $F_{hv}$  is the heavy vehicle adjustment factor. **Table 17** summarizes the demand volume in vehicles per lane to achieve a LOS F for both the AM and PM peak.

Table 17 – Demand Volume to achieve a LOS F at University Blvd

Peak Hour and Direction of Analysis	PHF	Heavy Vehicle Adjustment Factor	Demand Volume (veh/hr)
AM Peak Northbound	0.64	0.91	1097
AM Peak Southbound	0.64	0.91	2194
PM Peak Northbound	0.71	0.88	1180
PM Peak Southbound	0.71	0.88	2360

Since northbound University Blvd is more likely to fail than southbound University Blvd, a LOS analysis for the northbound was conducted on the roadway to determine the Existing 2021, No-Build 2023, No-Build 2028, Build 2023, Build 2028 scenarios. According to the Albuquerque Studios Master Plan Development TIS provided in **Appendix D**, the full Build-Out of the Albuquerque Studios traffic is expected in 2035 and both the No-Build 2035 and Build 2035 was considered. **Table 18** summarizes the volumes, demand flow rates, densities, and LOS.

Table 18 – LOS Analysis for Northbound University Blvd

Scenarios		Volumes	Density	LOS
Existing 2021	AM Peak	317	7	A
	PM Peak	356	8	A
No-Build 2023	AM Peak	342	8	A
	PM Peak	384	9	A
No-Build 2028	AM Peak	539	12	B
	PM Peak	1109	25	C
No-Build 2035	AM Peak	2483	55	F
	PM Peak	1191	26	C
Build 2023	AM Peak	652	14	B
	PM Peak	771	17	B
Build 2028	AM Peak	849	19	C
	PM Peak	1496	33	D
Build 2035	AM Peak	2793	62	F
	PM Peak	1578	35	D

In 2023 and 2028 Build conditions, the roadway is expected to experience a LOS B for 2023 AM and PM peak hours and a LOS D or better for 2028 AM and PM peak hours. In 2035, the LOS F is expected on University Blvd once the full Build-Out traffic of the Albuquerque Studios is present. This is evident since the 2035 No Build AM Peak experiences a LOS F.

**SECTION 7 - CONCLUSIONS AND RECOMMENDATIONS****7.1 Intersections (Synchro)**

From the evaluation of the No-Build and Build scenarios, it was concluded that Intersections 6, 7, and 8 are the main intersections impacted by the proposed developments. Intersection 6 experiences a failing LOS in the 2028 PM Peak. Intersection 7 experiences a failing LOS in the AM Peak for both 2023 and 2028. Intersection 8 experiences a failing LOS in the PM peak for both 2023 and 2028 and in the 2028 AM Peak. Intersections 6-8 fail primarily on the left turning traffic from the minor streets due to the high traffic from the Albuquerque Studios that free flows on University Blvd, which causes insufficient gaps for vehicles turning left. Intersections 1, 2, 3, 4, 5, 9, 10, and 11 are expected to perform at a LOS C or better in both the 2023 and 2028 AM and PM Peak.

**7.2 Mitigations Results**

To mitigate the impacts of the generated traffic by the proposed development the following mitigations were modeled:

1. Signalizing Intersections 6-8
2. Placing roundabouts at Intersections 6-8
3. Placing All Way Stop Controlled (AWSC) at Intersections 6-8

**Table 19** summarizes the intersection results for the 2023 and 2028 AM and PM peak hour Mitigated scenarios. **Table 19** also includes the 2023 and 2028 AM and PM peak hour Build conditions for comparison. The Synchro results for the AM and PM peak hour analyses of the 2023 and 2028 Mitigation are included in **Appendix M**.

**Table 19 – Operational Measures for Mitigation Scenarios**

Intersection Number	Location	Alternative	AM Peak Hour			PM Peak Hour		
			Delay (sec)	LOS	V/C	Delay (sec)	LOS	V/C
6	University Blvd & Fritts Crossing	2023 Build	12.2 (WB)	B	0.32	29.6 (WB)	D	0.50
		2028 Build	12.8 (WB)	B	0.53	342.7 (WB)	F	1.50
		2023 Signalized	2.8	A	0.36	6.7	A	0.43
		2028 Signalized	2.4	A	0.32	5.4	A	0.42
		2023 Roundabout	6.2	A	0.42	6.7	A	0.43
		2028 Roundabout	5.3	A	0.36	6.5	A	0.38
		2023 AWSC	18.9	C	0.73	24.6	C	0.83
		2028 AWSC	15.3	C	0.69	61.8	F	1.23
7	University Blvd & Eastman Crossing/ Bobby Foster	2023 Build	93.9 (EBL)	F	0.83	25.6 (EBL)	D	0.58
		2028 Build	** (WBL)	F	8.18	** (WBL)	F	2.72
		2023 Signalized	6.0	A	0.37	8.3	A	0.57
		2028 Signalized	12.6	B	0.86	13.5	B	0.87
		2023 Roundabout	5.8	A	0.16	7.0	A	0.29
		2028 Roundabout	9.4	A	0.53	15.5	C	0.66
		2023 AWSC	11.3	B	0.42	13.1	B	0.48
		2028 AWSC	53.2	F	1.09	110.4	F	1.49
8	University Blvd & Strand Loop	2023 Build	21.0 (EB)	C	0.57	184.5 (EB)	F	1.21
		2028 Build	14.5 (EB)	B	0.24	65.1 (WBL)	F	0.80
		2023 Signalized	10.8	B	0.67	20.6	C	0.89
		2028 Signalized	3.7	A	0.25	7.7	A	0.57
		2023 Roundabout	5.4	A	0.25	13.9	B	0.71
		2028 Roundabout	4.4	A	0.24	6.6	A	0.40
		2023 AWSC	11.2	B	0.47	70.7	F	1.17
		2028 AWSC	11.7	B	0.57	40.7	E	1.08

\*\*-Intersection delay calculated in Synchro was too high. As a result, Synchro reports delay as "Err".

### 7.3 Intersections Recommendations

From the mitigation analyses conducted in Synchro, it can be seen that signalizing or building a roundabout at Intersections 6 results in a LOS of A in both the 2023 and 2028 Build conditions; however, for this intersection a roundabout is the preferred control to reduce the unnecessary stopping and minimize delay along University Blvd. For Intersection 7, signalization or a roundabout at Intersections 7 results in a LOS of C or better in both the 2023 and 2028 Build conditions; however, it is recommended that this intersection be built as an AWSC until a signal study warrants a signal. For Intersection 8, signalizing the interseciton results in a LOS of C or better in both the 2023 and 2028 Build conditions. Although a roundabout at Intersection 8 would improve the LOS in 2023, in the 2028 PM Peak, a LOS E is expected. A roundabout at Intersection 8 will be more difficult to construct at this location and is not recommended. It is recommended that signal warrants be conducted prior to implementing a signal or a roundabout.

An AWSC for Intersection 6-8 is not recommended as a permanent control, since the LOS F remains in the 2028 PM peak hour when compared to the Build Conditions. In the AM peak, the LOS improves to a LOS C or better in 2023 and 2028 except for Intersection 7 which experiences a LOS F in the 2028 AM peak hour. In the PM peak, the LOS improves to a LOS C or better in 2023 except for Intersection 8 which experiences a LOS E in the 2023 AM peak hour.

#### **7.4 Turn Lane Recommendations**

In addition to the control of the intersections, turn lane warrants were considered and analyzed using the City of Albuquerque's DPM. Intersections 1-6, and 8-10 do not warrant turn lanes. For intersection 7, it is recommended that the turn lane warrants be analyzed once the realignment of Bobby Foster Rd is being designed.

For Intersection 11, an eastbound left turn and a southbound right turn is warranted. Using the Albuquerque DPM, the eastbound left and southbound right storage lengths were calculated. **Table 20.** shows the calculated storage length for these movements.

**Table 20 – Storage Length Calculations for Intersection 11**

Intersection Number	Movement	Storage Length	Transition Length	Total Length
<b>11</b>	SBR*	240	150	390
	EBL**	100	150	250

\* Calculated using City of Albuquerque DPM

\*\* Calculated using the NMDOT Access Management Manual and the City of Albuquerque DPM.

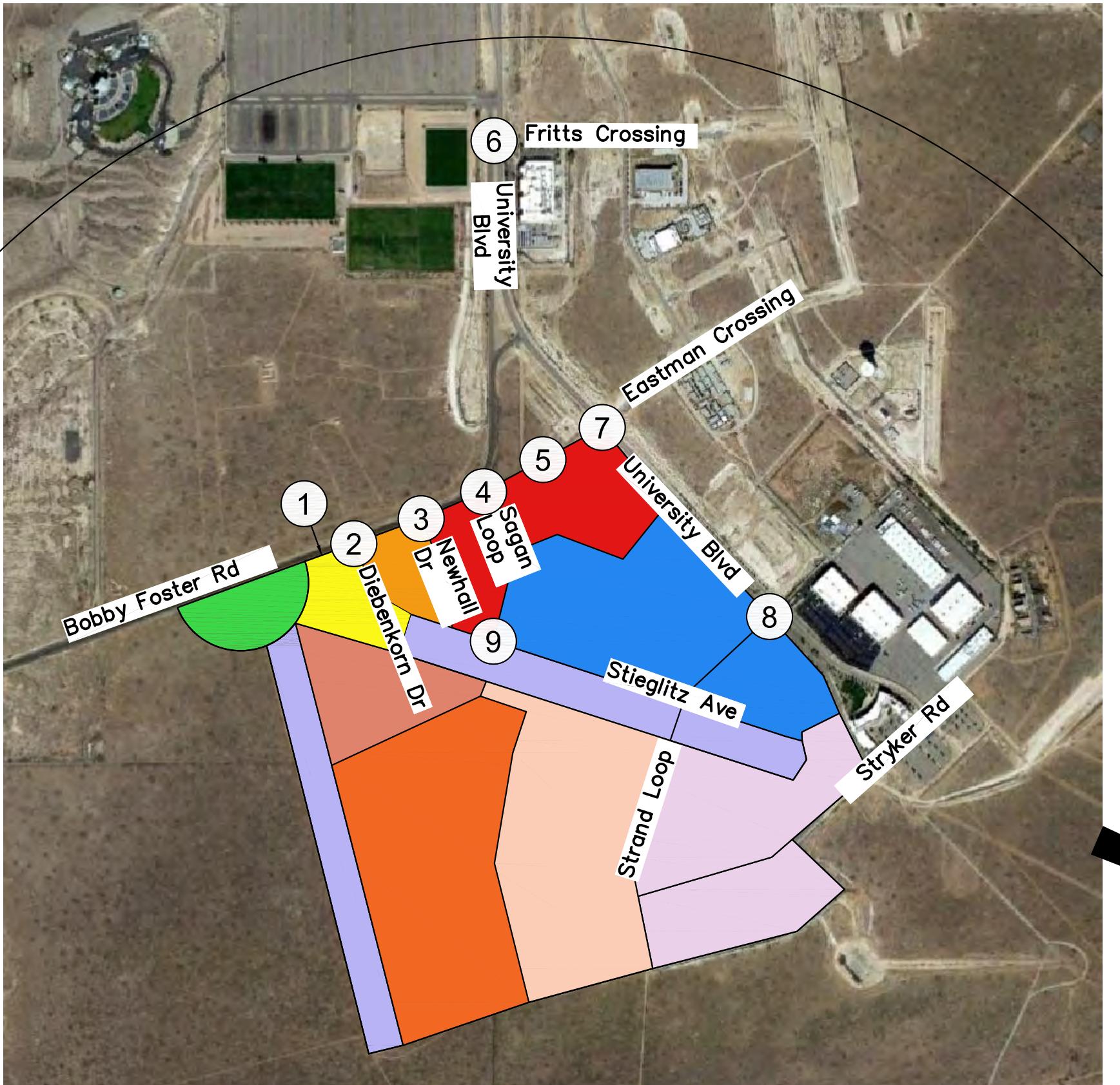
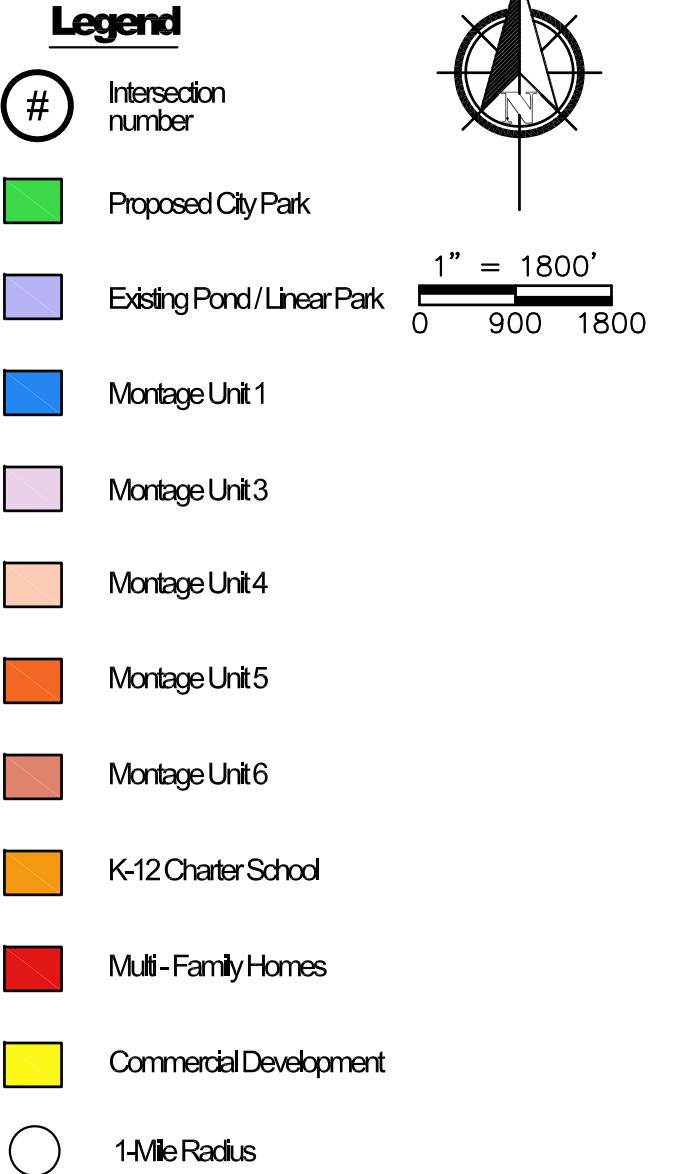
#### **7.4 Highway Capacity Analysis Recommendations**

From the highway capacity analysis for University Blvd from Crick Ave to Rio Bravo Blvd, it was noted that the northbound demand volume is lower than the southbound demand volume. This is expected since there is one lane northbound and two lanes southbound along University Blvd. It is important to note that once the volume during the peak hour exceeds the demand volume, the LOS F will be experienced along University Blvd. Assuming a similar truck percentage and PHF as the data collected in April 28, 2021, the demand volumes for the AM peak northbound, AM peak southbound, PM peak northbound, and PM peak southbound are 1097, 2194, 1180, and 2360, respectively. After conducting the 2023 and 2028 Build conditions analyses, the roadway is expected to experience a LOS B for 2023 AM and PM peak hours and a LOS D or better for 2028 AM and PM peak hours. In 2035, the LOS F is expected on University Blvd once the full Build-Out traffic from the Albuquerque Studios is present.

# **APPENDIX A**

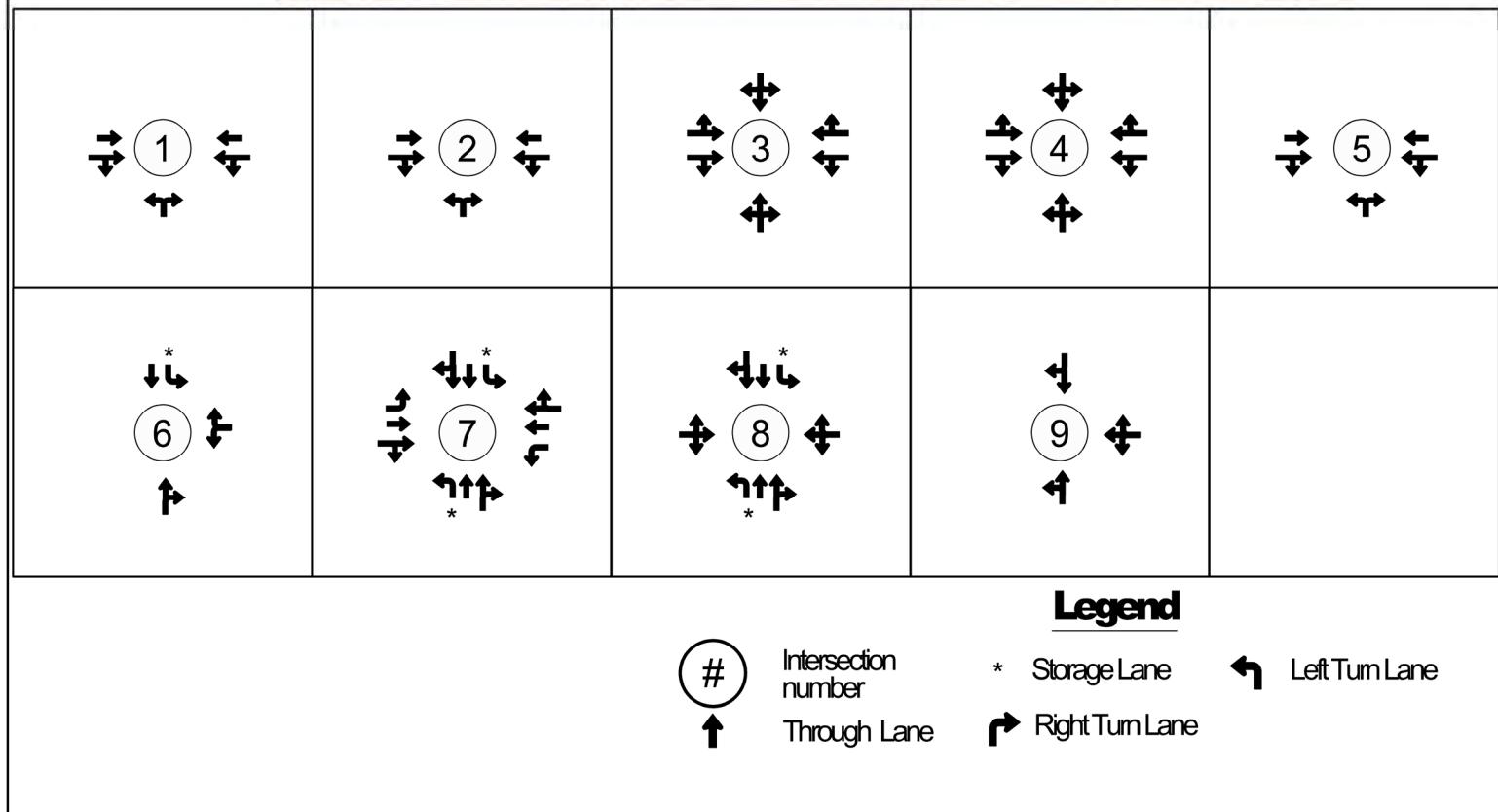
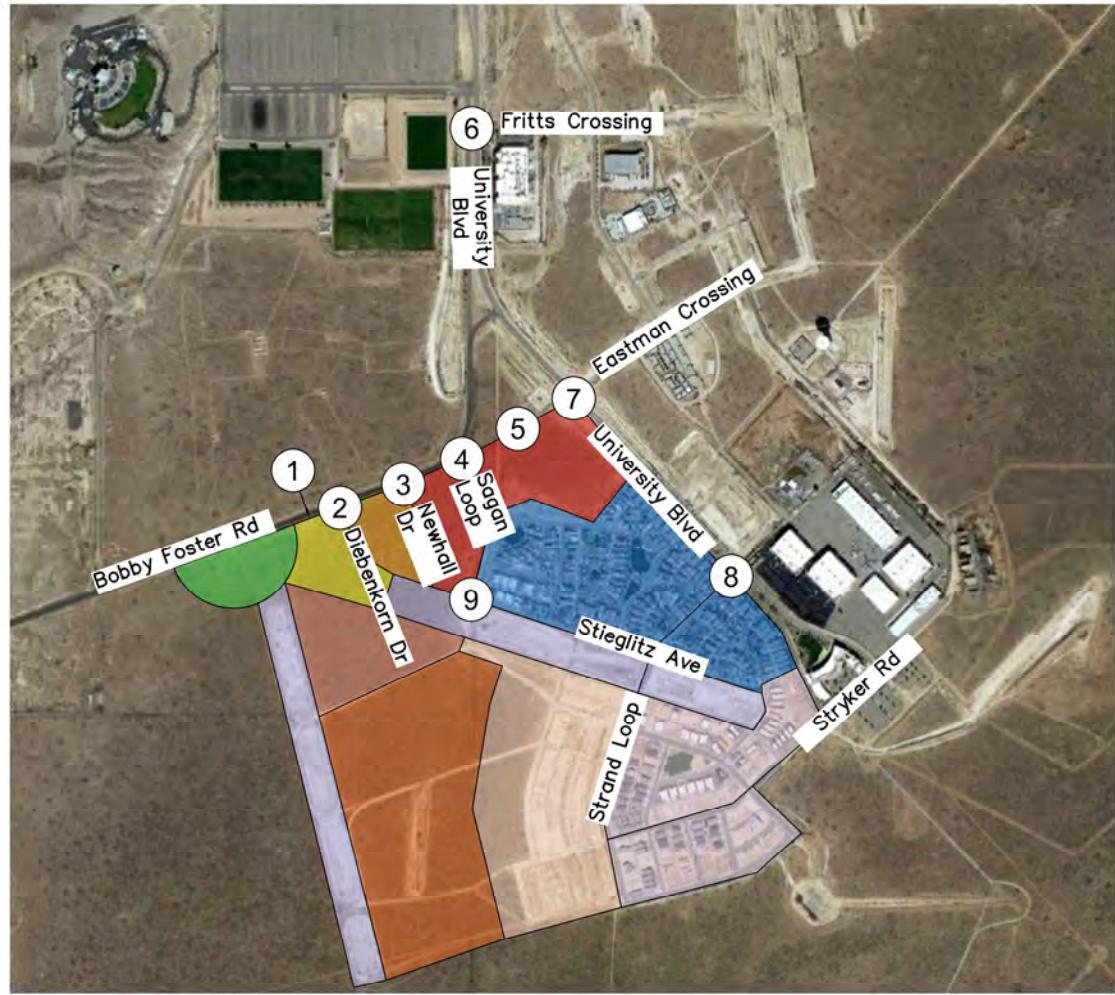
## **Figures**

## Montage Units Traffic Impact Analysis

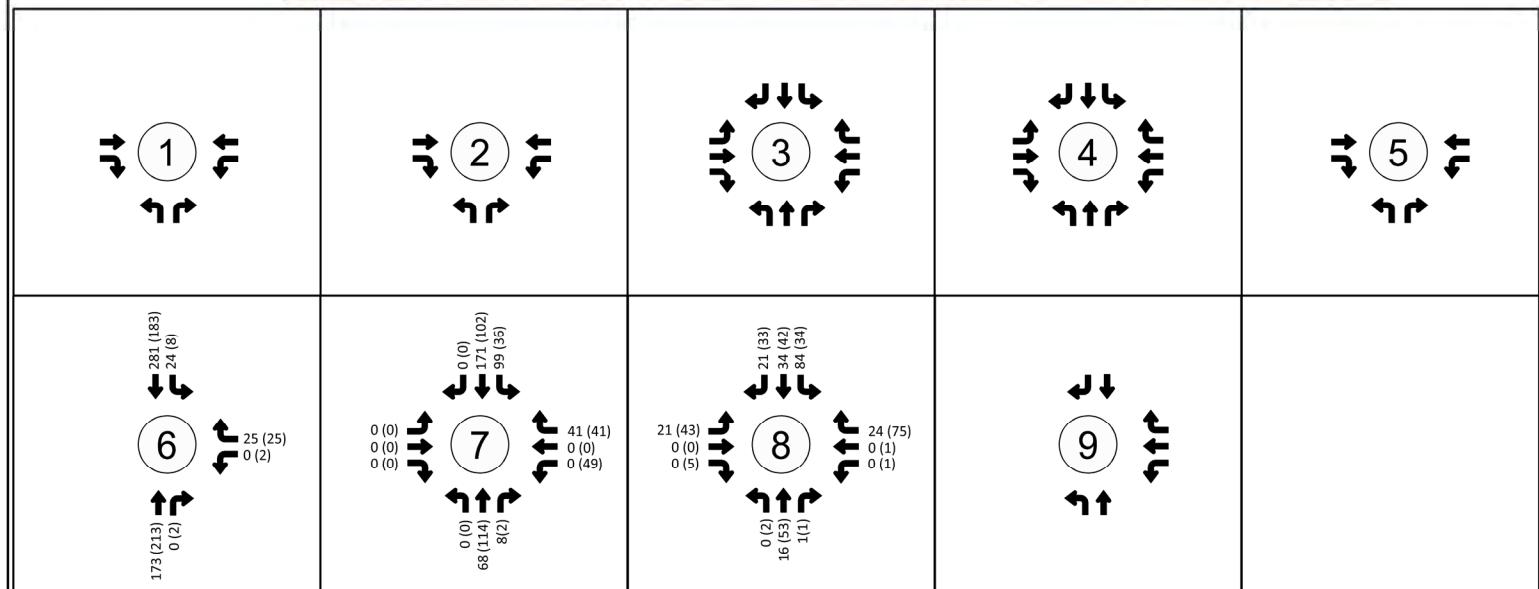
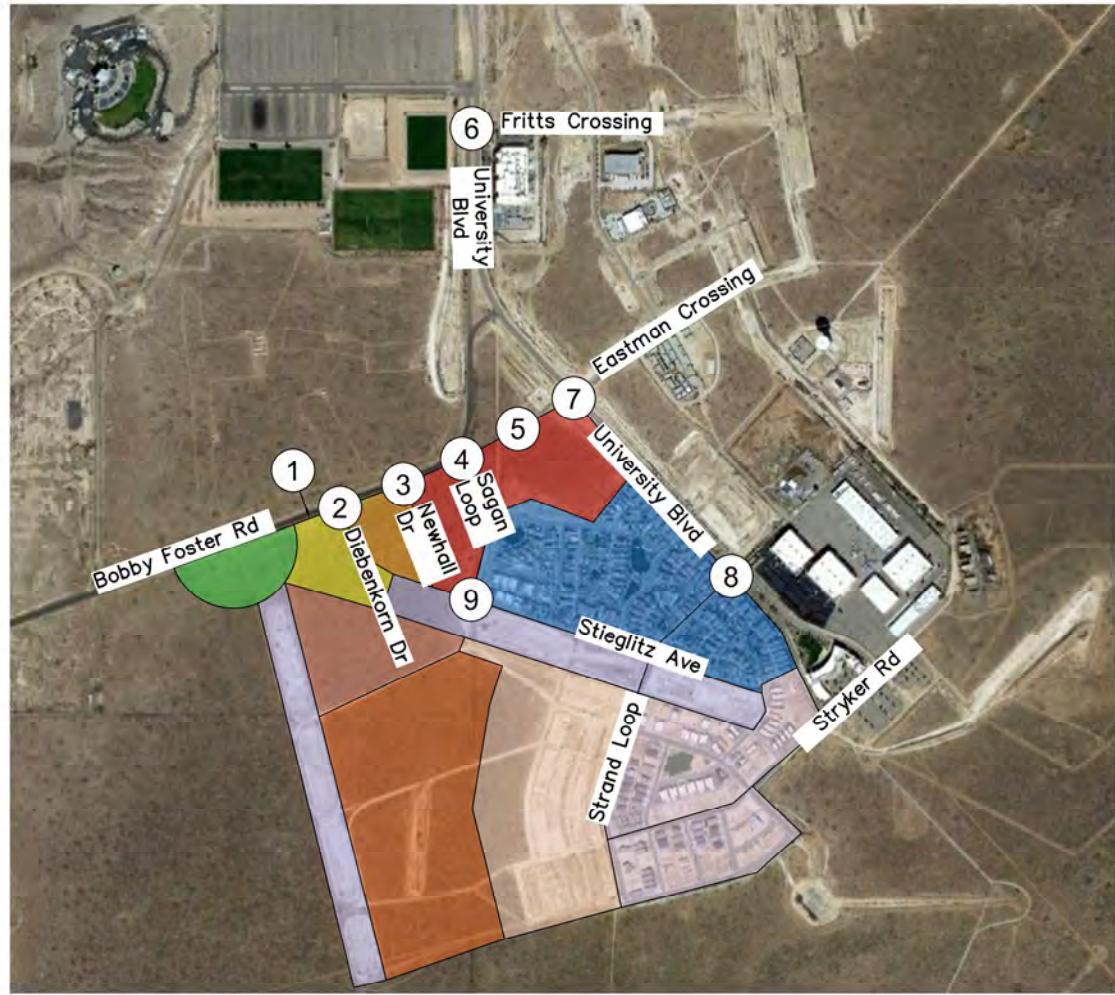


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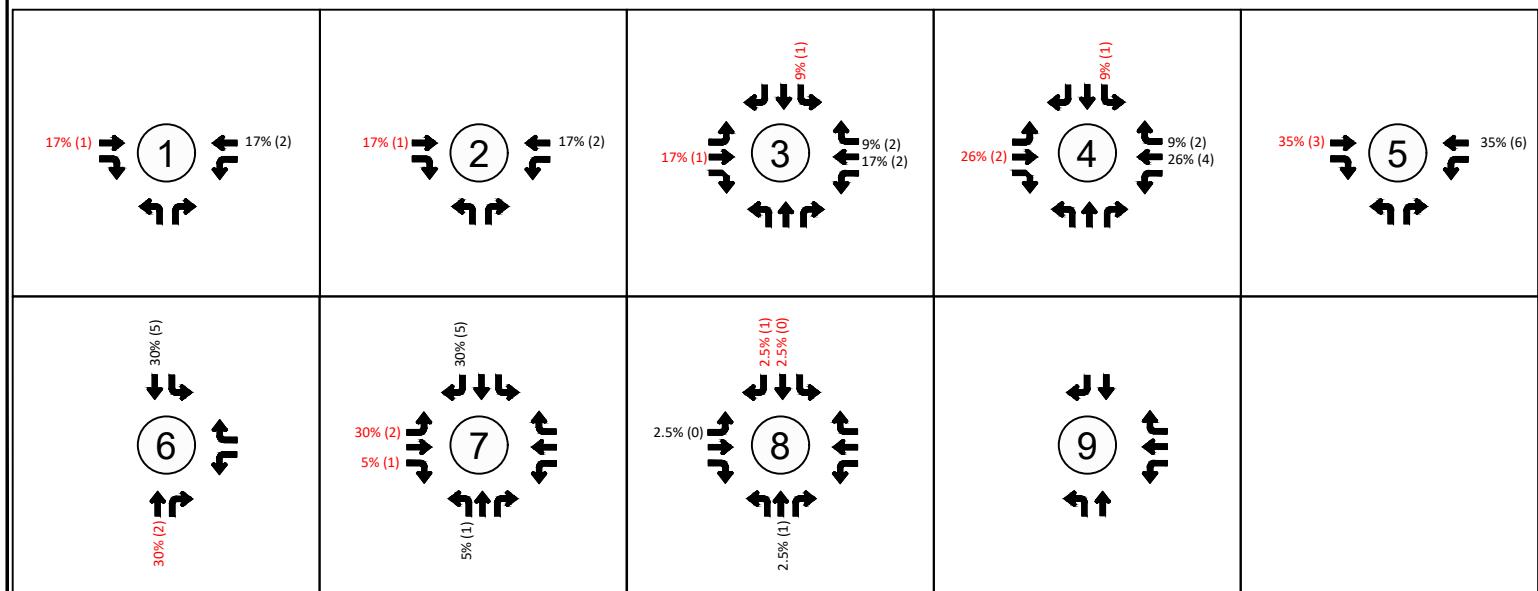
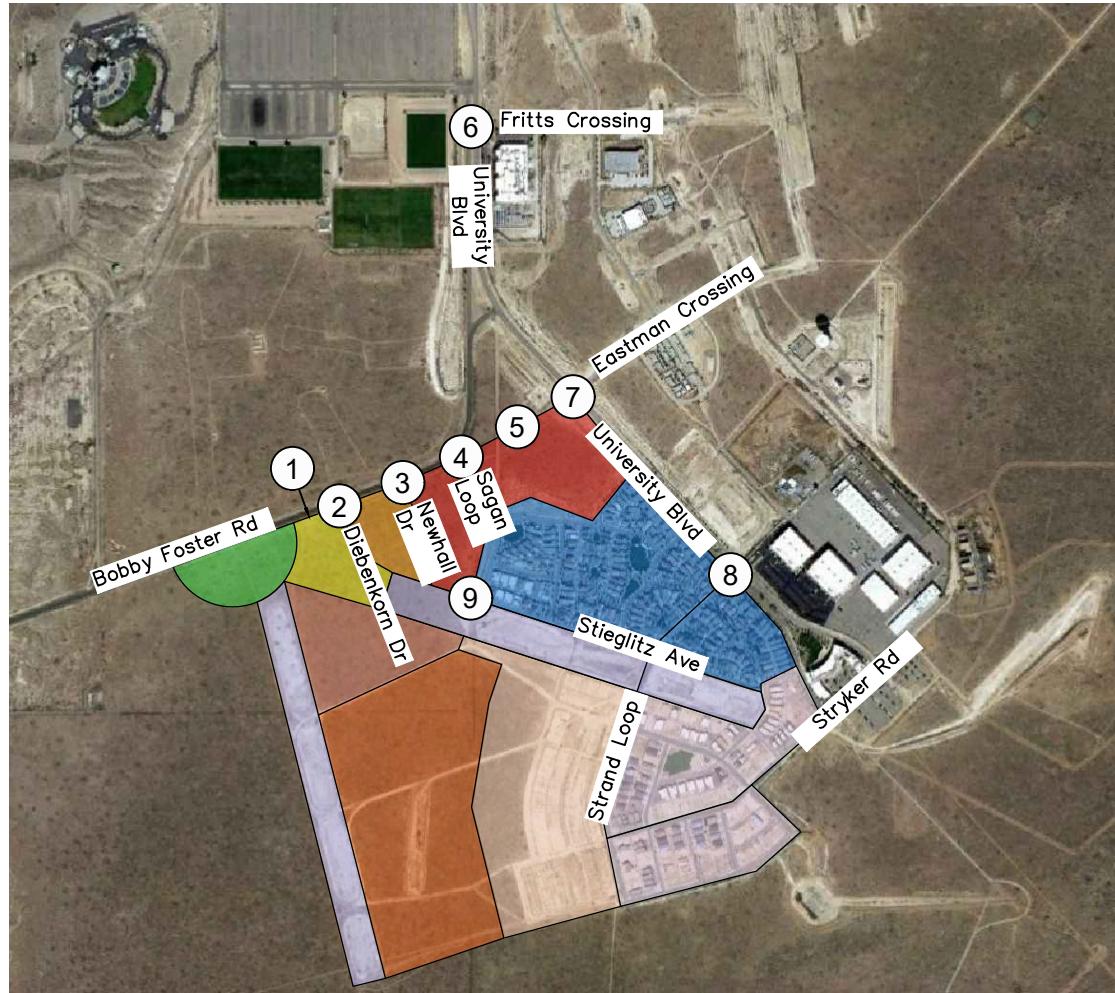
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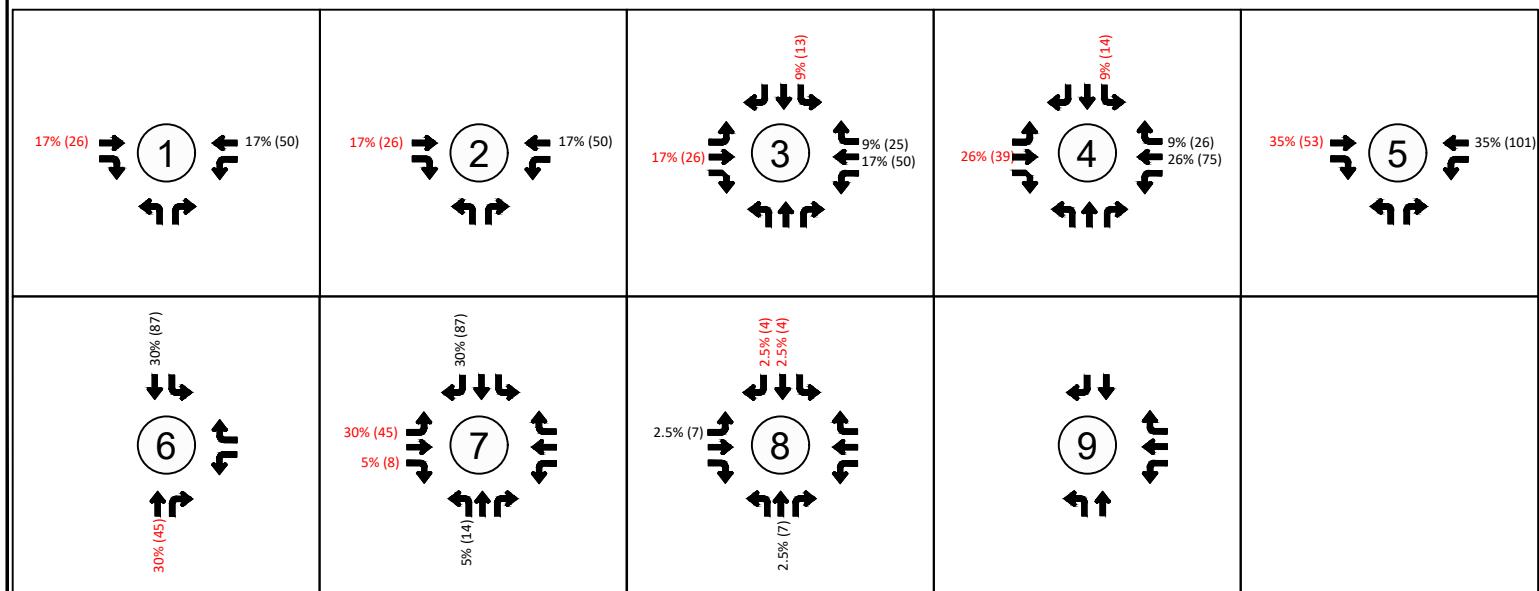
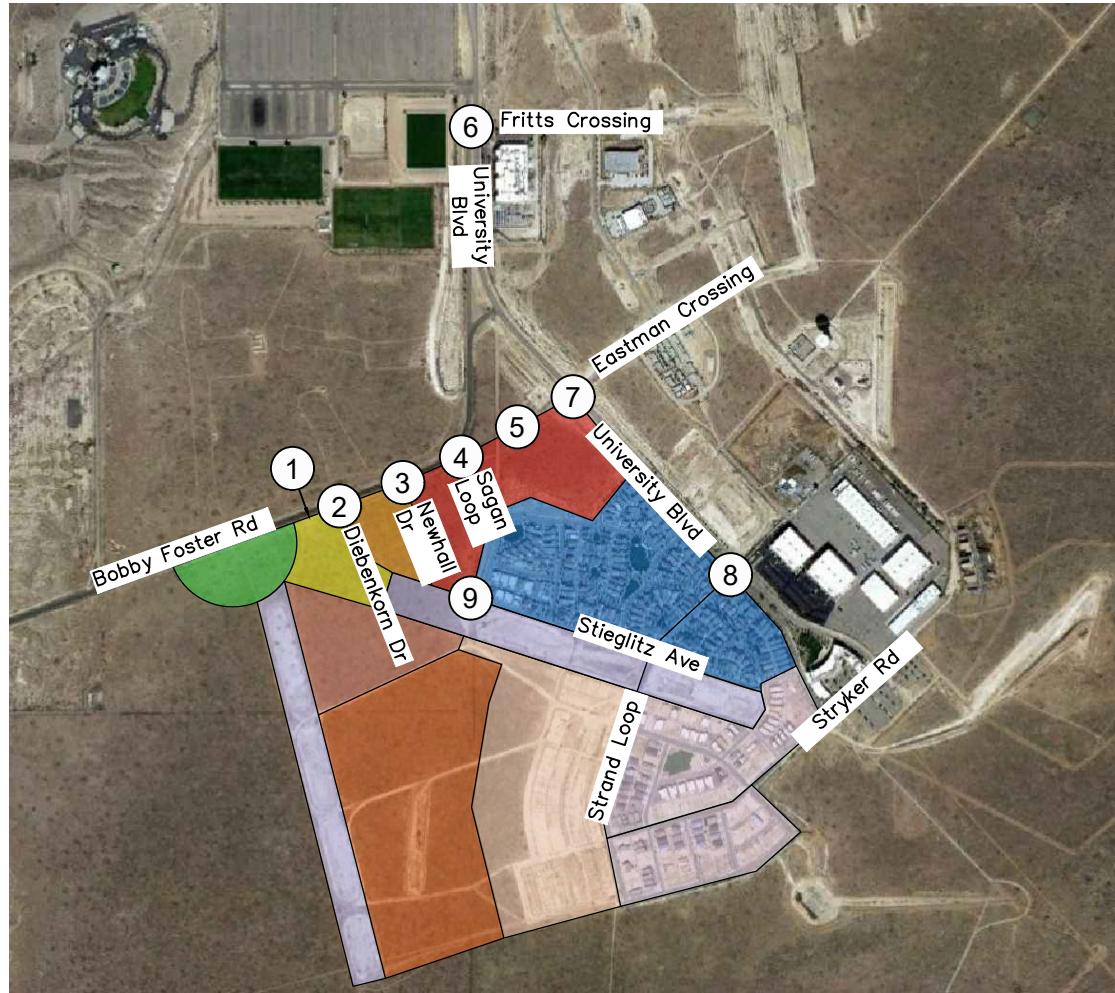
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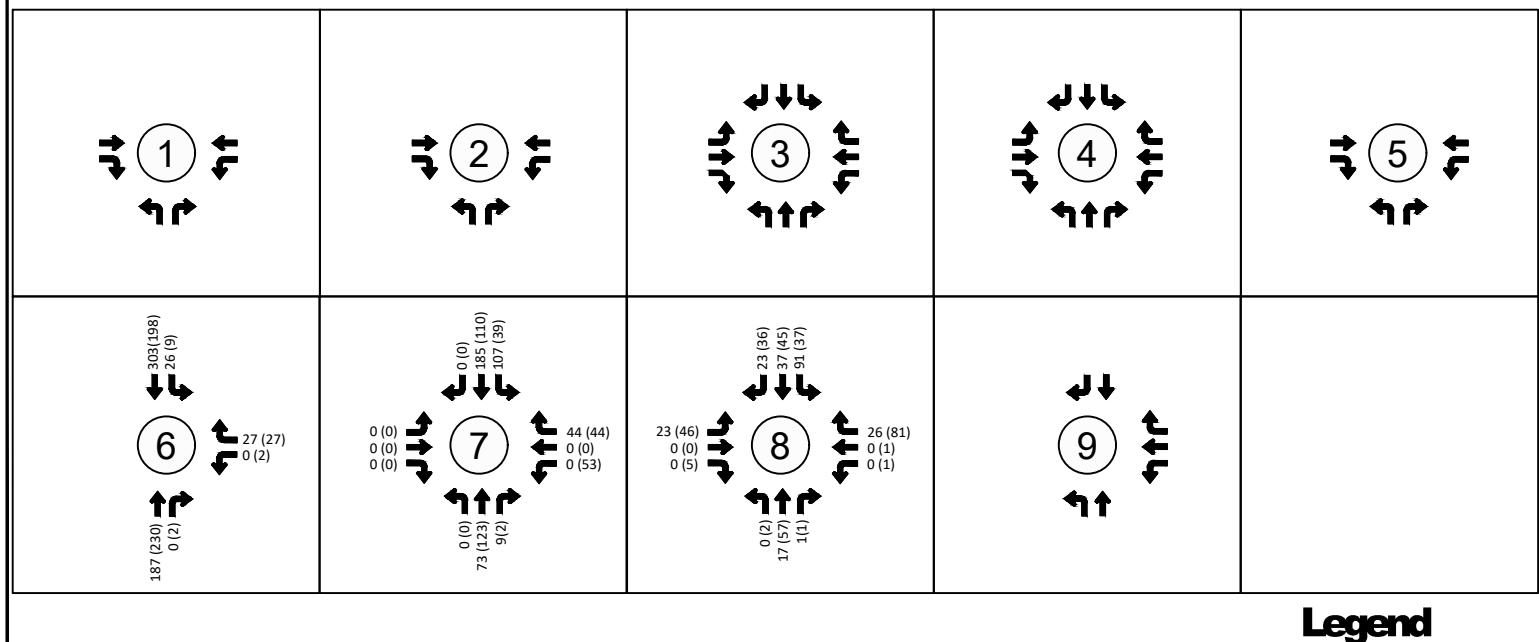
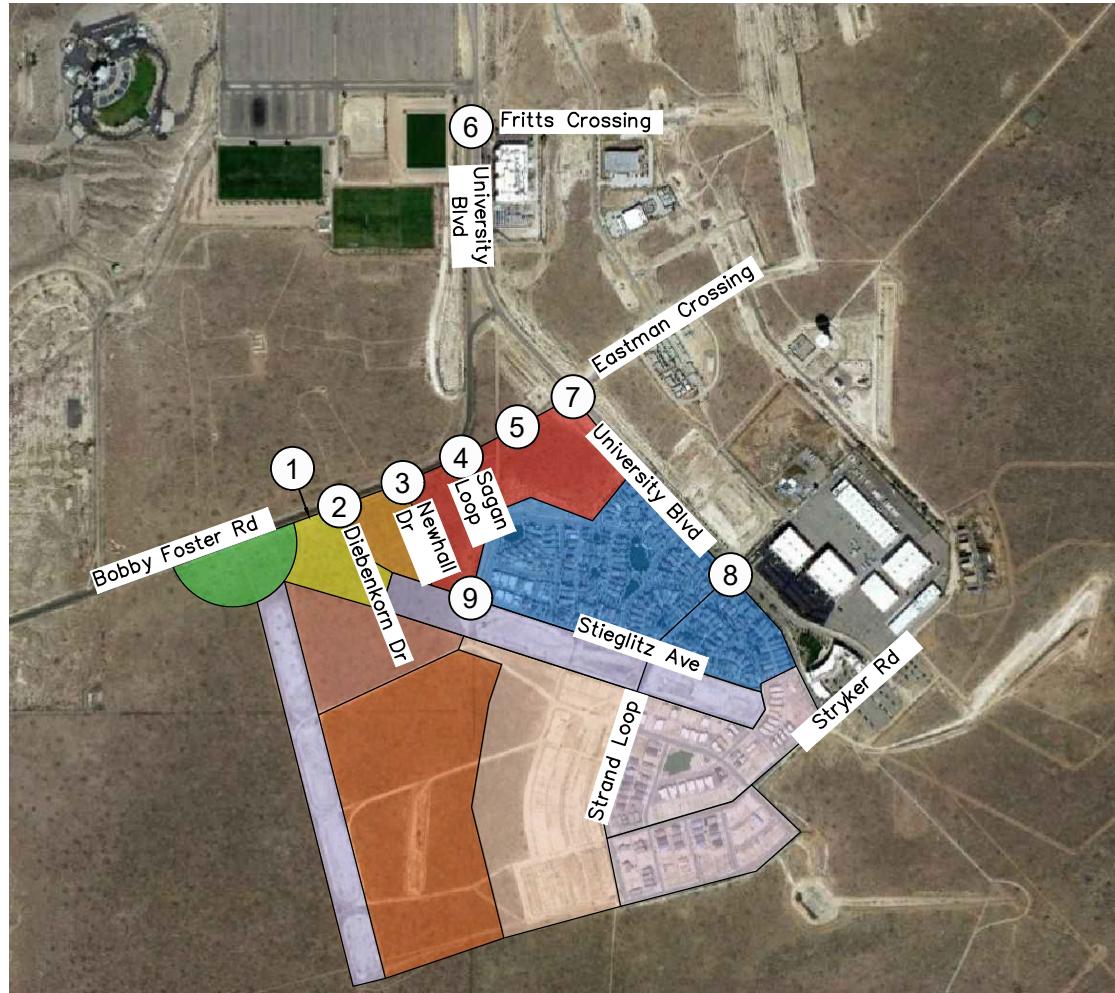
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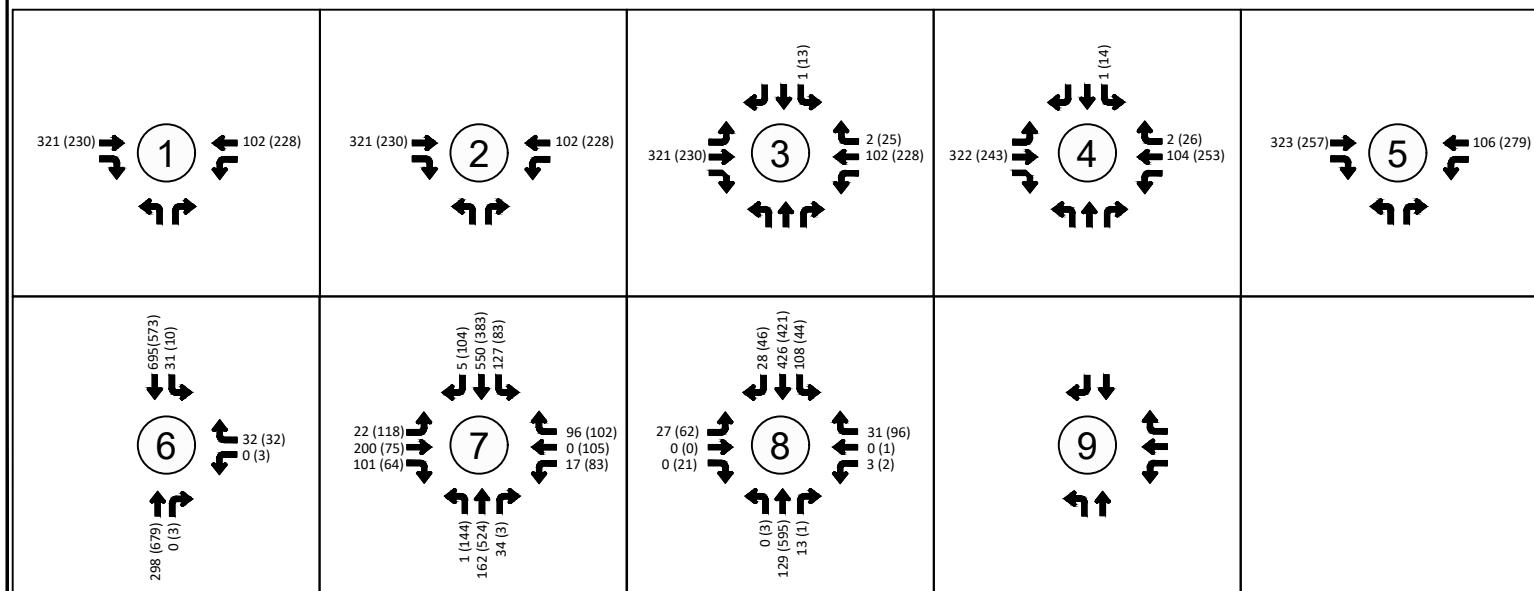
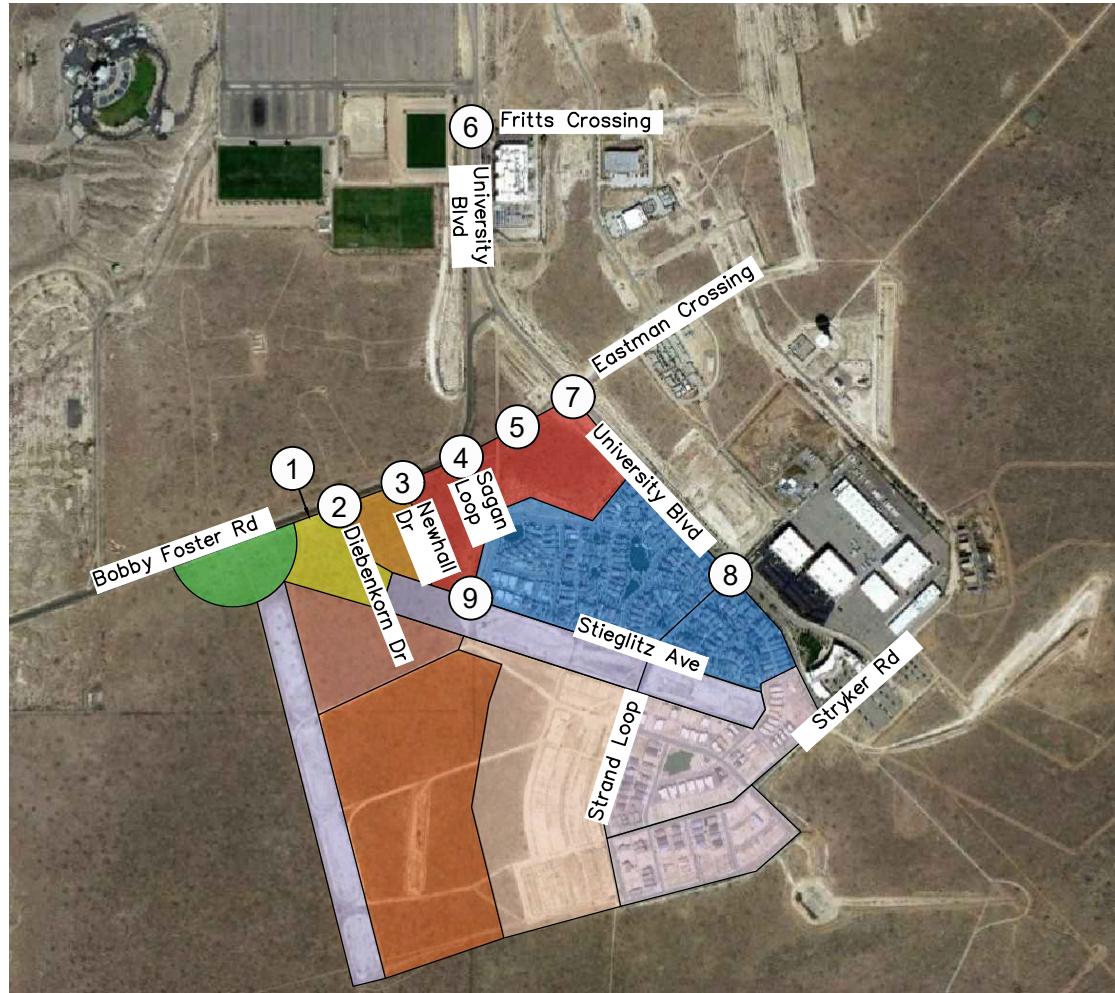
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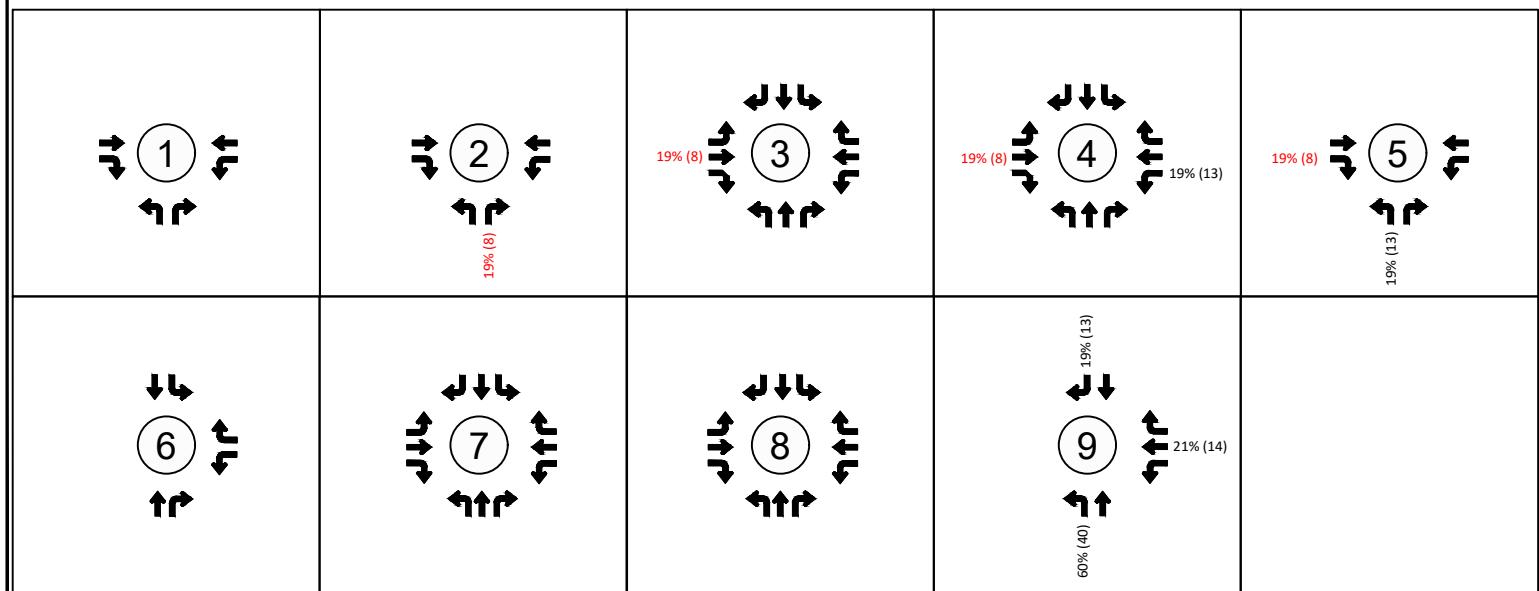
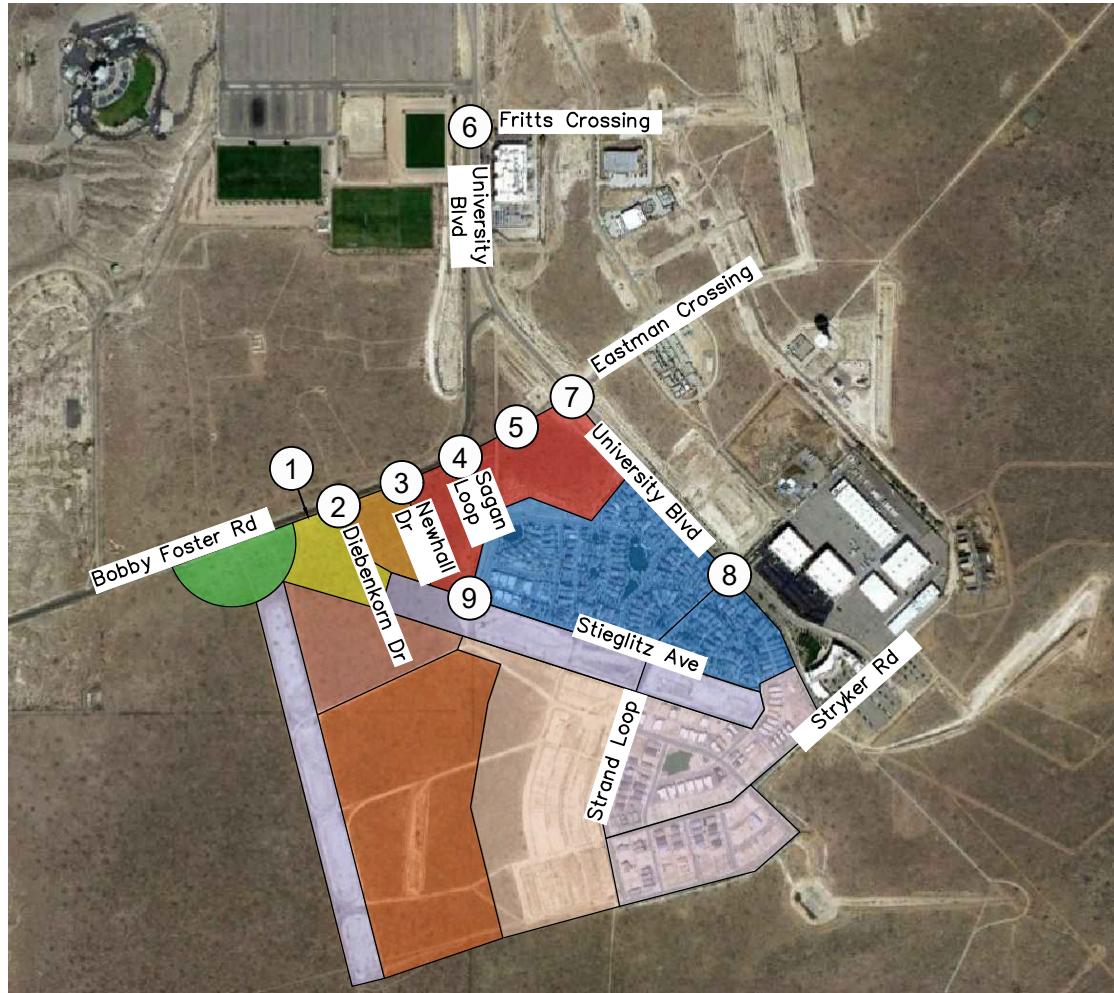
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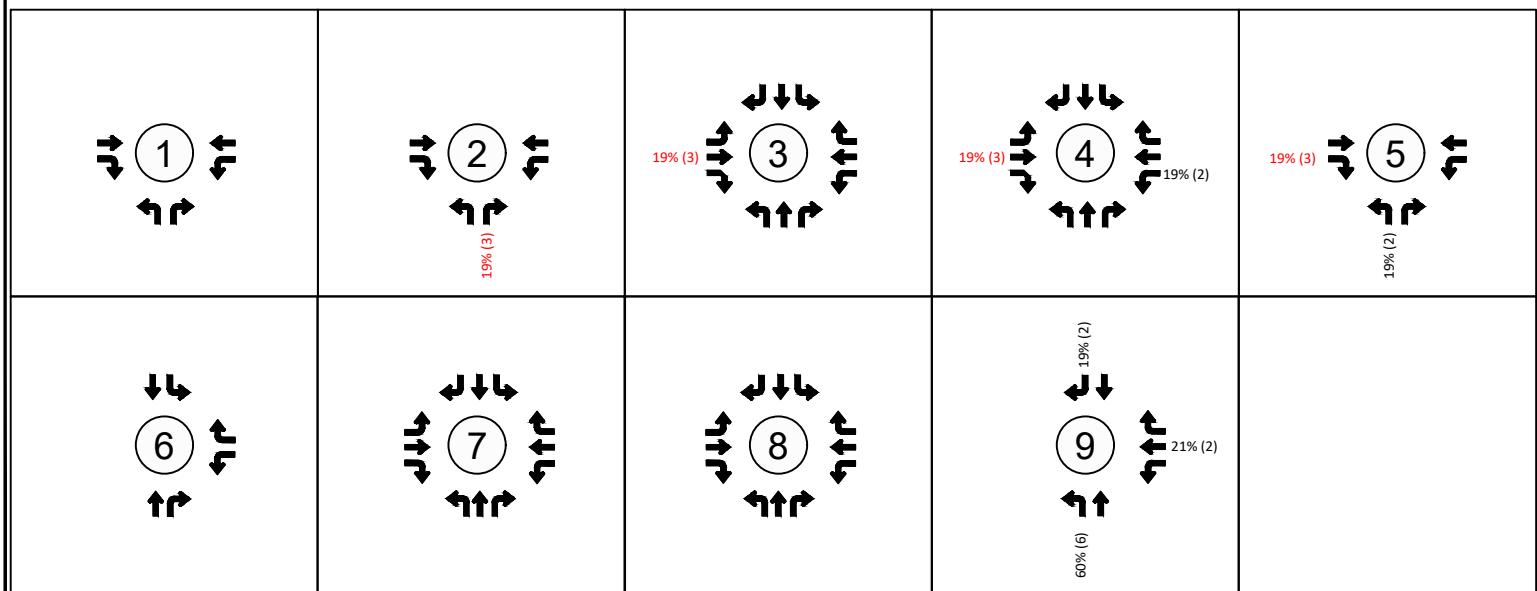
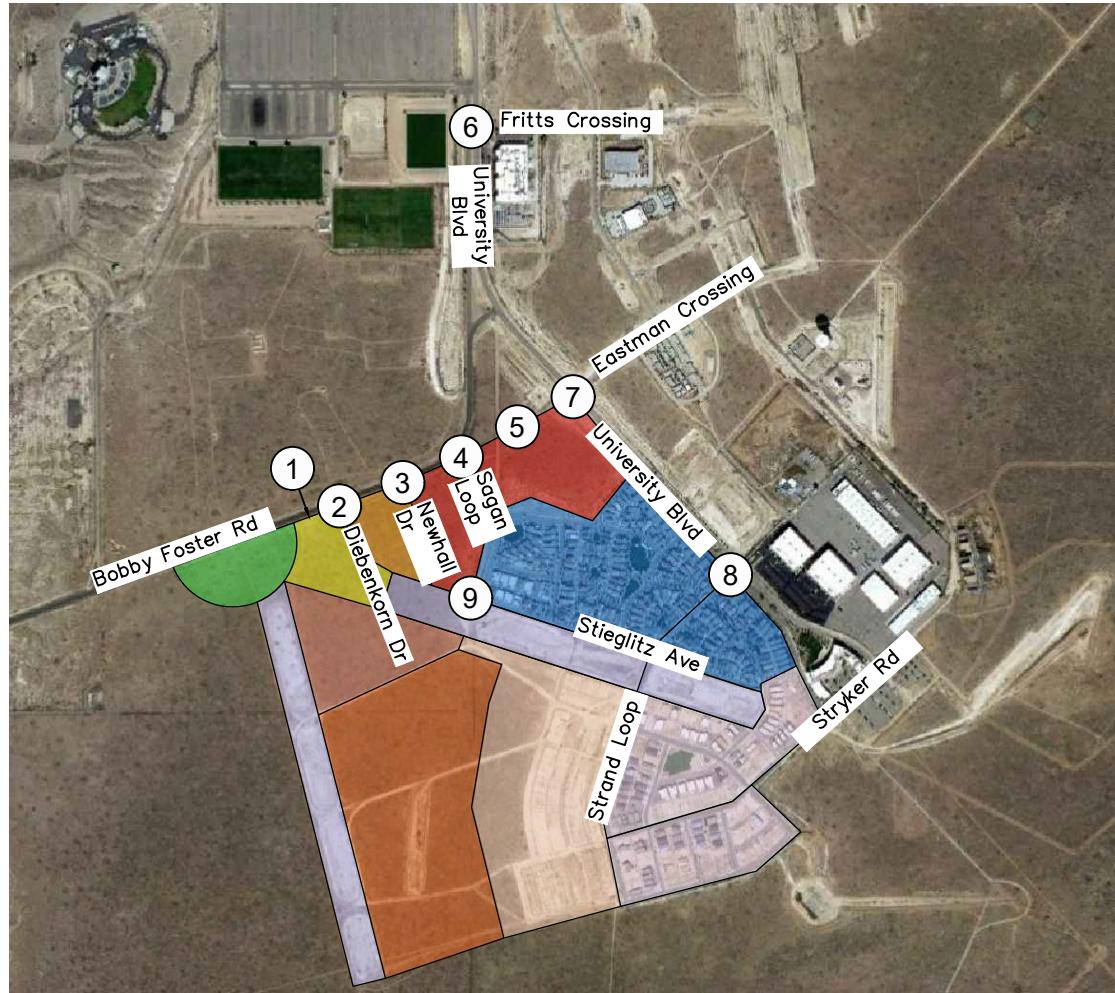
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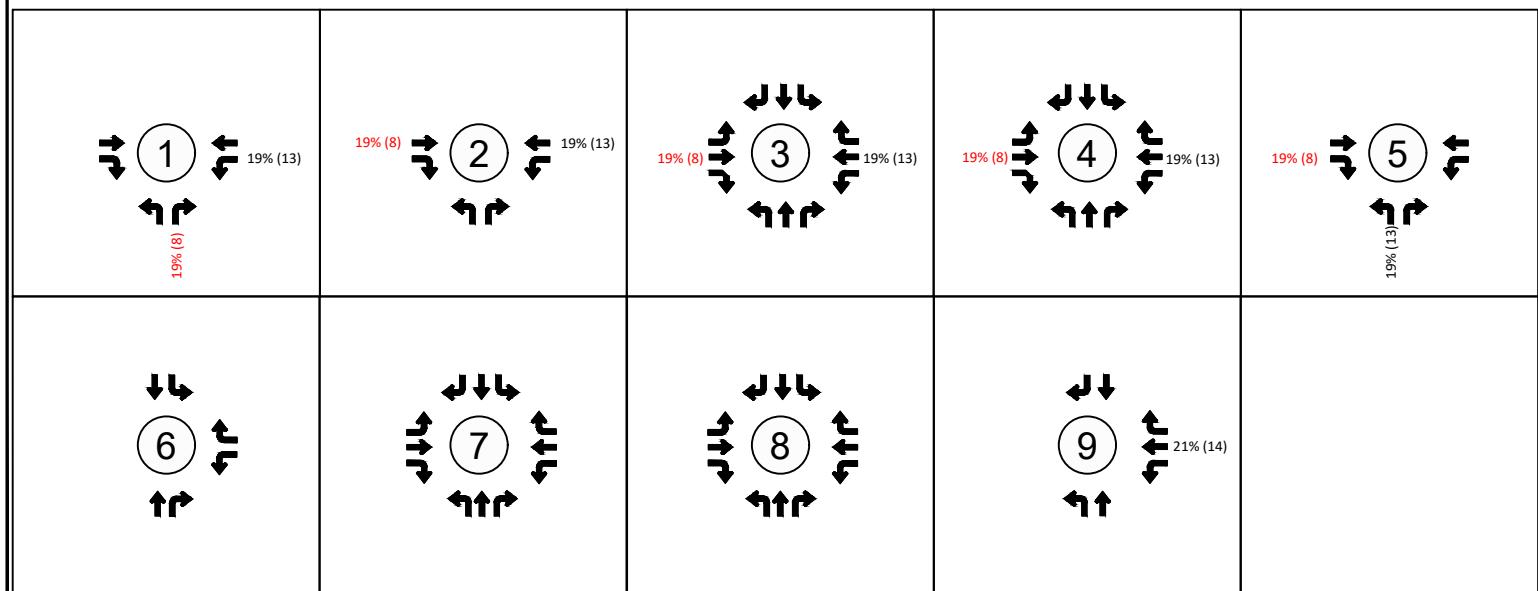
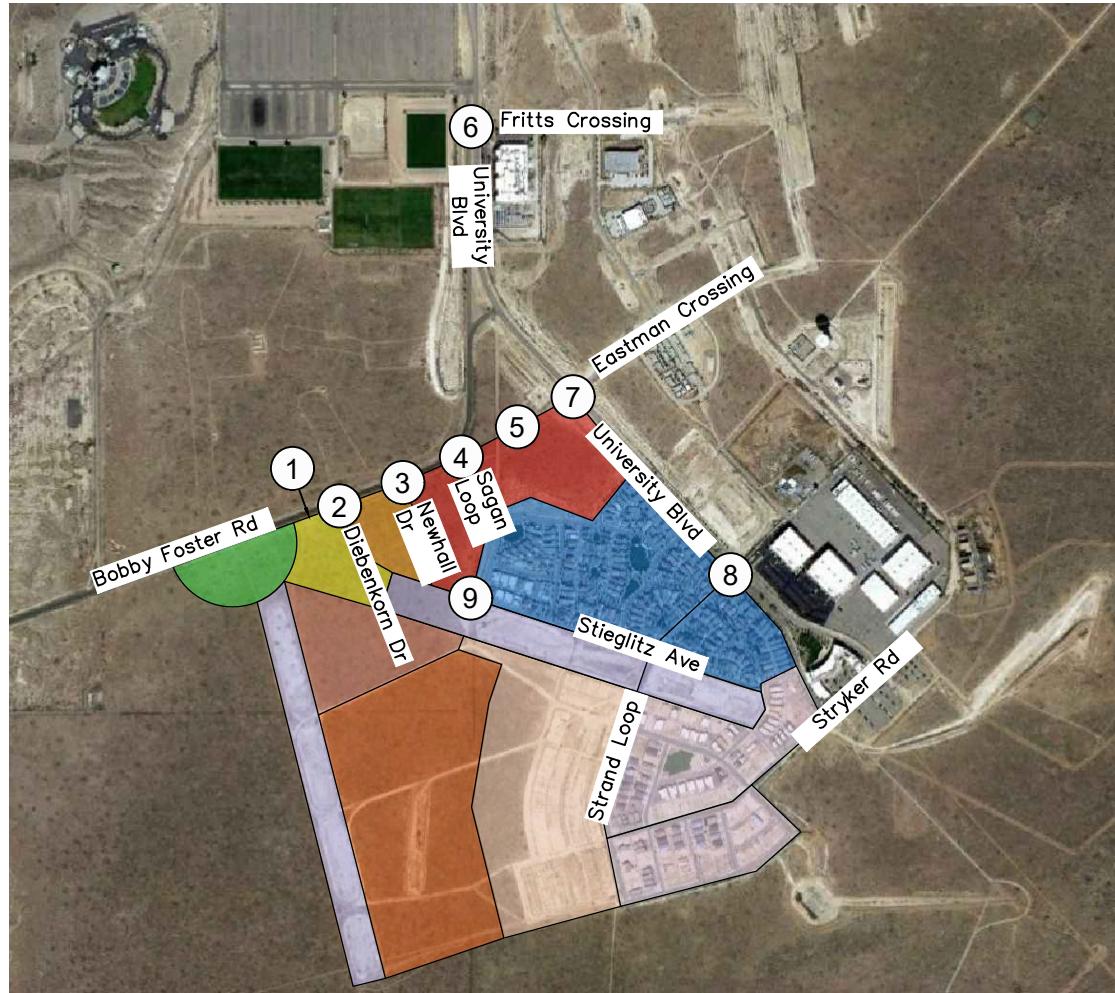
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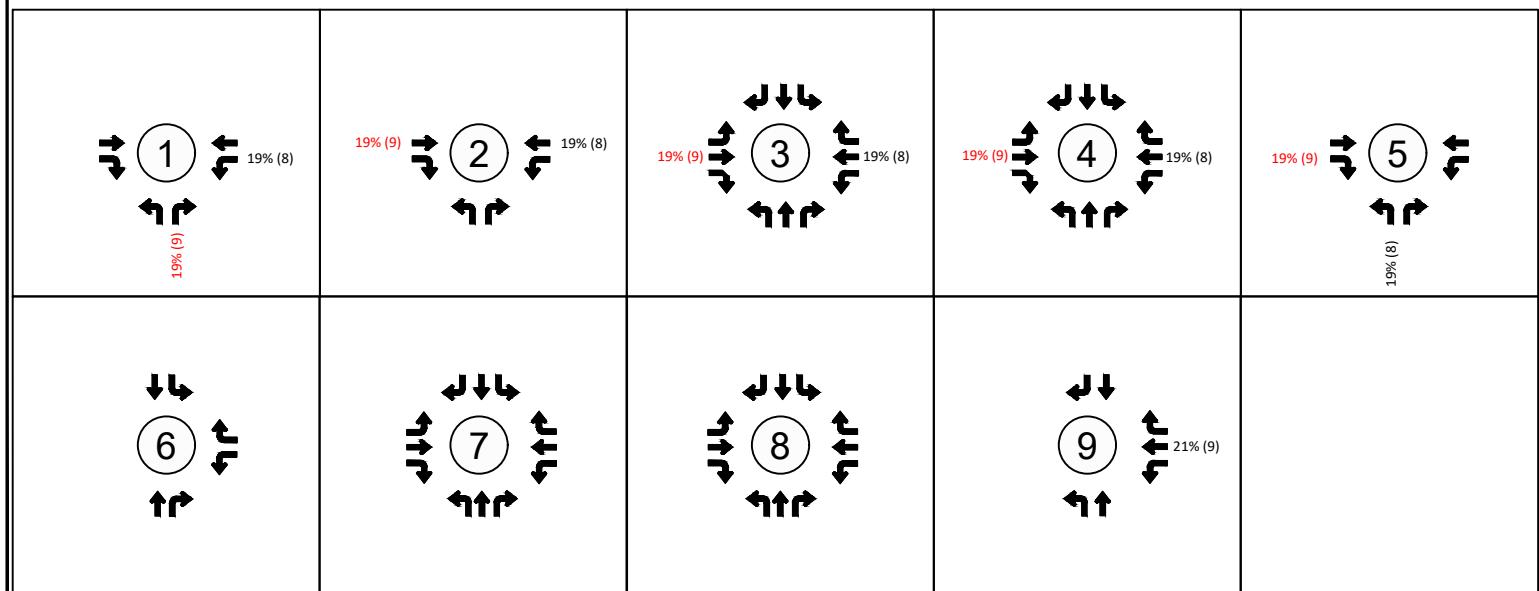
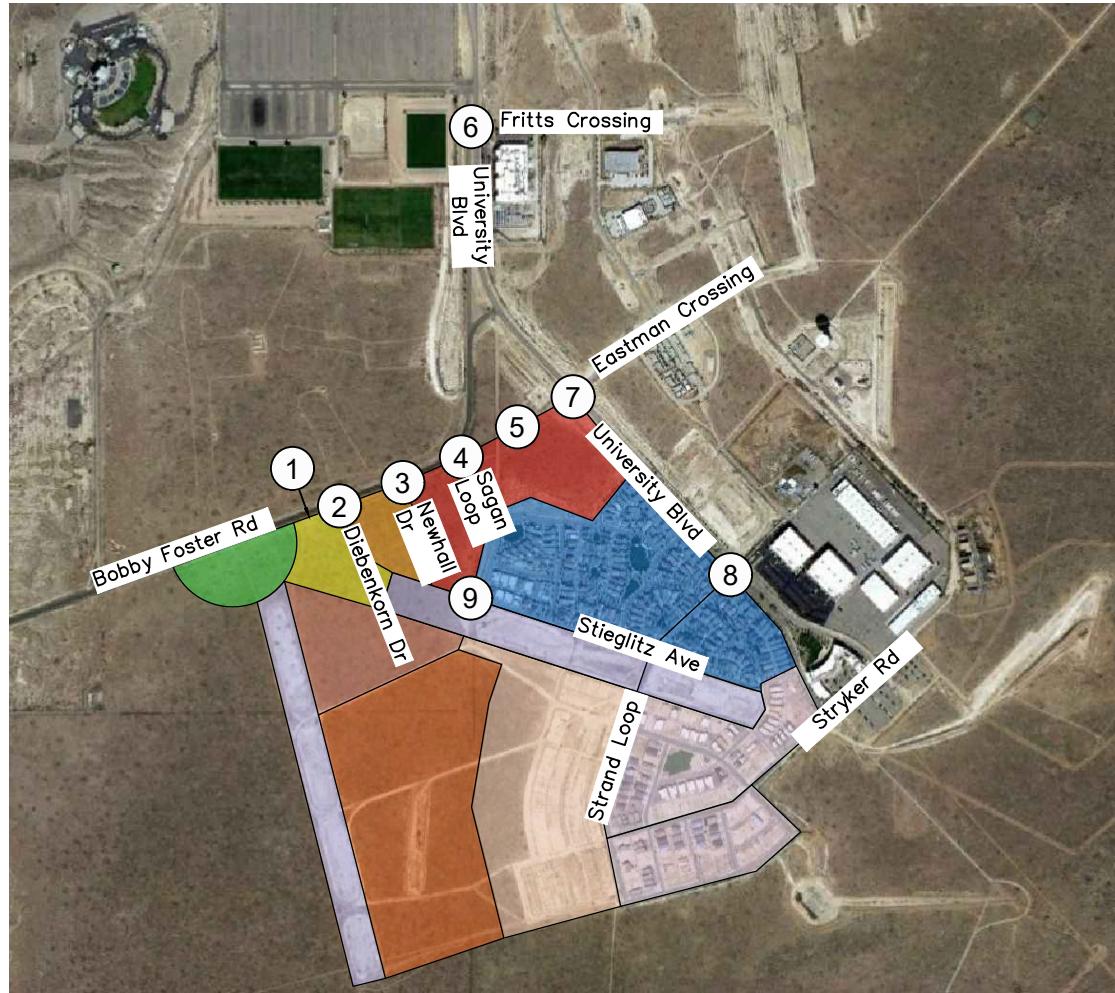
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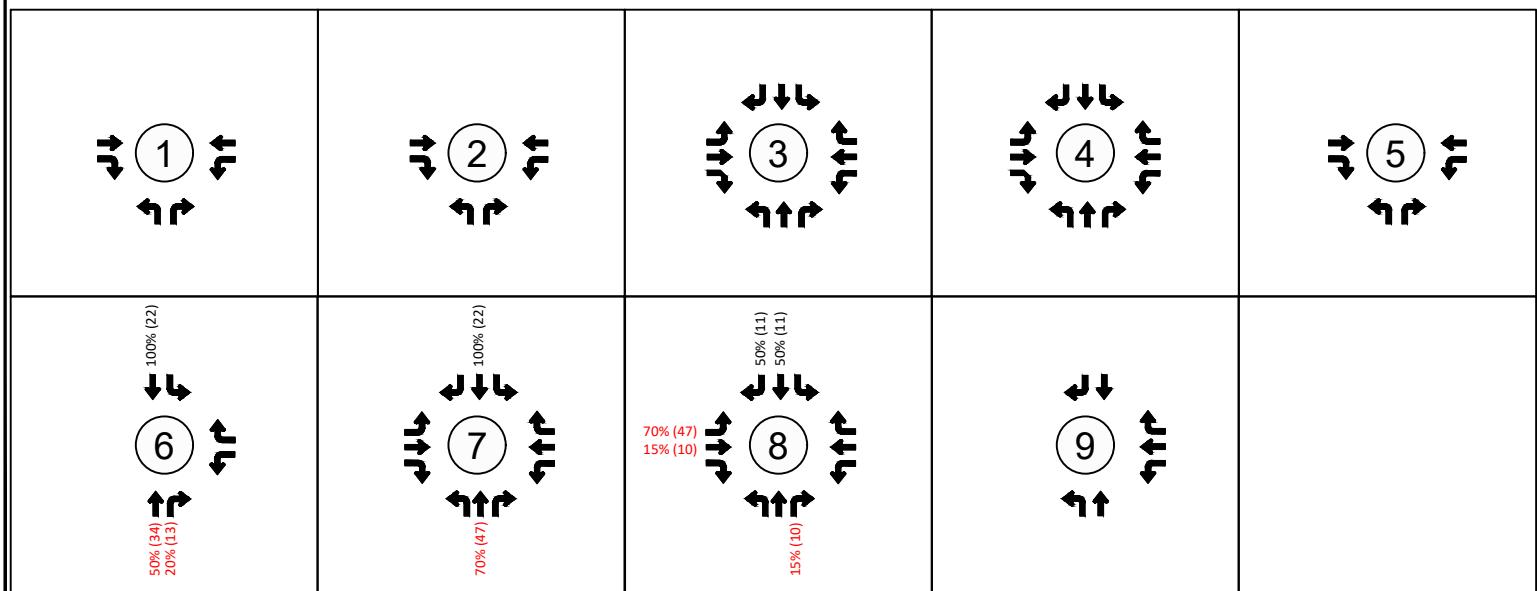
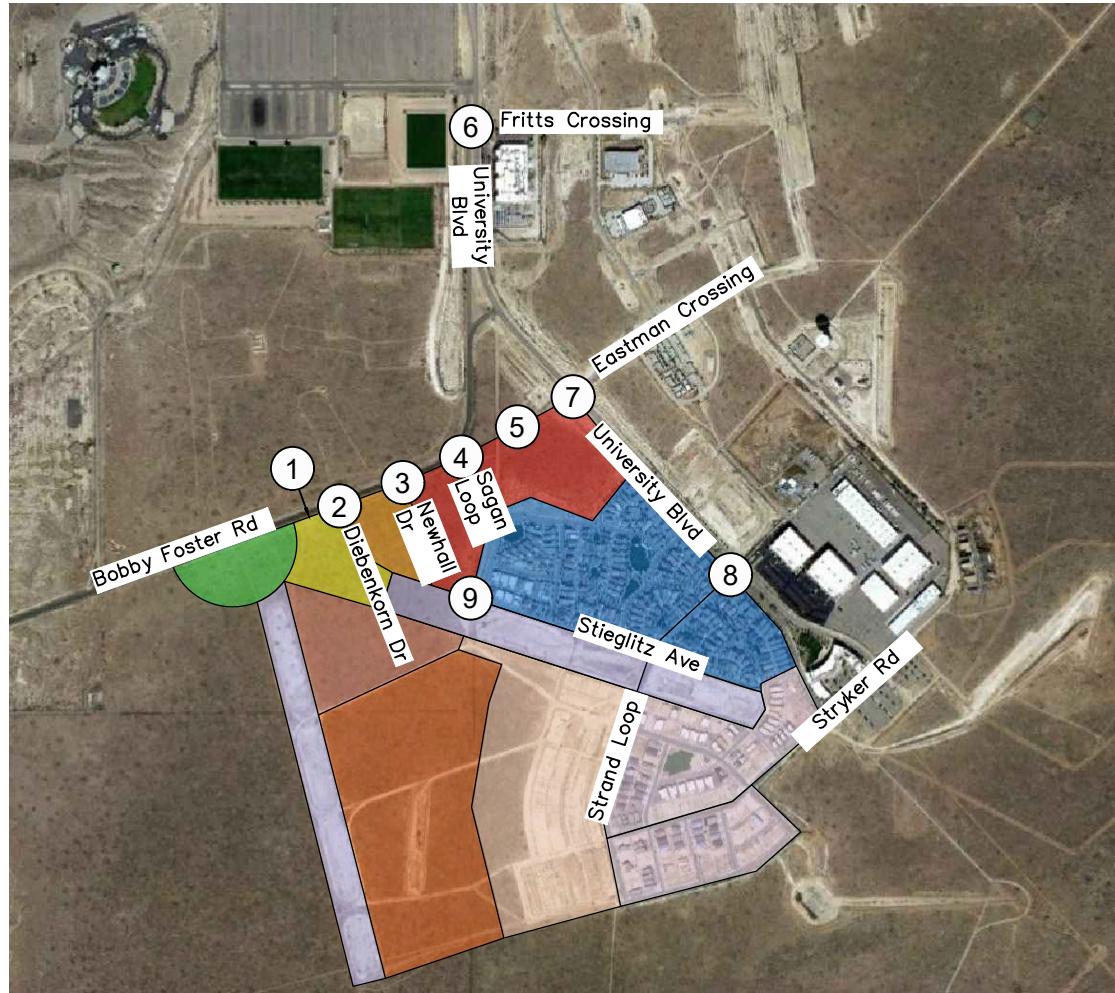
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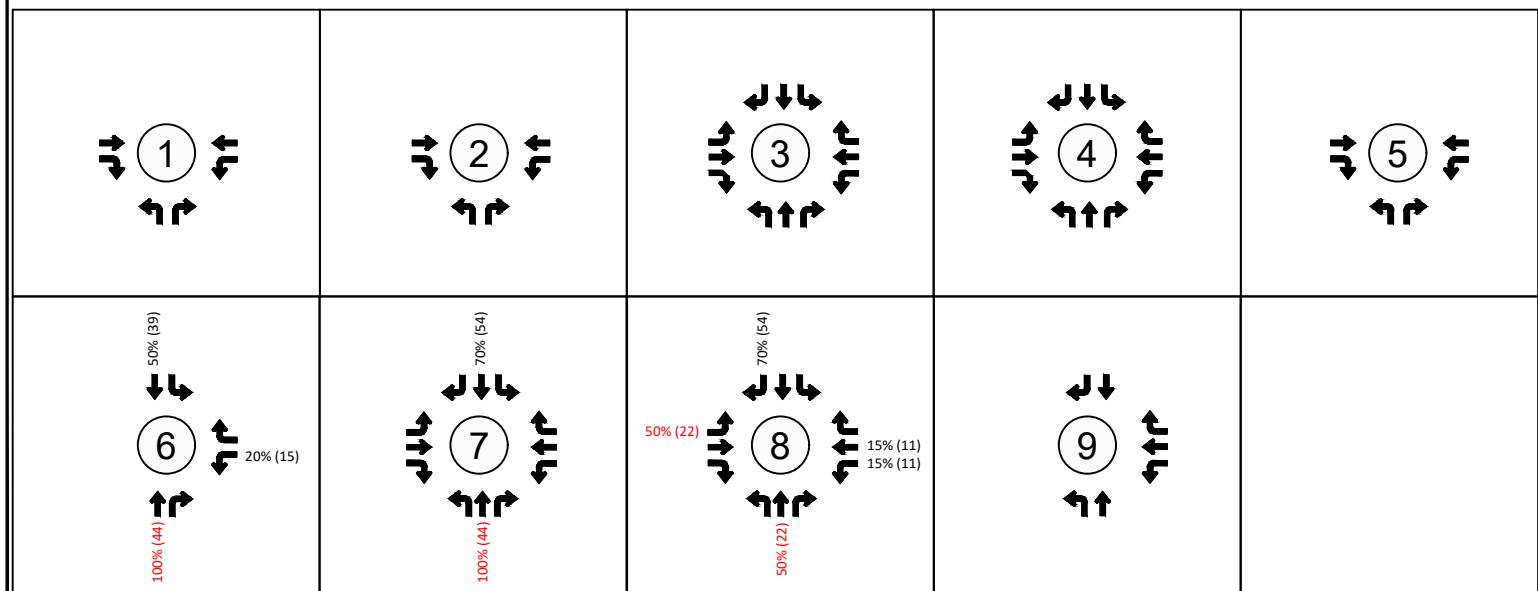
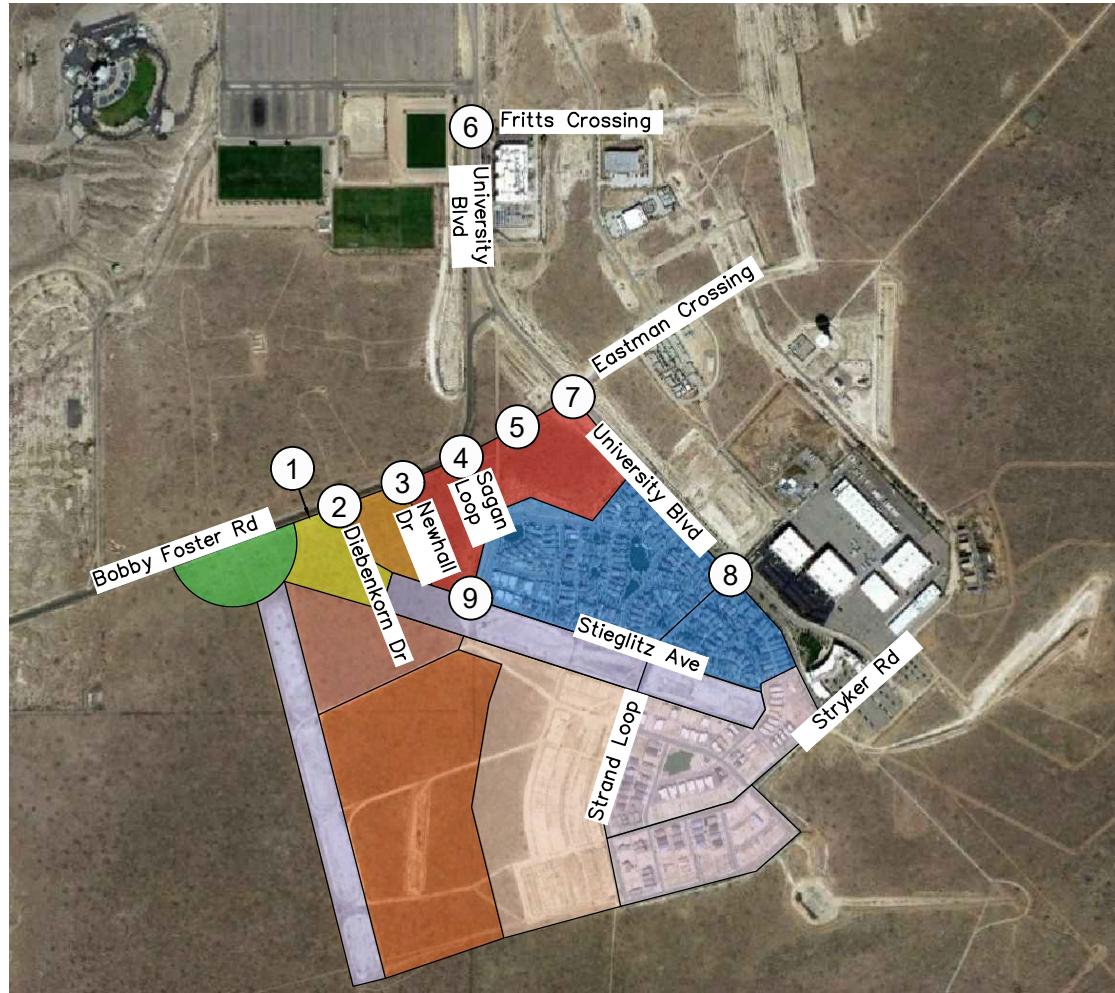
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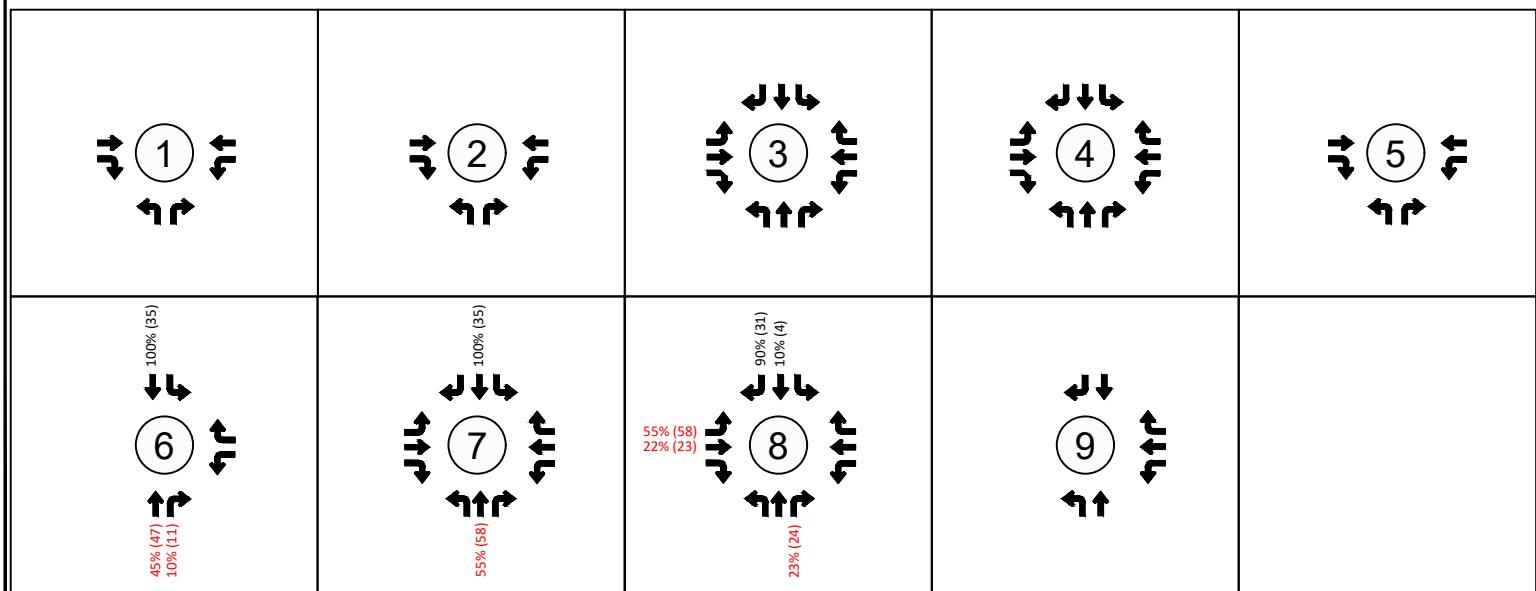
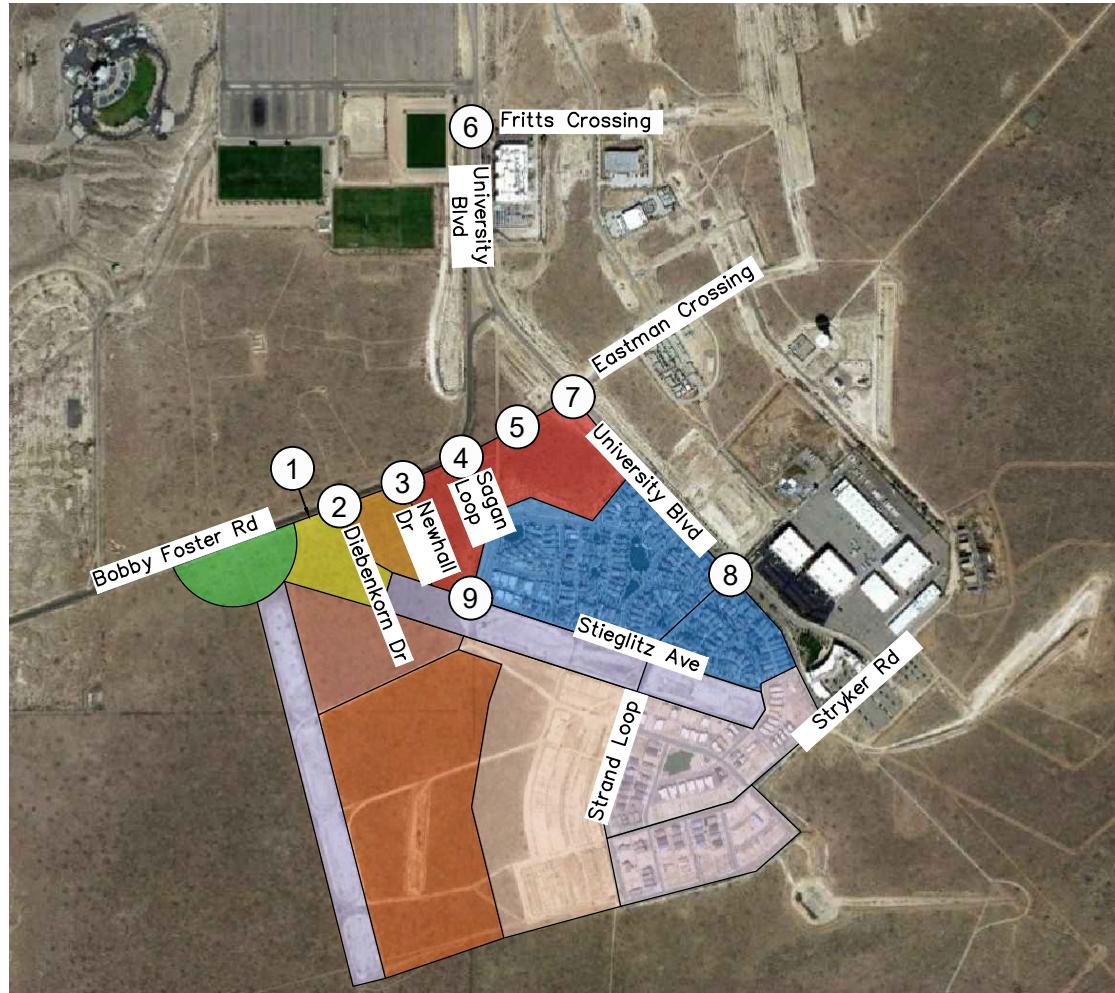


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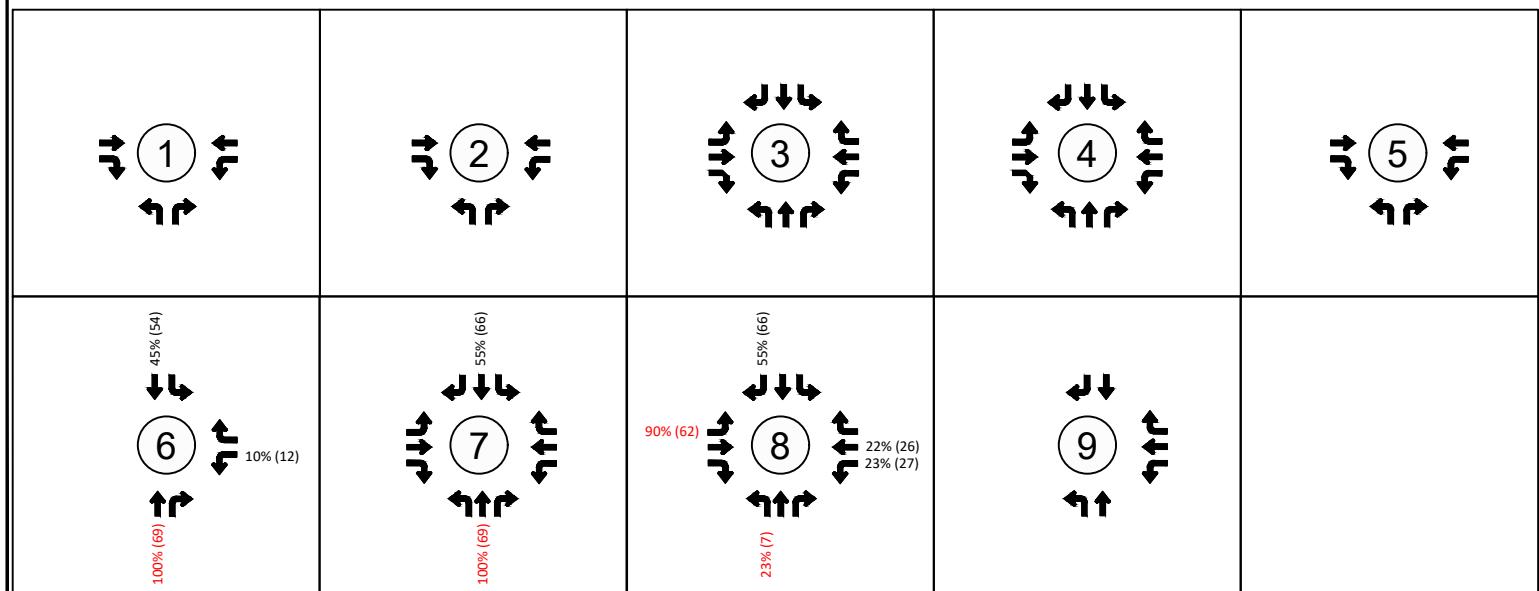
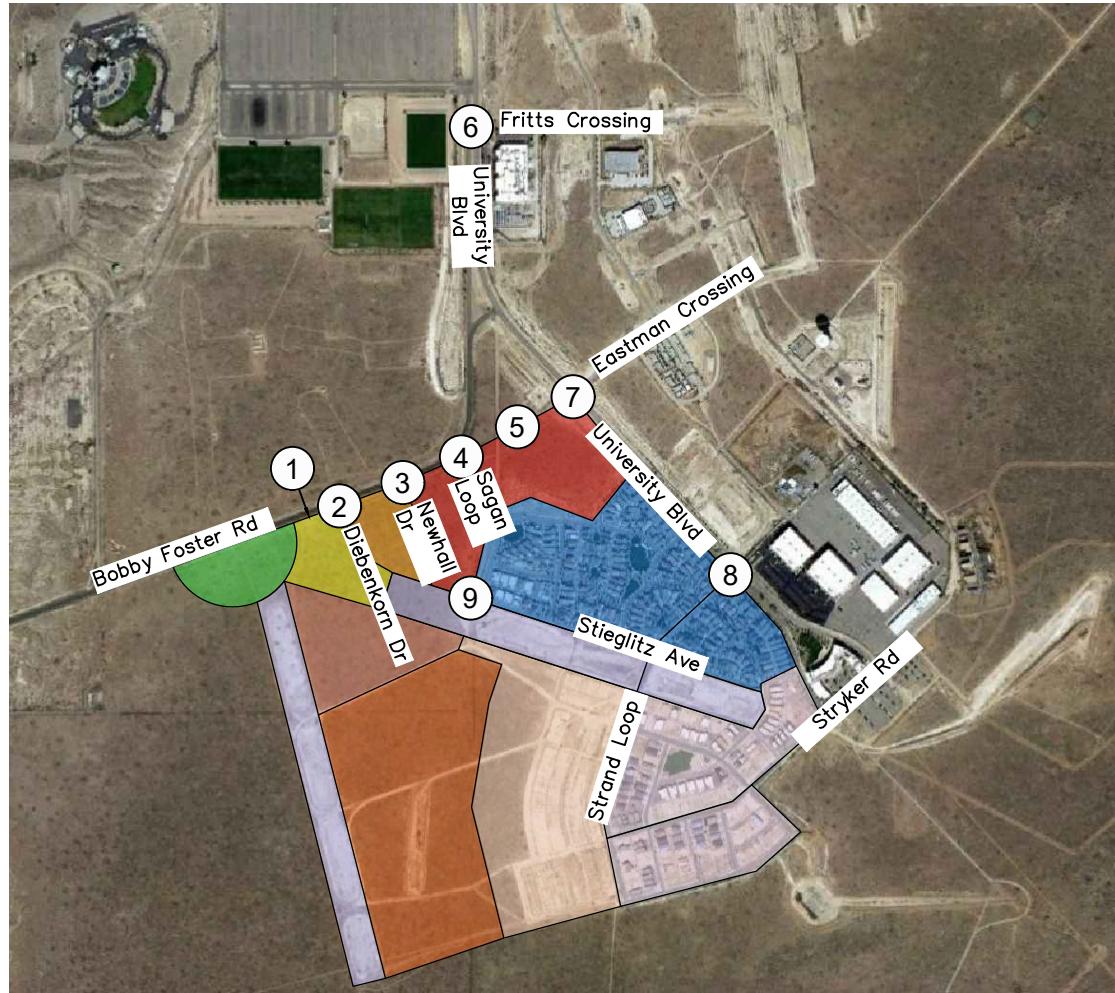
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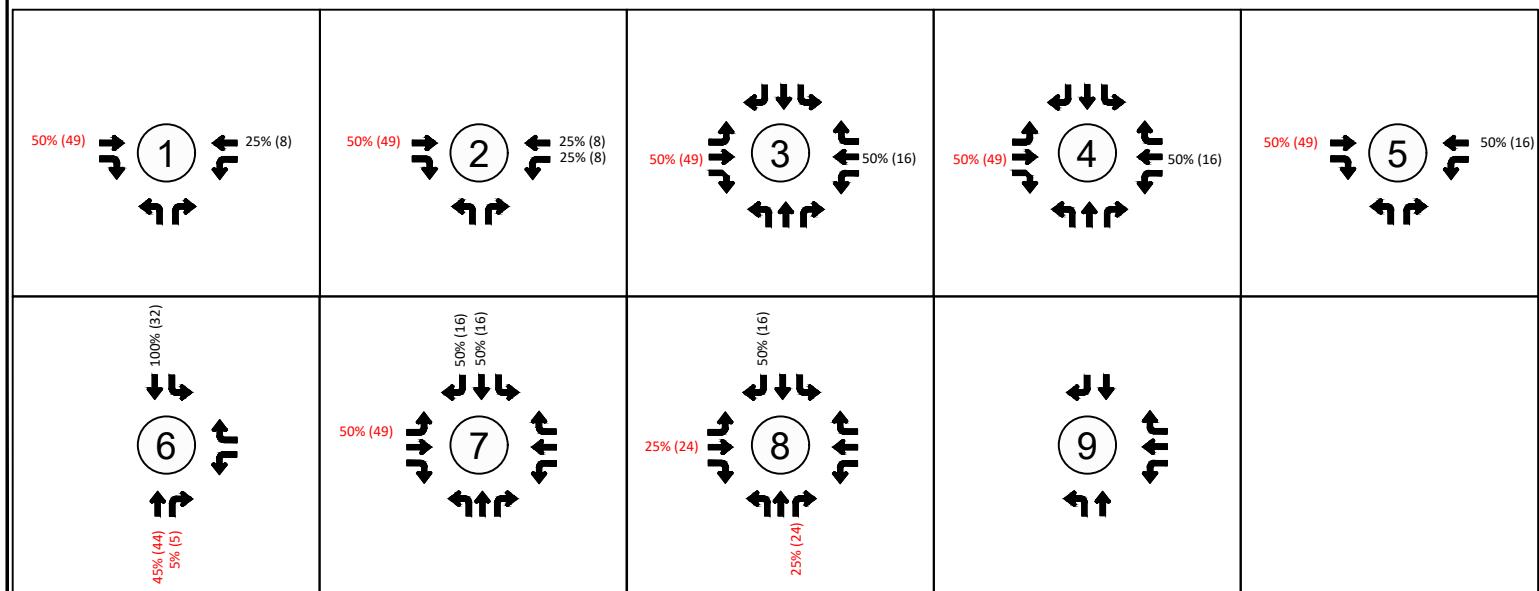
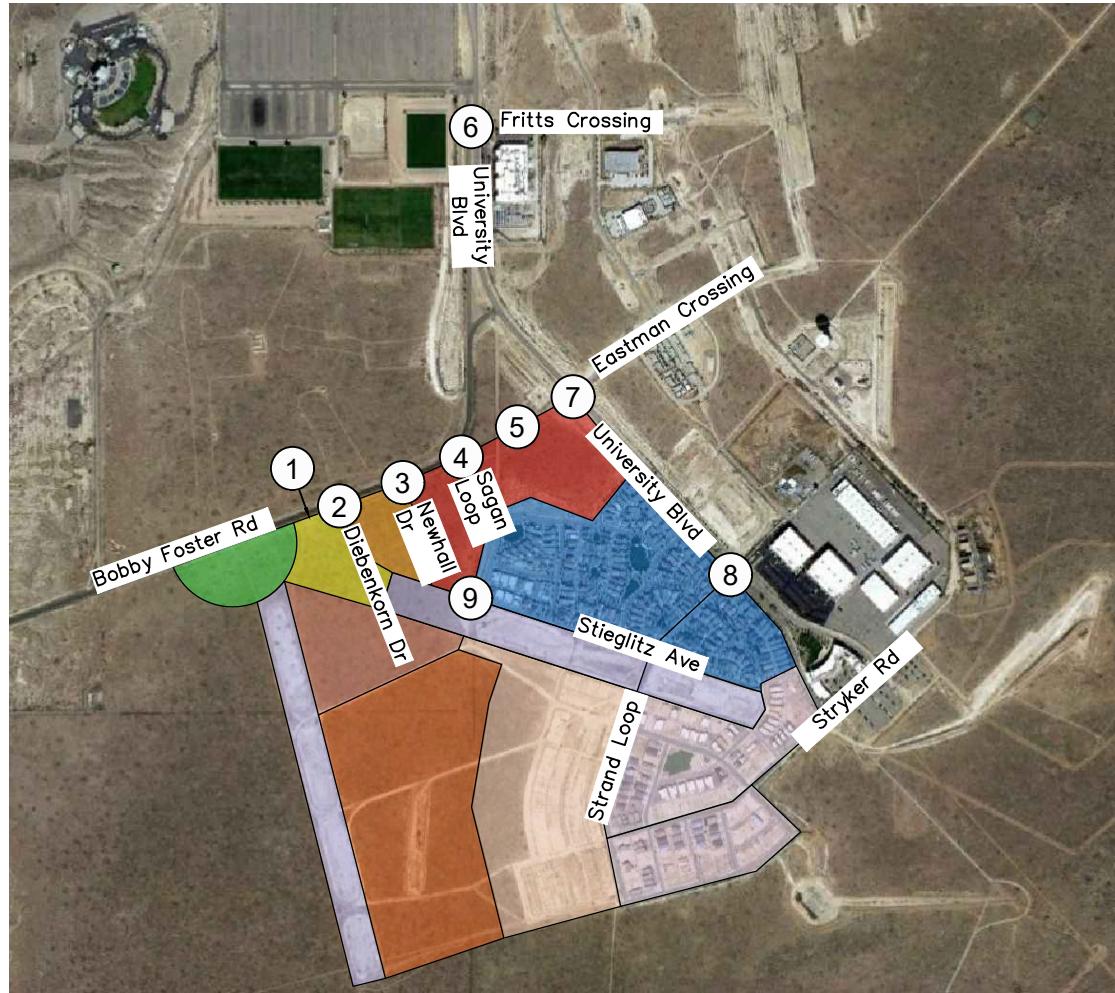


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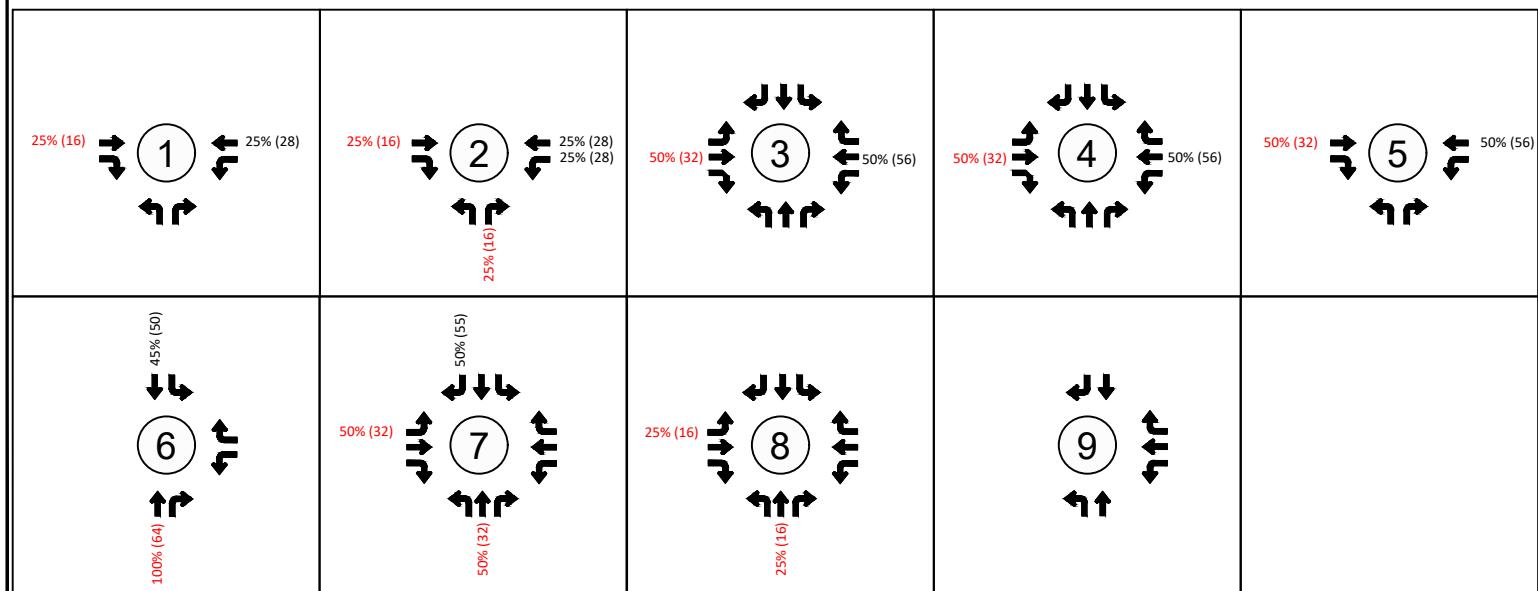
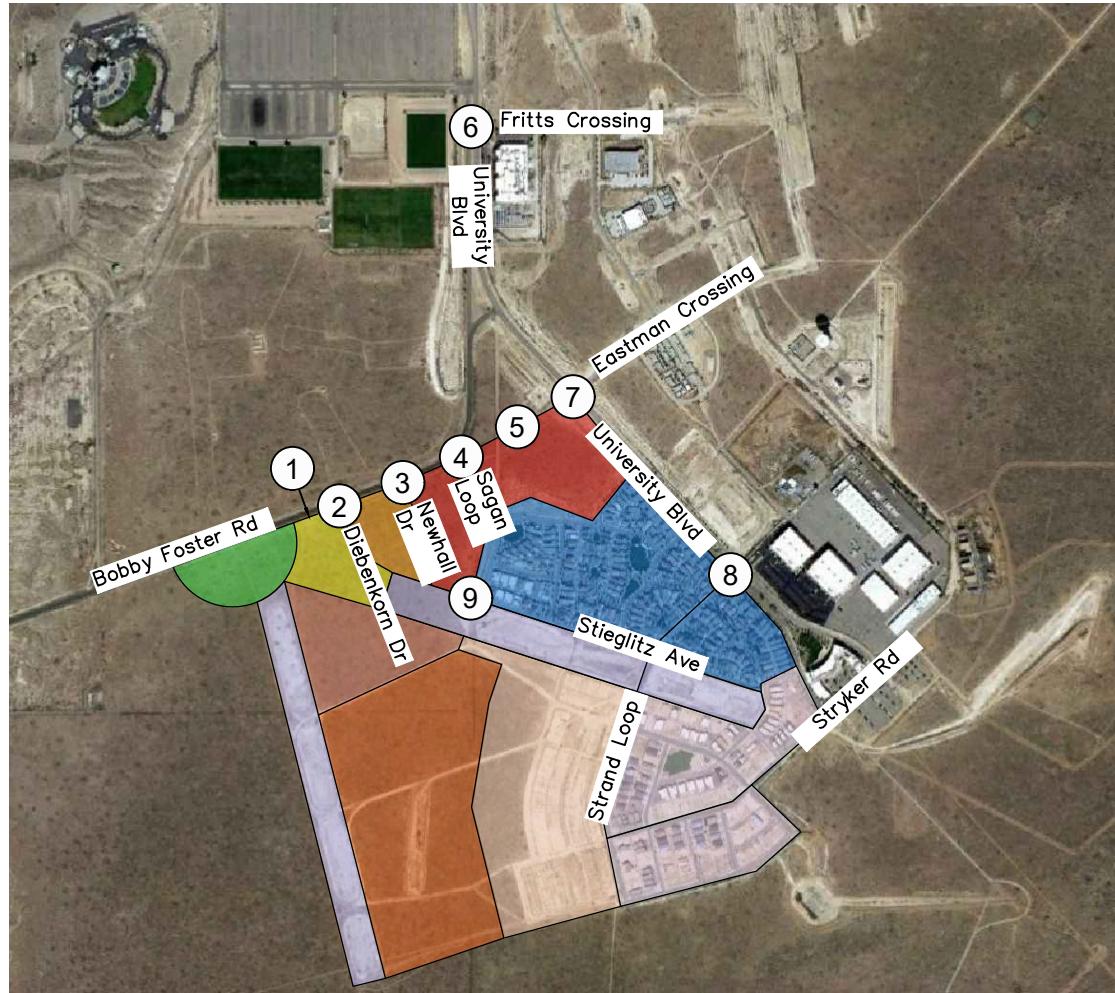
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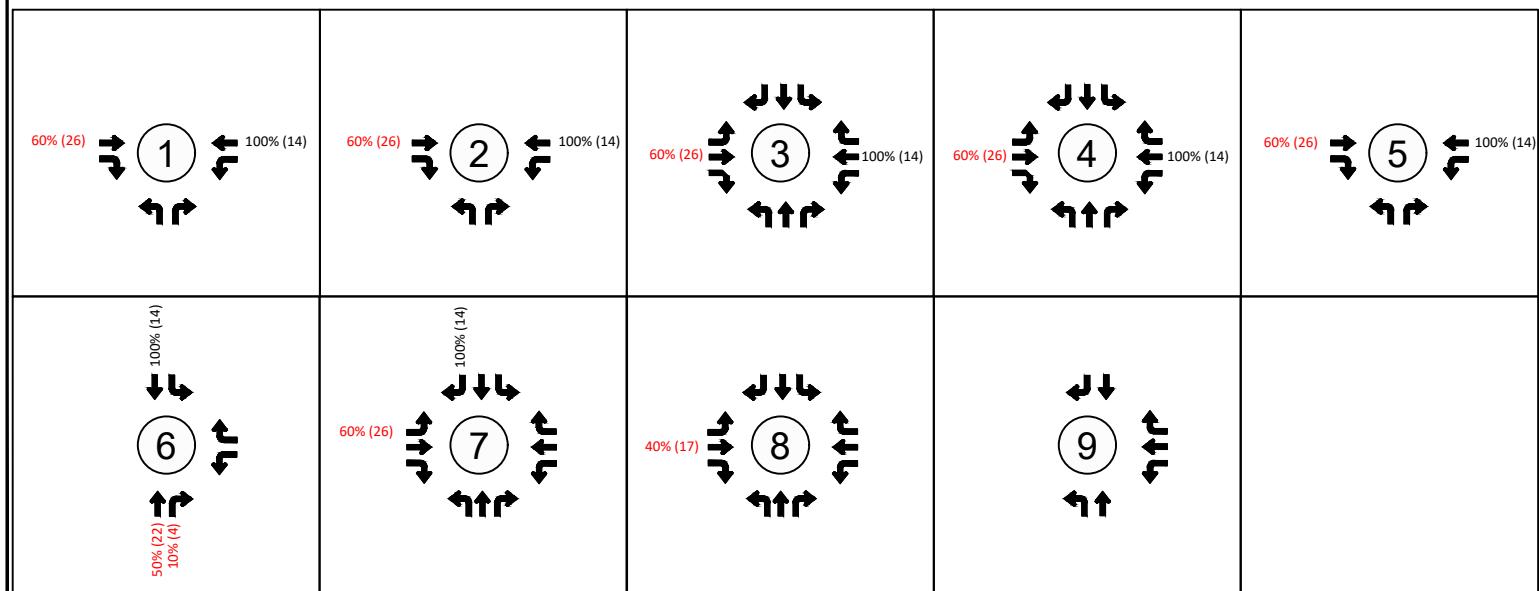
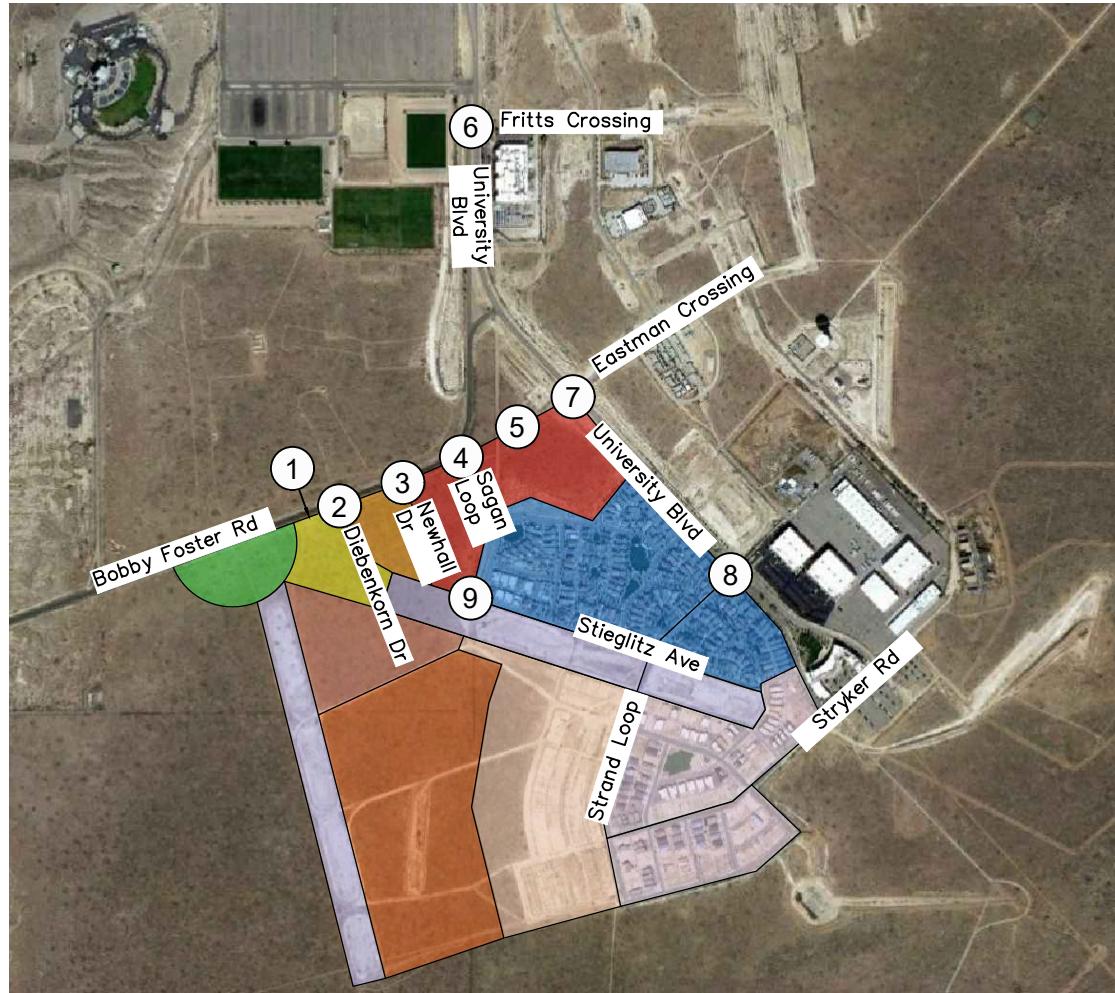
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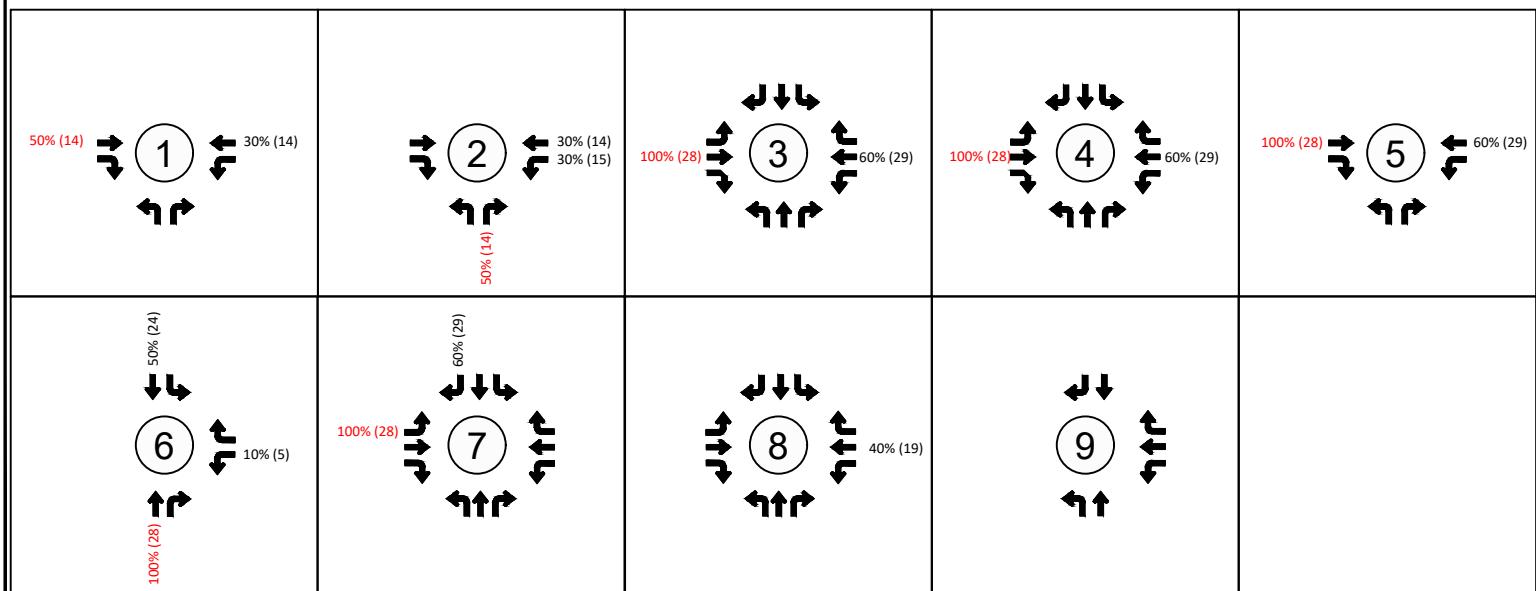
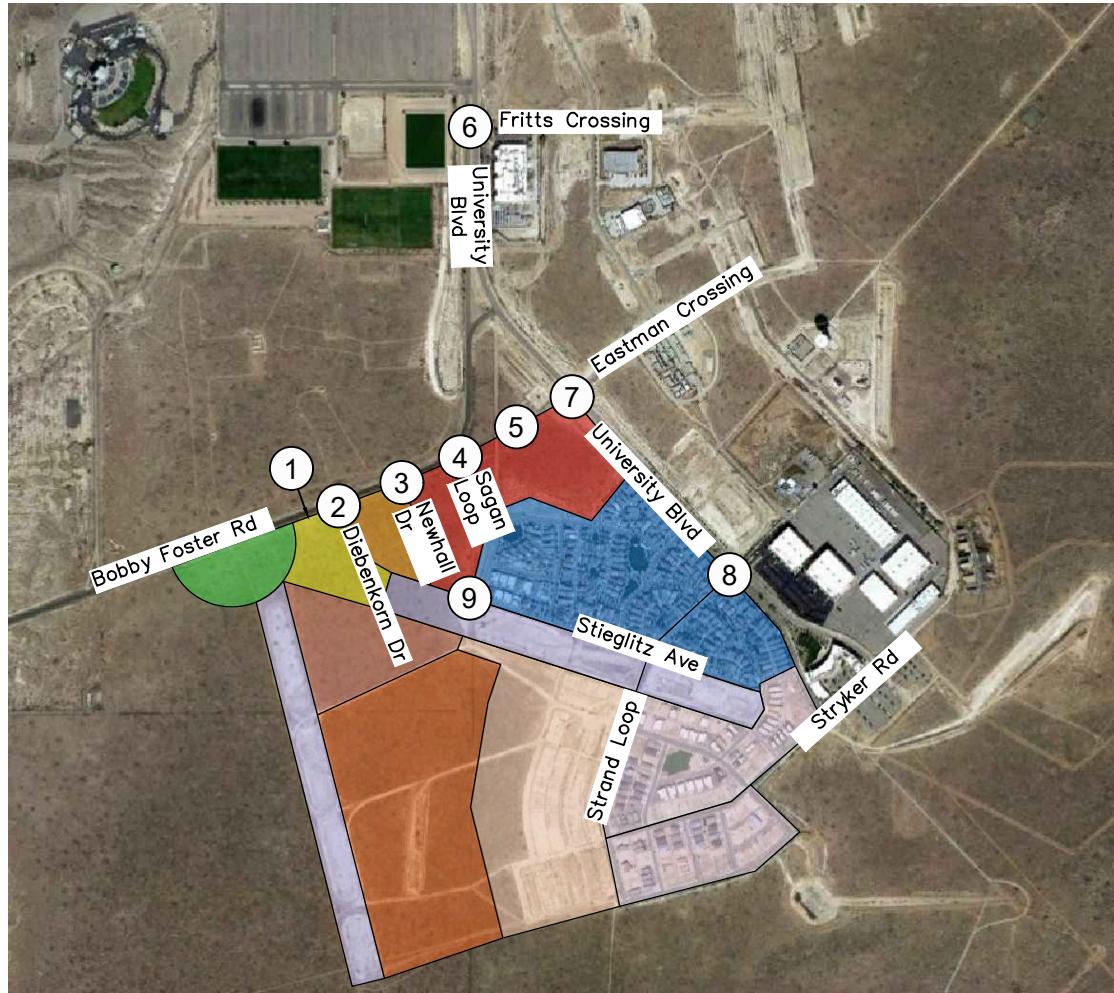
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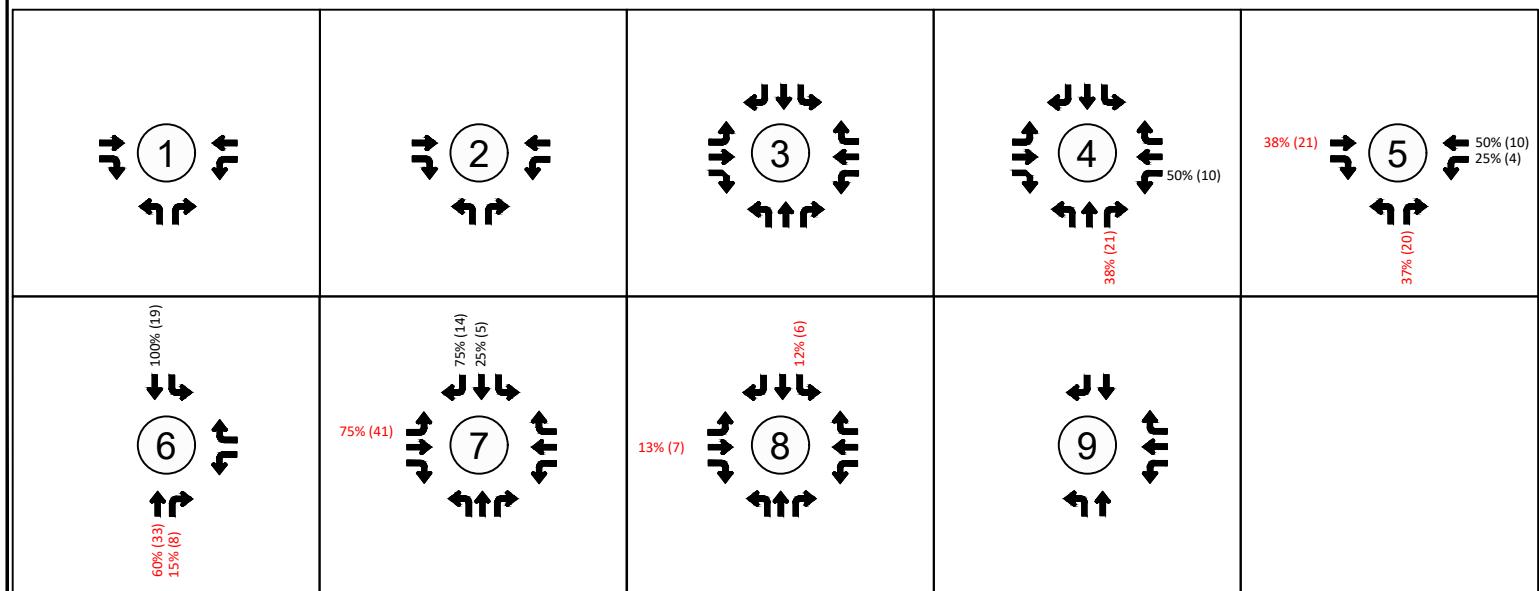
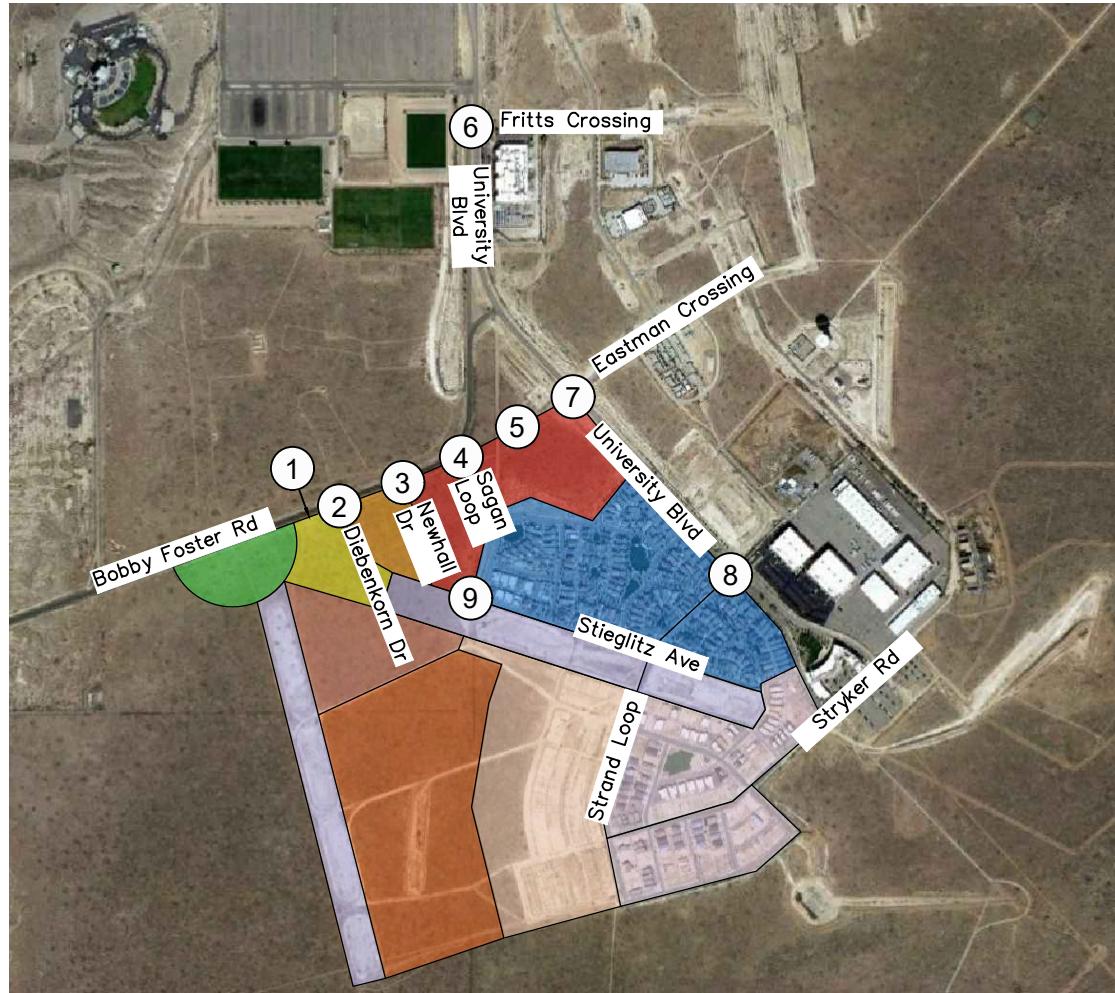
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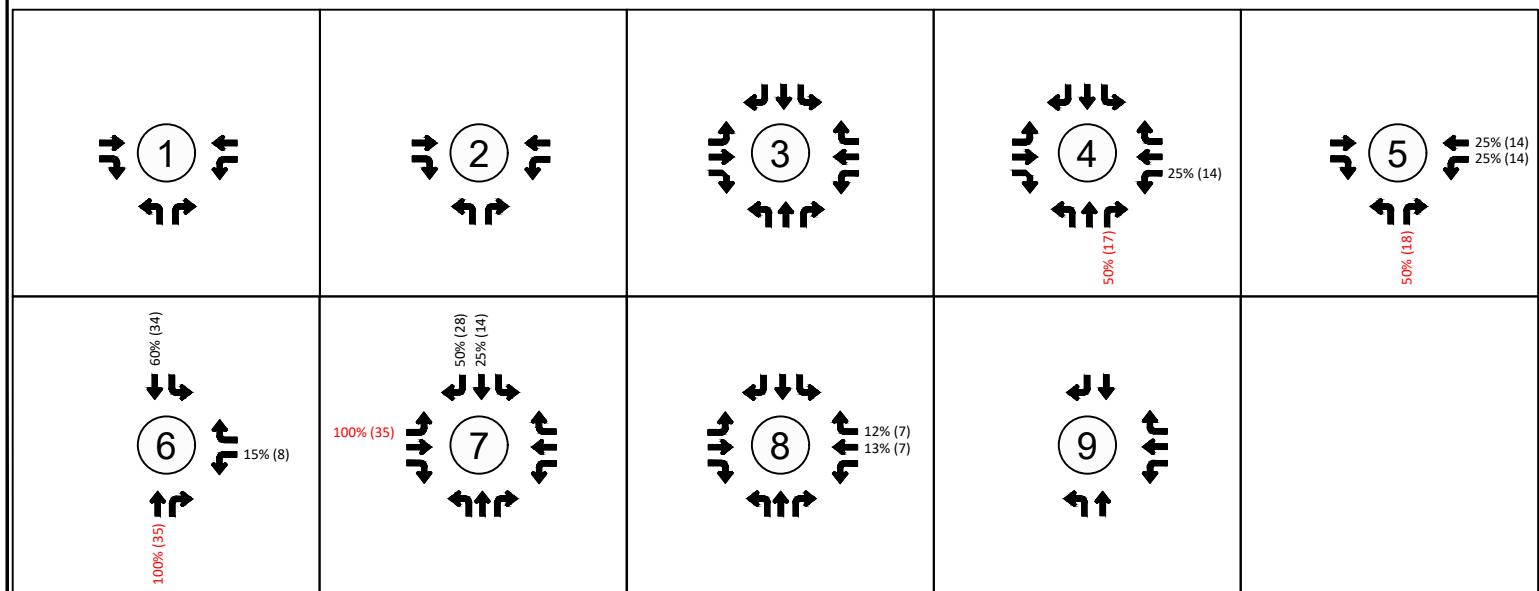
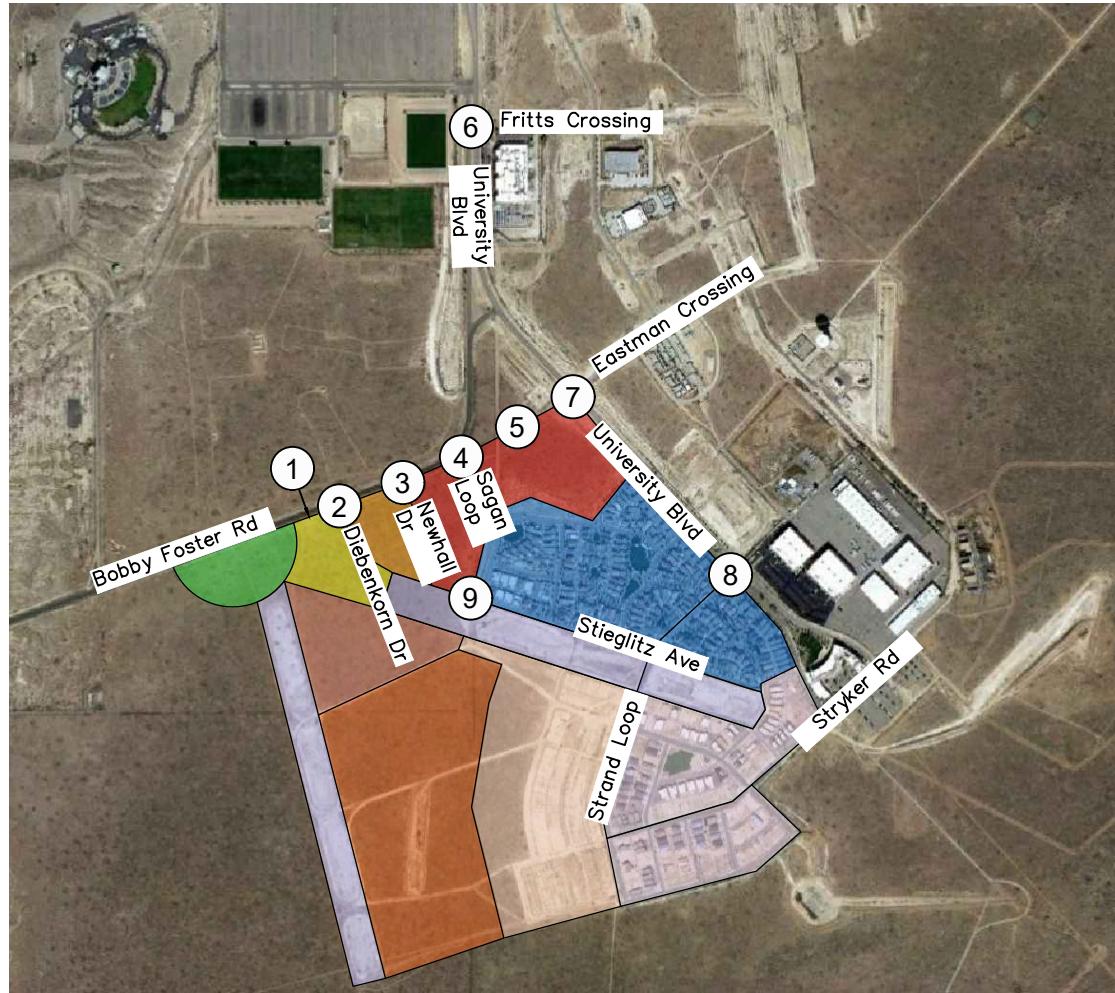
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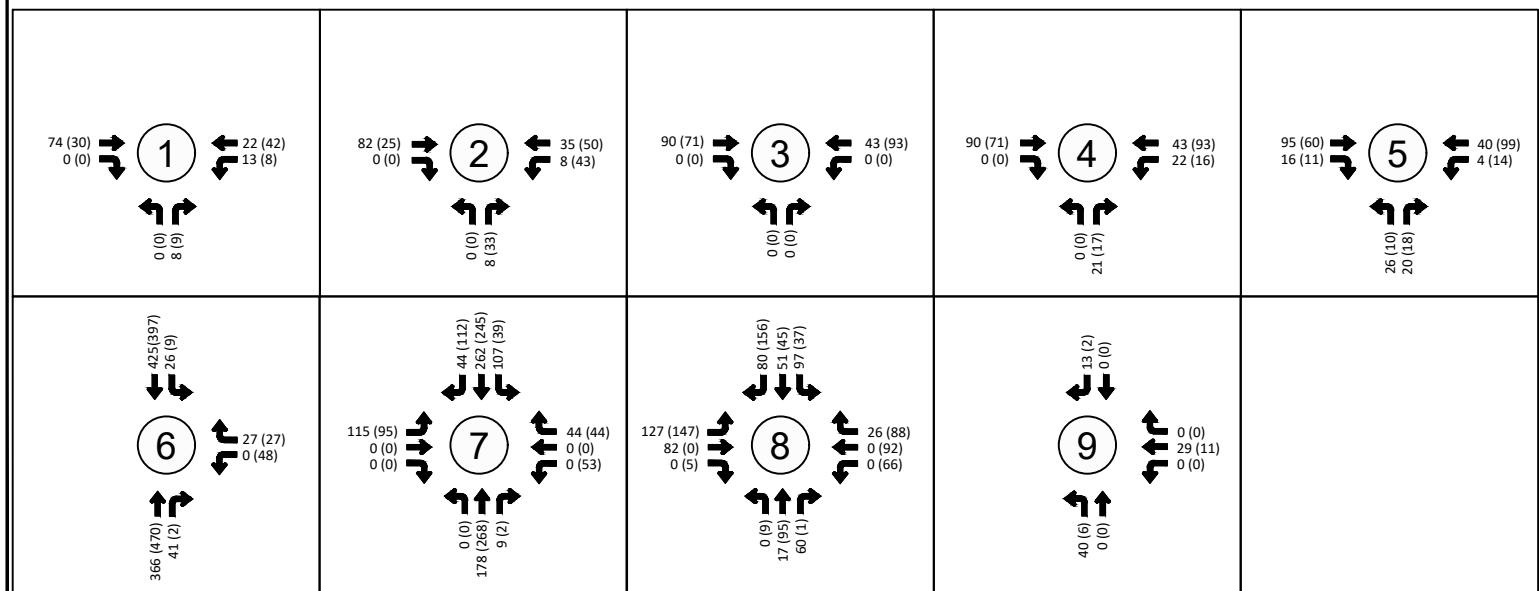
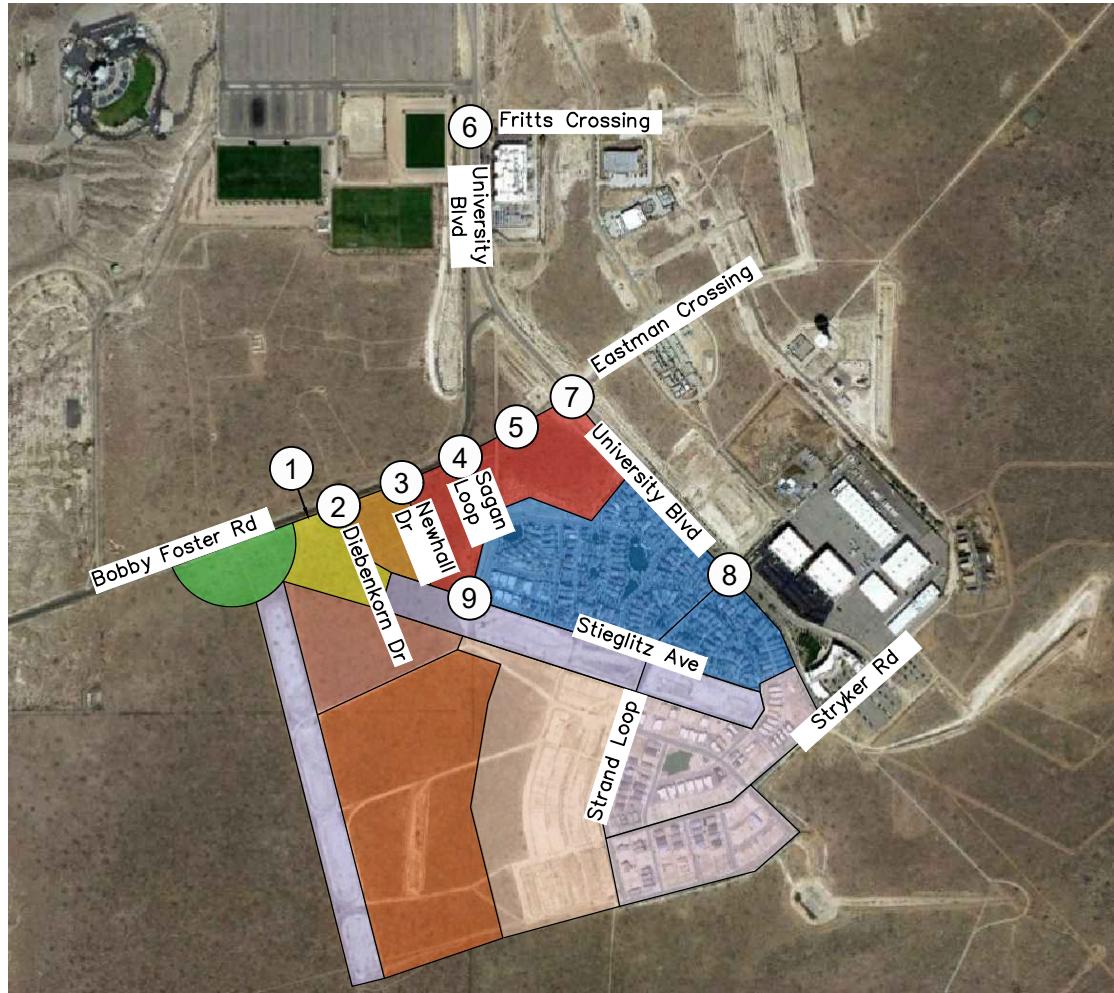
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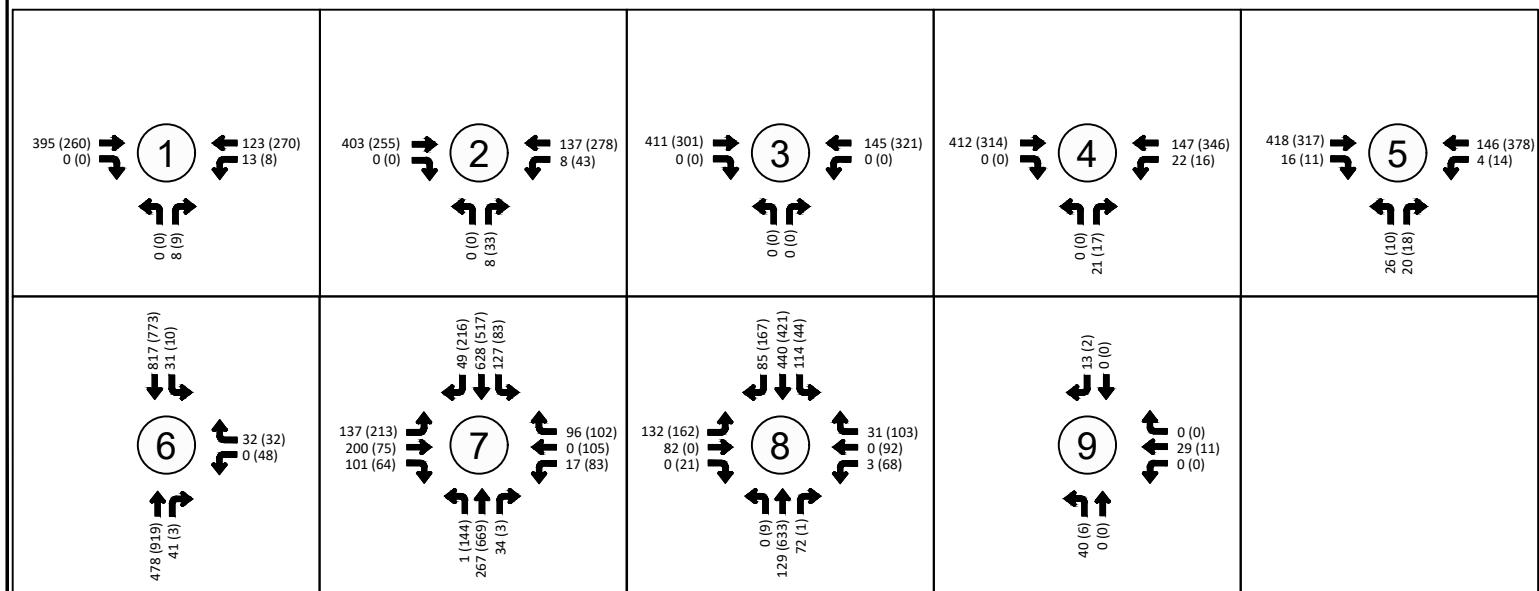
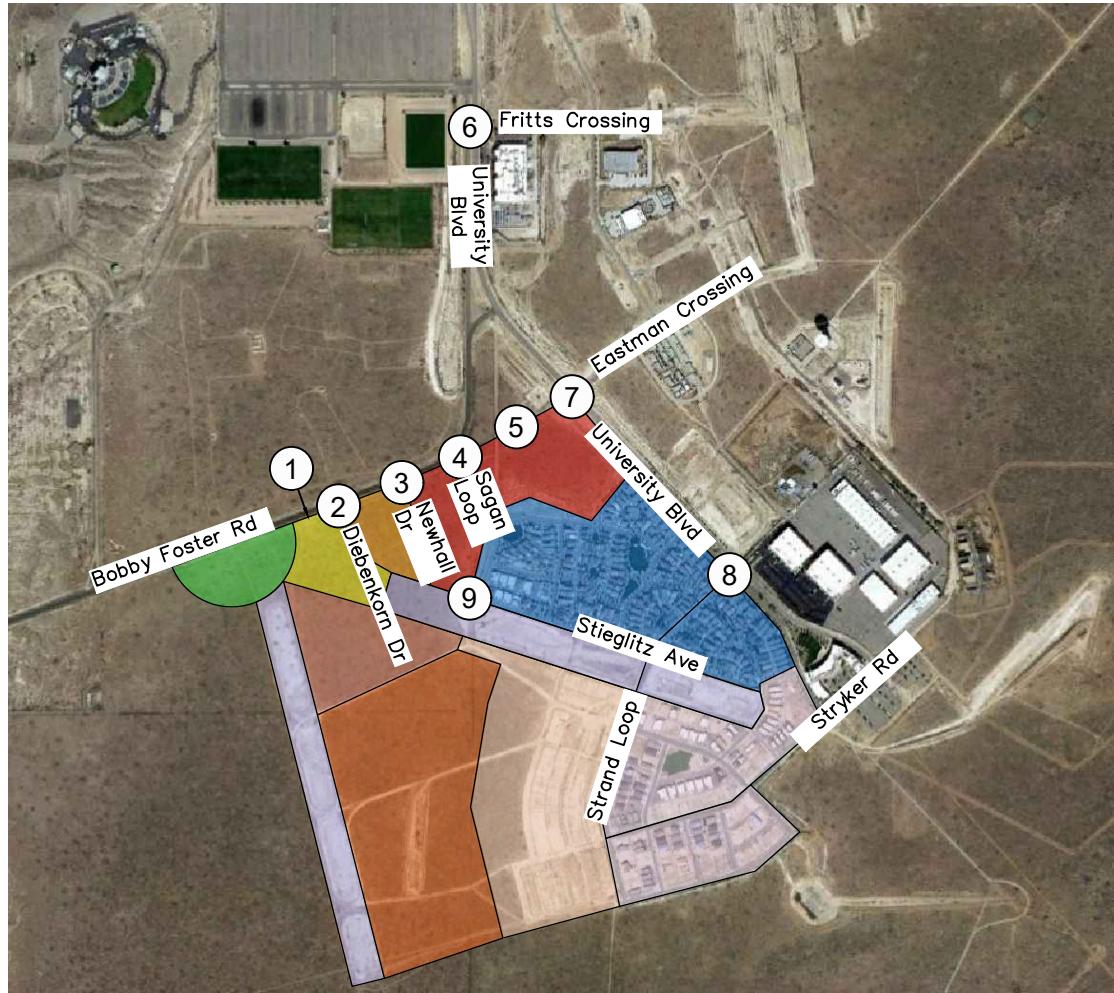
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### Legend

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- # (#) AM (PM)

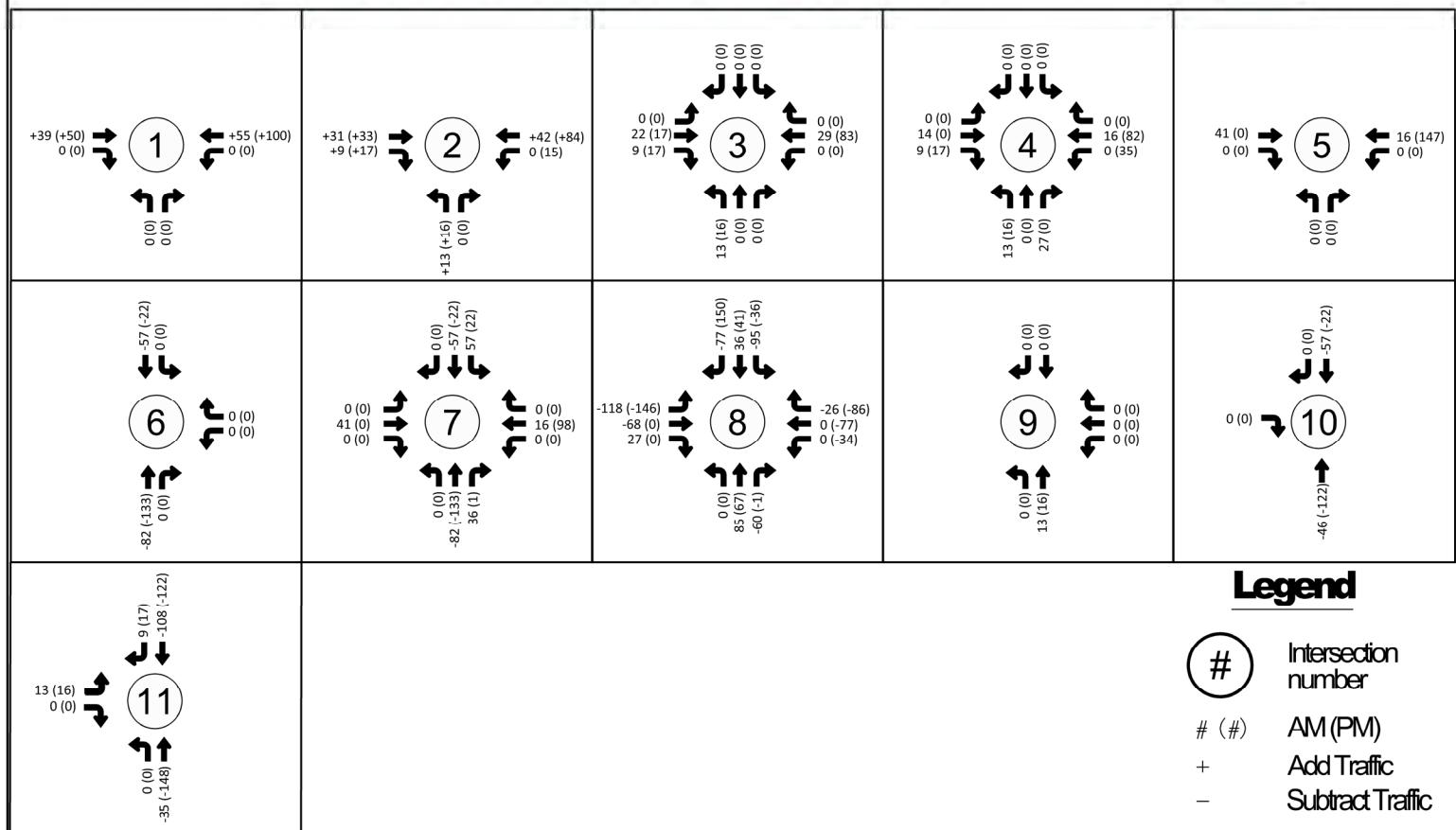
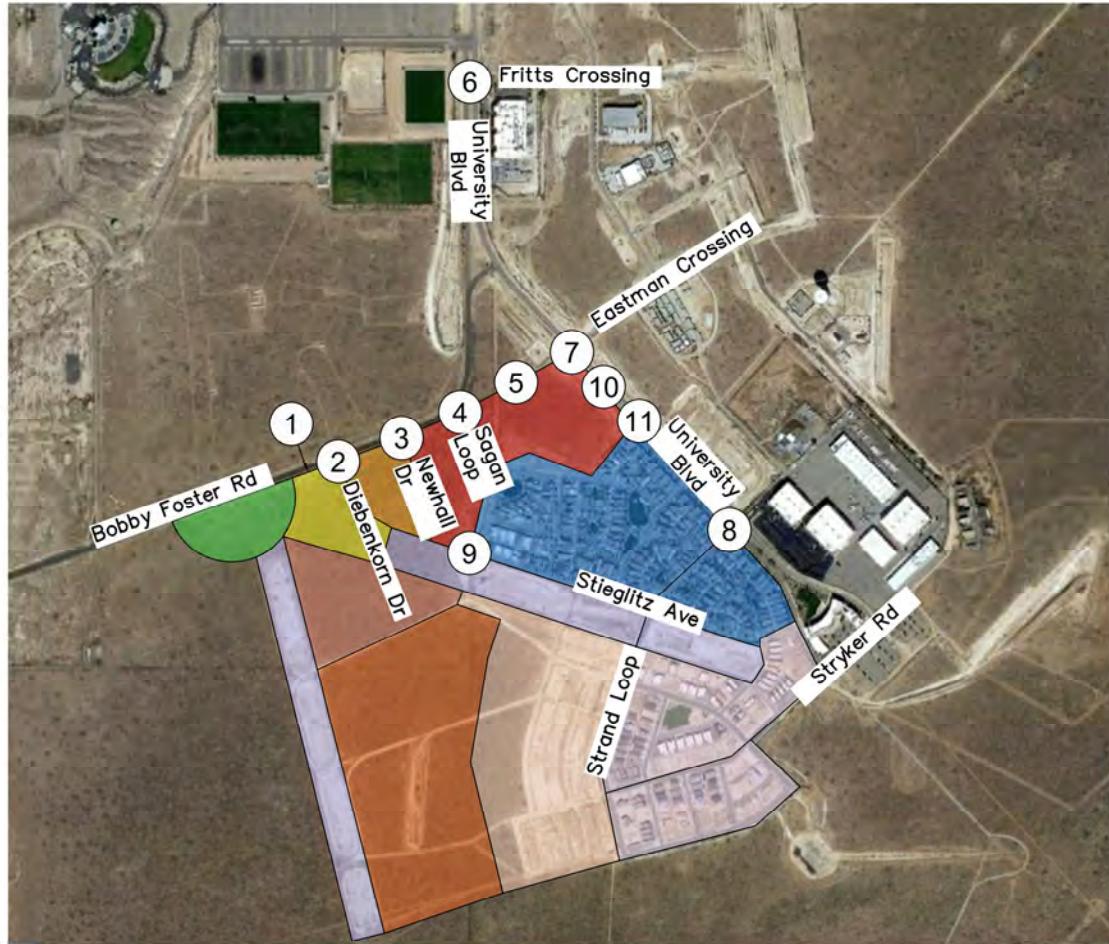
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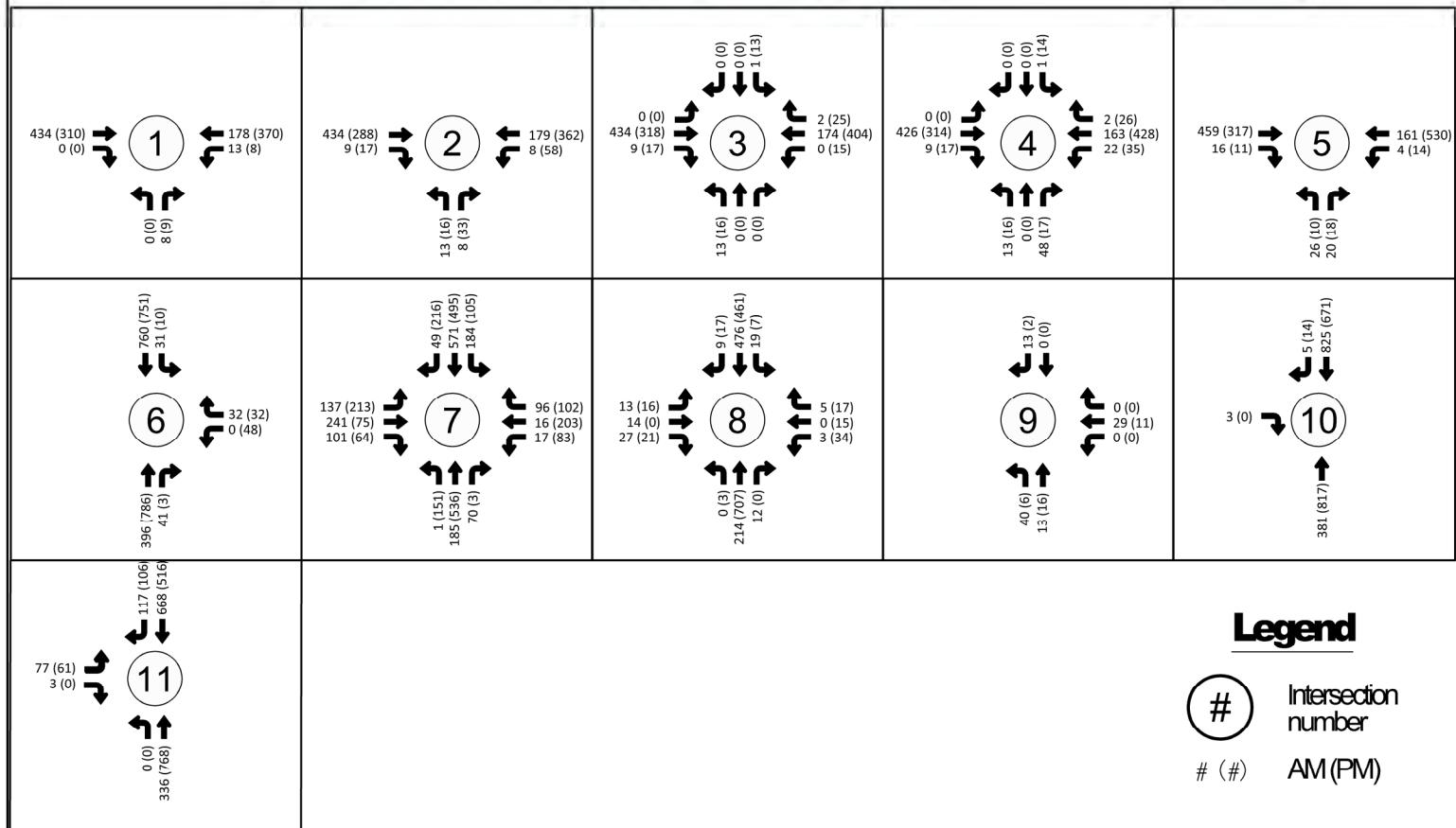
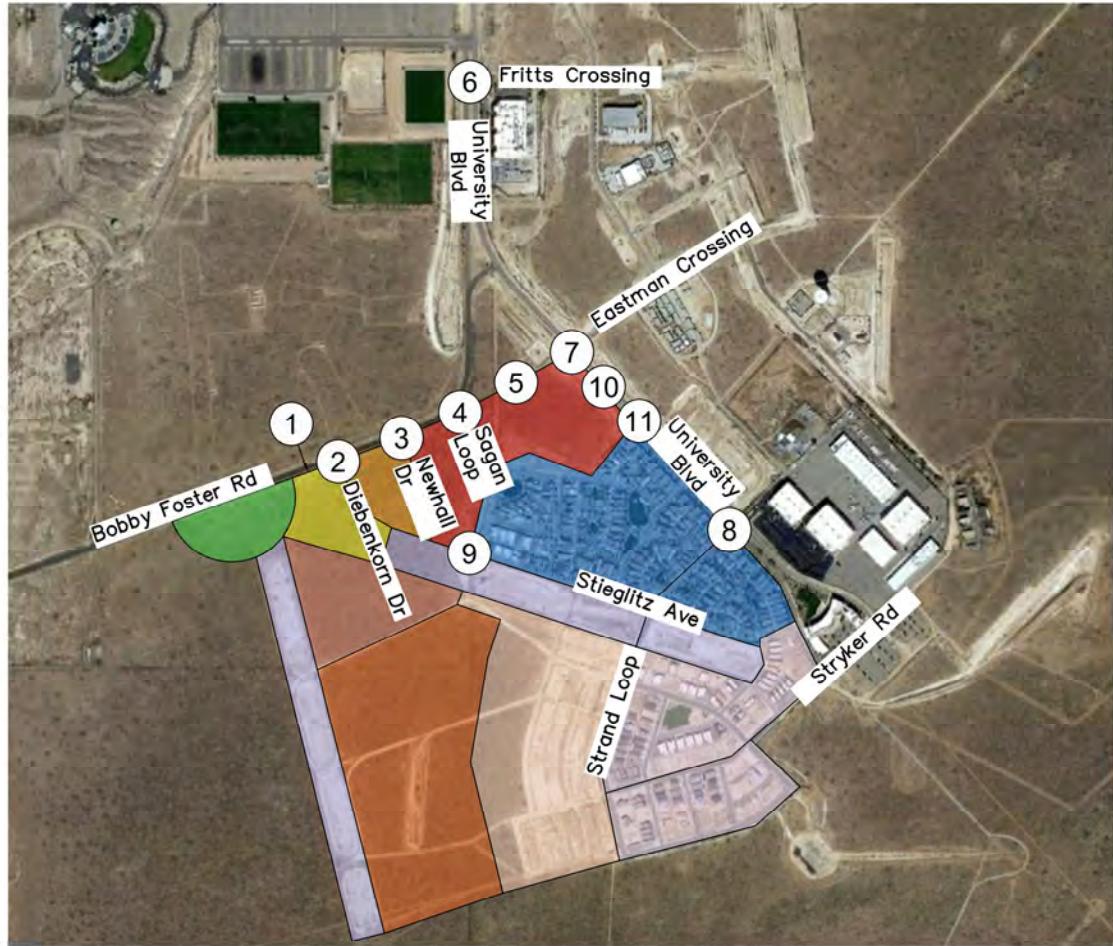
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### Legend

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- # (#) AM (PM)
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- Subtract Traffic

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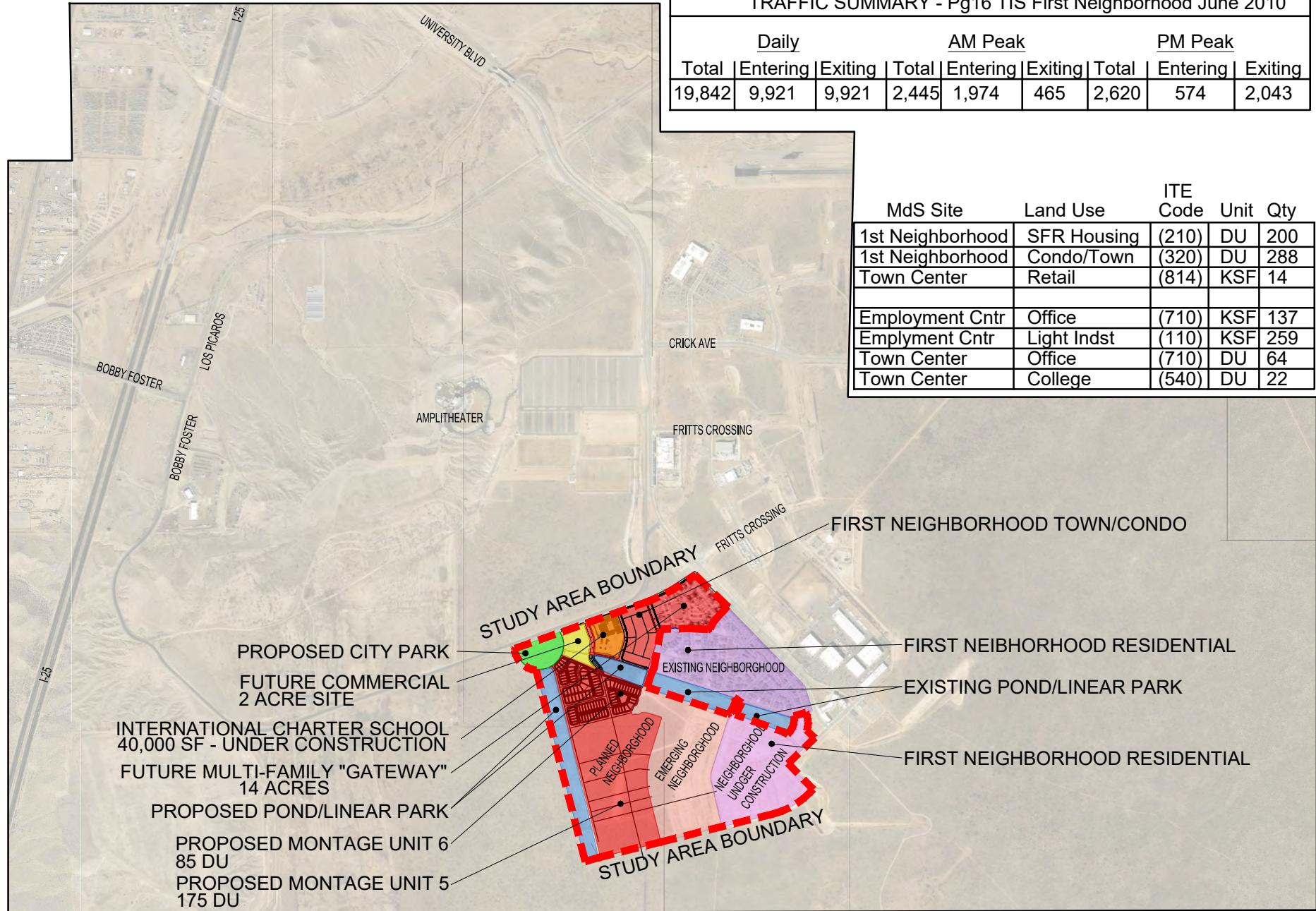


### Legend

- # Intersection number
- # (#) AM (PM)

# **APPENDIX B**

## **Montage Units Site Development Plan**

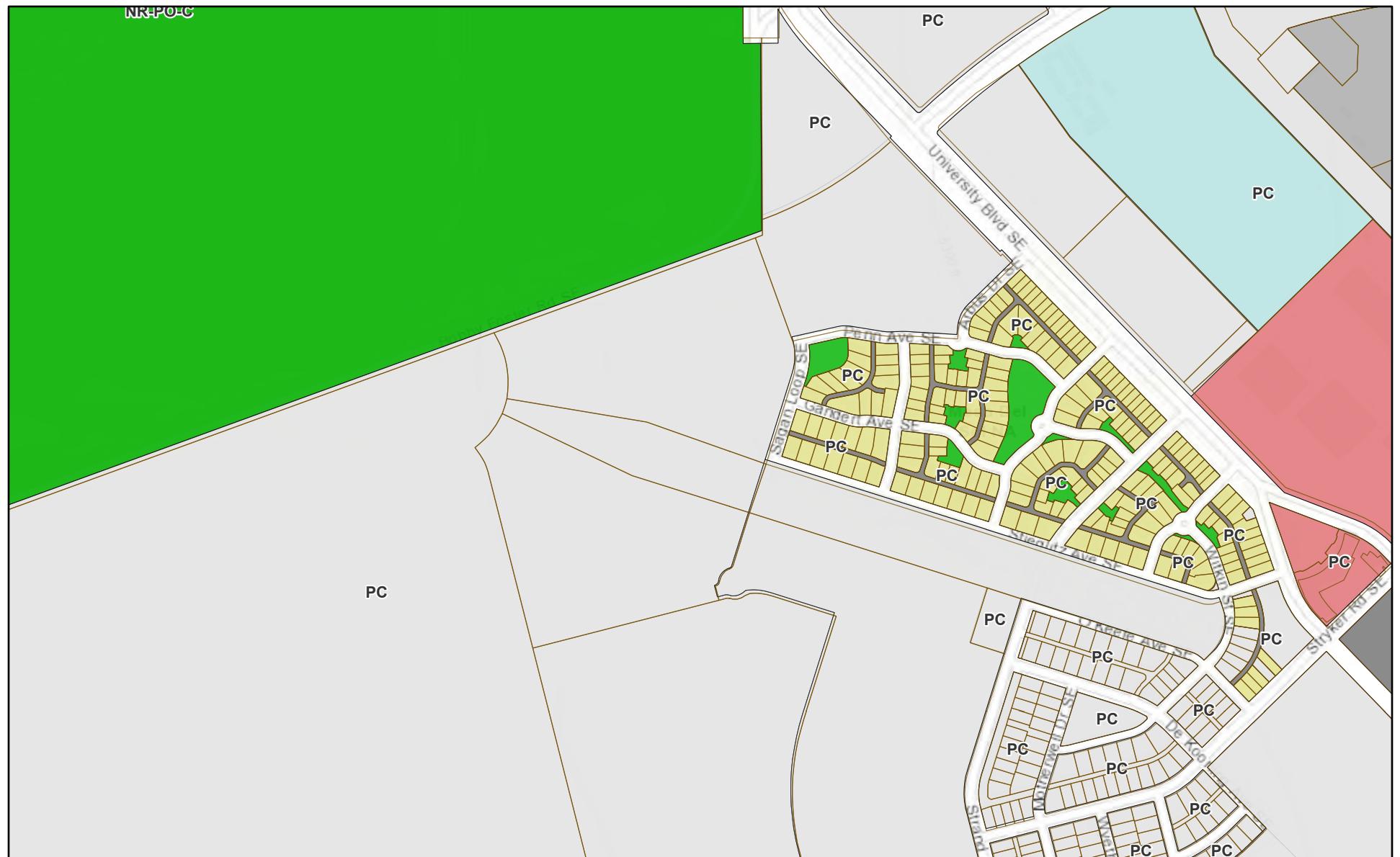


Designed For:  SC <sup>3</sup> DEVELOPMENT	MONTAGE UNIT 5 & 6 SUBDIVISION, INTERNATIONAL SCHOOL & GATEWAY MULTI-FAMILY MESA DEL SOL  TRAFFIC STUDY BOUNDARY SCOPING MEETING	Designed By:  <b>HUITT-ZOLLARS</b> Huitt-Zollars, Inc. 333 Rio Rancho Drive NE, Suite 101 Rio Rancho, New Mexico 87124 Phone (505) 892-5141 Fax (505) 892-3259	DATE: MARCH 2021  FIGURE A
--	---	--	--

# **APPENDIX C**

**Albuquerque, NM  
Zoning Map**

# Montage Units Albuquerque, New Mexico



June 7, 2021

1:9,028

0 0.05 0.1 0.2 0.4 km  
0 0.1 0.2

Bernalillo County, NM, City of Albuquerque, Bureau of Land Management,

# **APPENDIX D**

**Albuquerque Studios  
Master Plan Development TIS**



**Albuquerque Studios Master Plan  
Development**

Traffic Impact Study

HT# R16DA3006A  
received 6/28/2021

June 18, 2021

Prepared for:

Confidential Private Client

Prepared by:

Stantec Consulting Services Inc.



**ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

<b>Revision</b>	<b>Description</b>	<b>Author</b>		<b>Quality Check</b>		<b>Independent Review</b>	



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

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Prepared by \_\_\_\_\_ 06/18/2021

(signature)

**Clay Koontz, PE/PTOE; Traffic Engineer**

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**Colleen Ruiz, PE; Project Manager**

Approved by \_\_\_\_\_

(signature)

**Daryl Zerfass, PTP; Principal Traffic Engineering and Transportation Planning**



## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
<b>ABBREVIATIONS .....</b>	<b>VIII</b>
<b>1.0 INTRODUCTION AND BACKGROUND .....</b>	<b>1</b>
1.1 STUDY PURPOSE.....	1
1.2 STUDY PROCEDURES .....	1
1.2.1    Information Sources.....	1
1.2.2    Scope.....	2
1.2.3    LOS.....	2
<b>2.0 EXISTING CONDITIONS .....</b>	<b>2</b>
2.1 GENERAL AREA CHARACTERISTICS .....	2
2.2 AREA STREET NETWORK .....	6
2.3 EXISTING TRAFFIC VOLUMES .....	7
2.4 EXISTING LEVELS OF SERVICE (LOS) .....	8
2.5 EXISTING TRANSIT SERVICE.....	9
2.6 BICYCLE AND PEDESTRIAN CONSIDERATIONS .....	9
2.7 SAFETY EVALUATION/CRASH DATA .....	10
<b>3.0 FUTURE TRAFFIC CONDITIONS AND ANALYSIS YEARS.....</b>	<b>11</b>
3.1 PROJECT IMPLEMENTATION YEAR.....	11
3.2 SITE TRAFFIC .....	11
3.3 GROWTH IN THROUGH TRAFFIC.....	12
3.4 OTHER PLANNED DEVELOPMENT.....	14
3.5 CONSIDERATION OF PROGRAMMED ROADWAY IMPROVEMENTS.....	17
<b>4.0 PROPOSED SITE TRAFFIC CHARACTERISTICS .....</b>	<b>17</b>
4.1 SITE DEVELOPMENT CHARACTERISTICS.....	17
4.2 TRIP GENERATION.....	19
4.3 OTHER TRIP GENERATION CONSIDERATIONS.....	25
4.4 TRIP DISTRIBUTION .....	25
4.5 TRAFFIC ASSIGNMENT.....	28
<b>5.0 TRAFFIC ANALYSIS .....</b>	<b>28</b>
5.1 INTERSECTION AND ROADWAY ANALYSES .....	28
5.2 IDENTIFY ALTERNATIVE INTERSECTION AND ROADWAY DESIGNS .....	29
5.3 EVALUATE ALTERNATIVE INTERSECTION AND ROADWAY DESIGNS.....	30
5.4 PERFORM SIGNALIZATION AND STOP SIGN WARRANT ANALYSES.....	30
<b>6.0 SITE ACCESS REQUIREMENTS .....</b>	<b>31</b>



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

<b>7.0</b>	<b>SUMMARY OF FINDINGS.....</b>	<b>32</b>
<b>8.0</b>	<b>RECOMMENDATIONS AND MITIGATION MEASURES.....</b>	<b>33</b>
<b>9.0</b>	<b>REFERENCES.....</b>	<b>38</b>
<b>10.0</b>	<b>APPENDIX.....</b>	<b>38</b>

### LIST OF TABLES AND FIGURES

Figure 1. Studio Master Plan Phasing Exhibit.....	ii
Figure 2. Proposed Level B ADT Volumes .....	v
Table 1. City of Albuquerque (CABQ) Level of Service (LOS) Criteria.....	2
Figure 3. Study Area .....	4
Figure 4. Site Plan .....	5
Figure 5. Southbound University Boulevard at Site .....	6
Table 2. Summary of Intersection TMCs .....	7
Table 3. Summary of ADT (April 2021).....	8
Table 4. Summary of Intersection TMCs .....	8
Table 5. Summary of Existing LOS .....	8
Table 6. Existing Pedestrians and Bicycle Flow on University Boulevard .....	9
Figure 6. Crash Analysis (2017-2019).....	10
Figure 7. Historical Average Daily Traffic at Mesa del Sol .....	12
Figure 8. Amended Level B ADT Volumes with Roadway Vacations.....	13
Figure 9. 2026 No-Project AM Peak Hour Volumes.....	15
Figure 10. 2026 No-Project PM Peak Hour Volumes.....	16
Table 7. Existing Site Facilities.....	17
Table 8. Proposed Northern Development (Phase I).....	18
Table 9. Proposed Eastern Development (Phase II).....	18
Table 10. Proposed Phase III Periphery Development.....	18
Table 11. Peak Hour Trip Generation Projection by Access Type for Albuquerque Studios Expansion and Periphery Development .....	19
Figure 11. 2026 with Project AM Peak Hour Volumes.....	21
Figure 12. 2026 with Project PM Peak Hour Volumes.....	22
Figure 13. Buildout with Project AM Peak Hour Volumes .....	23
Figure 14. Buildout with Project PM Peak Hour Volumes .....	24
Figure 15. Hawking Vacation Redistribution.....	26
Figure 16. Eastman Vacation Redistribution .....	27
Table 12. Summary of Implementation Year (2026) LOS .....	28
Table 13. Summary of Horizon Year MdS Level B Master Plan LOS .....	29
Figure 17. Buildout Year Lane Configurations and Traffic Control.....	37



## Executive Summary

This Traffic Impact Study (TIS) was prepared for the Albuquerque Studios Master Plan development (Phase II) and incorporates Phase I traffic at the Albuquerque Studios Site located at (5650 University Blvd) Mesa del Sol (MdS) in Southeast Albuquerque. The study area for the Studio Master Plan development (Phase I plus Phase II) encompasses University Boulevard, Mesa del Sol Boulevard (future), Eastman Avenue, and Crick Avenue adjacent to the site frontage and areas within the boundary. The study area is shown in **Figure 3**.

The Studio Master Plan development is anticipated for build-out, implementation and opening in Quarter four (4) of Year 2023 (two years from present).

Phase I (Northern Phase) consists of an expansion of the existing film studio production operation to the north of existing (approximately 27 acres) as follows:

- |                     |              |         |
|---------------------|--------------|---------|
| • Vendor Village    | 2 Buildings  | 100 TSF |
| • Mill              | 2* Buildings | 50 TSF  |
| • Production Office | 1 Buildings  | 145 TSF |
| • Total             | 5 Buildings  | 295 TSF |

\*A second Mill is proposed as a replacement for an existing Mill for a net-zero increase in traffic for this building replacement.

The total building square footage of the existing Albuquerque Studios site is approximately 331 TSF.

Phase II (Eastern Phase) consists of an expansion of the existing and north film studio production operations to the east portion of the site (approximately 82 acres) as follows:

- |  |                   |         |
|--|-------------------|---------|
| • Production Office                                | 1 Building        | 75 TSF  |
| • Mills  | 2 Buildings       | 120 TSF |
| • Double Stages, production support with basecamps | 5 Units           | 260 TSF |
| • Daycare  | 1 Building        | 15 TSF  |
| • Total  | 9 Buildings/units | 470 TSF |

Phase II also consists of vacating a portion of Hawking Drive from Stryker Road to Eastman Avenue and Eastman Avenue from Gate D to Mesa del Sol Boulevard.



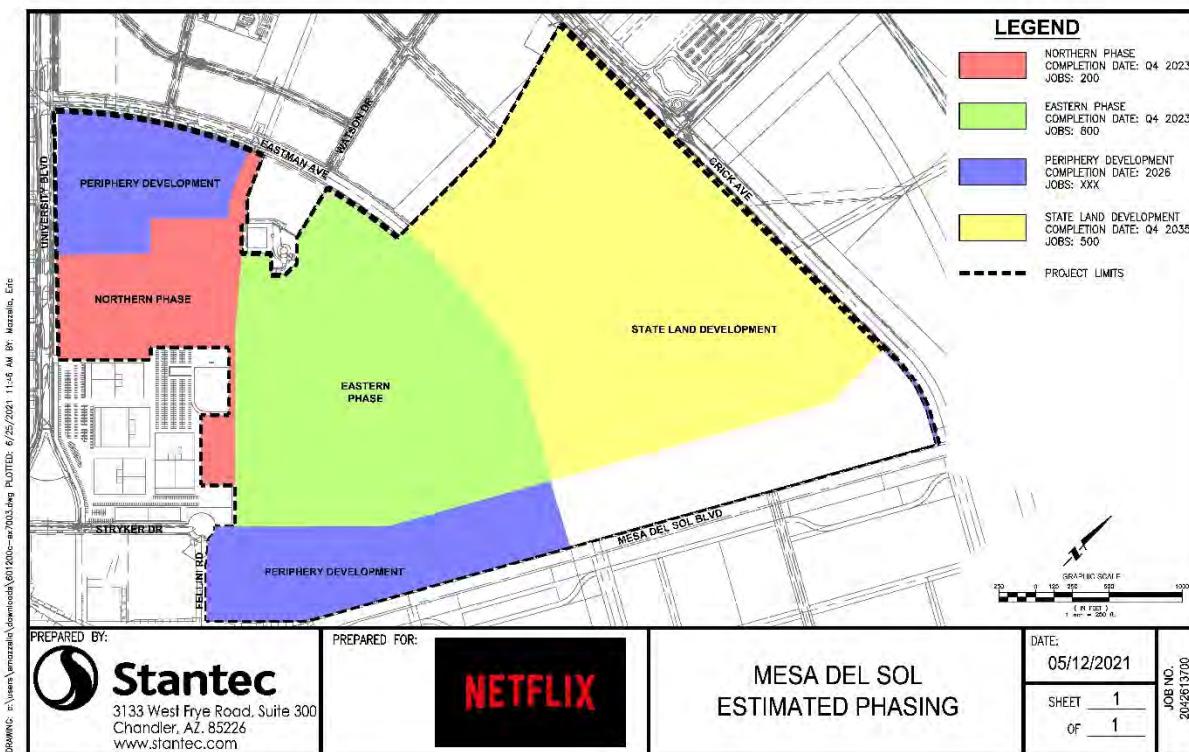
## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Phase III consists of site development (site periphery use) on the north (approximately 22 acres) and south (approximately 59 acres) portions of the site. The following periphery development is anticipated to occur by the end Year 2026.

- Office Headquarters (North) 400 TSF
- Office (South) 400 TSF
- Retail (South) 150 TSF

Additionally, the Owner has leased approximately 114 acres from the State Land Office (SLO) east of the eastern phase for long-term use. This long-term use is excluded from this TIS and will be considered at a future time when plans have been more fully developed.

**Figure 1. Studio Master Plan Phasing Exhibit**



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

The Average Daily Traffic (ADT) on University Blvd is 3,602 vehicles per day (April 2021) with nearly equal directional distribution (50%) in the northbound and southbound directions. The percentage of Heavy Commercial (%HC) was determined to be 5.15% during the study count period in April 2021.

The peak hour periods varied for the study area. On University Boulevard adjacent to the site, the corresponding AM Peak Hour, Noon Peak Hour, and PM Peak Hour occurred from 7:45 AM to 8:45 AM, 11:45 AM to 12:45 PM, and from 4:15 PM to 5:15 PM, respectively.

Six gates (Gates A-F) are proposed for the Studio Master Plan development area and are labeled on the site plan. Two additional future gates (Gates G and H) are preliminarily planned for the future studio development of the SLO area.

The projected trip generation for each gate is forecasted to be 43 in the AM Peak Hour and 43 for the PM Peak Hour.

The projected trip generation for the north periphery development is 260 in the AM Peak Hour, and 240 in the PM Peak Hour.

The projected trip generation for the south periphery development per driveway is: 78 in the AM Peak Hour and 146 in the PM Peak Hour.

Relative to the approved Level B Master Plan for MdS, this Albuquerque Studios Master Plan development including periphery is estimated at approximately 575 Thousand Square Feet (TSF) less than the current Level B Master Plan. In the AM peak hour, a decrease in overall trips by 739, including a decrease of 812 trips in the critical inbound direction (1071 vs. 1883), is forecasted. In the PM peak hour, a decrease of 202 trips in the critical outbound direction (1269 vs. 1471) is forecasted. During the PM peak hour in the inbound direction, the studio uses generate 112 trips compared to 103 trips for the current Level B Master Plan; however, with periphery development (retail and office), the PM inbound is a total of 775 trips due to retail use, resulting in an increase of 652 trips. The added retail use is complementary to the nearby large employment and residential areas and is not expected to have a regional impact. Future development of the SLO area with similar uses as proposed for the Studio Master Plan area would result in additional traffic reductions.

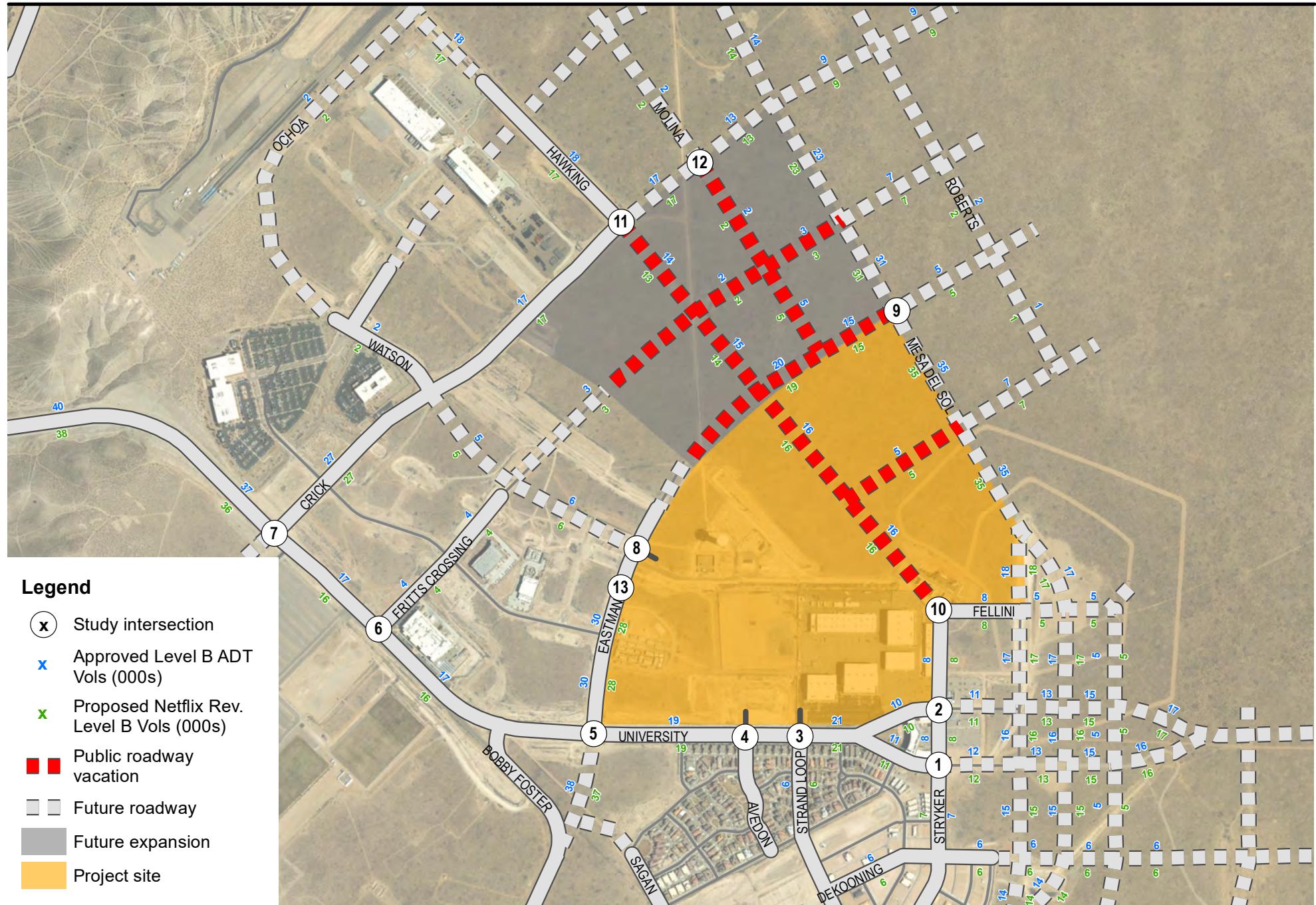
The traffic composition forecast on Hawking Drive and Eastman Avenue consists of through (background) traffic and site traffic. Upon vacation of Hawking Drive and Eastman Avenue, the traffic will be redistributed from Eastman Avenue and Hawking Drive to the adjacent roadways of University Boulevard, Mesa del Sol Boulevard, Crick Avenue and Watson Drive.



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

**Figure 2** shows the forecasted ADT volumes for the Study Area based on the current Level B Master Plan with a comparison to the forecasted ADT volumes for the Study Area with the reduced Studio Master Plan trip generation (note: roadway vacations are not included to provide a direct comparison of trip generation effects only).





**Figure 2**

Proposed Level B ADT Volumes

## Site Access Recommendations

Site access recommendations include all gates to be constructed with two exit lanes, two enter lanes, and stop-controlled traffic operation. Gates should be constructed similar to Gate A to allow for pedestrian access with ADA accommodations and required queue length of 160 feet (FT) on-site and 100 FT Left Turn bays on public streets where possible. This storage length is beyond the required length needed and analyzed. It is recommended that turn-around locations be provided in advance of the gate.

Additionally, pull-off areas designated for taxi and ridesharing should be provided at each gate.

## Adjacent Street Recommendations

- University Boulevard: Minor modifications to accommodate Gate A improvements and Gate B addition.
- Mesa del Sol Boulevard: Construction of  $\frac{1}{2}$  street improvements from Fellini Road to Crick Avenue for Master Plan traffic implementation year. Construct full build-out for horizon year traffic.
- Eastman Avenue: Construction of  $\frac{1}{2}$  street improvements from University Boulevard to Gate D for Master plan traffic implementation year. Construct build-out for horizon year traffic.
- Crick Avenue: Construction of  $\frac{1}{2}$  street improvements to connect Crick Avenue west to Mesa del Sol Boulevard for Master Plan traffic implementation year; Construct full build-out for Horizon Year traffic.
- Watson Drive: Watson Drive is an un-built street that would run N-S east of University. Watson Drive is currently proposed as a two-lane connector street in the Level B Master Plan for MdS. During the long-term horizon year, a four-lane facility should be considered to accommodate the future traffic volumes. It is recommended that a traffic analysis be revisited to assess the growth in MdS to validate this recommendation. As an alternative, a new two-lane connector could be considered along the west side of the SLO parcel (east of Watson Drive) that could accommodate the anticipated traffic flow, leaving Watson Drive as a two-lane street.



## Intersection Recommendations

1. University Boulevard and Eastman Avenue: Implementation year recommendations include a signalized intersection in the near term when one or more of the following “triggers” occur:

- Mixed-use development growth to the west of the site,
- Athletic Facilities/Complex improvements by Bernalillo County,
- Bobby Foster re-alignment,
- north periphery build-out and/or other development northeast of University and Eastman Avenue that will contribute additional Horizon Year traffic flows at this intersection.

It is also recommended that width for dual lefts for Westbound to Southbound for horizon year traffic conditions be included that can be re-marked as necessary in the future.

2. Mesa del Sol and Crick Avenue: Continuous flow Northbound to Westbound and Eastbound to Southbound movements until such time as other MdS development occurs north and east creating the need for additional traffic control for conflicting movements at this intersection. Ultimate build-out for the horizon year is recommended as a signalized intersection. Exclusive lanes (left-turn, through, right-turn) are recommended for horizon year traffic flows.

3. Mesa del Sol Couplets: Recommended for construction and implementation consistent with the Level B Horizon Year time frame.

## Periphery Driveway Recommendations

North Driveway: The north periphery driveway is recommended for the office build-out lanes use planned for this tract. Two inbound lanes, two outbound separated by a minimum four (4) FT raised median is recommended. Stop control is recommended for the outbound access lanes. The geometric designed to accommodate WB-50 design vehicle.

South Driveways: The south driveways are recommended for the forecasted office and retail use for these parcels. Driveways are recommended to be stop-controlled, 35 FT wide to provide two (2) outbound travel ways, and one inbound travel way. Geometry is to be designed per CABQ Curb Cut ordinance for either the WB-40 or WB 50 design vehicle.



## **Abbreviations**

AADT	Annualized Average Daily Traffic
AAWDT	Annualized Average Weekday Traffic
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AMPA	Albuquerque Metropolitan Planning Area
AWSC	All-way Stop Control
BC	Bernalillo County
CABQ	City of Albuquerque
COVID	Coronavirus
DPM	Development Process Manual
FAR	Floor Area Ratio
HC	Heavy Commercial
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System
LOS	Level of Service
MdS	Mesa del Sol
MRCOG	Mid-Region Council of Governments
NMDOT	New Mexico Department of Transportation
PC	Planned Community
PHF	Peak Hour Factor
SLO	State Land Office



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

SF	Square Feet
TAQA	Traffic Analysis and Querying Application
TIS	Traffic Impact Study
TMC	Turning Movement Count
TWSC	Two-Way Stop Control
SWA	Signal Warrant Analysis
UNM-TRU	University of New Mexico Traffic Research Unit
VPH	Vehicles per Hour



## **ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

### Introduction and Background

## **1.0 INTRODUCTION AND BACKGROUND**

This Traffic Impact Study (TIS) was conducted to support the Albuquerque Studios Master Plan and MdS Level B Master Plan amendment approval (including Partial Street Vacation for Hawking Street and Eastman Drive) for the expansion of the Albuquerque Studios site located at 5650 University Blvd in Mesa del Sol Planned Community in the City of Albuquerque. This TIS scope encompasses/includes the North Development Phase I TIS submitted on June 2, 2021, additional development for Phase 2 (East Studio Development) and includes a traffic assessment for site periphery uses described herein.

### **1.1 STUDY PURPOSE**

The study purpose is to assess the traffic impacts on the roadway network within the study area for the Master Plan expansion of the Albuquerque Studios site.

### **1.2 STUDY PROCEDURES**

The TIS procedures follow the current edition of the Development Process Manual (DPM), City of Albuquerque, dated September 4, 2020.

#### **1.2.1 Information Sources**

Existing traffic data were collected during the week of April 19, 2021, for use in this TIS. This data was used to develop the trip generation estimates for the site development and for development of the baseline for the traffic analyses.

Crash data were obtained from UNM-TRU (a division of the University of New Mexico geospatial and Population Studies Department) for the study area [TRU Request Data | Geospatial and Population Studies \(unm.edu\)](#)

The MRCOG website [Traffic Flow Maps and Busiest Intersections | Mid-Region Council of Governments, NM \(mrcog-nm.gov\)](#) was referenced in determination of background traffic and growth of traffic expected on University Blvd. Additionally, the Traffic Analysis and Querying Application (TAQA) available from MRCOG was referenced for existing traffic data to support this TIS.

“Big Data” Platform using anonymous cell phone “pings” and other Global Positioning System (GPS) devices was used to calibrate the traffic data for impacts of COVID to reflect Pre-COVID (“Normal”) traffic patterns and volumes was obtained for use in this TIS.



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

### 1.2.2 Scope

The scope of the TIS includes the Albuquerque Studios proposed site, exterior adjacent streets, and interior future streets considered for vacation (Hawking Drive and Eastman Avenue). Exterior streets include University Boulevard, Eastman Avenue, Mesa del Sol Boulevard (Future), and Crick Avenue (future) adjacent to the site. A total of eight (8) proposed gated access locations are proposed. Gate A is an existing gate for the stie. Gate B is proposed for Phase I, Gates C-F are proposed for Phase II, and Gates G and H are anticipated for future development of the SLO area. Up to eleven (11) proposed driveways are proposed, ten (10) onto future Mesa del Sol Boulevard/Fellini Road and one (1) onto Eastman Drive for future “Periphery” site uses contemplated for mixed-use of Office and Retail by year 2026.

### 1.2.3 LOS

The desired Level of Service (LOS) corresponds to LOS C-D (Table 7.5.88 pg. 7-164 DPM). LOS is a traffic analysis term that represents the delay traveling through intersections. Traffic LOS is designated “A” through “F” with LOS A representing free flow conditions and LOS F representing severe traffic congestion.

**Table 1. City of Albuquerque (CABQ) Level of Service (LOS) Criteria**

Functional Classification and Roadway Type	Employment Center
Collector	LOS C-D
Arterial at Employment Center (EC)	LOS D

## 2.0 EXISTING CONDITIONS

The roadway network and existing conditions are described in this section. Also described are current traffic volumes and roadway conditions used in the traffic analysis for this TIS.

### 2.1 GENERAL AREA CHARACTERISTICS

The project site is located in the planned community of Mesa Del Sol in southeast Albuquerque. Land use for the site is designated as Employment Center. Adjacent to the site and to the west is residential single-family housing. The Mesa del Sol Master



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

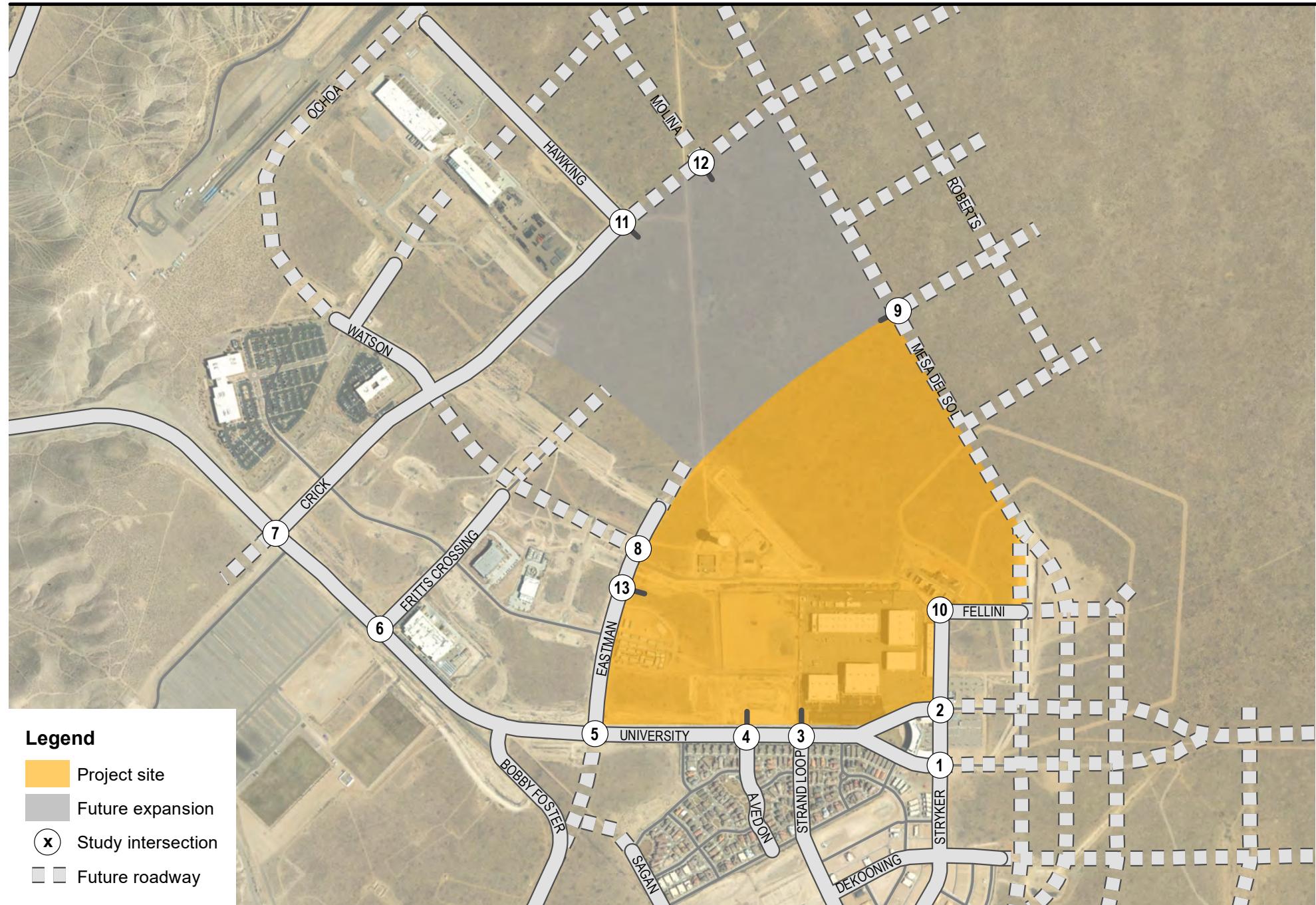
### Existing conditions

Plan includes a complete mixed-use land use. The site is currently zoned as a Planned Community (PC). A copy of the zone atlas page R-16-Z is provided in the Appendix. Other planned development at Mesa del Sol includes residential construction, schools, and planned construction/expansion of athletic facilities.

The study area is shown in **Figure 3**. The Site Plan is shown in **Figure 4**.



ALBUQUERQUE STUDIOS EXPANSION MASTER PLAN  
TRAFFIC IMPACT STUDY



**Figure 3**  
Study Area

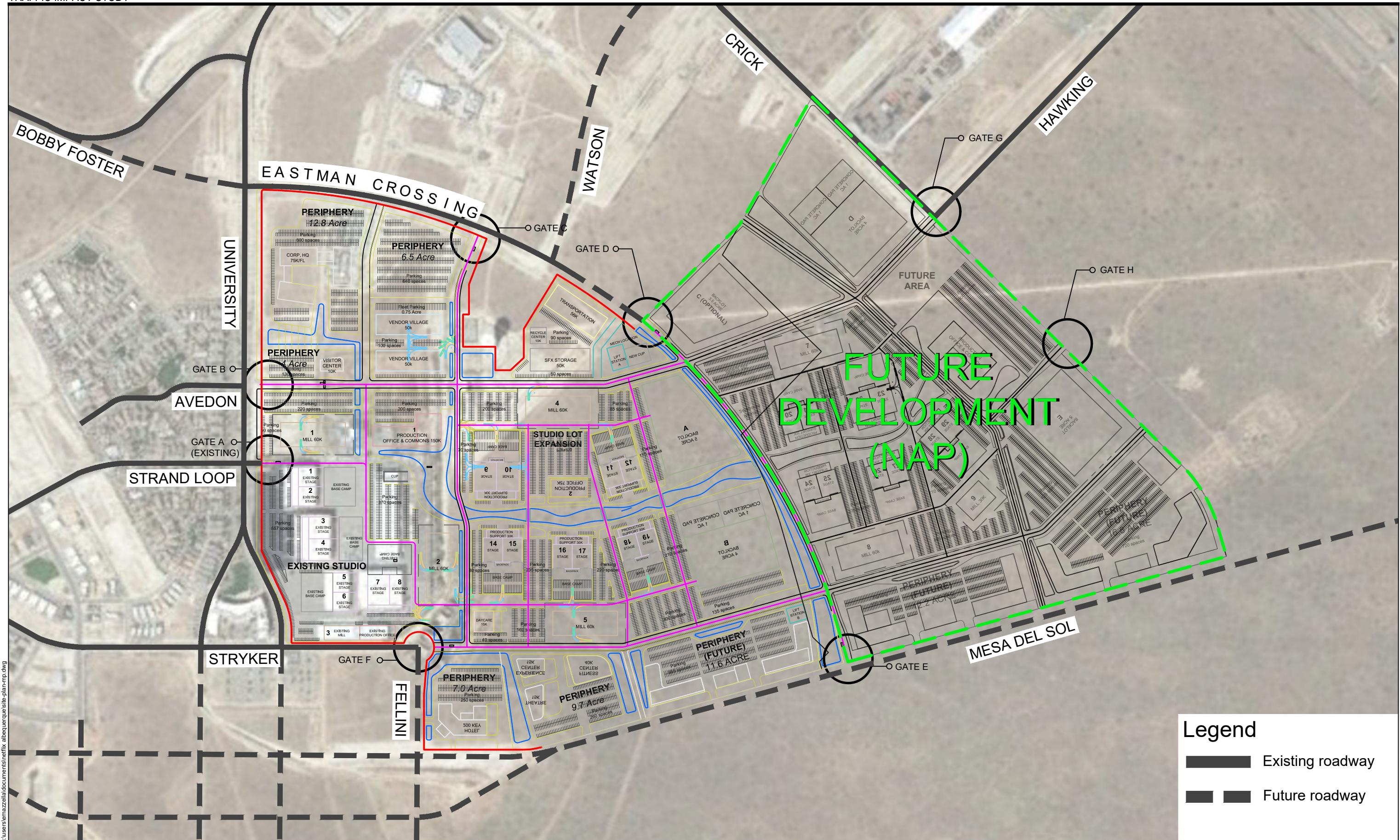


Figure 4  
Project Site Plan  
5



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

### 2.2 AREA STREET NETWORK

The street network in the influence area includes University Boulevard adjacent to the site and the corresponding intersecting streets Strand Loop SE/Gate A and Avedon Avenue SE. Both intersecting streets provide access to single-family residential.

University Boulevard is classified as an Urban Major Collector Street (Source MRCOG, Roadway-Functional Classification in the Albuquerque Metropolitan Planning Area [AMPA]). University Boulevard is constructed with two standard width driving lanes in the northbound (NB) and southbound (SB) directions with parallel parking along the outside curb line. The existing speed limit is 35 mph for University Boulevard. Bike lanes (5 feet) are provided along University Boulevard on the outside of the right thru travel lane. The street is a paved typical urban typical asphalt concrete pavement section with roadway lighting along University.

University Boulevard has existing permanent “Wrong Way” and “Do Not Enter” signs to alert vehicles of the illegal movement of NB traffic traveling in the SB lanes.

**Figure 5. Southbound University Boulevard at Site**



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

University Boulevard is constructed with a raised landscaped median (50 feet wide). 110 feet long left-turn lanes exist at the median openings along University Boulevard.

### 2.3 EXISTING TRAFFIC VOLUMES

Traffic data were collected for the study along University Boulevard from Crick Avenue (North) to Stryker Road (South). Average Daily Traffic (ADT) and intersection turning movement counts (TMC) were collected for this (TIS). Traffic data were collected during the week of April 19th, 2021. Raw traffic data is provided in the appendix.

Traffic data were calibrated using the NMDOT Methodology issued in October 2020. An analysis was conducted pre-COVID (April 2019) and during COVID (April 2020). A corresponding factor was obtained and applied to the April 2021 TMC traffic data collected for this Study. Any outliers determined using the “Big Data” platform were limited to a 1.42 increase or a 0.42 decrease. This value was determined from the ADT decrease from April 2019 to April 2020.

**Table 2. Summary of Intersection TMCs**

Intersection	AM Peak Hour*	PM Peak Hour*
1. University (SB) and Stryker	69 (7:30 AM – 8:30 AM)	43 (3:45 PM – 4:45 PM)
2. University (NB) and Stryker	32 (8:45 AM – 9:45 AM)	44 (3:45 PM – 4:45 PM)
3. University and Gate A/Strand Loop	200 (7:45 AM – 8:45 AM)	286 (4:15 PM – 5:15 PM)
4. University and Avedon	320 (7:45 AM – 8:45 AM)	299 (4:15 PM – 5:15 PM)
5. University and Eastman Crossing	387 (7:45 AM – 8:45 AM)	308 (3:00 PM – 4:00 PM)
6. University and Bobby Foster	295 (7:45 AM – 8:45 AM)	322 (3:00 PM – 4:00 PM)
7. University and Fritts	504 (7:45 AM – 8:45 AM)	433 (3:00 PM – 4:00 PM)
8. University and Crick	597 (7:45 AM – 8:45 AM)	560 (3:00 PM – 4:00 PM)

\*Data calibrated for COVID using NMDOT Methodology (Method 3, October 2020)



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

**Table 3. Summary of ADT (April 2021)**

Location	ADT – Direction 1	ADT – Direction 2
Stryker Rd.	233 (Eastbound)	250 (Westbound)
University Blvd*	1,602 (Northbound)	1,606 (Southbound)
*The percentage of Heavy Commercial (%HC) for University was 5.1%		

**Table 4. Summary of Intersection TMCs**

Intersection	AM Peak Hour*, **	PM Peak Hour*, **
1.Bobby Foster and Los Picos	97 (7:45 AM – 8:45 AM)	82 (3:45 PM – 4:45 PM)
2. Bobby Foster and Broadway	882 (6:30 AM – 7:30 AM)	1118 (3:45 PM – 4:45 PM)
3.University and Rio Bravo	1,072 (7:45 AM – 8:45 AM)	976 (3:00 PM – 4:00 PM)
4.Rio Bravo and Broadway	3,769 (6:45 AM – 7:45 AM)	4,519 (3:00 PM – 4:00 PM)
5. 2 <sup>nd</sup> Street and Rio Bravo	3,750 (7:45 AM – 8:45 AM)	4,774 (3:00 PM – 4:00 PM)

\*Data calibrated for COVID using NMDOT Methodology (Method 3, October 2020)

\*\*Traffic Data Collected by others for use in MdS Mixed-use development project April 2021. Calibrated by Albuquerque Studios TIS team for inclusion and use in this study.

Traffic data calibration limits of 52% increase/decrease for Bobby Foster Road, 19% increase/decrease for Broadway, 39% increase/decrease for Rio Bravo Boulevard, and 47% increase/decrease for 2<sup>nd</sup> Street were developed and used in this study when calibrating the TMCs.

## 2.4 EXISTING LEVELS OF SERVICE (LOS)

**Table 5. Summary of Existing LOS**

Intersection	Traffic Control	AM Peak Hour Delay (sec), LOS	PM Peak Hour Delay (sec), LOS
1. University (SB) & Stryker	TWSC	0, A	9.3, A
2. University (NB) & Stryker	TWSC	8.3, A	0.0, A

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

3. University & Ex Gate/Strand Loop	TWSC	10.8, B	10.3, B
4. University & Future Gate B/Avedon	TWSC	10.1, B	9.8, A
5. University & Eastman Crossing	TWSC	8.8, A	9.3, A
6. University & Bobby Foster	TWSC	9.8, A	9.8, A
7. University & Fritts Crossing	TWSC	9.4, A	9.8, A
8. University & Crick	TWSC	9.2, A	9.7, A

The existing storage length for ingress traffic is 150 feet at the gate for the Southbound to Eastbound turning movement. Existing Gate A storage is for approximately twelve (12) vehicles on site and an additional four (4) vehicles on University Blvd. (SB to EB).

An existing queuing analysis was conducted on May 20, 2021. Arrivals to Gate A and processing of vehicles into the site were analyzed during the 11:30 AM to 1:00 PM noon peak period. The maximum queue length was two (2) vehicles during this period. Gate processing rates generally took less than five (5) seconds. Maximum gate processing times were approximately three (3) minutes. The maximum rate occurred on occasion but not routinely.

## 2.5 EXISTING TRANSIT SERVICE

At present time, public transit/transportation is not available to or from MdS. Rio Bravo Boulevard is the closest facility with transit service at the present time. Future transit service to MsD is currently being planned for. The nearest transit stop/service is from Rio Bravo Boulevard bus route 222.

## 2.6 BICYCLE AND PEDESTRIAN CONSIDERATIONS

Multi-modal transit plays an important role in the MdS community. Bike lanes exist along both sides of University Boulevard. Public sidewalks parallel University Boulevard and are constructed to meet Americans with Disabilities Act (ADA) requirements. Additional protection is provided to pedestrians with a landscaped buffer on University Boulevard.

**Table 6. Existing Pedestrians and Bicycle Flow on University Boulevard**

Intersection	Daily Pedestrian Flow	Daily Bicycle Flow
1. University (SB) and Stryker (9-hour)	26	2
2. University (NB) and Stryker (9-hour)	2	0
3. University and Gate A/Strand Loop (12-hour)	40	1
4. University and Avedon (9-hour)	33	0
5. University and Eastman Crossing (12-hour)	12	1
6. University and Bobby Foster (12-hour)	0	2

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

Existing conditions

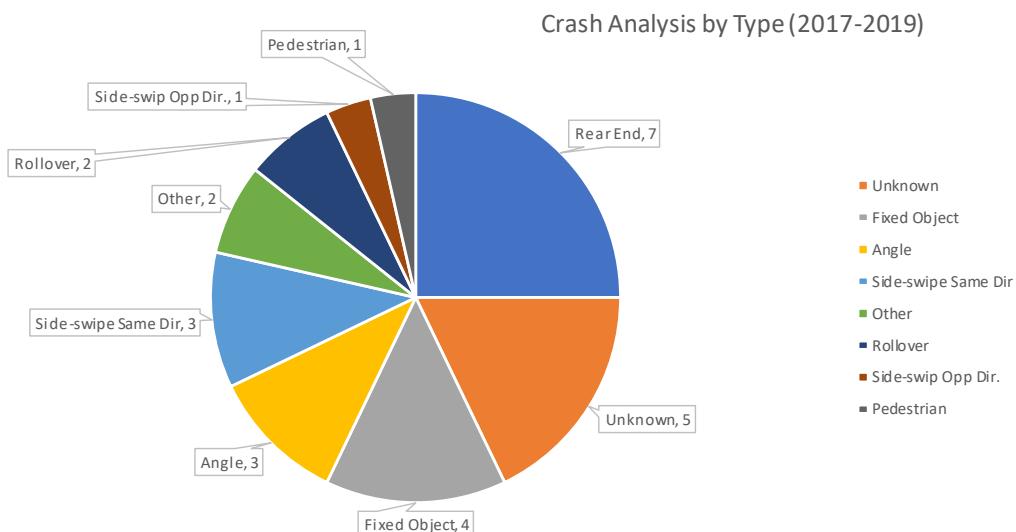
7. University and Fritts Crossing (9-hour)	4	2
8. University and Crick (9-hour)	1	0

## 2.7 SAFETY EVALUATION/CRASH DATA

Crash data along University Boulevard and in the study area were obtained from UNM-TRU for the three most recent years available (2017-2019). There was a total of twenty-eight (28) crashes during the three-year period. There were no reported fatal crashes. There was one (1) reported serious injury crash, two (2) non-serious injury crashes, three (3) possible injury crashes, and twenty-two (22) property damage only crashes. The average crash frequency for the area was just over nine (9) crashes per year during the study period.

The crash analysis revealed that the predominant types of crashes were rear end (7) and Fixed Object (4). There were five (5) crashes of unknown type. There were three (3) angle crashes and three (3) side-swipe same direction crashes. Angle crashes typically occur at intersections or access locations.

**Figure 6. Crash Analysis (2017-2019)**



future traffic conditions and analysis years

## 3.0 FUTURE TRAFFIC CONDITIONS AND ANALYSIS YEARS

### 3.1 PROJECT IMPLEMENTATION YEAR

The North Development (Phase I) and East Development (Phase II) are anticipated for implementation, build-out, and opening in Quarter 4 of 2023 (two years from present). The implementation year for the periphery development is year 2026.

### 3.2 SITE TRAFFIC

Site traffic is traffic attributable to the site development at time of implementation and opening (Q4, Year 2023).

The site traffic forecasted for the Studio development traffic (North and East Phases) during the AM and PM Peak hours for each gate are as follows:

- AM Peak Hour - Total of 43 Trip Ends
- PM Peak Hour - Total of 43 Trip Ends

The total traffic forecasted for the Periphery areas (North (1 driveway)) and South (up to 10 driveways) during the AM, and PM Peak hours for each driveway are as follows:

- North AM Peak Hour - Total of 260 Trip Ends
- North PM Peak Hour - Total of 216 Trip Ends
- South AM Peak Hour - Total of 88 Trip Ends
- South PM Peak Hour - Total of 146 Trip Ends

A Trip End is defined as either an arrival to the site or departure from the site.

The site traffic is further described and detailed in the Trip Generation Section of the report in Section 4.2 Trip Generation.

Internal Capture rates of 5% were used between residential and office and 10% for office to Retail. ITE Internal Capture data were reviewed. Upon review of the ITE data, engineering judgement was used to select the internal capture rates used in this analysis.

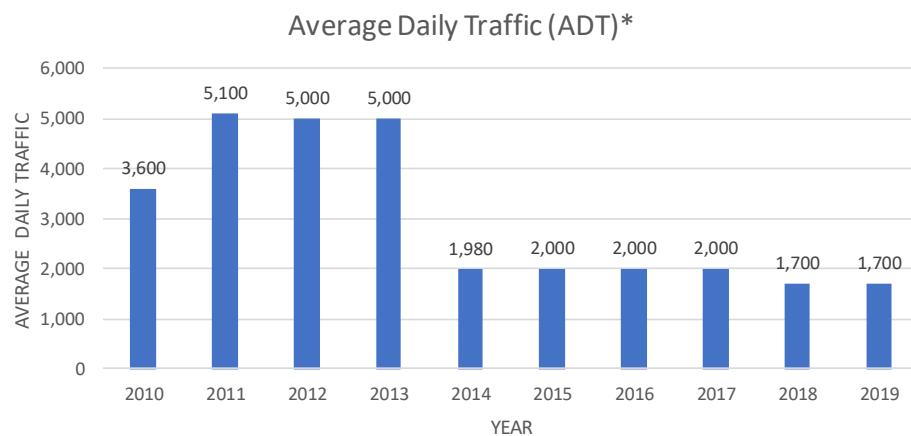
## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

future traffic conditions and analysis years

### 3.3 GROWTH IN THROUGH TRAFFIC

A review of the MRCOG 10-year historical growth rate in traffic are shown to have declined from 3,600 ADT in 2010 to 1,700 in 2019. Based upon the decline, this study has elected to use a 0.5% annualized growth rate (Minimum required by DPM, reference pg. 7-167).

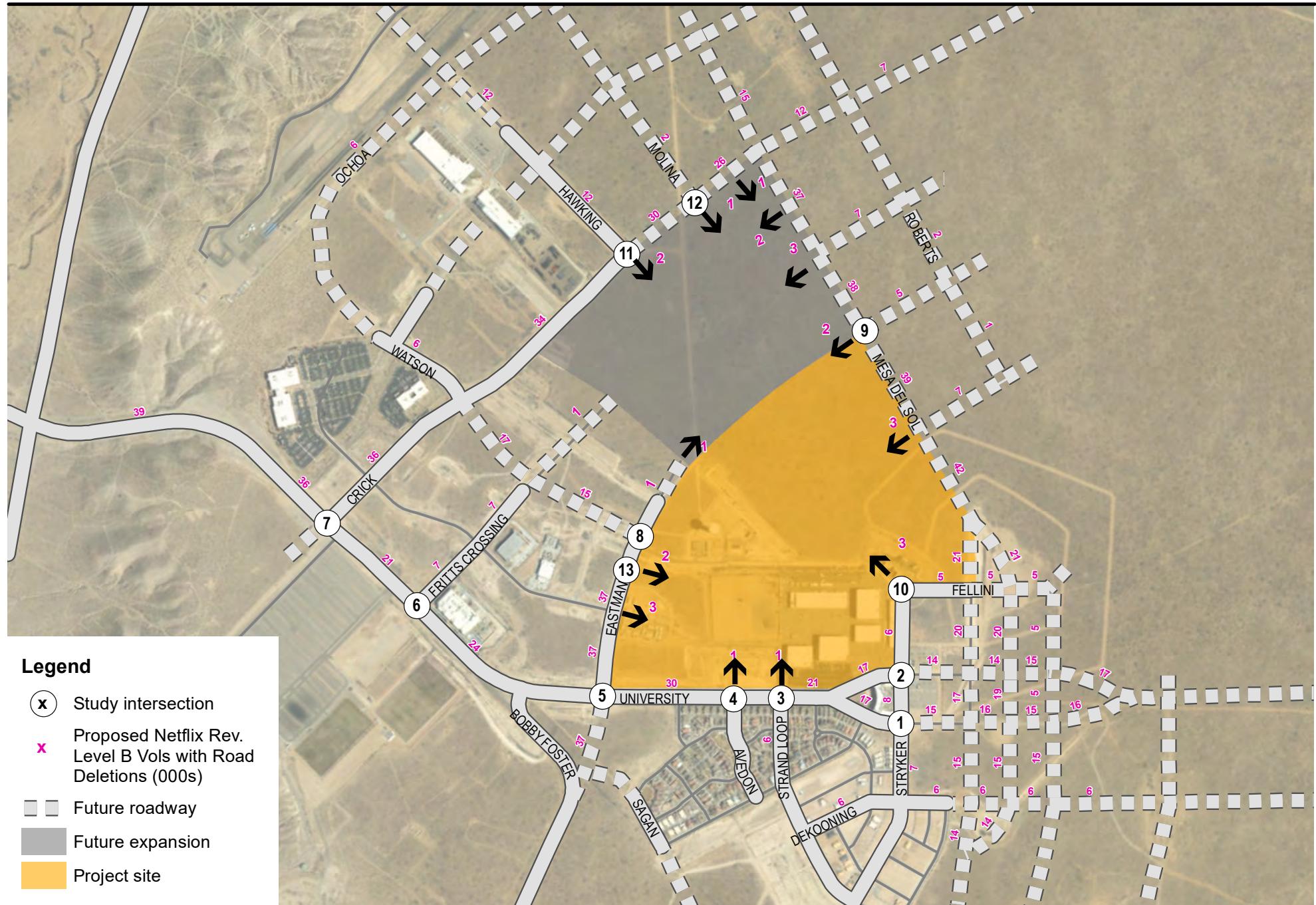
**Figure 7. Historical Average Daily Traffic at Mesa del Sol**



\*Source MRCOG website.

The ADT forecasts for the current Level B Master Plan for MdS, amended for the Project and necessary roadway vacations are shown in **Figure 8**.





**Figure 8**

Amended Level B ADT Volumes with Roadway Deletions

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

future traffic conditions and analysis years

### 3.4 OTHER PLANNED DEVELOPMENT

There is ongoing development at MdS. The projects have been coordinating traffic data for existing conditions and proposed conditions for this study. This coordination is anticipated to continue with future master planning for this Albuquerque Studios Site. Other known planned development consists of residential, commercial, retail, and construction of a new school and athletic facilities.

Trip Generation provided to the Albuquerque Studios Project Development team for the MdS Mixed-use development is summarized as follows:

AM Peak Hour Enter	271
AM Peak Hour Exit	496
PM Peak Hour Enter	534
PM Peak Hour Exit	336

This site is located west of the Mesa del Sol residential area, south of Bobby Foster Road and west of University Boulevard. Based upon a review of the site, a trip distribution of 50% is forecasted to/from the west (Bobby Foster Road) and 50% is forecasted to/from University Boulevard. The implementation year for this TIS distributes the University Boulevard portion of the traffic 70% (University Boulevard & Bobby Foster Road/Eastman Avenue), 15% (University Boulevard & Avedon Avenue), and 15% (University Boulevard and Strand Loop SE):

**Figures 9 and 10** show the AM and PM Peak Hour for 2026 without the Project based on the current MdS Level B Master Plan.



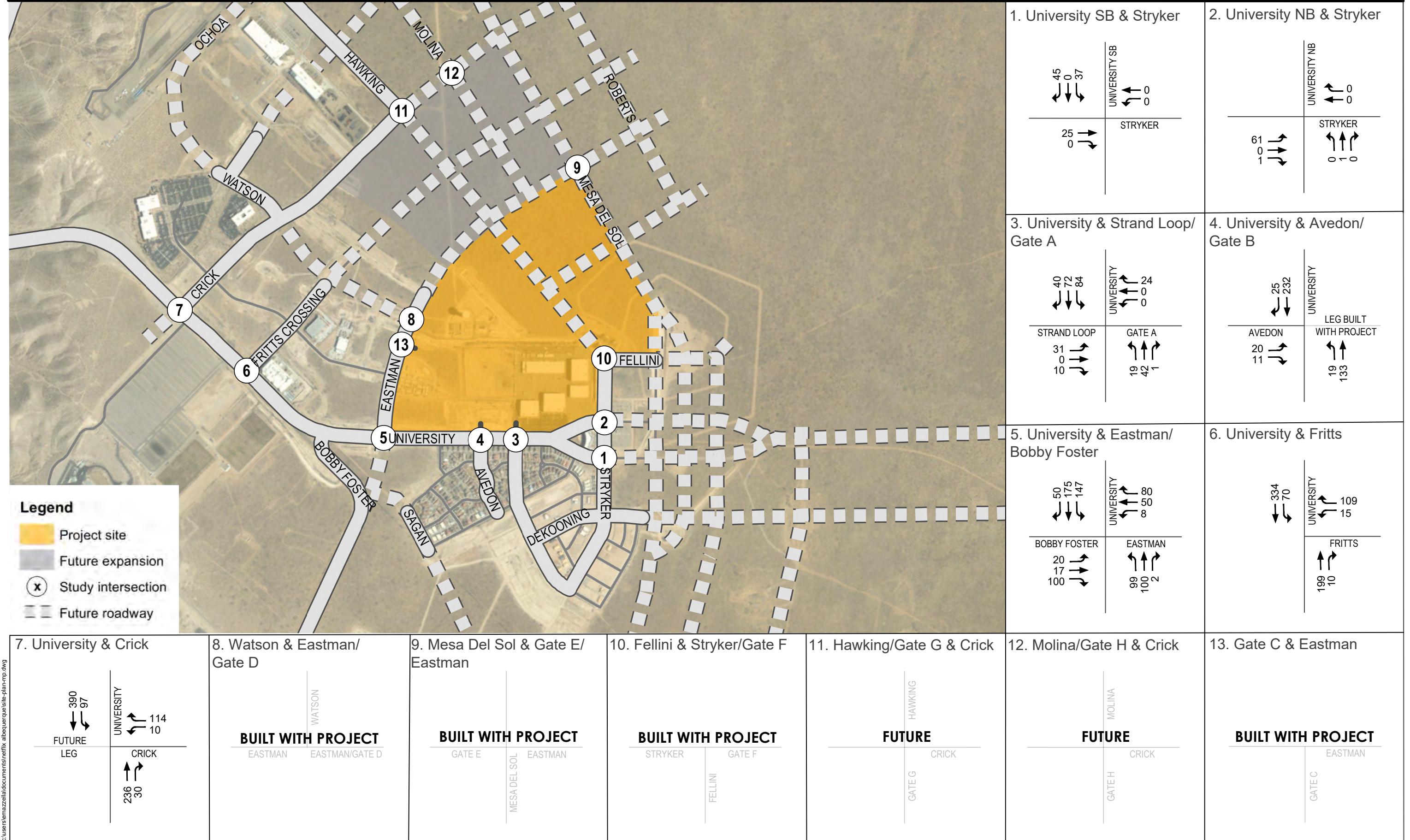


Figure 9

2026 No-Project AM Peak Hour Volumes



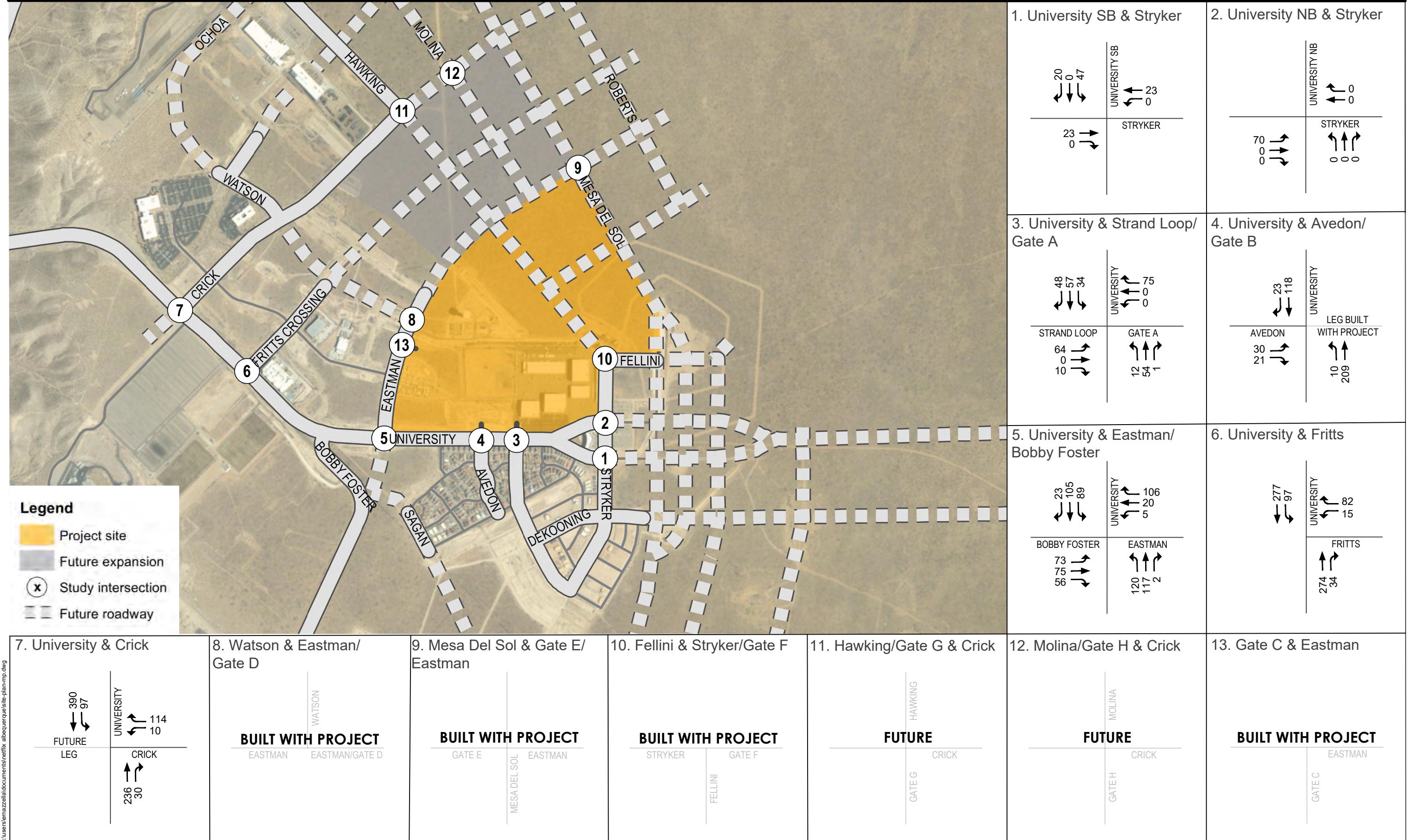


Figure 10

2026 No-Project PM Peak Hour Volumes



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

proposed site traffic characteristics

### 3.5 CONSIDERATION OF PROGRAMMED ROADWAY IMPROVEMENTS

Public stakeholders include the CABQ, BC, MRCOG, and NMDOT. Currently there are localized improvements planned north of the study area on University Boulevard. A widening project of the bridge over the Tijeras Arroyo is under construction. No other planned improvements are programmed for University Boulevard at this time.

Mesa del Sol Boulevard is a future proposed arterial roadway to Mesa del Sol. A timeline has not been established for the roadway at this time. Other improvements associated with Mesa del Sol Blvd include a study to plan and design of a new interchange at Mesa del Sol Boulevard & I-25. Also being studied are improvements at Bobby Foster/Los Picos that include the possibility of a new Interchange with I-25. This study is expected to commence in Fall of 2021.

## 4.0 PROPOSED SITE TRAFFIC CHARACTERISTICS

### 4.1 SITE DEVELOPMENT CHARACTERISTICS

The North and East Development phases are proposed as an expansion of existing operations to reflect similar density and building facilities compared with the existing site. A summary of the existing site facilities and proposed facilities for the Northern Development are shown in Table 7 and Table 8, respectively.

**Table 7. Existing Site Facilities**

Development Summary	Quantity and Size
Building A, Stage 1, and 2	1 @ 50 TSF
Building B, Stage 3, and 4	1 @ 60 TSF
Stage 5 and 6	1 @ 36 TSF
Stage 7 and 8	1 @ 65 TSF
Mill	1 @ 80 TSF
Production Offices	1 @ 40 TSF
Total	6 @ 331 TSF
TSF – Thousand square feet	

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

proposed site traffic characteristics

**Table 8. Proposed Northern Development (Phase I)**

Development Summary	Quantity and Size
Vendor Village	2 @ 50 TSF
Mill *	1 @ 50 TSF
Production Offices	1 @ 145 TSF
Total	4 @ 295 TSF
TSF – Thousand square feet	

\*Note: Two (2) Mill Buildings are proposed for the North Development Phase, however one of the Mill Buildings is a replacement for an existing Mill Building on-site

**Table 9. Proposed Eastern Development (Phase II)**

Development Summary	Quantity and Size
Production Office	1 @ 75 TSF
Mills	2 @ 60 TSF
Double Stage Units with basecamp and support space	5 @ 52 TSF Average
Daycare	1 @ 15 TSF
Total	9= 470 TSF
TSF – Thousand square feet	

**Table 10. Proposed Phase III Periphery Development**

Development Summary	Quantity and Size
Office (North)	4 @ 100 TSF
Office (South)	4 @ 100 TSF
Retail (South)	3 @ 50 TSF
Total	11 = 1,250 TSF
TSF – Thousand square feet	

State Land Office (Phase IV) future long-term development to year 2035 with similar supporting uses for the studio operations business is a future project. The SLO uses are excluded from the project evaluated by this TIS but the traffic generation is included in the horizon year background conditions.



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

proposed site traffic characteristics

### 4.2 TRIP GENERATION

Trip Generation for the Studios Expansion was estimated based upon existing conditions at Gate A. Existing Gate A traffic data was collected during April 2021 (April 20, 2021). April 2021 was indicated as a high-use period for business operations by the Owner. The April 2021 Gate A data were calibrated for COVID, following the NMDOT Guidelines (Method 3) issued in October 2020. The North Development Phase I is nearly equal to the size of the existing Albuquerque Studios Development (approximately 90% of the size). Corresponding trip generation is also projected at 90% of existing trip generation at Gate A. The Eastern Development is approximately 40% larger than the existing Albuquerque Studios site operations.

The periphery traffic was projected based upon the most conservative combinations of land-use contemplated for these areas, Office for the North Periphery, and Office and Retail for the South Periphery use. The ITE Trip Generation Manual was used for the periphery Traffic projections.

**Table 11. Peak Hour Trip Generation Projection by Access Type for Albuquerque Studios Expansion and Periphery Development**

Each Gate	Each Proposed Gate Total Proposed Gates = 8	North Proposed Periphery Driveway One Driveway Proposed	Each South Proposed Periphery Driveway Ten (10 Proposed Driveways)
– Enter – AM Peak Hour – PM Peak Hour	Enter 33 13	Enter 247 6	Enter 56 64
– Exit – AM Peak Hour – PM Peak Hour	Exit 10 30	Exit 13 210	Exit 22 82

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

proposed site traffic characteristics

The forecasted Trip Generation for the peak hour (Trips) by Building Type is summarized below:

### Phase I (North)

	AM	PM
Mill (17%) of the Trips Generated:	17	17
Vendor Village (34%) of the Trips Generated	34	34
Production Offices (49%) of the Trips Generated	48	48

### Phase II (East)

Mill (16%) of the Trips Generated	53	53
Production office (26%) of the Trips Generated	90	90
Stages (55%) of the Trips Generated	189	189
Day Care (3%) of the Trips Generated	10	10

### Phase III Periphery

North Office (18%) of Periphery Trips Generated	260	217
South Office/Retail	780	1,460
(82%) of the Periphery Trips Generated)		

**Figure 11** and **Figure 12** show the AM and PM Peak Hour 2026 with Project traffic volumes for the site. **Figure 13** and **Figure 14** show the Buildout year with Project AM and PM peak hour volumes.



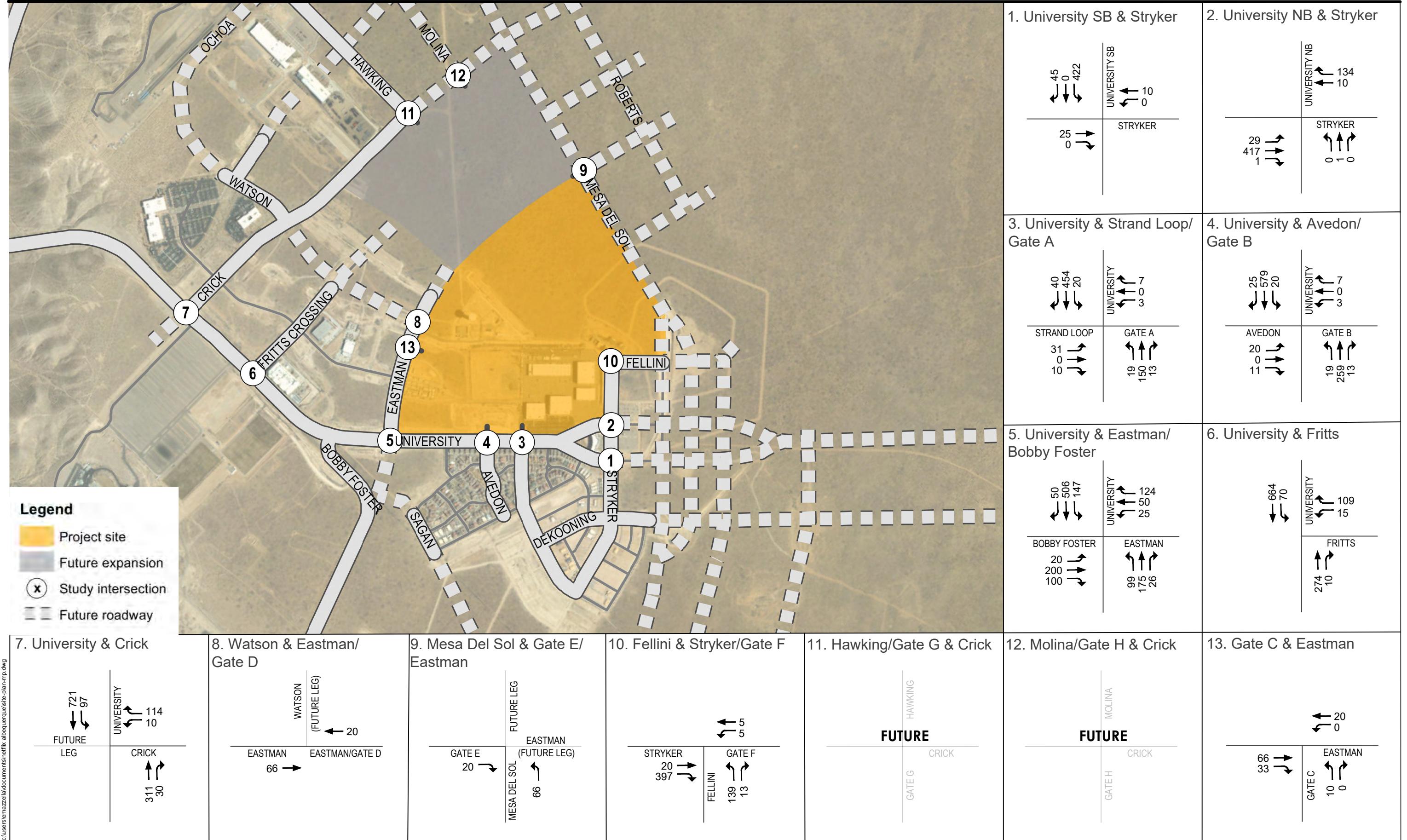


Figure 11

2026 With Project AM Peak Hour Volumes



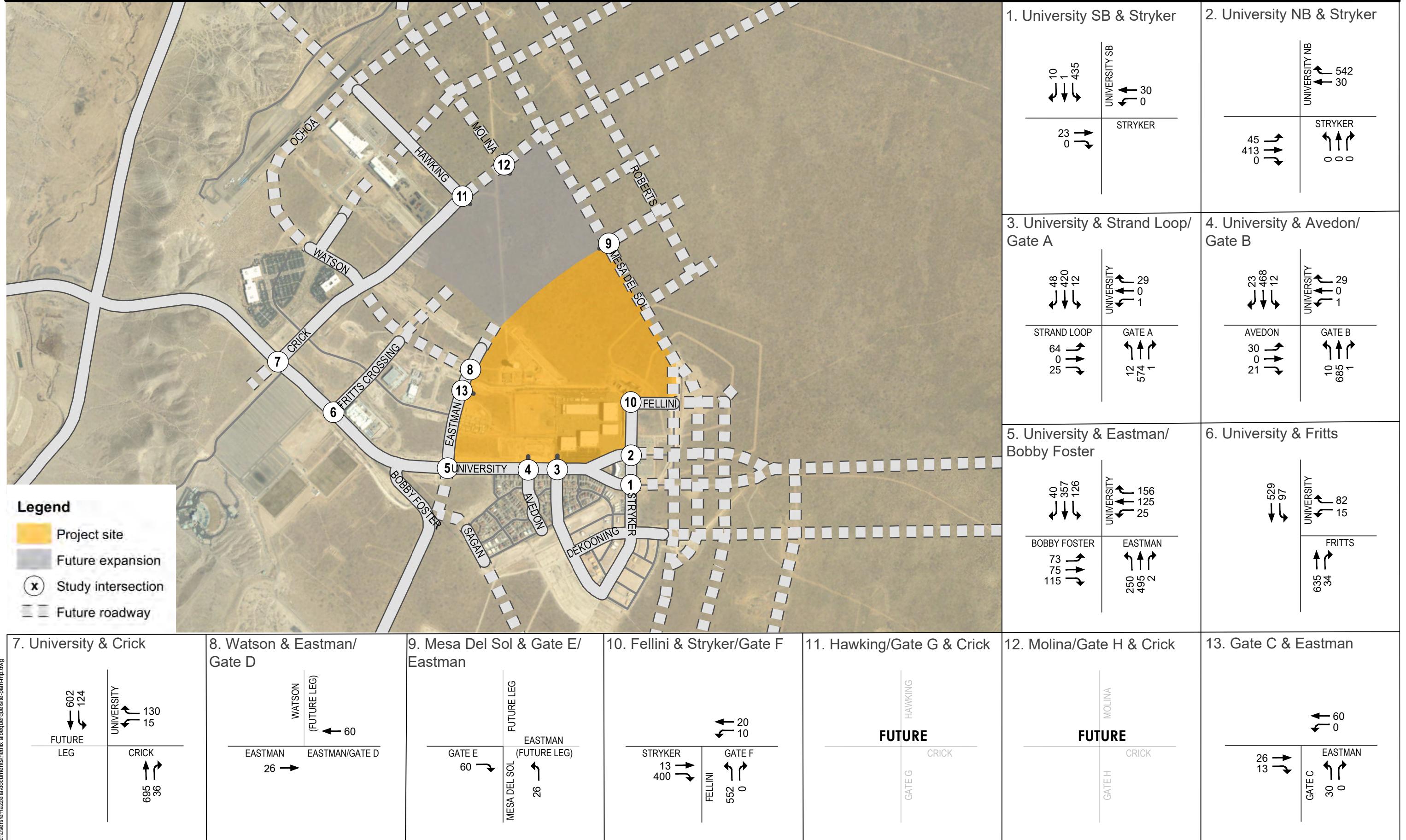


Figure 12

2026 With Project PM Peak Hour Volumes



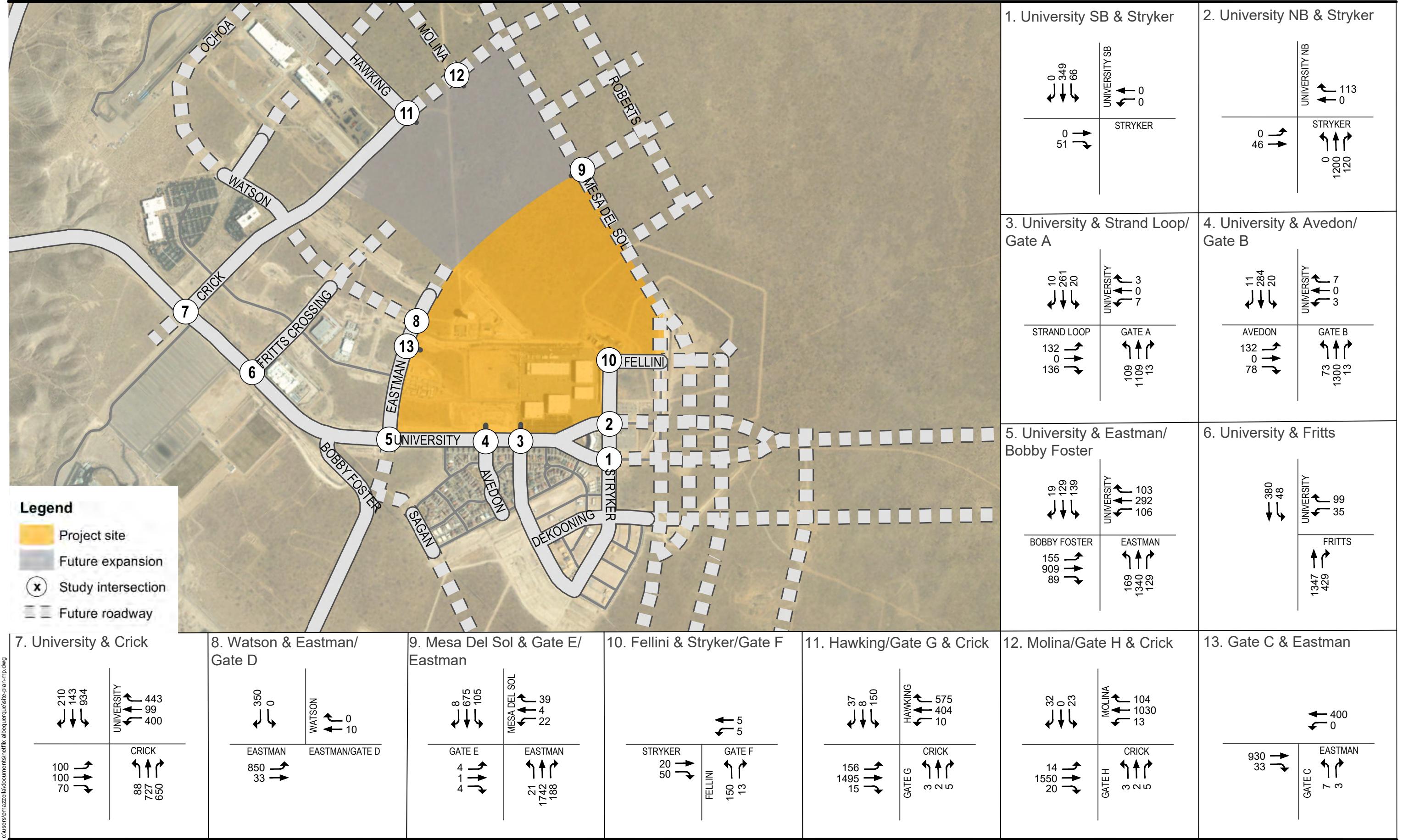


Figure 13

Buildout With Project AM Peak Hour Volumes



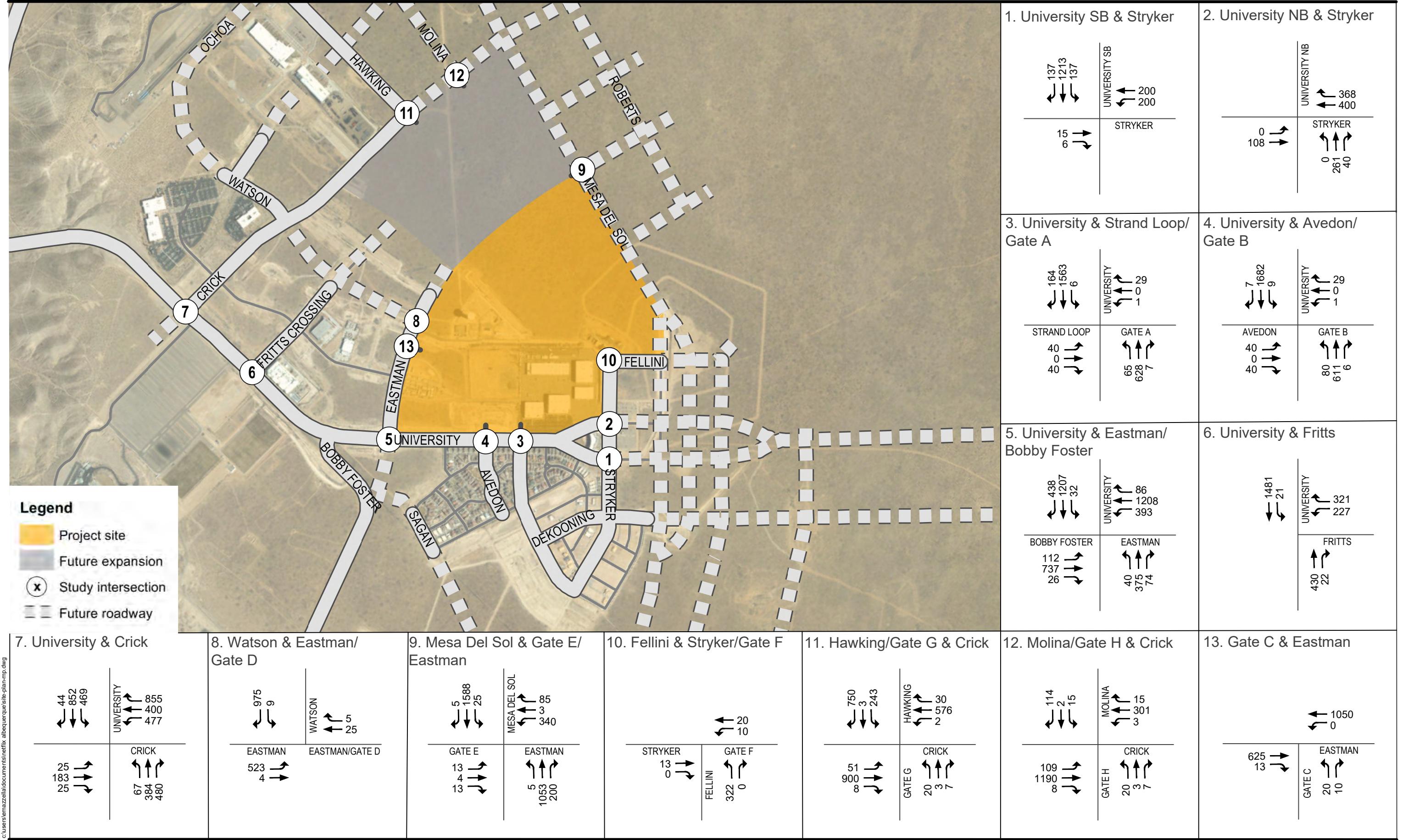


Figure 14

Buildout With Project PM Peak Hour Volumes



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

proposed site traffic characteristics

### 4.3 OTHER TRIP GENERATION CONSIDERATIONS

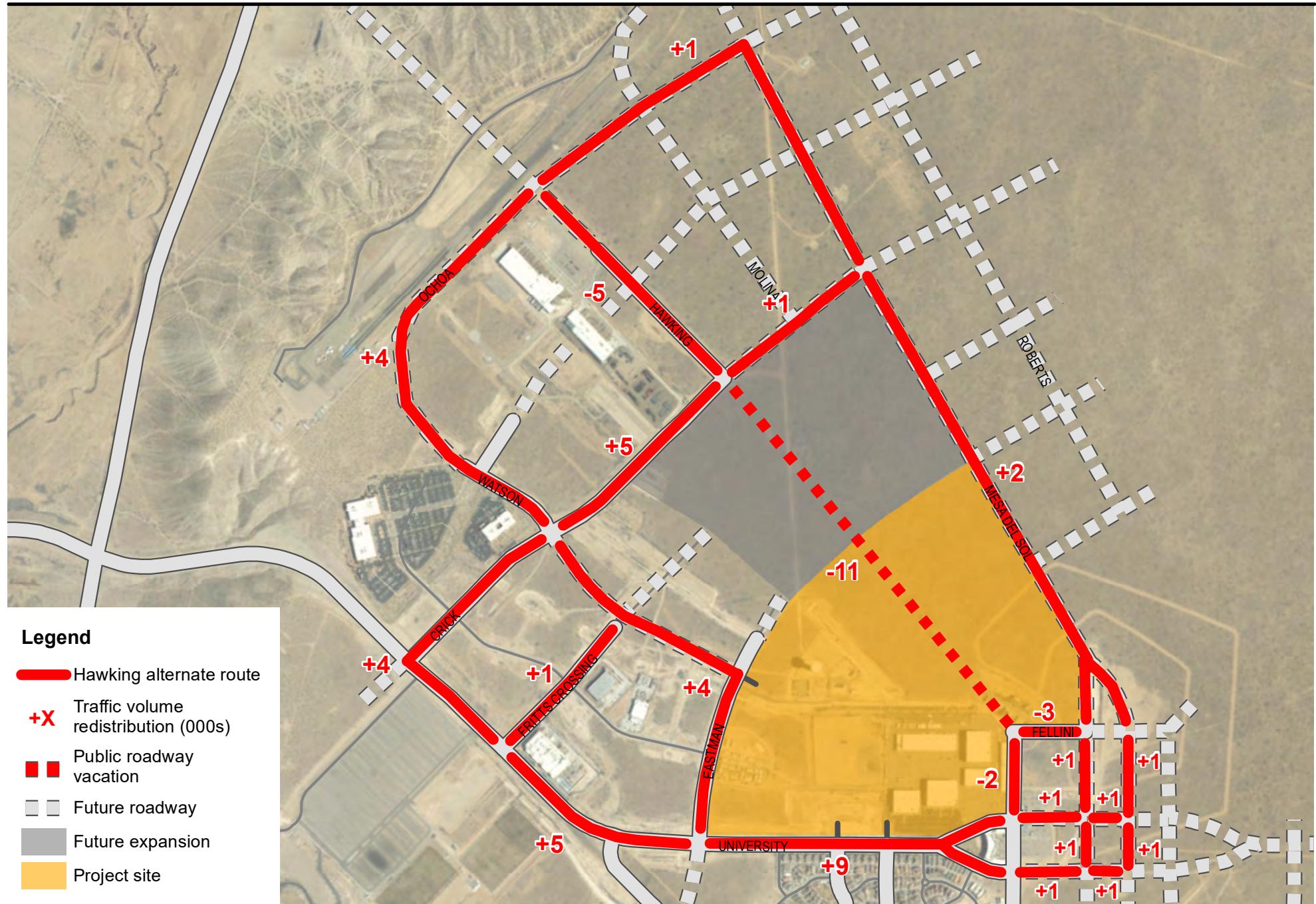
No other trip generation considerations were relevant to this analysis.

### 4.4 TRIP DISTRIBUTION

The primary distribution of Ingress/Egress traffic for this project is expected to use University Boulevard. This may change in the future, lessening the traffic on University and re-distributing to I-25 and MdS, and/or I-25 and Bobby Foster if future interchanges are constructed. Traffic was distributed taking account existing distribution and balancing of traffic for the future Implementation and horizon year study conditions.

**Figures 13 and 14** show the forecasted traffic re-distributed to adjacent roadways upon vacation of Hawking Drive and Eastman Avenue and other connectors shown in the Level B circulation plan.





**Figure 15**

Hawking Vacation Redistribution

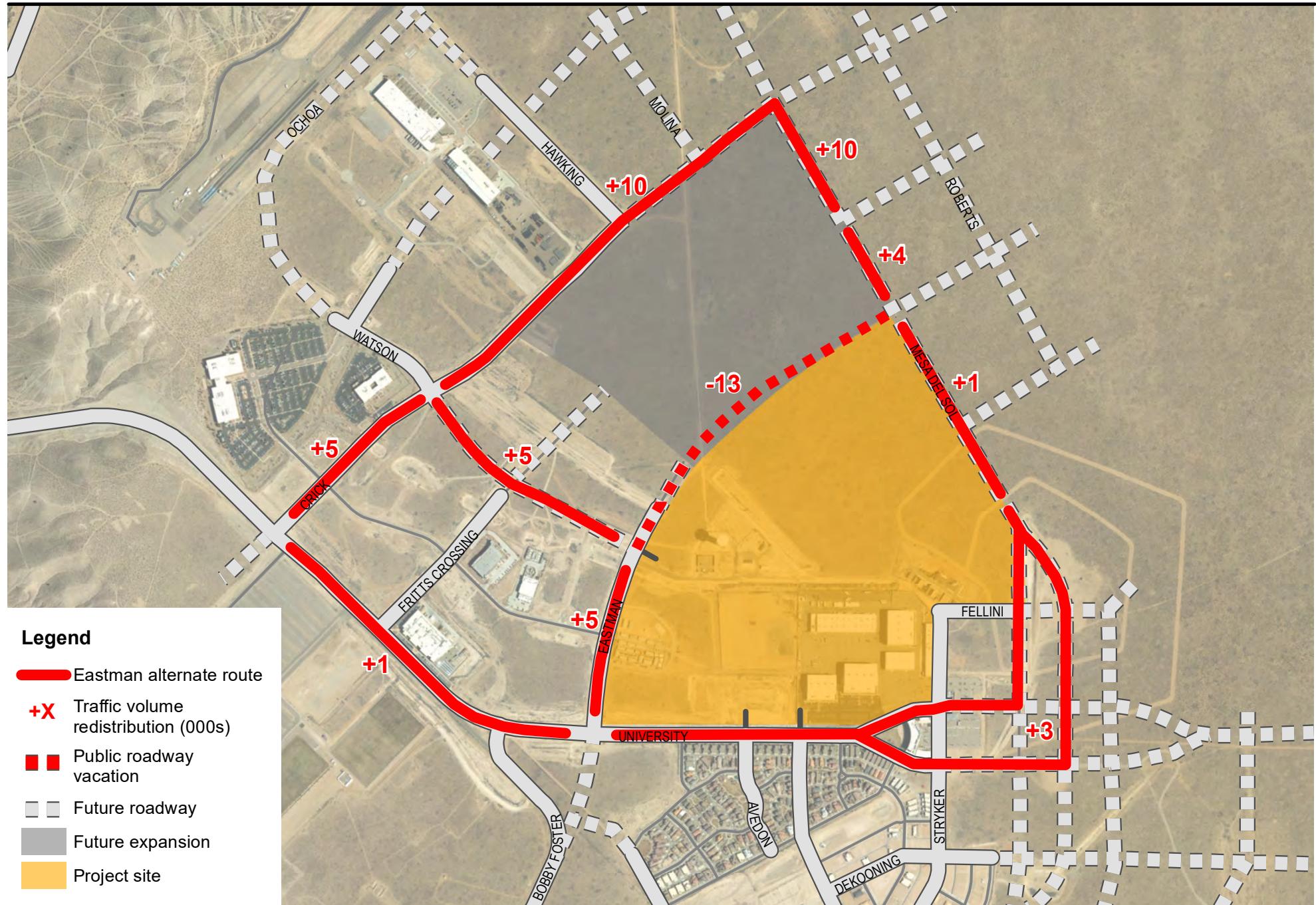


Figure 16

Eastman Vacation Redistribution

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

traffic analysis

### 4.5 TRAFFIC ASSIGNMENT

Forecasted traffic was balanced for the Master Plan among each of the access points. Each gate is anticipated to generate roughly the same traffic flows for the AM and PM peak hours.

## 5.0 TRAFFIC ANALYSIS

Synchro traffic engineering analysis software was used to conduct intersection and access operational analyses. Existing, build-out, and horizon year LOS were determined for each of the peak periods for the proposed gate accesses and study area intersections. Figure 9 and Figure 10 illustrate the forecasted traffic conditions for implementation year (2026) during the AM and PM Peak Hour analysis periods, respectively.

### 5.1 INTERSECTION AND ROADWAY ANALYSES

Below in Table 12, a summary of the Intersection LOS is provided for the implementation year scenario:

**Table 12. Summary of Implementation Year (2026) LOS**

Intersection	Traffic Control	2026 without Project				2026 with Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1. University (SB) & Stryker	TWSC	9.9	A	9.9	A	24.5	C	22.1	C
2. University (NB) & Stryker	TWSC	0.0	A	0.0	A	9.2	A	-	-
3. University & Ex Gate/Strand Loop	TWSC	11.5	B	10.5	B	16.2	C	21.0	C
4. University & Future Gate/Avedon	TWSC	10.9	B	9.9	A	19.2	C	19.2	C
5. University & Bobby Foster/Eastman	Signal	12.3	B	14.1	B	18.1	B	18.9	B
6. University & Fritts Crossing	TWSC	11.9	B	12.0	B	15.3	C	20.7	C
7. University & Crick	TWSC	11.9	B	16.1	C	14.3	B	33.5	D
10. Fellini & Stryker/Gate F	AWSC	-	-	-	-	10.5	B	31.6	D
13. Gate C & Eastman	TWSC	-	-	-	-	9.2	A	9.2	A

Table 13 provides a summary of the Intersection LOS for the Level B long-range horizon year scenario:

## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

traffic analysis

**Table 13. Summary of Horizon Year Mds Level B Master Plan LOS**

Intersection	Traffic Control	Horizon Year with Project			
		AM Peak Hour		PM Peak Hour	
		Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1. University (SB) & Stryker	Signal	1.9	A	24.0	C
2. University (NB) & Stryker	Signal	7.2	A	13.9	B
3. University & Ex Gate/Strand Loop	Signal	13.6	B	11.4	B
4. University & Future Gate/Avedon	Signal	11.3	B	6.1	A
5. University & Bobby Foster/Eastman	Signal	53.2	D	47.6	D
6. University & Fritts Crossing	Signal	8.7	A	23.0	C
7. University & Crick	Signal	51.7	D	41.1	D
8. Eastman & Gate D/Watson	Signal	6.0	A	7.5	A
9. Mesa Del Sol & Gate E/Eastman	Signal	14.4	B	22.7	C
10. Fellini & Stryker/Gate F	AWSC	8.1	A	10.0	A
11. Gate G/Hawking & Crick	Signal	14.3	B	25.8	C
12. Gate H/Molina & Crick	Signal	6.7	A	6.2	A
13. Gate C & Eastman	TWSC	23.1	C	23.9	C

## 5.2 IDENTIFY ALTERNATIVE INTERSECTION AND ROADWAY DESIGNS

Ingress and egress are proposed through two travel lanes in each direction for each of the Gate accesses. A modification to the gate processing operation is being evaluated and proposed to allow Owner operation traffic to pass through the gate from the right lane using an electronic security detection system. The left lane is proposed for visitors and will require gate attendant interaction.

Two alternatives (Typical) were identified in this TIS, one alternative for Implementation year conditions, and one alternative for horizon year conditions. For the implementation year conditions, design and construction of adjacent ½ street improvements (side along site frontage) was identified. For the horizon year conditions, full Level B build-out improvements were identified with some minor modifications such as auxiliary lane configurations, left turning bays/lanes and potential expansion of Watson Drive if determined as need through future traffic analysis.

## 5.3 EVALUATE ALTERNATIVE INTERSECTION AND ROADWAY DESIGNS

The alternatives for Gate B-H are like the existing intersection configuration at Gate A. Minor modifications described in Chapter 6 are proposed at each gate to accommodate the site plus background traffic.

Alternative intersection and roadway designs were explored and evaluated for the Implementation year and horizon year conditions. Generally,  $\frac{1}{2}$  street improvements with auxiliary lanes to support implementation year traffic flows were evaluated and recommended for the implementation year conditions to attain the required LOS during the peak hours. Full-build-out of the streets and intersections are recommended for the Horizon Year conditions to attain the required LOS during the peak hours

## 5.4 PERFORM SIGNALIZATION AND STOP SIGN WARRANT ANALYSES

Traffic data for University Boulevard and Strand Loop/Gate A was reviewed and determined if more detailed signal warrant analyses should be conducted. The initial review indicated that the four primary warrants that are applicable include:

- Warrant 1. Eight-Hour Vehicular Volume
- Warrant 2. Four-Hour Vehicular Volume
- Warrant 3. Peak Hour
- Warrant 4. Pedestrian Volume

Based upon a review of the traffic data, existing and forecasted volumes are well below the flows the thresholds that would satisfy any of the applicable traffic signal warrants. Therefore, further investigation is not needed at this time.

Eastman Avenue and University Boulevard: The traffic forecasts for the North and East Phases (Implementation Year) are well below the thresholds to satisfy any of the applicable traffic signal warrants. There are several potential future triggers that may contribute traffic that may satisfy one or more of the signal warrants. A signal warrant review should be re-visited when one or more of the triggers occur:

1. Multi-use development at MdS west of the site and University in combination with a realignment of Bobby Foster into the Eastman Avenue/University Boulevard intersection.
2. North Periphery Implementation with office space land-use



## **ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

site access requirements

3. Athletic Facilities/Complex Development northwest of the site in combination with a realignment of Bobby Foster into Eastman Avenue/University Boulevard intersection.
4. Other background traffic or development north of Eastman Avenue and east of University Boulevard, or in the vicinity of the intersection that will access through the intersection.

## **6.0 SITE ACCESS REQUIREMENTS**

### **Gate Access**

Access to the site is proposed through Gates A thru Gates F. Gate A is existing, Gates B-F are proposed site access gates. Two additional gates (Gates G and H) are preliminarily anticipated on future Crick Avenue for future development in the SLO area.

Minor roadway improvements are proposed to accommodate the Gate access design. Gate configuration and design are proposed to be similar to Gate A.

Installation of standard stop signs for exiting traffic are proposed for each Gate egress.

Any obstructions to limit sight distance to such as street lighting poles, landscaping, signing, etc., should be removed or relocated.

Access (Gate B) at the existing intersection of University Boulevard and Avedon Avenue is proposed for initial access to the North Development. The access is proposed as a stop-controlled access onto University Boulevard. Full access is proposed to allow all movements at the intersection.

Proposed Gate access configuration will include two inbound standard width driving lanes and one standard width exiting lane. A raised median approximately 12-15 feet is proposed to separate ingress and egress movements.

Based upon a preliminary analysis of queues, queue length for each of the gates are expected to be less than or similar to existing queues. Implementation of electronic gate processing for site employees and staffs should accelerate the rate of vehicles entering the site.

### **Periphery Access**



## **ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

summary of findings

Access to the North periphery uses is proposed thru a stop-controlled driveway onto Eastman Avenue, aligning with Turing Drive to the north.

Access for the South periphery uses are proposed thru up to ten (10) access points on the south perimeter of the site (Fellini Road and Mesa del Sol Boulevard). As periphery uses gets more defined, the access plan should be revisited to verify traffic operations and access recommendations.

A 35 FT wide driveway is recommended to provide two exiting movements and one lane for entering movements.

It is recommended that the curb cuts be constructed following the CABQ Curb-cut ordinance (6-5-4) with max design radii of (30 FT) for WB-40 and 35 FT for WB 50 design vehicle.

## **7.0 SUMMARY OF FINDINGS**

A summary of the TIS findings are provided below:

Site Development: A decrease of 575 TSF of development from the Level B Master Plan

Site Development AM Peak Hour Traffic: A decrease of -739 Trips from the Level B Master Plan

Site Development PM Peak Hour Traffic: A decrease of -202 Trips from the Level B Master Plan in the critical outbound direction (due to retail uses in the periphery development, the PM inbound traffic volume increases by 652 Trips).

For the implementation year conditions,  $\frac{1}{2}$  street construction provides the required capacity and LOS for the site development and background traffic in the study area.

For the horizon year conditions, full buildout consistent with the Level B Master Plan with some modifications were found to achieve the acceptable LOS within the study area.

LOS for Implementation Year was found to be acceptable at all locations.

LOS for Horizon Year was found to be acceptable at all locations with implementation of recommended improvements.



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

recommendations and mitigation measures

*The proposed storage length of 160 FT (for each lane) on-site at each gate is adequate for the peak conditions. It is recommended that additional left turn storage length of 100 ft be provided from the public street where possible and appropriate.*

## 8.0 RECOMMENDATIONS AND MITIGATION MEASURES

The following recommendations and mitigation measures are proposed for the Albuquerque Studios Masterplan Expansion (North and East Development).

### Access Gate Implementation Year Recommendations:

- Gate A Existing Gate on University Boulevard/Strand Loop Southeast
- Gate B Proposed Gate on University Boulevard/Avedon Avenue
- Gate C Proposed Gate on Eastman Avenue
- Gate D Proposed Gate on Eastman Avenue
- Gate E Proposed Gate on Mesa del Sol Boulevard
- Gate F Proposed Gate on Fellini Road/Stryker Road
- Recommendations specific to each gate are as follows: Gate A: Addition of an additional exiting lane is recommended to consist of two ingress lanes and two egress lanes.
- Gate B: Open (remove) existing temporary curb for the University Boulevard SB Left Turn Lanes to accommodate SB to EB left turning movements into the site.
- Gate B: Align Gate B with Avedon Avenue (West leg)
- Gate F: The Fellini/Striker Gate is recommended to be a three-way stop-controlled access.
- All Gates: Install typical standard stop sign for exiting gate traffic. All gates are recommended to be stop-controlled in the Implementation Year.
- All Gates: Remove or relocate any obstruction such as landscaping, signage, street light poles and other potential obstruction so that adequate sight distance is provided for traffic. Any landscaping or vegetation on University Boulevard limiting adequate sight distance should be removed, relocated, or pruned.
- All Gates, intersections, and streets: Provide ADA and bicycle related accommodations at all gate access locations.



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

recommendations and mitigation measures

- All Gates: Proposed lane configuration to consist of two-ingress lanes and two egress lanes.
- All Gates: Just prior to the access gates, it is recommended that pull-out, drop off areas be provided for ridesharing operations.
- All Gates: It is recommended that all gates be provided with a turn-around area, similar to the configuration at Gate A.
- All Gates: Intersections and streets are recommended to have retro-reflective pavement markings as appropriate for each of the access gates, intersections, and street modifications.
- All Gates: Removals or relocation of existing infrastructure may be necessary for some of the gate accesses. These items include minor pavement marking removals, landscaping (NB University Boulevard), street lighting pole, signing, curb and gutter, and sidewalk, etc.
- All Gates: It is recommended that pedestrian access/accommodations be incorporated through sidewalks and ADA ramps. Bicycle lanes should remain unchanged on University Boulevard in the NB and SB directions. Future accommodations for transit/bus stops are contemplated as Mesa del Sol grows and develops.

### Public Street Recommendations:

- University Boulevard: Minor modifications to accommodate Gate A improvements and Gate B addition for Implementation Year conditions.  
Horizon Year: Build out University Boulevard at Eastman Avenue in conjunction with University Boulevard/Eastman Avenue/Bobby Foster Road realignment and signalization improvements (identified below in Public Intersection recommendations).
- Mesa del Sol Boulevard Construction of ½ street improvements from Fellini Road to Crick Avenue for Masterplan traffic implementation year. Construct full build-out for horizon year traffic.
- Eastman Avenue Construction of ½ street improvements from University to Gate D for Master plan traffic implementation year. Construct build-out for horizon year traffic.



## **ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

recommendations and mitigation measures

- Crick Avenue Construction of ½ street improvements to connect Crick Avenue west to Mesa del Sol Boulevard for Masterplan traffic implementation year; Construct Crick Avenue full build-out for Horizon Year traffic.
- Watson Drive: Future horizon year recommendation: Construct Watson Drive initially as a two-lane street for horizon year traffic conditions. A four-lane Street is recommended for consideration in the future. An alternate would be to construct a new two-lane roadway parallel to the west side of the SLO Parcel from Eastman Avenue to Crick Avenue. It is recommended to re-evaluate the growth and traffic in a future analysis to further justify that this additional capacity is needed.

### **Public Intersection recommendations:**

1. University and Eastman Avenue; Implementation year recommendations include a signalized intersection in the near term when one or more of the following “triggers” occur:

- Mixed-use development growth to the west of the site
- Athletic Facilities/Complex improvements by Bernalillo County
- Bobby Foster Road re-alignment
- north periphery build-out and/or other development northeast of University Boulevard and Eastman Avenue that will contribute additional Horizon Year traffic flows at this intersection.

It is recommended that width for dual lefts for WB to SB for horizon year traffic conditions be included that can be re-marked as necessary in the future.

2. Mesa del Sol and Crick Avenue: Continuous flow northbound to eastbound and southbound to westbound until such time as other MdS development occurs north and east creating the need for additional traffic control for conflicting movements at this intersection. Ultimate build-out for the horizon year is recommended as a signalized intersection.

3. Mesa del Sol Couplets

Recommended as two-way adjacent to the site from Fellini Roade, east to the location where they come together as one street at Mesa del Sol Boulevard. (Approximately 800-900 FT).



## ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT

recommendations and mitigation measures

Recommended for construction per Level B Plan for Horizon Year conditions as a network roadway.

4. University Boulevard and Crick Avenue: Intersection as constructed to accommodate the implementation year traffic.

Recommend traffic signal for horizon year conditions as a key network intersection.

### **Periphery Driveway Recommendations (Implementation Year)**

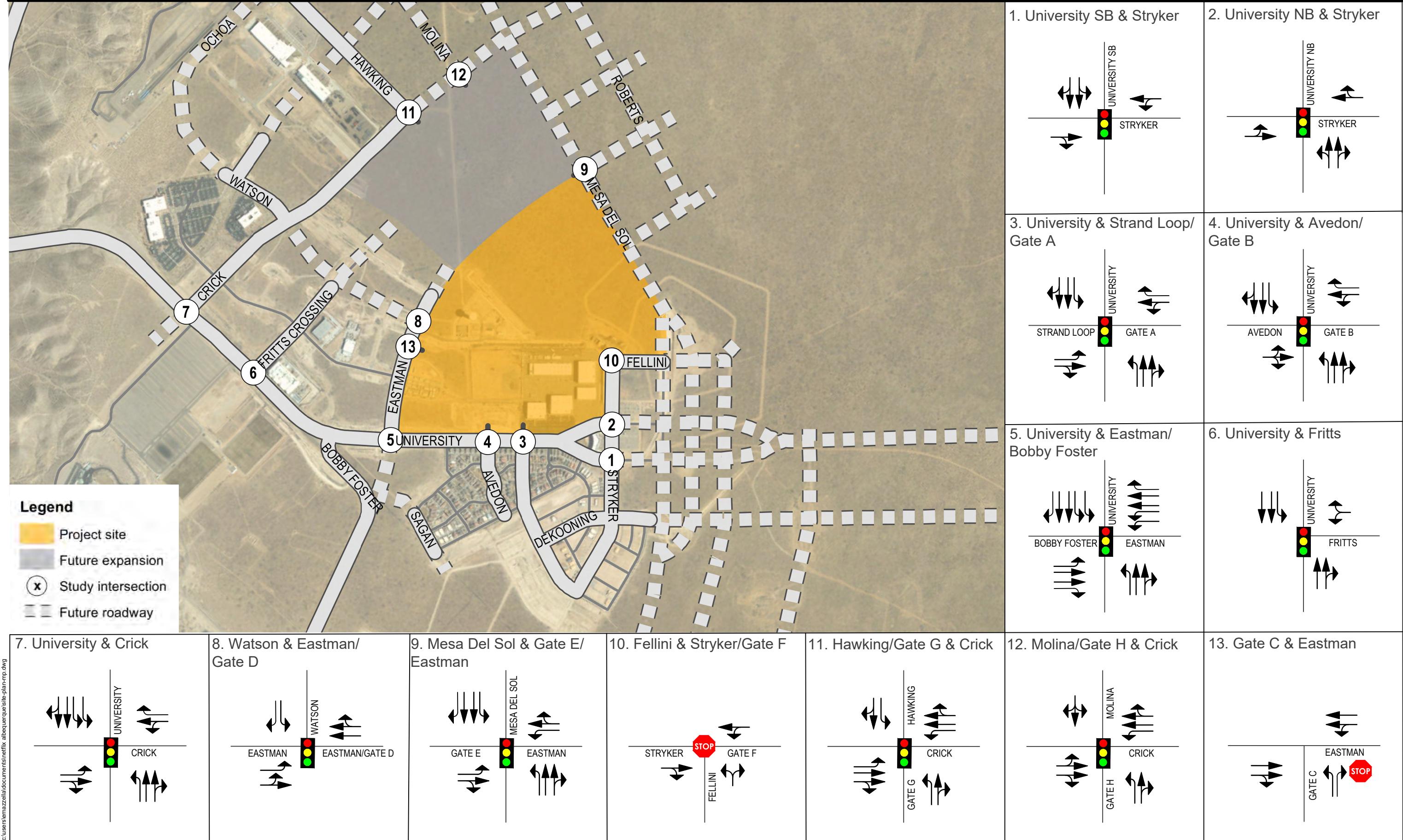
North Driveway: The north periphery driveway is recommended for the office build-out lanes use planned for this tract. Two inbound lanes, two outbound separated by a minimum four (4) FT. raised median is recommended. Stop control is recommended for the outbound access lanes. Access geometry to be designed to accommodate WB-50 design vehicle

South Driveways: The south driveways are recommended for the forecasted office and retail use for these parcels. Driveways are recommended to be stop-controlled, 35 FT wide to provide two (2) outbound travel ways, and one inbound travel way. Geometry is to be designed per CABQ Curb Cut ordinance for the appropriate design vehicle, either the WB-40 or WB 50 design vehicle.

Based upon the traffic analyses conducted herein, no adverse impacts associated with the development are foreseen. If the recommendations proposed in Section 8 are implemented, future traffic should be accommodated in a safe and efficient manner.

**Figure 17** summarizes the recommendations for traffic control and lane configurations for the Implementation (Buildout) Year.





**Figure 17**

Buildout Year Lane Configurations and Traffic Control

## **ALBUQUERQUE STUDIOS MASTER PLAN DEVELOPMENT**

### References

## **9.0 REFERENCES**

Development Process Manual (DPM) City of Albuquerque September 4, 2020 7-158 to 7-172

MRCOG Website [www.mrcog-nm.gov](http://www.mrcog-nm.gov)

[Geospatial and Population Studies | University of New Mexico \(unm.edu\)](http://Geospatial and Population Studies | University of New Mexico (unm.edu)) Website

HOK Masterplan site planning documents

## **10.0 APPENDIX**

I. Traffic Data – April 2021 TMCs and ADT and Trip Generation Spreadsheet

II. Crash Data – 2017-2019

III. NMDOT COVID Traffic Data Calibration Methodology

IV. CABQ Zone Atlas

V. Traffic Analysis Detail – Synchro Operational Analyses

- Existing Conditions AM Peak Hour
- Existing Conditions PM Peak Hour
- 2026 with Project AM Peak Hour
- 2026 with Project PM Peak Hour



# **TRAFFIC DATA**

**April 2021 TMCs and ADT**

Albuquerque Studios Expansion Traffic Data Calibration Summary																	
		AM Peak Hour					Noon Peak Hour					PM Peak Hour					
Intersection	April	2019	2020	Adjust	2021	2021	Pre-COVID	2020	Adjust	2021	2021	Pre-COVID	2020	Adjust	2021	2021	
		Pre-COVID	COVID	Factor	Actual	Calibrated	Pre-COVID	COVID	Factor	Actual	Calibrated	Pre-COVID	COVID	Factor	Actual	Calibrated	
12 Hour TMC																	
<u>Univ &amp; Ex Gate/Strand Loop</u>		7:45 AM					11:45 AM					4:15 PM					
NB Left	0	0		0	0		0	0		5	5	0	0		2	2	
NB Thru	13	19	0.68	24	16		38	19	1.42	39	55	33	10	1.42	37	53	
NB Right	0	0		1	1		26	0		7	7	0	39	0.00	1	1	
SB Left	256	129	1.42	59	84		90	73	1.23	81	100	65	19	1.42	24	34	
SB Thru	46	81	0.57	59	34		72	50	1.42	55	78	32	25	1.28	33	42	
SB Right	0	8	0.00	21	21		9	19	0.58	12	7	87	53	1.42	23	33	
WB Left	0	0		1	0		0	0		3	3	0	0		1	1	
WB Thru	0	0		0	0		17	0		0	0	0	0		0	0	
WB Right	16	23	0.70	34	24		94	24	1.42	37	53	109	41	1.42	53	75	
EB Left	16	46	0.58	36	21		7	6	1.17	21	25	28	15	1.42	30	43	
EB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
EB Right	0	0		0	0		0	0		1	0	0	0		5	5	
				235	200					261	327				209	286	
12 Hour TMC																	
<u>Univ &amp; Eastman Crossing</u>		7:45 AM					11:30 AM					3:00 PM					
NB Left	0	0		0	0		0	0		0	0	0	0		0	0	
NB Thru	74	131	0.56	120	68		134	63	1.42	114	162	63	0		114	114	
NB Right	30	26	1.15	7	8		18	0		2	2	55	71	0.77	7	2	
SB Left	222	37	1.42	70	99		23	0		5	5	118	0		36	36	
SB Thru	144	117	1.23	139	171		98	70	1.40	171	239	85	78	1.09	94	102	
SB Right	0	0		0	0		0	0		0	0	0	0		0	0	
WB Left	70	0		5	0		33	0		3	3	66	0		5	5	
WB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
WB Right	35	0		41	41		0	0		2	2	127	0		49	49	
EB Left	0	0		0	0		0	0		0	0	0	0		0	0	
EB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
EB Right	0	0		0	0		0	0		0	0	0	0		0	0	
				382	387				297	413				305	308		
12 Hour TMC																	
<u>Univ and Bobby Foster</u>		3.5% HC 7:45 AM					11:30 AM					3:00 PM					
EB Left	34	6	1.42	14	20		10	8	1.25	5	6	0	7	0.00	8	8	
EB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
EB Right	0	23	0.00	21	21		0	13	0.00	3	3	0	0		10	10	
WB Left	0	0		0	0		0	0		0	0	0	0		0	0	
WB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
WB Right	0	0		0	0		0	0		0	0	0	0		0	0	
NB Left	27	21	1.29	19	24		24	58	0.58	5	3	76	10	1.42	27	38	
NB Thru	107	119	0.90	138	124		108	0		113	113	116	61	1.42	134	190	
NB Right	0	0		0	0		0	0		0	0	0	0		0	0	
SB Left	0	0		0	0		0	0		0	0	0	0		0	0	
SB Thru	32	125	0.58	182	106		9	71	0.58	174	101	49	87	0.58	119	69	
SB Right	0	47	0.00	2	0		0	14	0.00	6	0	0	4	0.00	6	6	
				376	295				306	226				304	322		
Nine Hour TMC																	
<u>Univ &amp; Crick Ave</u>		7:45 AM					11:30 AM					3:00 PM					
NB Left	0	0	--	0	0		0	0		1	1	0	0		0	0	
NB Thru	193	148	1.30	168	219		165	95	1.42	136	193	196	92	1.42	197	280	
NB Right	47	0		5	5		19	0		6	0	0	0		3	3	
EB Left	0	0		0	0		0	0		0	0	0	0		0	0	
EB Thru	0	0		0	0		0	0		0	0	0	0		0	0	
EB Right	37	0		0	0		0	0	--	0	0	0	0		0	0	
SB Left	222	61	1.42	35	50		44	0		29	29	15	8	1.42	24	34	
SB Thru	340	114	1.42	206	293		146	88	1.42	180	256	196	89	1.42	118	168	
SB Right	0	0		0	0		0	0		0	0	0	0		0	0	

Albuquerque Studios North  
Development Trip Generation 5/11/2021

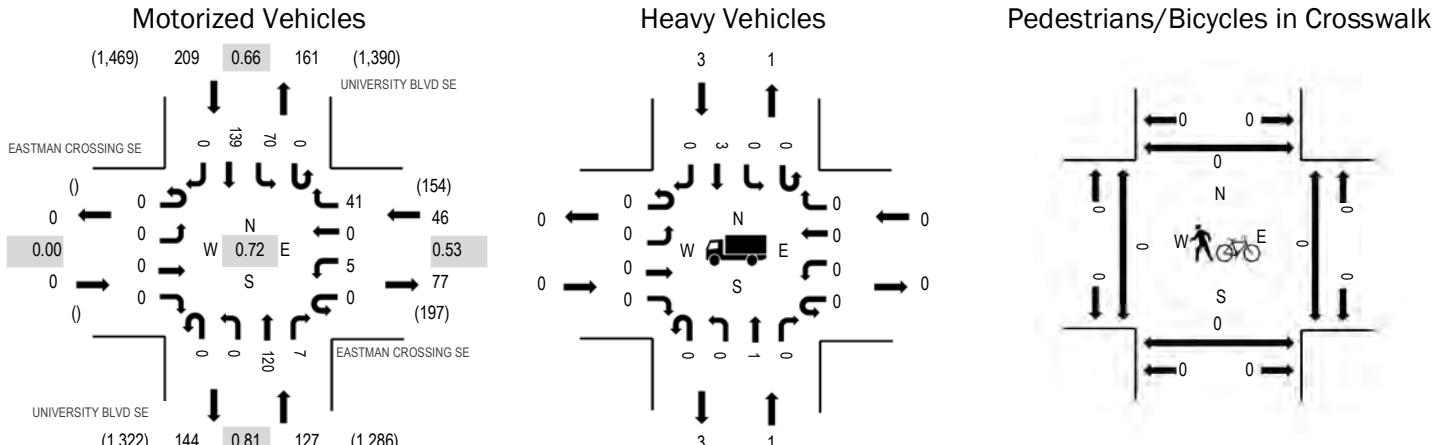
							AM Peak	AM Peak	Noon Peak	Noon Peak	PM Peak	PM Peak							
				Units	Existing	Permanent	Trip Gen	Trip Gen	Trip Gen	Trip Gen	Trip Gen	Trip Gen							
			Facility			Size X 1000	Jobs/Employees	Entering	Exiting	Entering	Exiting	Entering	Exiting						
Existing		<b><i>Existing</i></b>				SQ. FT													
		Bldg A, Stage 1 and 2		1	50														
		Bldg B. Stage 3 and 4		1	60														
		Stage5 & 6		1	36														
		Stage 7 & 8		1	65														
		Mill 2		1	80														
		Mill 3 (Ex) /Ex Production office (Stage 8?)		1	40														
Already Built out	Total SF Building				331			<b>85</b>	<b>25</b>	<b>107</b>	<b>56</b>	<b>34</b>	<b>76</b>		Ingress/Egress thru Existing Gate A				
						Proposed													
						Size X 1000													
						SQ. FT													
Phase I	<b><i>North</i></b>																		
Buildout (Summer 2022)	Vendor Village (2@ 50K each)			2	100														
	Mill 1			1	50														
	Production Office and Commons 1&2			1	145														
	Mill 2 Demo and replacement			1	--														
	Total SF Building				295			<b>76</b>	<b>22</b>	<b>95</b>	<b>50</b>	<b>30</b>	<b>68</b>		Ingress/Egress thru proposed Gate B at Univ/Avedon				

**Location:** 4 UNIVERSITY BLVD SE & EASTMAN CROSSING SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.53
NB	0.8%	0.81
SB	1.4%	0.66
All	1.0%	0.72

**Traffic Counts - Motorized Vehicles**

Interval Start Time	EASTMAN CROSSING SE				EASTMAN CROSSING SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Total	Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound												
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
7:00 AM	0	0	0	0	0	1	0	1	0	0	22	0	0	4	26	0	54	292	
7:15 AM	0	0	0	0	0	0	0	1	0	0	35	1	0	0	24	28	0	89	317
7:30 AM	0	0	0	0	0	1	0	1	0	0	29	0	0	0	7	39	0	77	360
7:45 AM	0	0	0	0	0	0	0	0	0	0	25	0	0	0	6	41	0	72	382
8:00 AM	0	0	0	0	0	2	0	9	0	0	25	2	0	0	16	25	0	79	370
8:15 AM	0	0	0	0	0	2	0	17	0	0	27	5	0	41	40	0	132	348	
8:30 AM	0	0	0	0	0	1	0	15	0	0	43	0	0	0	7	33	0	99	273
8:45 AM	0	0	0	0	0	0	0	1	0	0	22	0	0	0	1	36	0	60	217
9:00 AM	0	0	0	0	0	0	0	0	0	0	24	0	0	0	1	32	0	57	199
9:15 AM	0	0	0	0	0	0	0	1	0	0	28	0	0	0	0	28	0	57	199
9:30 AM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	1	21	0	43	187
9:45 AM	0	0	0	0	0	1	0	0	0	0	25	0	0	0	0	16	0	42	182
10:00 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	2	29	0	57	191
10:15 AM	0	0	0	0	0	0	0	2	0	0	25	1	0	0	0	17	0	45	182
10:30 AM	0	0	0	0	0	0	0	2	0	0	18	2	0	0	0	16	0	38	189
10:45 AM	0	0	0	0	0	0	0	2	0	0	26	0	0	0	1	22	0	51	221
11:00 AM	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	23	0	48	254
11:15 AM	0	0	0	0	0	0	0	1	0	0	18	1	0	0	1	31	0	52	282
11:30 AM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	0	44	0	70	297
11:45 AM	0	0	0	0	0	2	0	0	0	0	32	2	0	0	1	47	0	84	289
12:00 PM	0	0	0	0	0	1	0	1	0	0	27	0	0	0	1	46	0	76	264
12:15 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	34	0	67	243
12:30 PM	0	0	0	0	0	1	0	4	0	0	27	0	0	0	1	29	0	62	239
12:45 PM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	0	33	0	59	218
1:00 PM	0	0	0	0	0	0	0	0	0	0	20	1	0	0	1	33	0	55	209
1:15 PM	0	0	0	0	0	0	0	0	0	0	32	0	0	0	1	30	0	63	200
1:30 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	10	0	41	185

1:45 PM	0	0	0	0	0	0	1	0	0	29	0	0	1	19	0	50	197	
2:00 PM	0	0	0	0	0	0	1	0	0	21	0	0	2	22	0	46	196	
2:15 PM	0	0	0	0	0	0	1	0	0	26	0	0	1	20	0	48	227	
2:30 PM	0	0	0	0	0	1	0	1	0	0	17	1	0	4	29	0	53	252
2:45 PM	0	0	0	0	0	0	0	0	0	25	3	0	1	20	0	49	283	
3:00 PM	0	0	0	0	0	0	0	4	0	0	35	5	0	13	20	0	77	305
3:15 PM	0	0	0	0	0	0	0	4	0	0	27	1	0	16	25	0	73	292
3:30 PM	0	0	0	0	0	5	0	24	0	0	23	1	0	7	24	0	84	281
3:45 PM	0	0	0	0	0	0	0	17	0	0	29	0	0	0	25	0	71	258
4:00 PM	0	0	0	0	0	0	0	9	0	0	25	0	0	0	30	0	64	246
4:15 PM	0	0	0	0	0	1	0	5	0	0	32	0	0	1	23	0	62	250
4:30 PM	0	0	0	0	0	0	0	0	0	0	35	0	0	0	26	0	61	237
4:45 PM	0	0	0	0	0	0	0	1	0	0	29	0	0	0	29	0	59	218
5:00 PM	0	0	0	0	0	0	0	2	0	0	43	0	0	1	22	0	68	215
5:15 PM	0	0	0	0	0	0	0	1	0	0	20	0	0	0	28	0	49	193
5:30 PM	0	0	0	0	0	0	0	0	0	0	19	0	0	0	23	0	42	185
5:45 PM	0	0	0	0	0	1	0	1	0	0	28	0	0	0	26	0	56	184
6:00 PM	0	0	0	0	0	1	0	0	0	0	23	0	0	0	22	0	46	168
6:15 PM	0	0	0	0	0	0	0	0	0	0	19	1	0	0	21	0	41	
6:30 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	20	0	41	
6:45 PM	0	0	0	0	0	0	1	0	0	0	20	1	0	0	18	0	40	
Count Total	0	0	0	0	0	21	0	133	0	0	1,257	29	0	168	1,301	0	2,909	
Peak Hour	0	0	0	0	0	5	0	41	0	0	120	7	0	70	139	0	382	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk					
	EB	NB	WB	SB		EB	NB	WB	SB	Total	
7:00 AM	0	0	0	0	0	7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	0	1	9:00 AM	0	0	0	0	0
9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	1	1	9:45 AM	0	0	0	0	0
10:00 AM	0	3	0	0	3	10:00 AM	0	0	0	0	0
10:15 AM	0	0	0	0	0	10:15 AM	0	0	0	0	0
10:30 AM	0	0	0	0	0	10:30 AM	0	0	0	0	0
10:45 AM	0	0	0	1	1	10:45 AM	0	0	0	0	0
11:00 AM	0	0	0	1	1	11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	1	0	1
11:30 AM	0	1	0	0	1	11:30 AM	0	0	0	0	0
11:45 AM	0	1	0	0	1	11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	1	1	12:30 PM	0	0	0	0	0
12:45 PM	0	1	0	0	1	12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	1	1	1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	1	1	1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	0	0	1	0	1
2:00 PM	0	0	0	1	1	2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0
2:45 PM	0	0	0	1	1	2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0

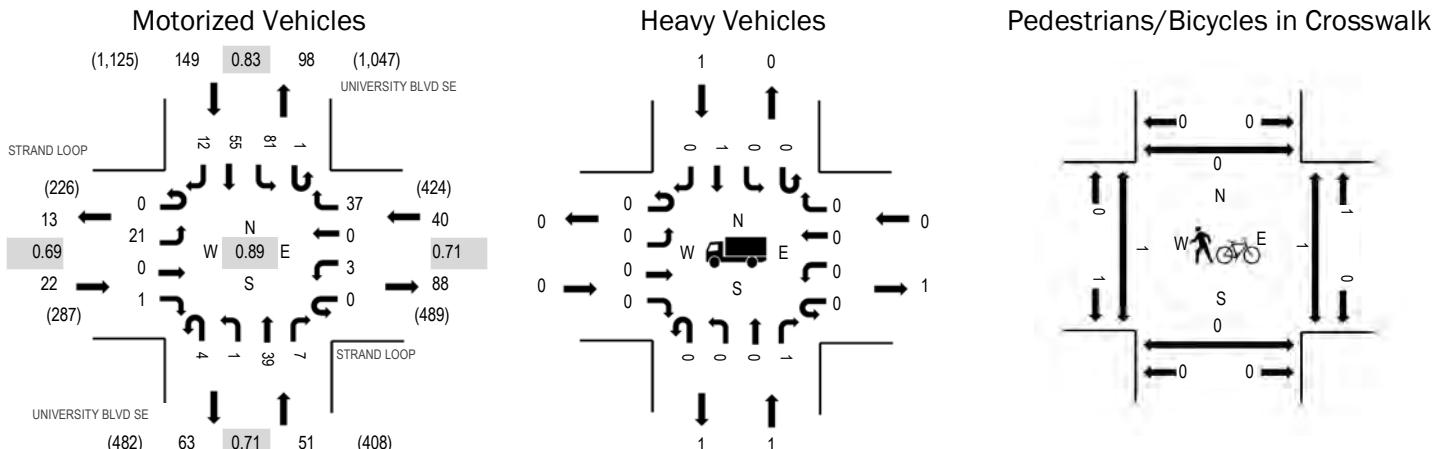
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	2	0	2
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	0	0	5:30 PM	0	0	4	0	4
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0	6:00 PM	0	0	0	0	0
6:15 PM	0	0	0	0	0	6:15 PM	0	0	2	0	2
6:30 PM	0	0	0	0	0	6:30 PM	0	0	0	0	0
6:45 PM	0	0	0	0	0	6:45 PM	0	0	0	0	0
Count Total	0	9	0	13	22	Count Total	0	0	13	0	13
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

**Location:** 5 UNIVERSITY BLVD SE & STRAND LOOP AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:45 AM - 12:45 PM

**Peak 15-Minutes:** 11:45 AM - 12:00 PM

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.69
WB	0.0%	0.71
NB	2.0%	0.71
SB	0.7%	0.83
All	0.8%	0.89

**Traffic Counts - Motorized Vehicles**

Interval Start Time	STRAND LOOP Eastbound				STRAND LOOP Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	8	0	0	0	1	0	7	1	0	4	0	0	8	12	4	45	209
7:15 AM	0	11	0	0	0	0	0	11	0	0	6	0	0	11	11	2	52	213
7:30 AM	0	7	0	0	0	0	0	6	0	0	2	0	1	13	14	10	53	222
7:45 AM	0	7	0	0	0	0	0	10	0	0	2	0	0	16	18	6	59	235
8:00 AM	0	9	0	0	0	0	0	4	0	0	6	1	2	13	10	4	49	223
8:15 AM	0	7	0	0	0	1	0	6	0	0	7	0	0	15	20	5	61	227
8:30 AM	0	13	0	0	0	0	0	14	0	0	9	0	0	13	11	6	66	208
8:45 AM	0	3	0	0	0	0	0	8	0	0	4	1	0	14	11	6	47	184
9:00 AM	0	6	0	0	0	4	0	9	0	0	4	2	0	15	8	5	53	174
9:15 AM	0	8	0	0	0	0	0	5	0	0	5	1	0	14	8	1	42	172
9:30 AM	0	6	0	0	0	1	0	4	0	0	9	1	0	7	11	3	42	174
9:45 AM	0	5	0	0	0	0	0	5	0	0	9	0	0	9	5	4	37	166
10:00 AM	0	3	0	0	0	0	0	14	0	0	7	1	1	12	7	6	51	172
10:15 AM	0	2	0	0	0	0	0	14	0	0	9	1	0	9	9	0	44	159
10:30 AM	0	5	0	0	0	1	0	5	0	0	5	1	0	6	9	2	34	164
10:45 AM	0	3	0	0	0	0	0	7	0	0	12	1	1	7	8	4	43	183
11:00 AM	0	7	1	0	0	1	0	6	0	0	5	0	1	4	10	3	38	214
11:15 AM	0	2	1	0	0	1	0	1	1	0	14	0	0	18	8	3	49	250
11:30 AM	0	6	0	0	0	0	0	4	0	0	5	2	0	22	8	6	53	253
11:45 AM	0	5	0	0	0	1	0	15	1	1	5	2	0	30	10	4	74	262
12:00 PM	0	5	0	1	0	2	0	7	0	0	12	0	1	22	19	5	74	237
12:15 PM	0	5	0	0	0	0	0	6	1	0	9	2	0	18	11	0	52	207
12:30 PM	0	6	0	0	0	0	0	9	2	0	13	3	0	11	15	3	62	208
12:45 PM	0	3	0	2	0	1	0	8	0	0	8	0	0	12	11	4	49	185
1:00 PM	0	5	0	0	0	1	0	7	0	0	7	0	0	11	10	3	44	178
1:15 PM	0	6	0	0	0	0	0	7	0	0	9	4	1	7	15	4	53	165
1:30 PM	0	5	0	1	0	0	0	13	0	0	9	0	1	4	4	2	39	148

1:45 PM	0	6	0	0	0	0	0	9	0	0	9	1	0	9	4	4	42	144
2:00 PM	0	3	0	0	0	0	0	9	1	0	6	0	0	7	4	1	31	143
2:15 PM	0	2	0	1	0	0	0	4	0	0	13	0	0	4	5	7	36	162
2:30 PM	0	4	0	0	0	0	0	2	0	0	9	0	0	13	7	0	35	175
2:45 PM	0	4	0	0	0	1	0	4	0	0	12	0	0	6	10	4	41	178
3:00 PM	0	12	0	0	0	1	0	4	0	0	13	0	1	8	10	1	50	186
3:15 PM	0	11	0	0	0	0	0	6	0	0	11	0	0	11	7	3	49	180
3:30 PM	0	7	0	0	0	0	0	5	0	0	5	0	0	6	7	8	38	186
3:45 PM	0	3	0	0	0	5	0	12	1	0	13	0	0	4	3	8	49	197
4:00 PM	0	3	0	1	0	2	0	12	1	0	4	0	0	4	8	9	44	202
4:15 PM	0	9	0	2	0	0	0	8	0	0	12	0	0	2	17	5	55	209
4:30 PM	0	7	0	2	0	0	0	13	1	0	9	0	1	6	7	3	49	188
4:45 PM	0	5	0	1	0	0	0	14	1	0	9	0	0	10	4	10	54	176
5:00 PM	0	9	0	0	0	1	0	18	0	0	7	1	1	4	5	5	51	171
5:15 PM	0	4	0	0	0	0	0	4	0	0	9	0	0	2	6	9	34	157
5:30 PM	0	2	0	0	0	0	0	8	0	0	7	0	0	2	8	10	37	155
5:45 PM	0	5	0	1	0	2	1	11	0	0	8	4	0	4	4	9	49	151
6:00 PM	0	5	0	0	0	0	0	11	0	0	5	0	0	5	5	6	37	135
6:15 PM	0	4	0	0	0	0	0	12	0	0	1	0	0	2	6	7	32	
6:30 PM	0	4	0	0	0	0	0	8	0	0	5	1	2	3	3	7	33	
6:45 PM	0	5	1	0	0	1	0	9	0	0	3	0	0	3	8	3	33	
Count Total	0	272	3	12	0	28	1	395	11	1	366	30	14	456	431	224	2,244	
Peak Hour	0	21	0	1	0	3	0	37	4	1	39	7	1	81	55	12	262	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	1
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0
8:00 AM	0	1	0	2	3	8:00 AM	0	0	0	0
8:15 AM	0	0	0	1	1	8:15 AM	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0
8:45 AM	0	0	1	0	1	8:45 AM	0	0	0	0
9:00 AM	0	0	1	0	1	9:00 AM	1	2	0	0
9:15 AM	0	0	0	0	0	9:15 AM	1	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0
9:45 AM	0	1	0	1	2	9:45 AM	1	0	0	0
10:00 AM	0	1	2	0	3	10:00 AM	2	1	0	0
10:15 AM	0	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	0	0	0	0	0	10:30 AM	1	0	0	0
10:45 AM	0	0	0	1	1	10:45 AM	2	0	0	0
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	0	0
11:30 AM	0	0	1	0	1	11:30 AM	0	0	0	0
11:45 AM	0	0	0	0	0	11:45 AM	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	1	0	1	0
12:30 PM	0	1	0	1	2	12:30 PM	0	0	0	0
12:45 PM	0	0	1	0	1	12:45 PM	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0
1:15 PM	0	0	0	0	0	1:15 PM	1	0	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	1	0
1:45 PM	0	0	0	1	1	1:45 PM	2	0	1	0
2:00 PM	0	0	0	1	1	2:00 PM	0	0	0	0
2:15 PM	0	0	0	0	0	2:15 PM	1	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	2	0	0	0
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0

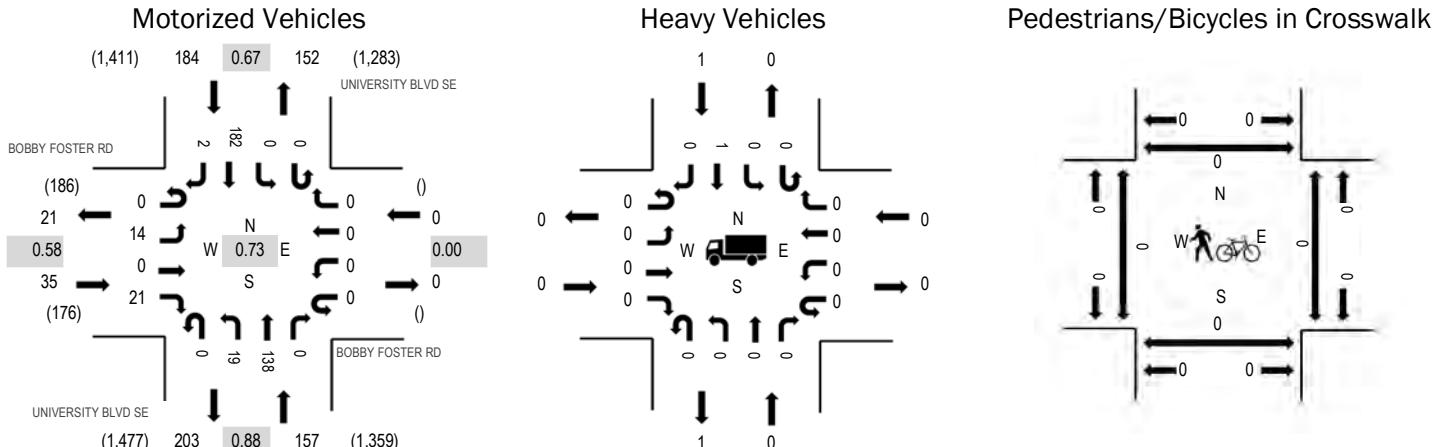
3:30 PM	0	0	0	0	0	3:30 PM	1	0	0	0	1
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	1	1
4:00 PM	0	0	0	0	0	4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	2	0	0	1	3
5:45 PM	0	0	0	0	0	5:45 PM	2	0	0	1	3
6:00 PM	0	0	0	0	0	6:00 PM	1	0	0	0	1
6:15 PM	0	0	0	0	0	6:15 PM	1	0	0	0	1
6:30 PM	0	0	0	0	0	6:30 PM	1	0	0	0	1
6:45 PM	0	0	0	0	0	6:45 PM	2	1	0	0	3
Count Total	0	5	6	10	21	Count Total	29	5	3	4	41
Peak Hour	0	1	0	1	2	Peak Hour	1	0	1	0	2

**Location:** 10 UNIVERSITY BLVD SE & BOBBY FOSTER RD AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.58
WB	0.0%	0.00
NB	0.0%	0.88
SB	0.5%	0.67
All	0.3%	0.73

**Traffic Counts - Motorized Vehicles**

Interval Start Time	BOBBY FOSTER RD				BOBBY FOSTER RD				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Total	Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound												
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
7:00 AM	0	0	0	3	0	0	0	0	0	6	18	0	0	0	0	29	0	56	286
7:15 AM	0	0	0	4	0	0	0	0	0	5	29	0	0	0	0	46	1	85	307
7:30 AM	0	0	0	1	0	0	0	0	0	0	27	0	0	0	0	44	0	72	350
7:45 AM	0	8	0	1	0	0	0	0	0	1	21	0	0	0	0	41	1	73	376
8:00 AM	0	1	0	5	0	0	0	0	0	3	32	0	0	0	0	36	0	77	367
8:15 AM	0	4	0	11	0	0	0	0	0	8	33	0	0	0	0	71	1	128	346
8:30 AM	0	1	0	4	0	0	0	0	0	7	52	0	0	0	0	34	0	98	275
8:45 AM	0	2	0	2	0	0	0	0	0	6	18	0	0	0	0	35	1	64	219
9:00 AM	0	0	0	3	0	0	0	0	0	1	22	0	0	0	0	30	0	56	200
9:15 AM	0	1	0	0	0	0	0	0	0	2	25	0	0	0	0	28	1	57	205
9:30 AM	0	1	0	1	0	0	0	0	0	2	17	0	0	0	0	20	1	42	193
9:45 AM	0	1	0	1	0	0	0	0	0	3	24	0	0	0	0	15	1	45	192
10:00 AM	0	1	0	2	0	0	0	0	0	5	19	0	0	0	0	33	1	61	206
10:15 AM	0	2	0	3	0	0	0	0	0	4	23	0	0	0	0	12	1	45	189
10:30 AM	0	2	0	0	0	0	0	0	0	2	14	0	0	0	0	20	3	41	195
10:45 AM	0	1	0	1	0	0	0	0	0	3	27	0	0	0	0	25	2	59	226
11:00 AM	0	2	0	2	0	0	0	0	0	0	20	0	0	0	0	20	0	44	251
11:15 AM	0	0	0	1	0	0	0	0	0	2	16	0	0	0	0	31	1	51	284
11:30 AM	0	2	0	0	0	0	0	0	0	1	24	0	0	0	0	44	1	72	306
11:45 AM	0	2	0	1	0	0	0	0	0	0	31	0	0	0	0	49	1	84	298
12:00 PM	0	0	0	1	0	0	0	0	0	2	27	0	0	0	0	47	0	77	276
12:15 PM	0	1	0	1	0	0	0	0	0	2	31	0	0	0	0	34	4	73	247
12:30 PM	0	4	0	6	0	0	0	0	0	1	29	0	0	0	0	24	0	64	246
12:45 PM	0	2	0	2	0	0	0	0	0	2	23	0	0	0	0	32	1	62	227
1:00 PM	0	3	0	5	0	0	0	0	0	0	20	0	0	0	0	20	0	48	215
1:15 PM	0	2	0	4	0	0	0	0	0	4	30	0	0	0	0	32	0	72	218
1:30 PM	0	3	0	1	0	0	0	0	0	1	27	0	0	0	0	11	2	45	194

1:45 PM	0	1	0	3	0	0	0	0	4	23	0	0	0	17	2	50	200
2:00 PM	0	4	0	3	0	0	0	0	2	20	0	0	0	21	1	51	208
2:15 PM	0	0	0	2	0	0	0	0	2	25	0	0	0	19	0	48	237
2:30 PM	0	0	0	2	0	0	0	0	0	16	0	0	0	31	2	51	266
2:45 PM	0	0	0	2	0	0	0	0	1	24	0	0	0	31	0	58	290
3:00 PM	0	3	0	5	0	0	0	0	5	35	0	0	0	30	2	80	304
3:15 PM	0	1	0	5	0	0	0	0	5	26	0	0	0	38	2	77	288
3:30 PM	0	2	0	0	0	0	0	0	13	33	0	0	0	26	1	75	272
3:45 PM	0	2	0	0	0	0	0	0	4	40	0	0	0	25	1	72	256
4:00 PM	0	0	0	2	0	0	0	0	2	32	0	0	0	28	0	64	246
4:15 PM	0	0	0	5	0	0	0	0	7	30	0	0	0	18	1	61	252
4:30 PM	0	0	0	5	0	0	0	0	1	28	0	0	0	21	4	59	241
4:45 PM	0	0	0	3	0	0	0	0	3	30	0	0	0	25	1	62	226
5:00 PM	0	2	0	2	0	0	0	0	5	40	0	0	0	21	0	70	214
5:15 PM	0	0	0	0	0	0	0	0	3	19	0	0	0	28	0	50	196
5:30 PM	0	0	0	2	0	0	0	0	2	18	0	0	0	22	0	44	185
5:45 PM	0	0	0	1	0	0	0	0	2	24	0	0	0	23	0	50	181
6:00 PM	0	0	0	2	0	0	0	0	2	23	0	0	0	20	5	52	173
6:15 PM	0	1	0	1	0	0	0	0	0	17	0	0	0	20	0	39	
6:30 PM	0	0	0	2	0	0	0	0	0	17	0	0	0	19	2	40	
6:45 PM	0	0	0	1	0	0	0	0	2	22	0	0	0	17	0	42	
Count Total	0	62	0	114	0	0	0	0	138	1,221	0	0	0	1,363	48	2,946	
Peak Hour	0	14	0	21	0	0	0	0	19	138	0	0	0	182	2	376	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0
8:00 AM	0	0	0	1	1	8:00 AM	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0
9:00 AM	0	0	0	0	0	9:00 AM	0	0	0	0
9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0
9:45 AM	0	0	0	1	1	9:45 AM	0	0	0	0
10:00 AM	0	1	0	0	1	10:00 AM	0	0	0	0
10:15 AM	0	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	0	0	0	0	0	10:30 AM	0	0	0	0
10:45 AM	0	0	0	1	1	10:45 AM	0	0	0	0
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	0	0
11:30 AM	0	0	0	0	0	11:30 AM	0	0	0	0
11:45 AM	0	0	0	0	0	11:45 AM	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0
12:30 PM	1	0	0	0	1	12:30 PM	0	0	0	0
12:45 PM	0	0	0	1	1	12:45 PM	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0
1:15 PM	0	0	0	0	0	1:15 PM	0	0	0	0
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	0	0	0	0
2:00 PM	0	0	0	1	1	2:00 PM	0	0	0	0
2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0

3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	1	1	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0	6:00 PM	0	0	0	2	2
6:15 PM	0	0	0	0	0	6:15 PM	0	0	0	0	0
6:30 PM	0	0	0	0	0	6:30 PM	0	0	0	0	0
6:45 PM	0	0	0	0	0	6:45 PM	0	0	0	0	0
Count Total	1	1	0	8	10	Count Total	0	0	0	2	2
Peak Hour	0	0	0	1	1	Peak Hour	0	0	0	0	0

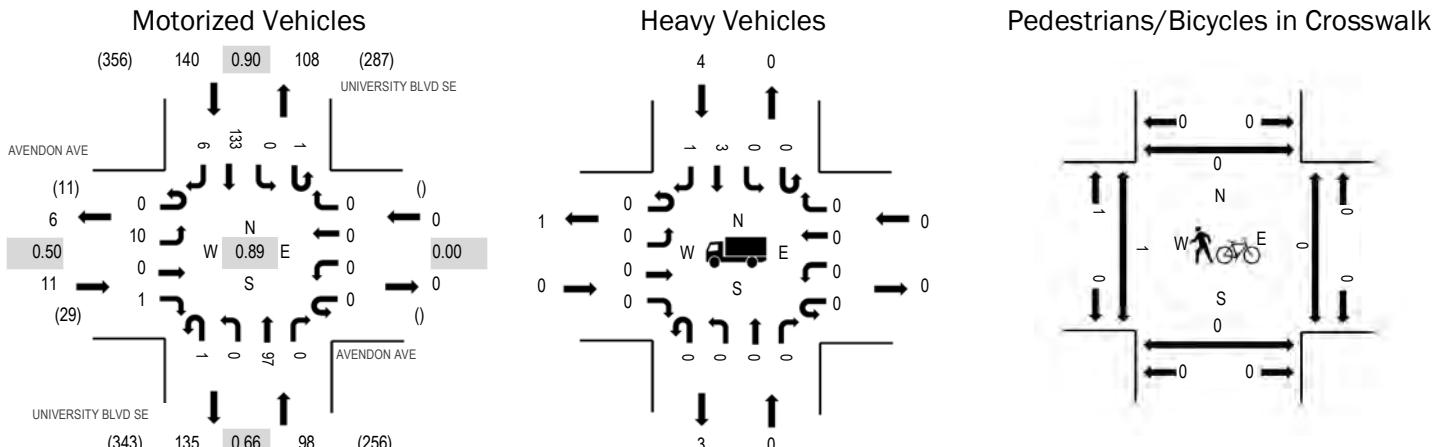
**Location:** 1 UNIVERSITY BLVD SE & AVENDON AVE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:30 AM - 08:45 AM

## Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	0.0%	0.00
NB	0.0%	0.66
SB	2.9%	0.90
All	1.6%	0.89

## Traffic Counts - Motorized Vehicles

Interval Start Time	AVENDON AVE Eastbound				AVENDON AVE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Total	Rolling Hour	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	17	0	0	0	24	2	44	220
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	29	0	1	0	24	0	56	225
7:30 AM	0	3	0	0	0	0	0	0	0	0	0	15	0	2	0	38	0	58	237
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	19	0	0	0	39	2	62	249
8:00 AM	0	2	0	0	0	0	0	0	0	1	0	21	0	0	0	25	0	49	239
8:15 AM	0	6	0	1	0	0	0	0	0	0	0	20	0	1	0	39	1	68	240
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	30	3	70	220
8:45 AM	0	3	0	0	0	0	0	0	0	0	0	15	0	0	0	34	0	52	196
9:00 AM	0	2	0	0	0	0	0	0	0	0	0	20	0	0	0	27	1	50	182
9:15 AM	0	5	0	0	0	0	0	0	0	0	0	18	0	1	0	22	2	48	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	21	0	46	
9:45 AM	0	2	0	0	0	0	0	0	1	0	0	18	0	0	0	17	0	38	
Count Total	0	28	0	1	0	0	0	0	2	0	254	0	5	0	340	11	641		
Peak Hour	0	10	0	1	0	0	0	0	1	0	97	0	1	0	133	6	249		

## Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	8:15 AM	1	0	0	0	1
8:30 AM	0	0	0	1	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	0	9:00 AM	4	0	0	0	4

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	1	1	9:45 AM	0	0	0	0	0
Count Total	0	2	0	5	7	Count Total	5	0	0	1	6
Peak Hour	0	0	0	4	4	Peak Hour	1	0	0	0	1

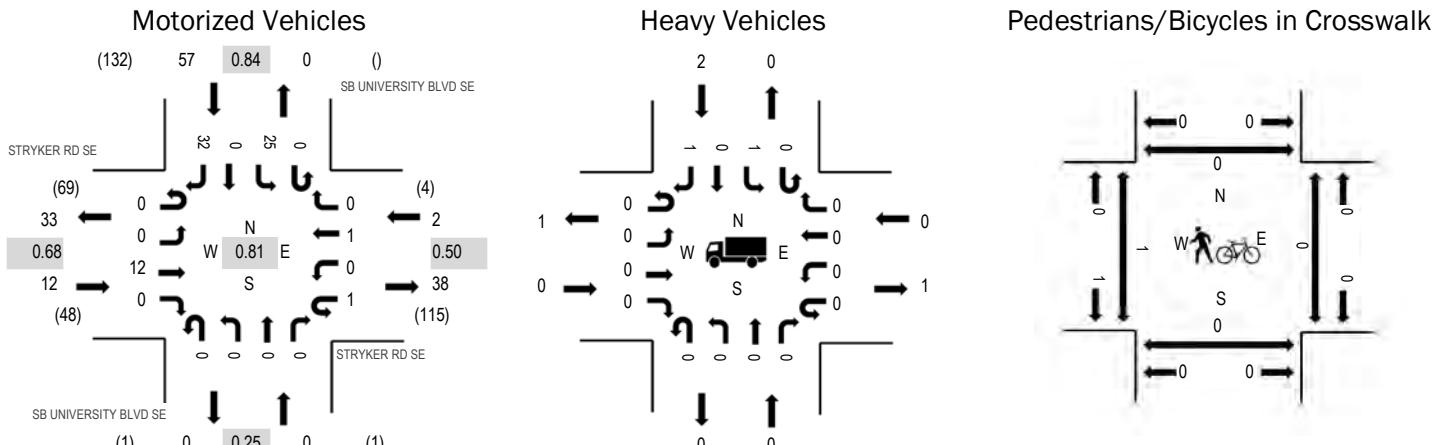
**Location:** 2 SB UNIVERSITY BLVD SE & STRYKER RD SE AM

**Date:** Wednesday, April 21, 2021

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

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.68
WB	0.0%	0.50
NB	0.0%	0.25
SB	3.5%	0.84
All	2.8%	0.81

### Traffic Counts - Motorized Vehicles

Interval Start Time	STRYKER RD SE				STRYKER RD SE				SB UNIVERSITY BLVD SE				SB UNIVERSITY BLVD SE				Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	8	1	4	15	66
7:15 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	3	0	9	18	67
7:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	4	0	10	17	71
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0	7	16	71
8:00 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	6	0	5	16	68
8:15 AM	0	0	4	0	1	0	0	0	0	0	0	0	0	7	0	10	22	67
8:30 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	4	0	7	17	55
8:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	5	13	52
9:00 AM	0	0	4	0	1	0	0	0	0	0	0	0	0	8	0	2	15	51
9:15 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	3	0	2	10	
9:30 AM	0	0	3	0	1	0	0	0	0	0	0	0	0	6	0	4	14	
9:45 AM	0	0	7	0	0	0	0	0	0	0	0	0	0	2	0	3	12	
Count Total	0	0	48	0	3	0	1	0	0	0	0	1	0	63	1	68	185	
Peak Hour	0	0	12	0	1	0	1	0	0	0	0	0	0	25	0	32	71	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	7:00 AM	0	1	0	1	2
7:15 AM	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	2	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	8:45 AM	0	2	0	0	2
9:00 AM	0	0	0	0	9:00 AM	0	0	0	0	0

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	1	1	9:45 AM	1	0	1	1	3
Count Total	1	0	0	3	4	Count Total	2	3	1	2	8
Peak Hour	0	0	0	2	2	Peak Hour	1	0	0	0	1

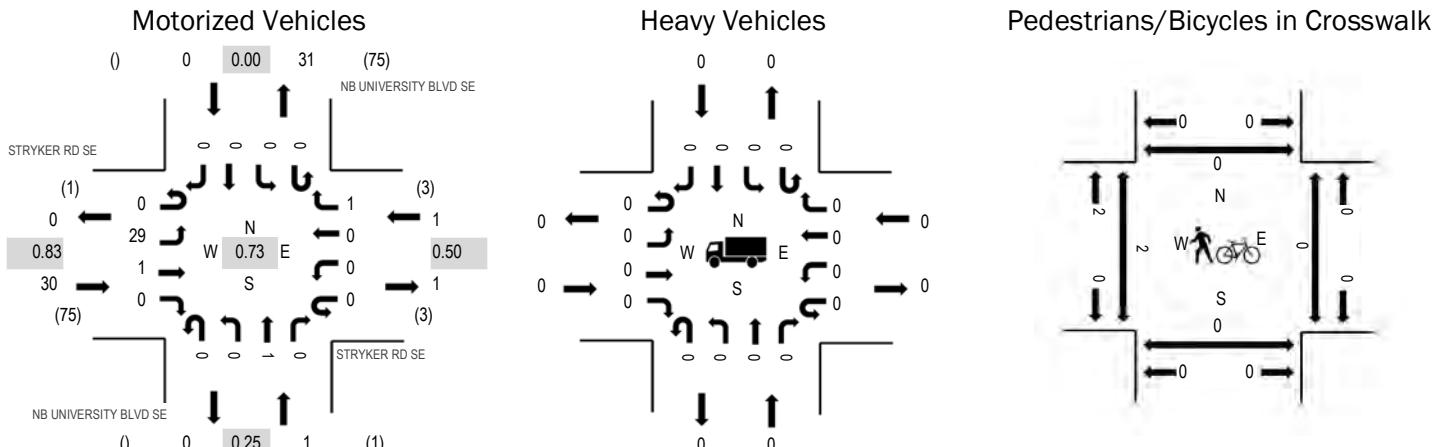
**Location:** 3 NB UNIVERSITY BLVD SE & STRYKER RD SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 08:45 AM - 09:45 AM

**Peak 15-Minutes:** 09:30 AM - 09:45 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.83
WB	0.0%	0.50
NB	0.0%	0.25
SB	0.0%	0.00
All	0.0%	0.73

### Traffic Counts - Motorized Vehicles

Interval Start Time	STRYKER RD SE				STRYKER RD SE				NB UNIVERSITY BLVD SE				NB UNIVERSITY BLVD SE				Total	Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound												
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
7:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	18	
7:15 AM	0	5	2	0	0	0	0	1	0	0	0	0	0	0	0	0	8	22	
7:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	20	
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	26	
8:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	30	
8:15 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	28	
8:30 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	30	
8:45 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	32	
9:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	31	
9:15 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8		
9:30 AM	0	8	1	0	0	0	0	1	0	0	1	0	0	0	0	0	11		
9:45 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5		
Count Total	0	72	3	0	0	0	1	2	0	0	1	0	0	0	0	0	79		
Peak Hour	0	29	1	0	0	0	0	1	0	0	1	0	0	0	0	0	32		

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	1	8:00 AM	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	2	0	0	2
9:00 AM	0	0	0	0	0	9:00 AM	0	0	0	0

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0	9:45 AM	0	0	0	0	0
Count Total	1	0	0	0	1	Count Total	2	0	0	0	2
Peak Hour	0	0	0	0	0	Peak Hour	2	0	0	0	2

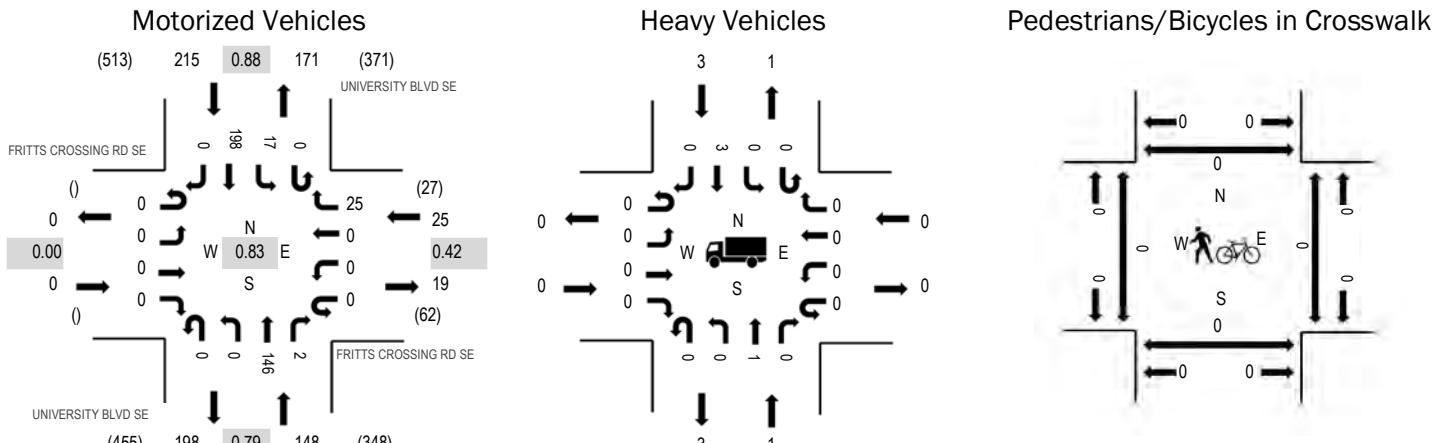
**Location:** 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.42
NB	0.7%	0.79
SB	1.4%	0.88
All	1.0%	0.83

### Traffic Counts - Motorized Vehicles

Interval Start Time	FRITTS CROSSING RD SE				FRITTS CROSSING RD SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Rolling Hour		
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru
7:00 AM	0	0	0	0	0	1	0	0	1	0	25	0	0	1	29	0	57	307	
7:15 AM	0	0	0	0	0	0	0	0	0	0	27	0	0	0	3	54	0	84	343
7:30 AM	0	0	0	0	0	0	0	1	0	0	30	0	0	0	8	42	0	81	376
7:45 AM	0	0	0	0	0	0	0	2	0	0	30	0	0	0	5	48	0	85	388
8:00 AM	0	0	0	0	0	0	0	6	0	0	31	1	0	0	3	52	0	93	365
8:15 AM	0	0	0	0	0	0	15	0	0	0	38	1	0	0	3	60	0	117	331
8:30 AM	0	0	0	0	0	0	0	2	0	0	47	0	0	0	6	38	0	93	275
8:45 AM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	5	35	0	62	226
9:00 AM	0	0	0	0	0	0	0	0	0	0	23	0	0	0	3	33	0	59	216
9:15 AM	0	0	0	0	0	0	0	0	0	0	28	0	0	0	7	26	0	61	
9:30 AM	0	0	0	0	0	0	0	0	0	0	20	0	0	0	5	19	0	44	
9:45 AM	0	0	0	0	0	0	0	0	0	0	24	0	0	0	11	17	0	52	
Count Total	0	0	0	0	0	1	0	26	1	0	345	2	0	0	60	453	0	888	
Peak Hour	0	0	0	0	0	0	0	25	0	0	146	2	0	0	17	198	0	388	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	0	1	9:00 AM	0	0	0	0	0

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	1	1	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0	9:45 AM	0	0	0	0	0
Count Total	0	3	0	4	7	Count Total	0	0	0	0	0
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

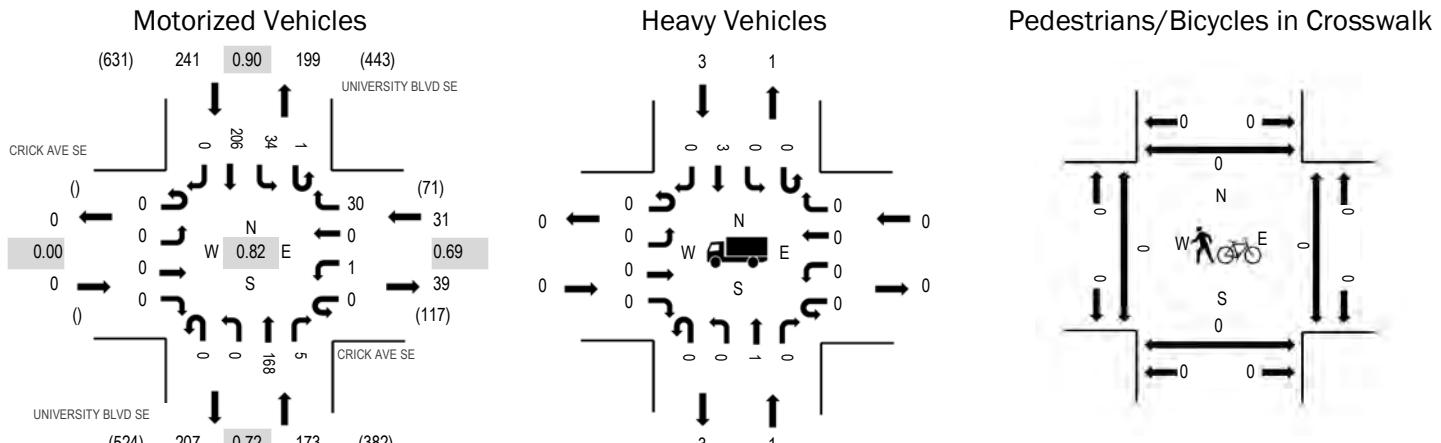
**Location:** 9 UNIVERSITY BLVD SE & CRICK AVE SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.69
NB	0.6%	0.72
SB	1.2%	0.90
All	0.9%	0.82

### Traffic Counts - Motorized Vehicles

Interval Start Time	CRICK AVE SE Eastbound				CRICK AVE SE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Rolling Hour	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	1	0	7	0	0	20	0	0	13	29	0	70	359
7:15 AM	0	0	0	0	1	0	0	6	0	0	26	2	2	16	55	0	108	406
7:30 AM	0	0	0	0	0	0	0	1	0	0	34	0	0	11	54	0	100	433
7:45 AM	0	0	0	0	0	1	0	2	0	0	21	2	0	10	45	0	81	445
8:00 AM	0	0	0	0	0	0	0	8	0	0	39	1	0	14	55	0	117	445
8:15 AM	0	0	0	0	0	0	0	12	0	0	50	0	1	7	65	0	135	398
8:30 AM	0	0	0	0	0	0	0	8	0	0	58	2	0	3	41	0	112	345
8:45 AM	0	0	0	0	0	0	0	5	0	0	23	0	0	6	47	0	81	292
9:00 AM	0	0	0	0	0	0	0	2	0	0	23	1	0	9	35	0	70	280
9:15 AM	0	0	0	0	0	1	0	7	0	0	30	0	0	7	37	0	82	
9:30 AM	0	0	0	0	0	2	0	2	0	0	24	1	1	3	26	0	59	
9:45 AM	0	0	0	0	0	0	0	5	0	0	24	1	2	7	30	0	69	
Count Total	0	0	0	0	1	5	0	65	0	0	372	10	6	106	519	0	1,084	
Peak Hour	0	0	0	0	0	1	0	30	0	0	168	5	1	34	206	0	445	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	1	2	9:00 AM	0	0	0	0	0

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	1	1	2	9:45 AM	0	0	0	0	0
Count Total	0	3	1	6	10	Count Total	0	0	0	0	0
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

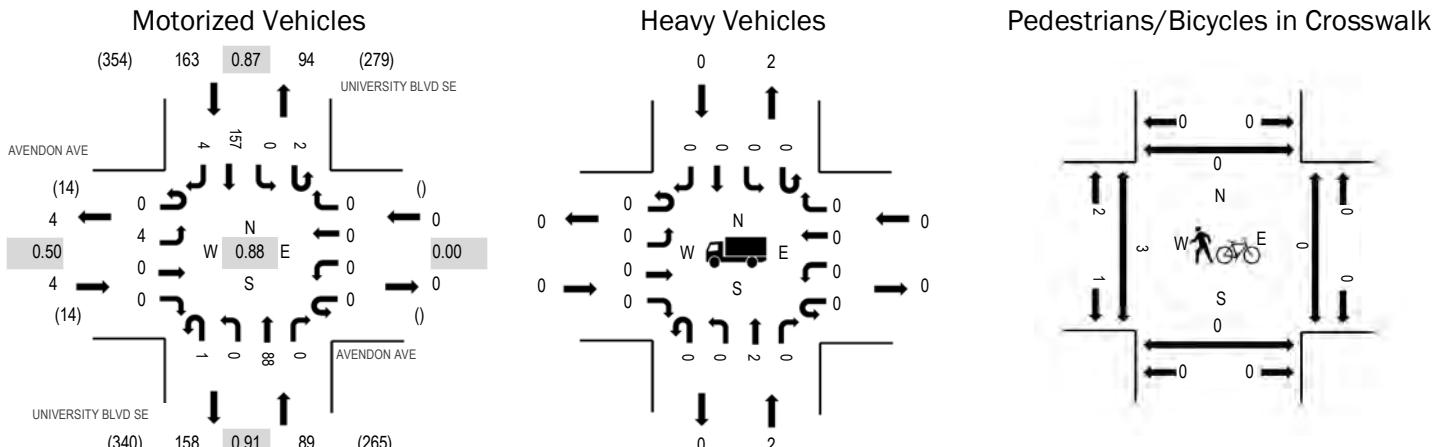
**Location:** 1 UNIVERSITY BLVD SE & AVENDON AVE Noon

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:30 AM - 12:30 PM

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

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	0.0%	0.00
NB	2.2%	0.91
SB	0.0%	0.87
All	0.8%	0.88

### Traffic Counts - Motorized Vehicles

Interval Start Time	AVENDON AVE Eastbound				AVENDON AVE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Rolling Hour	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	1	0	1	0	0	0	0	0	0	19	0	0	0	19	3	43	220
11:15 AM	0	1	0	0	0	0	0	0	0	0	16	0	0	0	28	0	45	250
11:30 AM	0	2	0	0	0	0	0	0	1	0	17	0	2	0	38	0	60	256
11:45 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	43	3	72	252
12:00 PM	0	1	0	0	0	0	0	0	0	0	25	0	0	0	46	1	73	230
12:15 PM	0	1	0	0	0	0	0	0	0	0	20	0	0	0	30	0	51	203
12:30 PM	0	0	0	0	0	0	0	0	0	0	27	0	0	0	29	0	56	207
12:45 PM	0	1	0	0	0	0	0	0	0	0	19	0	0	0	27	3	50	191
1:00 PM	0	2	0	1	0	0	0	0	0	0	18	0	0	0	22	3	46	183
1:15 PM	0	1	0	0	0	0	0	0	0	0	25	0	0	0	29	0	55	
1:30 PM	0	1	0	0	0	0	0	0	0	0	28	0	1	0	9	1	40	
1:45 PM	0	1	0	0	0	0	0	0	0	0	24	0	0	0	17	0	42	
Count Total	0	12	0	2	0	0	0	0	1	0	264	0	3	0	337	14	633	
Peak Hour	0	4	0	0	0	0	0	0	1	0	88	0	2	0	157	4	256	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	1	1	0	0	0	0	0
11:30 AM	0	2	0	0	2	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	2	0	0	0	2
12:15 PM	0	0	0	0	0	1	0	0	0	1
12:30 PM	0	0	0	1	1	0	0	0	0	0
12:45 PM	0	1	0	0	1	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0

1:15 PM	0	0	0	0	0	1:15 PM	1	0	0	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	2	0	0	0	2
Count Total	0	3	0	3	6	Count Total	6	0	0	0	6
Peak Hour	0	2	0	0	2	Peak Hour	3	0	0	0	3



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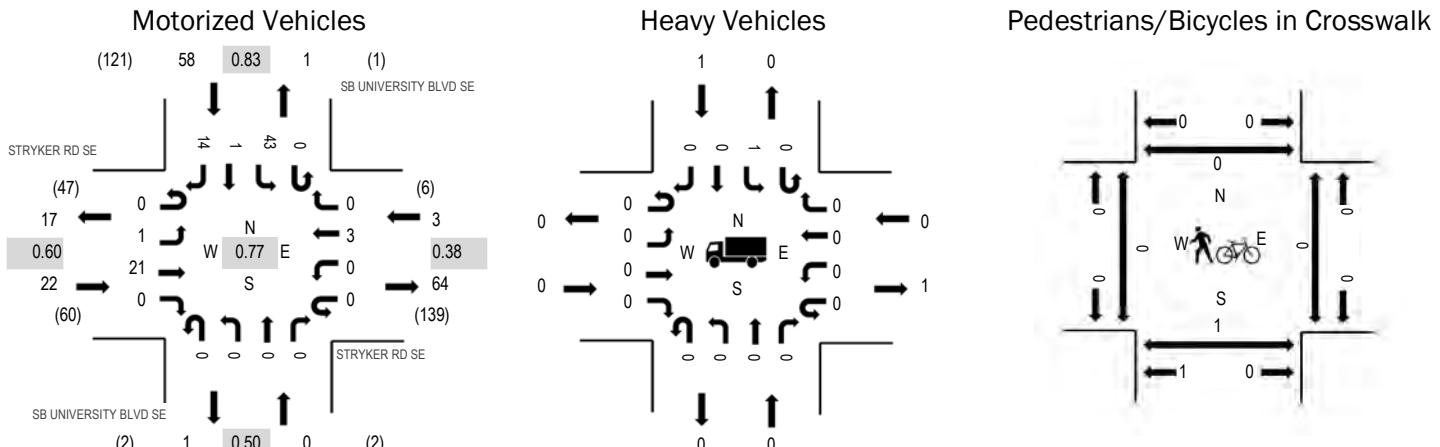
**Location:** 2 SB UNIVERSITY BLVD SE & STRYKER RD SE Noon

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:45 AM - 12:45 PM

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

## Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.60
WB	0.0%	0.38
NB	0.0%	0.50
SB	1.7%	0.83
All	1.2%	0.77

## Traffic Counts - Motorized Vehicles

Interval Start Time	STRYKER RD SE Eastbound				STRYKER RD SE Westbound				SB UNIVERSITY BLVD SE Northbound				SB UNIVERSITY BLVD SE Southbound				Rolling Hour	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	0	4	0	0	0	1	0	0	0	0	0	0	3	0	4	12	59
11:15 AM	0	0	10	0	0	0	0	0	0	0	0	0	0	5	0	3	18	72
11:30 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	5	0	3	13	69
11:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	9	0	3	16	83
12:00 PM	0	0	5	0	0	0	2	0	0	0	0	0	0	14	0	4	25	82
12:15 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	6	0	4	15	69
12:30 PM	0	1	8	0	0	0	0	0	0	0	0	0	0	14	1	3	27	69
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	7	0	7	15	53
1:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	6	1	2	12	48
1:15 PM	0	0	2	0	0	0	1	0	0	0	0	1	0	5	0	6	15	
1:30 PM	0	0	7	0	0	0	0	0	0	0	0	1	0	2	0	1	11	
1:45 PM	0	0	6	0	0	0	1	0	0	0	0	0	0	2	0	1	10	
Count Total	0	1	59	0	0	0	6	0	0	0	0	2	0	78	2	41	189	
Peak Hour	0	1	21	0	0	0	3	0	0	0	0	0	0	43	1	14	83	

## Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	1	1
11:15 AM	0	0	0	0	0	11:15 AM	0	0	0	0	0
11:30 AM	1	0	0	0	1	11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0	11:45 AM	0	1	0	0	1
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	1	1	12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0

1:15 PM	0	0	0	0	0	1:15 PM	0	0	0	1	1
1:30 PM	0	0	0	0	0	1:30 PM	0	2	2	0	4
1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	2	2
Count Total	1	0	0	1	2	Count Total	0	3	2	4	9
Peak Hour	0	0	0	1	1	Peak Hour	0	1	0	0	1

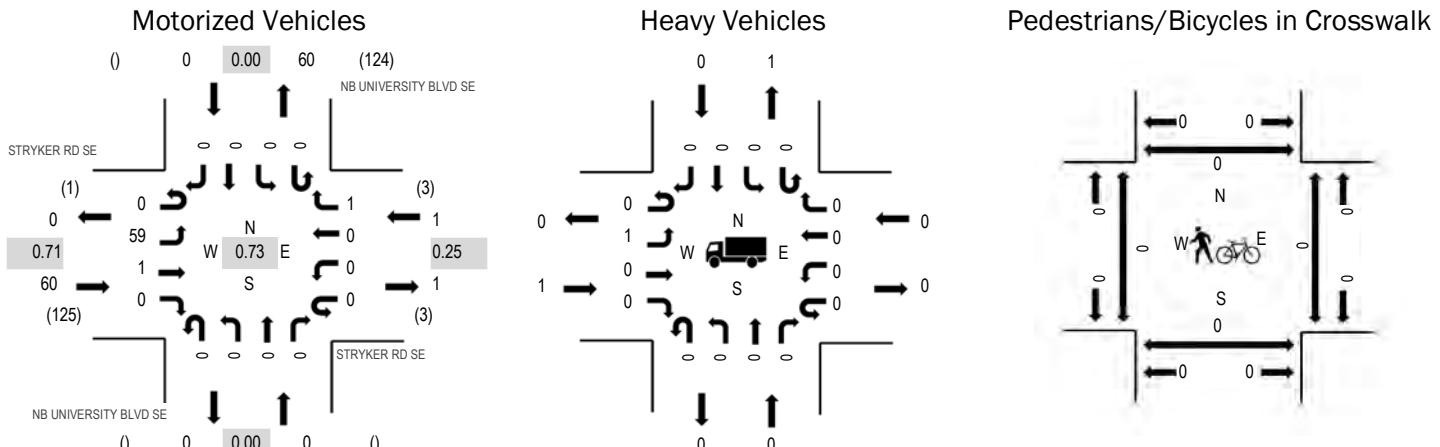
**Location:** 3 NB UNIVERSITY BLVD SE & STRYKER RD SE Noon

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:45 AM - 12:45 PM

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

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.7%	0.71
WB	0.0%	0.25
NB	0.0%	0.00
SB	0.0%	0.00
All	1.6%	0.73

### Traffic Counts - Motorized Vehicles

Interval Start Time	STRYKER RD SE Eastbound				STRYKER RD SE Westbound				NB UNIVERSITY BLVD SE Northbound				NB UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	4	1	0	0	0	1	0	0	0	0	0	0	0	0	0	6	40
11:15 AM	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	54
11:30 AM	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	50
11:45 AM	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	61
12:00 PM	0	18	1	0	0	0	0	1	0	0	0	0	0	0	0	0	20	57
12:15 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	45
12:30 PM	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	45
12:45 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	32
1:00 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	31
1:15 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
1:30 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
1:45 PM	0	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	7	
Count Total	0	122	3	0	0	0	1	2	0	0	0	0	0	0	0	0	128	
Peak Hour	0	59	1	0	0	0	0	1	0	0	0	0	0	0	0	0	61	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	0	0	11:15 AM	0	0	0	0	0
11:30 AM	1	0	0	0	1	11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0	11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:30 PM	1	0	0	0	1	12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0

1:15 PM	0	0	0	0	0	1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0
Count Total	2	0	0	0	2	Count Total	0	0	0	0	0
Peak Hour	1	0	0	0	1	Peak Hour	0	0	0	0	0

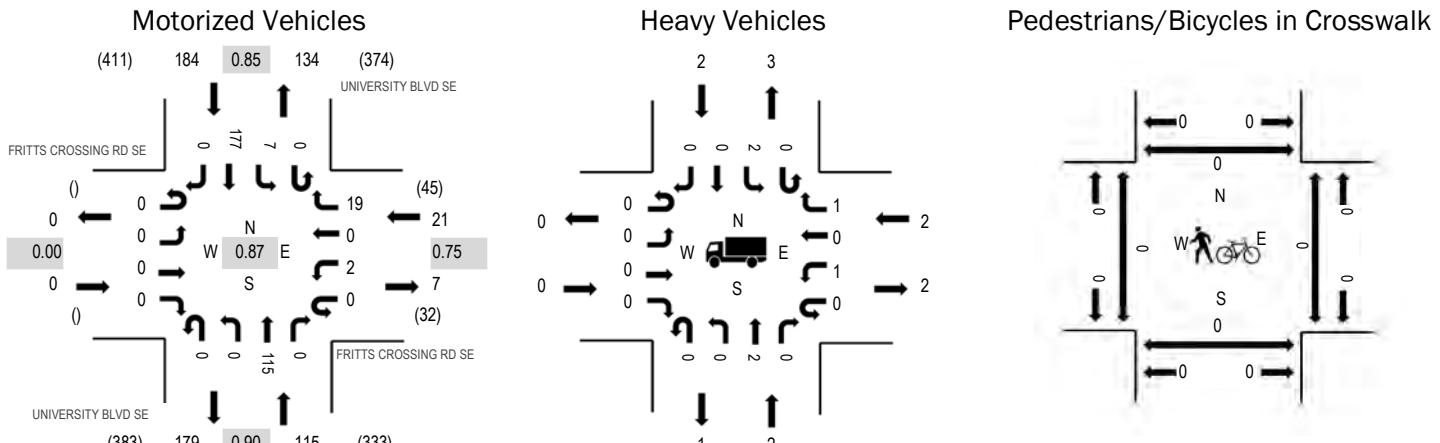
**Location:** 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE Noon

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:15 AM - 12:15 PM

**Peak 15-Minutes:** 11:45 AM - 12:00 PM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	9.5%	0.75
NB	1.7%	0.90
SB	1.1%	0.85
All	1.9%	0.87

### Traffic Counts - Motorized Vehicles

Interval Start Time	FRITTS CROSSING RD SE				FRITTS CROSSING RD SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		
11:00 AM	0	0	0	0	0	0	0	1	0	0	20	0	1	4	22	0	48	286
11:15 AM	0	0	0	0	0	1	0	6	0	0	22	0	0	1	36	0	66	320
11:30 AM	0	0	0	0	0	0	0	5	0	0	29	0	0	1	45	0	80	318
11:45 AM	0	0	0	0	0	1	0	3	0	0	34	0	0	3	51	0	92	297
12:00 PM	0	0	0	0	0	0	0	5	0	0	30	0	0	2	45	0	82	272
12:15 PM	0	0	0	0	0	0	0	2	0	0	29	1	0	0	32	0	64	246
12:30 PM	0	0	0	0	0	0	0	2	0	0	28	0	0	2	27	0	59	240
12:45 PM	0	0	0	0	0	0	0	4	0	0	26	0	0	3	34	0	67	238
1:00 PM	0	0	0	0	0	0	0	2	0	0	23	0	0	3	28	0	56	231
1:15 PM	0	0	0	0	0	2	0	1	0	0	29	0	0	3	23	0	58	
1:30 PM	0	0	0	0	0	0	0	5	0	0	33	0	0	2	17	0	57	
1:45 PM	0	0	0	0	0	0	0	5	0	0	29	0	0	7	19	0	60	
Count Total	0	0	0	0	0	4	0	41	0	0	332	1	1	31	379	0	789	
Peak Hour	0	0	0	0	0	2	0	19	0	0	115	0	0	7	177	0	320	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
11:00 AM	0	0	0	1	1	0	0	0	0	0
11:15 AM	0	0	1	0	1	0	0	0	0	0
11:30 AM	0	2	0	0	2	0	0	0	0	0
11:45 AM	0	0	0	2	2	0	0	0	0	0
12:00 PM	0	0	1	0	1	0	0	0	0	0
12:15 PM	0	0	1	0	1	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0

1:15 PM	0	0	0	0	0	1:15 PM	0	0	1	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	0	0	1	0	1
Count Total	0	2	3	4	9	Count Total	0	0	2	0	2
Peak Hour	0	2	2	2	6	Peak Hour	0	0	0	0	0

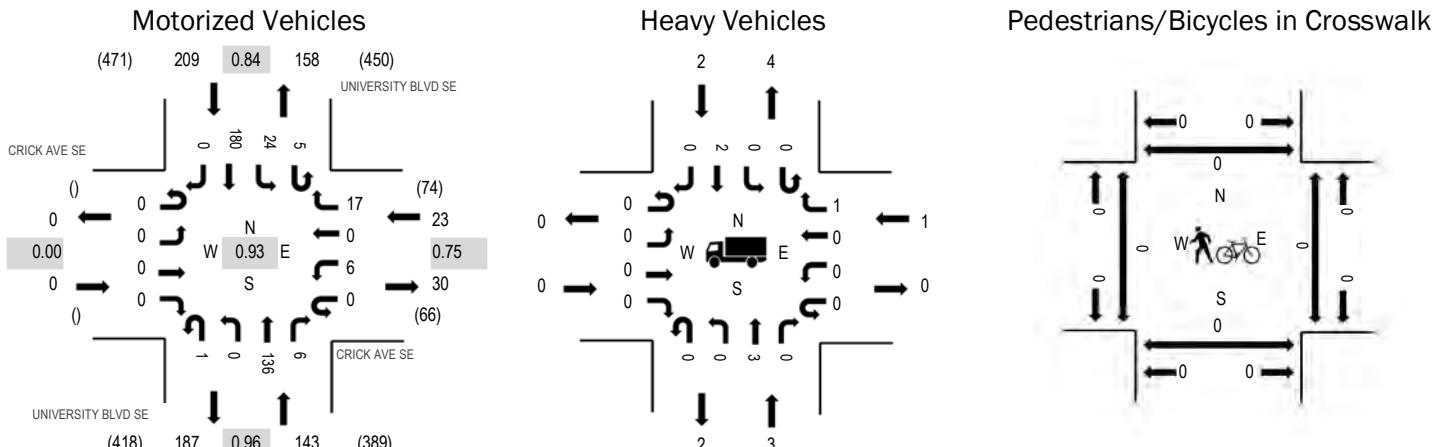
**Location:** 9 UNIVERSITY BLVD SE & CRICK AVE SE Noon

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:30 AM - 12:30 PM

**Peak 15-Minutes:** 11:45 AM - 12:00 PM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	4.3%	0.75
NB	2.1%	0.96
SB	1.0%	0.84
All	1.6%	0.93

### Traffic Counts - Motorized Vehicles

Interval Start Time	CRICK AVE SE Eastbound				CRICK AVE SE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
11:00 AM	0	0	0	0	0	1	0	8	0	0	29	1	0	4	27	0	70	319
11:15 AM	0	0	0	0	0	0	0	4	0	0	18	0	1	4	32	0	59	348
11:30 AM	0	0	0	0	0	2	0	2	0	0	35	0	1	3	46	0	89	375
11:45 AM	0	0	0	0	0	0	0	2	1	0	35	1	2	10	50	0	101	362
12:00 PM	0	0	0	0	0	4	0	7	0	0	33	1	1	7	46	0	99	338
12:15 PM	0	0	0	0	0	0	0	6	0	0	33	4	1	4	38	0	86	314
12:30 PM	0	0	0	0	0	0	0	7	0	0	38	0	0	4	27	0	76	303
12:45 PM	0	0	0	0	0	1	0	8	0	0	25	0	0	5	38	0	77	285
1:00 PM	0	0	0	0	0	0	0	5	1	0	29	0	2	8	30	0	75	277
1:15 PM	0	0	0	0	0	0	0	8	0	0	31	2	0	1	33	0	75	
1:30 PM	0	0	0	0	0	0	0	7	0	0	36	1	0	2	12	0	58	
1:45 PM	0	0	0	0	0	1	0	1	0	0	35	0	0	4	28	0	69	
Count Total	0	0	0	0	0	9	0	65	2	0	377	10	8	56	407	0	934	
Peak Hour	0	0	0	0	0	6	0	17	1	0	136	6	5	24	180	0	375	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
11:00 AM	0	0	0	1	1	11:00 AM	0	0	0	0	0
11:15 AM	0	1	0	0	1	11:15 AM	0	0	0	0	0
11:30 AM	0	1	0	0	1	11:30 AM	0	0	0	0	0
11:45 AM	0	1	1	2	4	11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:15 PM	0	1	0	0	1	12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	1	1	12:30 PM	0	0	0	0	0
12:45 PM	0	0	1	0	1	12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0

1:15 PM	0	0	0	1	1	1:15 PM	0	0	0	0	0
1:30 PM	0	0	2	1	3	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	0	0	0	0	0
Count Total	0	4	4	7	15	Count Total	0	0	0	0	0
Peak Hour	0	3	1	2	6	Peak Hour	0	0	0	0	0



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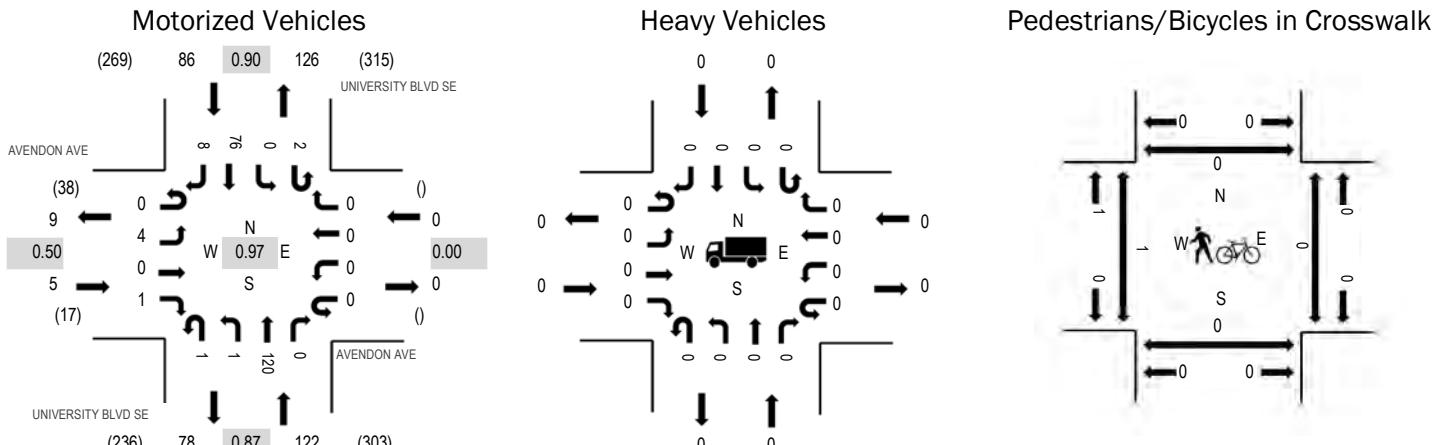
**Location:** 1 UNIVERSITY BLVD SE & AVENDON AVE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 04:15 PM - 05:15 PM

**Peak 15-Minutes:** 04:15 PM - 04:30 PM

## Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	0.0%	0.00
NB	0.0%	0.87
SB	0.0%	0.90
All	0.0%	0.97

## Traffic Counts - Motorized Vehicles

Interval Start Time	AVENDON AVE Eastbound				AVENDON AVE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Rolling Hour	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
3:00 PM	0	3	0	2	0	0	0	0	0	0	29	0	0	0	18	2	54	196
3:15 PM	0	1	0	0	0	0	0	0	0	2	26	0	0	0	22	1	52	191
3:30 PM	0	1	0	0	0	0	0	0	0	0	18	0	0	0	20	3	42	194
3:45 PM	0	0	0	0	0	0	0	0	0	0	28	0	0	0	16	4	48	203
4:00 PM	0	3	0	0	0	0	0	0	0	0	20	0	0	0	21	5	49	209
4:15 PM	0	0	0	1	0	0	0	0	0	1	28	0	1	0	23	1	55	213
4:30 PM	0	4	0	0	0	0	0	0	1	0	29	0	0	0	15	2	51	200
4:45 PM	0	0	0	0	0	0	0	0	0	0	28	0	0	0	24	2	54	189
5:00 PM	0	0	0	0	0	0	0	0	0	0	35	0	1	0	14	3	53	184
5:15 PM	0	0	0	0	0	0	0	0	0	1	16	0	1	0	20	4	42	
5:30 PM	0	0	0	1	0	0	0	0	0	0	17	0	0	0	20	2	40	
5:45 PM	0	1	0	0	0	0	0	0	0	0	24	0	1	0	18	5	49	
Count Total	0	13	0	4	0	0	0	0	1	4	298	0	4	0	231	34	589	
Peak Hour	0	4	0	1	0	0	0	0	1	1	120	0	2	0	76	8	213	

## Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	1	1	3:15 PM	0	1	0	1	2
3:30 PM	0	0	0	0	0	3:30 PM	2	3	0	4	9
3:45 PM	0	0	0	0	0	3:45 PM	1	0	0	0	1
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	3	0	0	3	6
5:45 PM	0	0	0	0	0	5:45 PM	1	0	0	0	1
Count Total	0	0	0	1	1	Count Total	9	4	0	8	21
Peak Hour	0	0	0	0	0	Peak Hour	1	0	0	0	1



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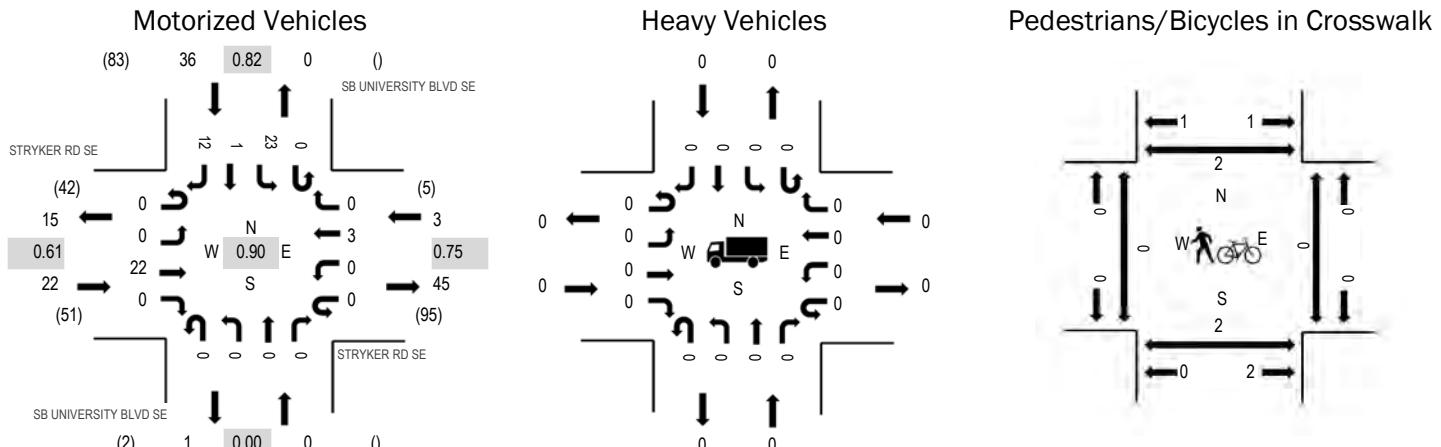
**Location:** 2 SB UNIVERSITY BLVD SE & STRYKER RD SE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 03:45 PM - 04:45 PM

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

## Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.61
WB	0.0%	0.75
NB	0.0%	0.00
SB	0.0%	0.82
All	0.0%	0.90

## Traffic Counts - Motorized Vehicles

Interval Start Time	STRYKER RD SE				STRYKER RD SE				SB UNIVERSITY BLVD SE				SB UNIVERSITY BLVD SE				Rolling Hour	
	Eastbound				Westbound				Northbound				Southbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
3:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0	8	17	51
3:15 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	5	0	3	13	47
3:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	4	49
3:45 PM	0	0	9	0	0	0	1	0	0	0	0	0	0	6	0	1	17	61
4:00 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	5	1	3	13	56
4:15 PM	0	0	5	0	0	0	1	0	0	0	0	0	0	4	0	5	15	52
4:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	8	0	3	16	46
4:45 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	2	0	4	12	44
5:00 PM	0	0	3	1	0	0	0	0	0	0	0	0	0	2	0	3	9	32
5:15 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	4	0	0	9	
5:30 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	3	0	6	14	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Count Total	0	0	50	1	0	0	5	0	0	0	0	0	0	45	1	37	139	
Peak Hour	0	0	22	0	0	0	3	0	0	0	0	0	0	23	1	12	61	

## Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	2	2
4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	2	2

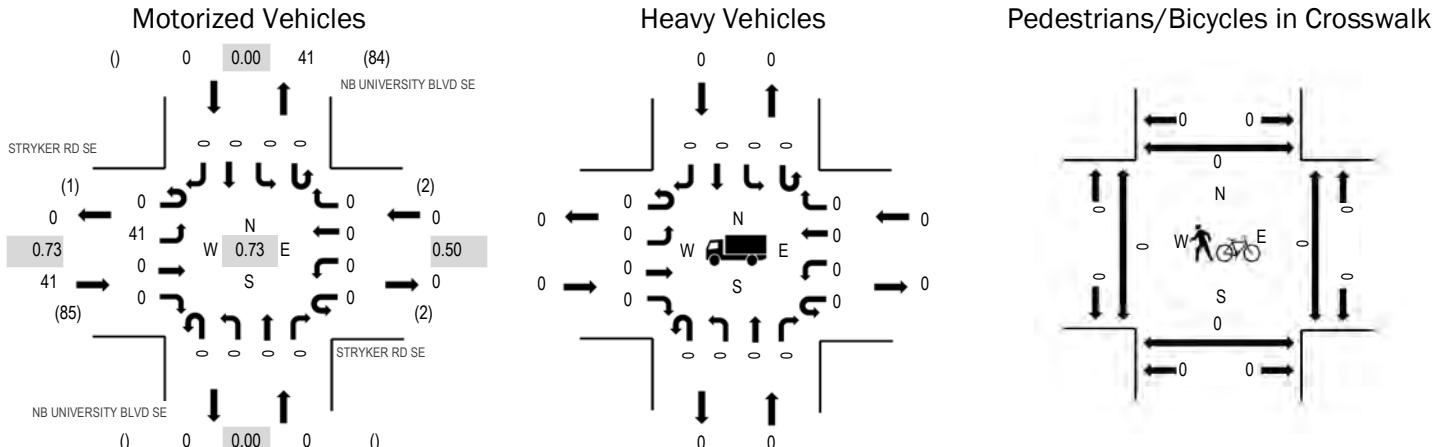
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	2	2
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	1	2	0	6	9
Peak Hour	0	0	0	0	0	Peak Hour	0	2	0	2	4

**Location:** 3 NB UNIVERSITY BLVD SE & STRYKER RD SE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 03:45 PM - 04:45 PM

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

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.73
WB	0.0%	0.50
NB	0.0%	0.00
SB	0.0%	0.00
All	0.0%	0.73

**Traffic Counts - Motorized Vehicles**

Interval Start Time	STRYKER RD SE Eastbound				STRYKER RD SE Westbound				NB UNIVERSITY BLVD SE Northbound				NB UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
3:00 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	32
3:15 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	31
3:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	32
<b>3:45 PM</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>41</b>
4:00 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	35
4:15 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	33
4:30 PM	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32
4:45 PM	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	8	28
5:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	20
5:15 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
5:30 PM	0	5	1	0	0	0	1	0	0	0	0	0	0	0	0	0	7	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Count Total</b>	<b>0</b>	<b>83</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	
<b>Peak Hour</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>	

**Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk**

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
<b>3:45 PM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3:45 PM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

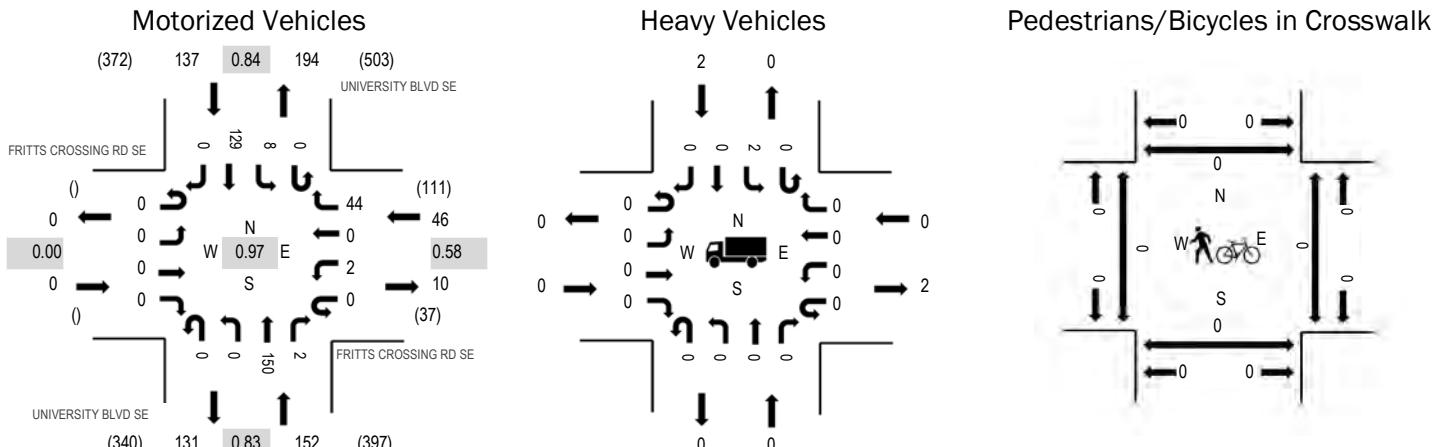
**Location:** 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 03:00 PM - 04:00 PM

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

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.58
NB	0.0%	0.83
SB	1.5%	0.84
All	0.6%	0.97

### Traffic Counts - Motorized Vehicles

Interval Start Time	FRITTS CROSSING RD SE				FRITTS CROSSING RD SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound		U-Turn		Left		Thru		Right			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	0	0	0	0	0	0	6	0	0	36	1	0	1	35	0	79	335
3:15 PM	0	0	0	0	0	1	0	10	0	0	33	1	0	2	39	0	86	316
3:30 PM	0	0	0	0	0	0	0	20	0	0	35	0	0	1	30	0	86	287
3:45 PM	0	0	0	0	0	1	0	8	0	0	46	0	0	4	25	0	84	277
4:00 PM	0	0	0	0	0	0	0	4	0	0	29	0	0	0	27	0	60	267
4:15 PM	0	0	0	0	0	1	0	6	0	0	29	0	0	1	20	0	57	272
4:30 PM	0	0	0	0	0	0	0	11	0	0	40	0	0	1	24	0	76	274
4:45 PM	0	0	0	0	0	0	0	9	0	0	34	0	0	3	28	0	74	267
5:00 PM	0	0	0	0	0	0	0	6	0	0	38	0	0	1	20	0	65	278
5:15 PM	0	0	0	0	0	0	0	6	0	0	19	0	0	2	32	0	59	
5:30 PM	0	0	0	0	0	0	0	4	0	0	24	0	0	11	30	0	69	
5:45 PM	0	0	0	0	0	0	0	18	0	0	32	0	0	8	27	0	85	
Count Total	0	0	0	0	0	3	0	108	0	0	395	2	0	35	337	0	880	
Peak Hour	0	0	0	0	0	2	0	44	0	0	150	2	0	8	129	0	335	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	1	1	0	0	0	0	0
3:45 PM	0	0	0	1	1	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0
4:15 PM	0	0	1	1	2	4:15 PM	0	0	0	0
4:30 PM	0	0	1	1	2	4:30 PM	0	0	0	0
4:45 PM	0	0	1	0	1	4:45 PM	0	1	0	1
5:00 PM	0	0	1	0	1	5:00 PM	0	0	0	0

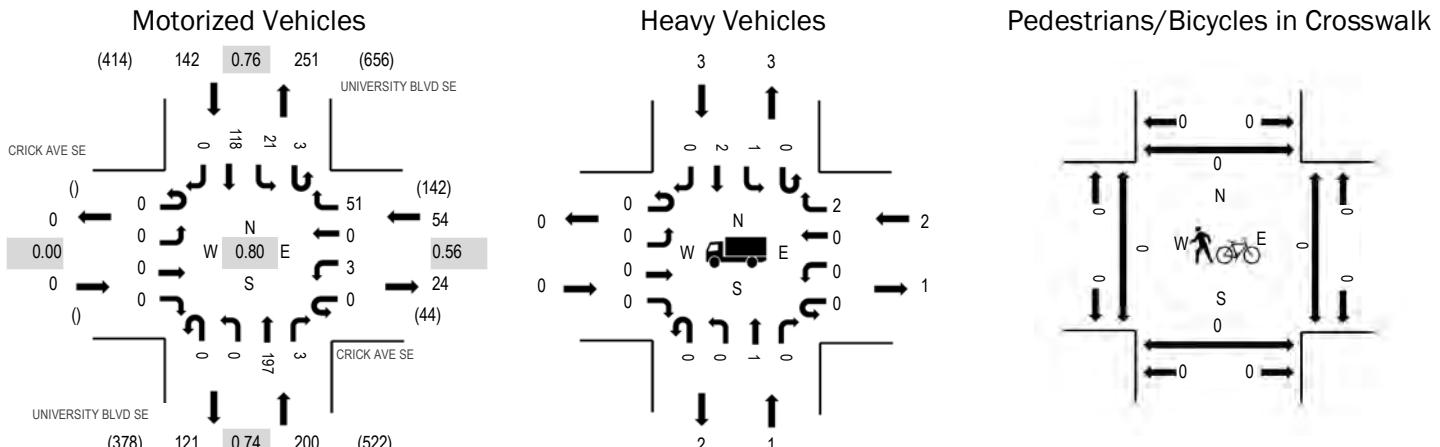
5:15 PM	0	0	0	0	0	5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	0	0	2	0	2
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	0	4	4	8	Count Total	0	2	2	0	4
Peak Hour	0	0	0	2	2	Peak Hour	0	0	0	0	0

**Location:** 9 UNIVERSITY BLVD SE & CRICK AVE SE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 03:00 PM - 04:00 PM

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

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	3.7%	0.56
NB	0.5%	0.74
SB	2.1%	0.76
All	1.5%	0.80

**Traffic Counts - Motorized Vehicles**

Interval Start Time	CRICK AVE SE Eastbound				CRICK AVE SE Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
3:00 PM	0	0	0	0	0	1	0	7	0	0	47	1	1	10	29	0	96	396
3:15 PM	0	0	0	0	0	1	0	7	0	0	27	1	1	3	35	0	75	370
3:30 PM	0	0	0	0	0	0	0	27	0	0	67	1	0	4	25	0	124	385
3:45 PM	0	0	0	0	0	1	0	10	0	0	56	0	1	4	29	0	101	364
4:00 PM	0	0	0	0	0	0	0	11	1	0	33	0	0	2	23	0	70	346
4:15 PM	0	0	0	0	0	1	0	11	0	0	42	0	2	6	28	0	90	366
4:30 PM	0	0	0	0	0	5	0	19	0	0	52	0	1	2	24	0	103	359
4:45 PM	0	0	0	0	0	2	0	2	0	0	47	0	0	3	29	0	83	321
5:00 PM	0	0	0	0	0	1	0	16	0	0	47	0	0	2	24	0	90	336
5:15 PM	0	0	0	0	0	0	0	15	0	0	29	0	1	3	35	0	83	
5:30 PM	0	0	0	0	0	0	0	2	0	0	26	0	0	1	36	0	65	
5:45 PM	0	0	0	0	0	1	0	2	0	0	45	0	2	1	47	0	98	
Count Total	0	0	0	0	0	13	0	129	1	0	518	3	9	41	364	0	1,078	
Peak Hour	0	0	0	0	0	3	0	51	0	0	197	3	3	21	118	0	396	

**Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk**

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	0	1	0	1	3:00 PM	0	0	0	0	0
3:15 PM	0	1	0	0	1	3:15 PM	0	0	0	0	0
3:30 PM	0	0	1	1	2	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	2	2	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	1	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1	4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0

5:15 PM	0	1	0	0	1	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	1	1
Count Total	0	3	3	5	11	Count Total	0	0	0	1	1
Peak Hour	0	1	2	3	6	Peak Hour	0	0	0	0	0

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Page 1

Date Start: 21-Apr-21

UNIVERSITY BLVD SE S.O. EASTMAN CROSSING

Site Code: 6

Station ID:

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/21/21	0	21	3	0	1	0	0	0	0	0	0	0	0	25
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
06:00	0	62	8	1	0	1	0	0	0	0	0	0	0	72
07:00	0	<b>101</b>	13	2	1	0	0	0	0	0	0	0	0	117
08:00	0	99	<b>17</b>	<b>4</b>	3	0	0	0	1	0	0	0	0	<b>124</b>
09:00	0	75	11	0	7	<b>2</b>	0	<b>1</b>	0	0	0	0	0	96
10:00	0	73	13	1	<b>8</b>	1	0	1	<b>2</b>	0	0	0	0	99
11:00	0	84	14	0	5	0	0	1	0	0	0	0	0	104
12 PM	0	86	16	0	4	0	0	2	<b>1</b>	0	0	0	0	109
13:00	<b>1</b>	87	14	1	<b>5</b>	<b>1</b>	0	1	1	0	0	0	0	111
14:00	0	84	7	1	4	0	0	1	0	0	0	0	0	97
15:00	0	97	16	0	4	0	0	<b>3</b>	1	0	0	0	0	<b>121</b>
16:00	0	99	<b>17</b>	<b>2</b>	0	0	0	0	0	0	0	0	0	118
17:00	0	<b>102</b>	10	1	1	1	0	1	0	0	0	0	0	116
18:00	0	72	7	0	3	0	0	0	0	0	0	0	0	82
19:00	0	46	9	0	1	0	0	1	0	0	0	0	0	57
20:00	0	29	2	0	0	0	0	0	1	0	0	0	0	32
21:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
22:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
23:00	0	65	3	0	0	0	0	0	0	0	0	0	0	68
Day Total	1	1338	187	13	47	6	0	12	7	0	0	0	0	1611
Percent	0.1%	83.1%	11.6%	0.8%	2.9%	0.4%	0.0%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.		07:00	08:00	08:00	10:00	09:00		09:00	10:00					08:00
		101	17	4	8	2		1	2					124
PM Peak Vol.	13:00	17:00	16:00	16:00	13:00	13:00		15:00	12:00					15:00
	1	102	17	2	5	1		3	1					121

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Page 2

Date Start: 21-Apr-21  
 UNIVERSITY BLVD SE S.O. EASTMAN CROSSING  
 Site Code: 6  
 Station ID:

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/22/21	0	23	2	0	0	0	0	0	0	0	0	0	0	25
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	23	0	0	0	0	0	0	0	0	0	0	0	23
06:00	0	62	8	0	1	0	0	0	0	0	0	0	0	71
07:00	0	<b>102</b>	13	0	5	0	0	0	0	0	0	0	0	120
08:00	0	102	<b>20</b>	0	<b>6</b>	0	0	0	<b>1</b>	0	0	0	0	<b>129</b>
09:00	0	82	6	0	5	<b>1</b>	0	1	0	0	0	0	0	95
10:00	0	74	13	0	6	1	0	<b>3</b>	0	0	0	0	0	97
11:00	0	85	16	0	2	0	0	2	0	0	0	0	0	105
12 PM	2	90	<b>16</b>	0	2	0	0	0	0	0	0	0	0	110
13:00	1	95	11	0	<b>3</b>	<b>1</b>	0	0	0	0	0	0	0	111
14:00	0	84	9	0	3	0	0	0	0	0	0	0	0	96
15:00	0	104	11	0	3	0	0	<b>1</b>	0	0	0	0	0	<b>119</b>
16:00	0	<b>113</b>	3	0	2	0	0	0	0	0	0	0	0	118
17:00	<b>3</b>	98	10	0	2	1	0	1	0	0	0	0	0	115
18:00	0	73	1	0	1	0	0	0	0	0	0	0	0	75
19:00	1	39	4	0	1	0	0	0	0	0	0	0	0	45
20:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
21:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
22:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
23:00	1	67	0	0	0	0	0	0	0	0	0	0	0	68
Day Total	8	1383	147	0	42	4	0	8	1	0	0	0	0	1593
Percent	0.5%	86.8%	9.2%	0.0%	2.6%	0.3%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.		07:00	08:00		08:00	09:00		10:00	08:00					08:00
		102	20		6	1		3	1					129
PM Peak Vol.	17:00	16:00	12:00		13:00	13:00		15:00						15:00
	3	113	16		3	1		1						119
Grand Total	9	2721	334	13	89	10	0	20	8	0	0	0	0	3204
Percent	0.3%	84.9%	10.4%	0.4%	2.8%	0.3%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	

**All Traffic Data Services**  
[www.alltrafficdata.net](http://www.alltrafficdata.net)

Page 3

Date Start: 21-Apr-21  
 UNIVERSITY BLVD SE S.O. EASTMAN CROSSING  
 Site Code: 6  
 Station ID:

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/21/21	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	53	13	0	0	0	0	0	0	0	0	0	0	66
06:00	0	45	7	0	5	0	0	0	0	0	0	0	0	57
07:00	0	102	30	1	3	2	0	0	0	0	0	0	0	138
08:00	0	105	21	1	6	1	0	2	0	0	0	0	0	136
09:00	0	77	6	1	8	0	0	1	1	0	0	0	0	94
10:00	0	70	14	0	5	1	0	2	0	0	0	0	0	92
11:00	0	119	18	0	8	0	0	3	0	0	0	0	0	148
12 PM	0	115	19	0	8	0	0	1	0	0	0	0	0	143
13:00	0	75	11	1	4	0	0	3	0	0	0	0	0	94
14:00	1	73	9	3	7	0	0	1	1	0	0	0	0	95
15:00	0	84	10	4	3	0	0	0	0	0	0	0	0	101
16:00	0	87	10	1	6	2	0	0	0	0	0	0	0	106
17:00	0	84	9	3	3	0	0	0	0	0	0	0	0	99
18:00	0	71	10	1	3	0	0	0	0	0	0	0	0	85
19:00	0	45	7	0	1	0	0	0	0	0	0	0	0	53
20:00	0	33	5	0	1	0	0	0	0	0	0	0	0	39
21:00	0	21	4	0	1	0	0	0	0	0	0	0	0	26
22:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	1	1284	206	16	72	6	0	13	2	0	0	0	0	1600
Percent	0.1%	80.3%	12.9%	1.0%	4.5%	0.4%	0.0%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.		11:00	07:00	07:00	09:00	07:00		11:00	09:00					11:00
		119	30	1	8	2		3	1					148
PM Peak Vol.	14:00	12:00	12:00	15:00	12:00	16:00		13:00	14:00					12:00
	1	115	19	4	8	2		3	1					143

**All Traffic Data Services**  
[www.alltrafficdata.net](http://www.alltrafficdata.net)

Page 4

Date Start: 21-Apr-21  
 UNIVERSITY BLVD SE S.O. EASTMAN CROSSING  
 Site Code: 6  
 Station ID:

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/22/21	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	56	11	0	0	0	0	0	0	0	0	0	0	67
06:00	0	49	7	0	1	0	0	0	0	0	0	0	0	57
07:00	0	113	21	1	2	2	0	0	0	0	0	0	0	139
08:00	0	108	25	1	0	2	0	0	2	0	0	0	0	138
09:00	0	76	8	1	7	1	0	1	1	0	0	0	0	95
10:00	0	70	19	0	1	0	1	1	1	0	0	0	0	93
11:00	0	122	18	0	5	1	0	2	1	0	0	0	0	149
12 PM	0	115	24	0	3	0	0	1	0	0	0	0	0	143
13:00	0	81	9	1	2	1	0	0	1	0	0	0	0	95
14:00	1	76	11	1	5	1	0	0	1	0	0	0	0	96
15:00	0	86	9	1	4	1	0	0	0	0	0	0	0	101
16:00	0	90	9	0	5	2	0	0	0	0	0	0	0	106
17:00	0	82	13	1	4	0	0	1	0	0	0	0	0	101
18:00	0	71	11	1	2	0	0	0	0	0	0	0	0	85
19:00	0	42	10	0	1	0	0	0	0	0	0	0	0	53
20:00	0	34	4	0	1	0	0	0	0	0	0	0	0	39
21:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
22:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	1	1322	212	8	43	11	1	6	7	0	0	0	0	1611
Percent	0.1%	82.1%	13.2%	0.5%	2.7%	0.7%	0.1%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.		11:00	08:00	07:00	09:00	07:00	10:00	11:00	08:00					11:00
		122	25	1	7	2	1	2	2					149
PM Peak Vol.	14:00	12:00	12:00	13:00	14:00	16:00		12:00	13:00					12:00
	1	115	24	1	5	2		1	1					143
Grand Total	2	2606	418	24	115	17	1	19	9	0	0	0	0	3211
Percent	0.1%	81.2%	13.0%	0.7%	3.6%	0.5%	0.0%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	

**All Traffic Data Services**  
[www.alltrafficdata.net](http://www.alltrafficdata.net)

Page 1

Date Start: 21-Apr-21  
 STRYKER RD SE W.O. SB UNIVERSITY BLVD SE  
 Site Code: 7  
 Station ID: 7

Start Time	21-Apr-21 Wed	EB	WB	Total
12:00 AM		0	1	1
01:00		0	0	0
02:00		0	1	1
03:00		0	0	0
04:00		0	2	2
05:00		2	2	4
06:00		12	12	24
07:00		15	37	52
08:00		19	27	46
09:00		18	11	29
10:00		16	19	35
11:00		26	14	40
12:00 PM		15	19	34
01:00		18	14	32
02:00		19	15	34
03:00		17	13	30
04:00		20	17	37
05:00		16	12	28
06:00		7	13	20
07:00		8	8	16
08:00		1	4	5
09:00		0	6	6
10:00		3	1	4
11:00		0	1	1
Total		232	249	481
Percent		48.2%	51.8%	
AM Peak Vol.	-	11:00	07:00	-
PM Peak Vol.	-	16:00	12:00	-
	-	20	19	37

**All Traffic Data Services**  
[www.alltrafficdata.net](http://www.alltrafficdata.net)

Page 2

Date Start: 21-Apr-21  
 STRYKER RD SE W.O. SB UNIVERSITY BLVD SE  
 Site Code: 7  
 Station ID: 7

Start Time	22-Apr-21	EB	WB	Total
	Thu			
12:00 AM		1	0	1
01:00		1	1	2
02:00		0	0	0
03:00		0	1	1
04:00		0	3	3
05:00		2	2	4
06:00		10	14	24
07:00		16	32	48
08:00		16	28	44
09:00		19	14	33
10:00		18	21	39
11:00		22	14	36
12:00 PM		18	14	32
01:00		19	17	36
02:00		16	15	31
03:00		19	15	34
04:00		19	17	36
05:00		14	14	28
06:00		8	11	19
07:00		9	10	19
08:00		4	4	8
09:00		1	3	4
10:00		1	1	2
11:00		1	0	1
Total		234	251	485
Percent		48.2%	51.8%	
AM Peak Vol.	-	11:00	07:00	07:00
PM Peak Vol.	-	22	32	48
Grand Total		13:00	13:00	13:00
Percent		19	17	36

ADT

ADT 483

AADT 483

Albuquerque Studios Expansion Traffic Data Calibration Summary											
	AM Peak Hour					PM Peak Hour					
	2019	2020	Adjust	2021	2021	2019	2020	Adjust	2021	2021	
	Pre-COVID	COVID	Factor	Actual	Calibrated	Pre-COVID	COVID	Factor	Actual	Calibrated	
Intersection	April	April		April	April	April	April		April	April	
9 Hour TMC											
<u>Bobby Foster &amp; Los Picosos</u>				7:45 AM					3:30 PM		
NB Left	33	23	1.43	24	34	171	53	1.52	30	46	
NB Thru	0	0		3	3	0	0		1	1	
NB Right	0	0		0	0	0	0		0	0	
SB Left	0	0		0	0	0	0		0	0	
SB Thru	0	0		1	1	0	23	0.00	3	3	
SB Right	6	15	0.48	18	9	61	45	1.36	40	54	
WB Left	0	0		0	0	0	0		0	0	
WB Thru	0	0		0	0	0	0		0	0	
WB Right	0	0		0	0	0	0		0	0	
EB Left	60	0		33	33	48	0		21	21	
EB Thru	0	0		0	0	0	0		0	0	
EB Right	183	36	1.52	34	52	35	0		3	3	
				113	97				98	82	
9 Hour TMC											
<u>Bobby Foster &amp; Broadway</u>				6:30 AM					3:30 PM		
NB Left	0	0		2	2	0	0		0	0	
NB Thru	757	515	1.47	371	545	330	345	0.96	334	319	
NB Right	158	39	1.52	16	24	27	27	1.00	17	17	
SB Left	94	87	1.08	36	39	45	29	1.52	41	62	
SB Thru	331	333	0.99	249	248	732	589	1.24	467	580	
SB Right	0	0		5	5	0	0		1	1	
WB Left	0	4	0.00	9	9	86	20	1.52	44	67	
WB Thru	0	0		0	0	0	0		0	0	
WB Right	0	8	0.00	7	7	127	73	1.52	46	70	
EB Left	0	0		3	3	0	0		1	1	
EB Thru	0	0		0	0	0	0		0	0	
EB Right	0	0		0	0	0	0		0	0	
				698	882				951	1118	
9 Hour TMC											
<u>University and Rio Bravo</u>				7:45 AM					3:00 PM		
EB Left	444	100	1.42	238	338	129	108	1.19	180	215	
EB Thru	0	0		0	0	0	0		0	0	
EB Right	337	141	1.42	206	293	110	72	1.42	92	131	
WB Left	0	0		0	0	0	0		0	0	
WB Thru	0	0		0	0	0	0		0	0	
WB Right	0	0		0	0	0	0		0	0	
NB Left	188	80	1.42	148	210	585	66	1.42	186	264	
NB Thru	105	63	1.67	35	58	91	51	1.42	35	50	
NB Right	0	0		0	0	0	0		0	0	
SB Left	0	0		0	0	0	0		0	0	
SB Thru	278	40	1.42	38	54	104	51	1.42	35	50	
SB Right	55	9	1.42	84	119	337	93	1.42	188	267	
				749	1072				716	976	
9 Hour TMC											
<u>Rio Bravo and Broadway</u>				6:45 AM					3:00 PM		
NB Left	54	45	1.20	91	109	108	96	1.13	197	222	
NB Thru	449	217	1.39	138	192	151	166	0.91	177	161	
NB Right	382	238	1.39	228	317	413	271	1.39	338	470	
EB Left	455	182	1.39	160	222	196	88	1.39	118	164	
EB Thru	1425	866	1.39	1185	1647	556	457	1.22	674	820	
EB Right	46	120	0.61	110	67	58	77	0.75	126	95	
SB Left	20	30	0.67	54	36	59	20	1.39	99	138	
SB Thru	201	153	1.31	101	133	311	298	1.04	282	294	
SB Right	79	79	1.00	63	63	400	288	1.39	258	358	
WB Left	260	254	1.02	287	294	402	284	1.39	286	398	
WB Thru	430	313	1.37	476	654	955	650	1.39	995	1383	
WB Right	39	38	1.03	34	35	31	47	0.66	25	16	
				2927	3769				3575	4519	
9 Hour TMC											
<u>2nd Street and Rio Bravo</u>				7:15 AM					4:00 PM		
NB Left	112	104	1.08	147	158	347	161	1.47	365	537	
NB Thru	418	62	1.47	67	98	411	127	1.47	79	116	
NB Right	72	19	1.47	47	69	758	68	1.47	63	93	
EB Left	584	115	1.47	189	278	98	92	1.07	97	103	
EB Thru	1483	988	1.47	1327	1951	541	436	1.24	780	968	
EB Right	203	132	1.47	157	231	131	90	1.46	148	215	
SB Left	138	23	1.47	70	103	105	74	1.42	114	162	
SB Thru	24	65	0.53	43	23	184	64	1.47	87	128	
SB Right	90	4	1.47	52	76	540	200	1.47	270	397	
WB Left	62	60	1.03	76	79	32	66	0.53	62	33	
WB Thru	420	324	1.30	486	630	1672	1141	1.47	1340	1964	
WB Right	91	91	1.00	54	54	124	34	1.47	40	59	
				2715	3750				3445	4774	

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

*ADVANCED DESIGN*

Weather: Overcast  
 Serial Number: 3082  
 Collected By: DPitts  
 Other:

File Name : Bobby Foster - Los Picaros 04282021 DP  
 Site Code : 00000000  
 Start Date : 4/28/2021  
 Page No : 1

### Groups Printed- Passenger Vehicles - Trucks

	Los Picaros From North			Los Picaros From South			Bobby Foster From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:30 AM	0	0	0	0	3	0	5	5	0	13
06:45 AM	4	0	0	0	8	0	6	9	0	27
Total	4	0	0	0	11	0	11	14	0	40
07:00 AM	2	0	0	0	5	0	3	14	0	24
07:15 AM	5	0	0	0	1	0	4	5	0	15
07:30 AM	1	0	0	0	1	0	4	9	0	15
07:45 AM	3	0	0	0	2	0	10	7	0	22
Total	11	0	0	0	9	0	21	35	0	76
08:00 AM	3	0	0	1	3	0	11	7	0	25
08:15 AM	3	1	0	2	10	0	8	11	0	35
08:30 AM	9	0	0	0	9	0	5	8	0	31
08:45 AM	6	0	0	0	5	0	6	3	0	20
Total	21	1	0	3	27	0	30	29	0	111
09:00 AM	3	0	0	0	1	0	4	3	0	11
09:15 AM	4	0	0	0	0	0	4	8	0	16
09:30 AM	0	0	0	0	1	0	0	1	0	2
*** BREAK ***										
Total	7	0	0	0	2	0	8	12	0	29
*** BREAK ***										
11:00 AM	6	1	0	0	3	0	4	2	0	16
11:15 AM	5	0	0	0	5	0	2	4	0	16
11:30 AM	13	0	0	0	2	0	2	7	0	24
11:45 AM	8	0	0	0	2	0	5	8	0	23
Total	32	1	0	0	12	0	13	21	0	79
12:00 PM	13	0	0	0	1	0	3	7	0	24
12:15 PM	9	0	0	2	2	0	8	7	0	28
12:30 PM	8	0	0	0	1	0	3	5	0	17
12:45 PM	7	0	0	1	2	0	0	8	0	18
Total	37	0	0	3	6	0	14	27	0	87
01:00 PM	3	0	0	0	1	0	3	14	0	21
01:15 PM	6	0	0	0	1	0	2	9	0	18
01:30 PM	8	0	0	0	1	0	2	6	0	17
01:45 PM	5	0	0	1	2	0	3	11	0	22
Total	22	0	0	1	5	0	10	40	0	78
02:00 PM	4	2	0	1	5	0	1	9	0	22
02:15 PM	2	0	0	0	2	0	0	4	0	8
*** BREAK ***										
Total	6	2	0	1	7	0	1	13	0	30
03:00 PM	6	0	0	0	3	0	4	10	0	23
03:15 PM	6	0	0	0	6	0	7	4	0	23

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

**ADVANCEDesign**

File Name : Bobby Foster - Los Picaros 04282021 DP

Site Code : 00000000

Start Date : 4/28/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

	Los Picaros From North			Los Picaros From South			Bobby Foster From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
03:30 PM	11	3	0	0	20	0	1	5	0	40
03:45 PM	4	0	0	0	2	0	0	5	0	11
Total	27	3	0	0	31	0	12	24	0	97
04:00 PM	13	0	0	1	3	0	1	5	0	23
04:15 PM	12	0	0	0	5	0	1	6	0	24
04:30 PM	8	0	0	0	5	0	1	6	0	20
04:45 PM	8	0	0	0	4	0	1	3	0	16
Total	41	0	0	1	17	0	4	20	0	83
05:00 PM	11	0	0	0	6	0	2	2	0	21
05:15 PM	3	0	0	0	2	0	4	2	0	11
05:30 PM	9	0	0	1	0	0	1	5	0	16
05:45 PM	3	0	0	0	2	0	6	3	0	14
Total	26	0	0	1	10	0	13	12	0	62
Grand Total	234	7	0	10	137	0	137	247	0	772
Apprch %	97.1	2.9	0	6.8	93.2	0	35.7	64.3	0	
Total %	30.3	0.9	0	1.3	17.7	0	17.7	32	0	
Passenger Vehicles	173	6	0	8	127	0	131	191	0	636
% Passenger Vehicles	73.9	85.7	0	80	92.7	0	95.6	77.3	0	82.4
Trucks	61	1	0	2	10	0	6	56	0	136
% Trucks	26.1	14.3	0	20	7.3	0	4.4	22.7	0	17.6

# Huitt-Zollars, Inc.

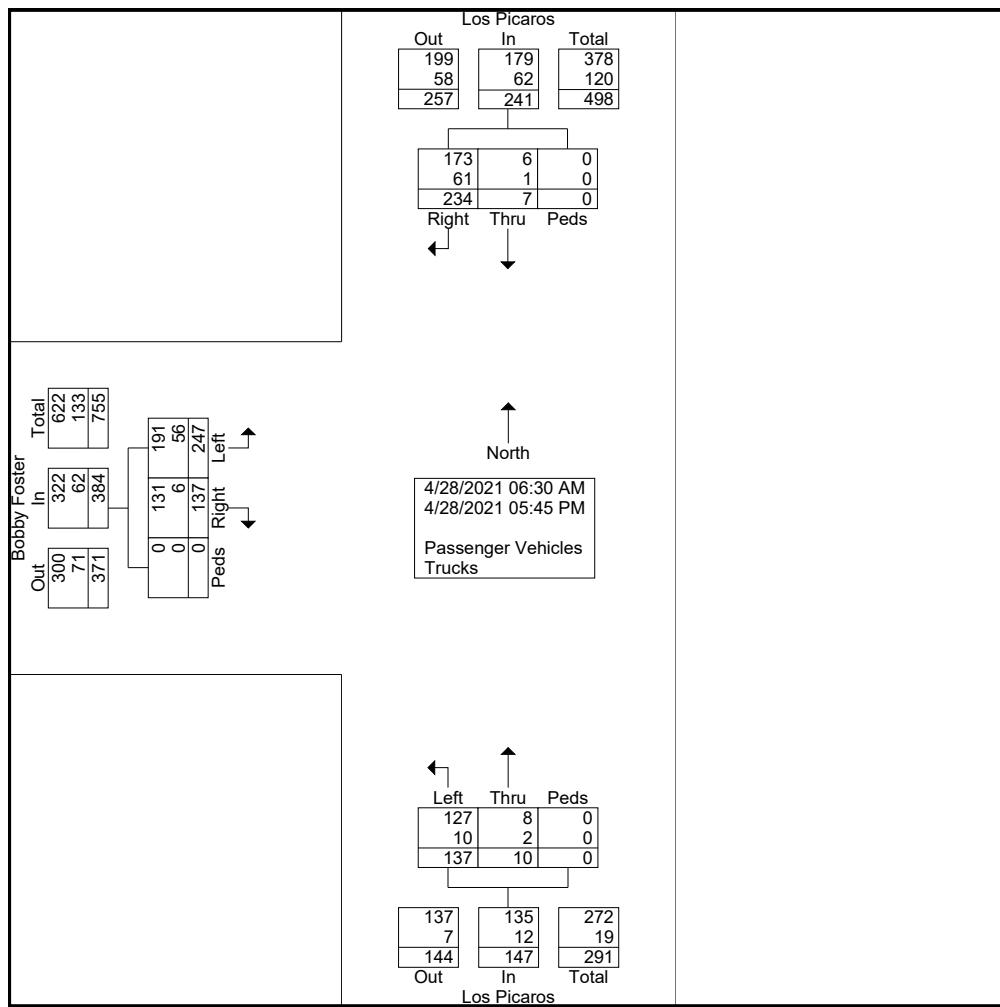
333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
*ADVANCEDDESIGN*

File Name : Bobby Foster - Los Picaros 04282021 DP

Site Code : 00000000

Start Date : 4/28/2021

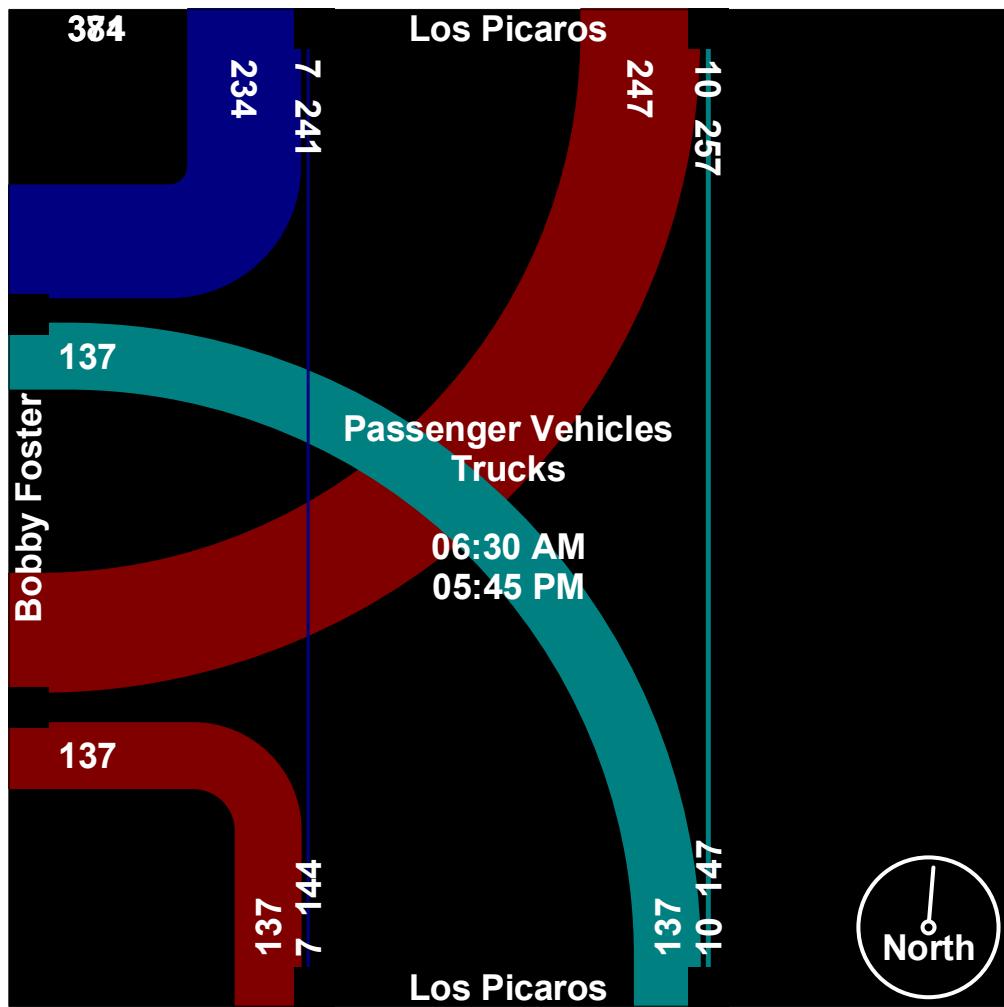
Page No : 3



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File Name : Bobby Foster - Los Picaros 04282021 DP  
Site Code : 00000000  
Start Date : 4/28/2021  
Page No : 4



# Huitt-Zollars, Inc.

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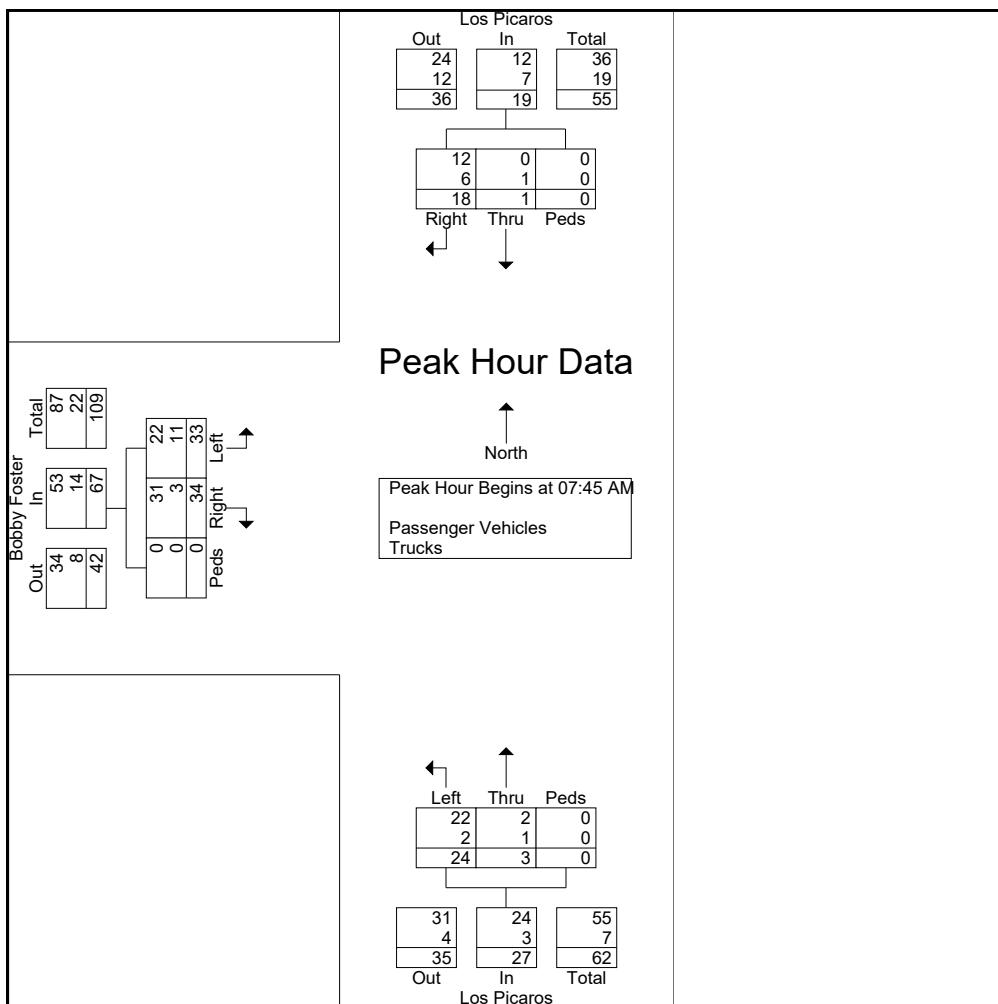
File Name : Bobby Foster - Los Picaros 04282021 DP

Site Code : 00000000

Start Date : 4/28/2021

Page No : 5

	Los Picaros From North				Los Picaros From South				Bobby Foster From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1</b>													
<b>Peak Hour for Entire Intersection Begins at 07:45 AM</b>													
07:45 AM	3	0	0	3	0	2	0	2	10	7	0	17	22
08:00 AM	3	0	0	3	1	3	0	4	11	7	0	18	25
08:15 AM	3	1	0	4	2	10	0	12	8	11	0	19	35
08:30 AM	9	0	0	9	0	9	0	9	5	8	0	13	31
Total Volume	18	1	0	19	3	24	0	27	34	33	0	67	113
% App. Total	94.7	5.3	0		11.1	88.9	0		50.7	49.3	0		
PHF	.500	.250	.000	.528	.375	.600	.000	.563	.773	.750	.000	.882	.807
Passenger Vehicles	12	0	0	12	2	22	0	24	31	22	0	53	89
% Passenger Vehicles	66.7	0	0	63.2	66.7	91.7	0	88.9	91.2	66.7	0	79.1	78.8
Trucks	6	1	0	7	1	2	0	3	3	11	0	14	24
% Trucks	33.3	100	0	36.8	33.3	8.3	0	11.1	8.8	33.3	0	20.9	21.2



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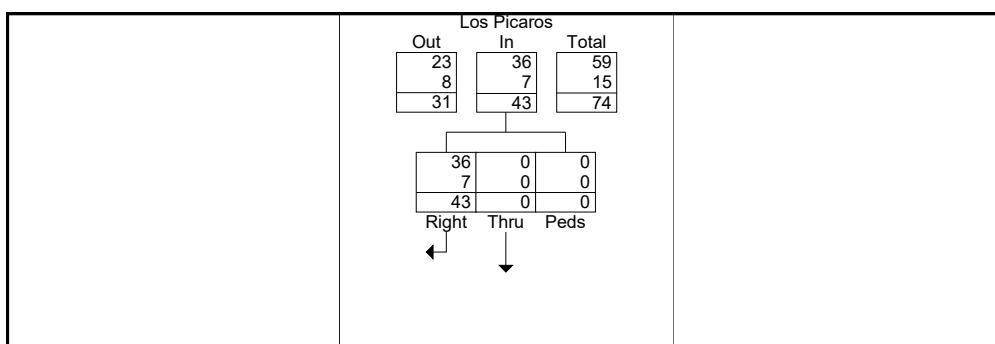
File Name : Bobby Foster - Los Picosos 04282021 DP

Site Code : 00000000

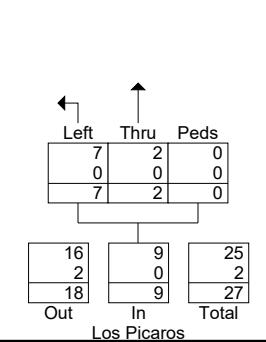
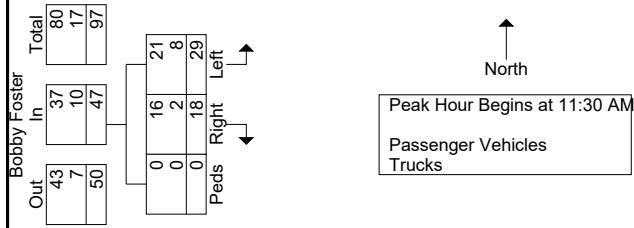
Start Date : 4/28/2021

Page No : 6

Start Time	Los Picosos From North				Los Picosos From South				Bobby Foster From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
<b>Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1</b>														
<b>Peak Hour for Entire Intersection Begins at 11:30 AM</b>														
11:30 AM	13	0	0	13	0	2	0	2	2	7	0	9	24	
11:45 AM	8	0	0	8	0	2	0	2	5	8	0	13	23	
12:00 PM	13	0	0	13	0	1	0	1	3	7	0	10	24	
12:15 PM	9	0	0	9	2	2	0	4	8	7	0	15	28	
Total Volume	43	0	0	43	2	7	0	9	18	29	0	47	99	
% App. Total	100	0	0		22.2	77.8	0		38.3	61.7	0			
PHF	.827	.000	.000	.827	.250	.875	.000	.563	.563	.906	.000	.783	.884	
Passenger Vehicles	36	0	0	36	2	7	0	9	16	21	0	37	82	
% Passenger Vehicles	83.7	0	0	83.7	100	100	0	100	88.9	72.4	0	78.7	82.8	
Trucks	7	0	0	7	0	0	0	0	2	8	0	10	17	
% Trucks	16.3	0	0	16.3	0	0	0	0	11.1	27.6	0	21.3	17.2	



## Peak Hour Data



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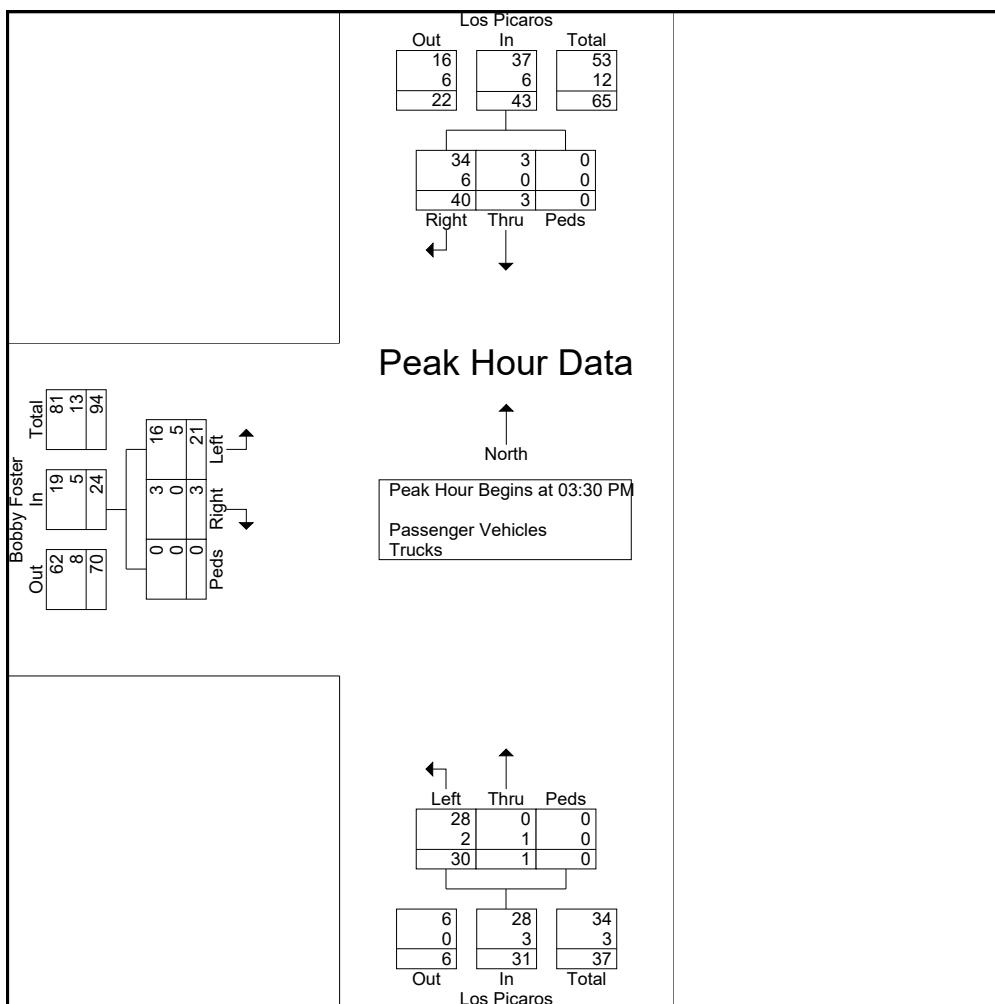
File Name : Bobby Foster - Los Picosos 04282021 DP

Site Code : 00000000

Start Date : 4/28/2021

Page No : 7

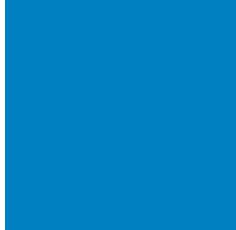
Start Time	Los Picosos From North				Los Picosos From South				Bobby Foster From West				
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 02:00 PM to 06:00 PM - Peak 1 of 1</b>													
<b>Peak Hour for Entire Intersection Begins at 03:30 PM</b>													
03:30 PM	11	3	0	14	0	20	0	20	1	5	0	6	40
03:45 PM	4	0	0	4	0	2	0	2	0	5	0	5	11
04:00 PM	13	0	0	13	1	3	0	4	1	5	0	6	23
04:15 PM	12	0	0	12	0	5	0	5	1	6	0	7	24
Total Volume	40	3	0	43	1	30	0	31	3	21	0	24	98
% App. Total	93	7	0		3.2	96.8	0		12.5	87.5	0		
PHF	.769	.250	.000	.768	.250	.375	.000	.388	.750	.875	.000	.857	.613
Passenger Vehicles	34	3	0	37	0	28	0	28	3	16	0	19	84
% Passenger Vehicles	85.0	100	0	86.0	0	93.3	0	90.3	100	76.2	0	79.2	85.7
Trucks	6	0	0	6	1	2	0	3	0	5	0	5	14
% Trucks	15.0	0	0	14.0	100	6.7	0	9.7	0	23.8	0	20.8	14.3



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File Name : Bobby Foster - Los Picaros 04282021 DP  
Site Code : 00000000  
Start Date : 4/28/2021  
Page No : 8



# Huitt-Zollars, Inc.

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Weather: Overcast  
 Serial Number: 3082  
 Collected By: DPitts  
 Other:

File Name : Broadway - Bobby Foster 04282021 DP  
 Site Code : 00000000  
 Start Date : 4/29/2021  
 Page No : 1

## Groups Printed- Passenger Vehicles - Trucks

Start Time	Broadway From North				Bobby Foster From East				Broadway From South				Driveway From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
06:30 AM	5	72	8	0	1	0	3	0	2	97	0	0	0	0	2	0	190
06:45 AM	0	70	7	0	1	0	1	0	4	117	2	0	0	0	1	0	203
Total	5	142	15	0	2	0	4	0	6	214	2	0	0	0	3	0	393
07:00 AM	0	51	14	0	3	0	3	0	5	67	0	0	0	0	0	0	143
07:15 AM	0	56	7	0	2	0	2	0	5	90	0	0	0	0	0	0	162
07:30 AM	1	61	7	0	3	0	0	0	6	110	0	0	0	0	0	0	188
07:45 AM	0	62	5	0	1	0	3	0	8	75	0	0	0	0	0	0	154
Total	1	230	33	0	9	0	8	0	24	342	0	0	0	0	0	0	647
08:00 AM	0	55	16	0	5	0	4	0	8	70	0	0	0	0	2	0	160
08:15 AM	0	59	16	0	5	0	7	0	9	80	0	0	0	0	0	0	176
08:30 AM	0	47	3	0	11	0	6	0	3	71	0	0	0	0	0	0	141
08:45 AM	0	58	8	0	3	0	3	0	3	67	0	0	0	0	0	0	142
Total	0	219	43	0	24	0	20	0	23	288	0	0	0	0	2	0	619
09:00 AM	0	69	5	0	3	0	5	0	1	62	0	0	0	0	0	0	145
09:15 AM	0	63	7	0	5	0	0	0	7	57	0	0	0	0	0	0	139
09:30 AM	0	18	9	0	2	0	1	0	0	26	0	0	0	0	0	0	56
*** BREAK ***																	
Total	0	150	21	0	10	0	6	0	8	145	0	0	0	0	0	0	340
*** BREAK ***																	
11:00 AM	0	66	9	0	6	1	2	1	4	53	1	0	0	0	0	0	143
11:15 AM	0	61	6	0	3	0	6	0	3	41	0	0	0	0	0	0	120
11:30 AM	0	72	9	0	10	0	2	0	4	81	0	0	0	0	0	0	178
11:45 AM	1	79	10	0	13	0	3	0	5	78	0	0	0	0	1	0	190
Total	1	278	34	0	32	1	13	1	16	253	1	0	0	0	1	0	631
12:00 PM	0	90	13	0	10	0	0	0	3	71	0	0	0	0	0	0	187
12:15 PM	0	92	11	0	3	0	2	0	3	64	0	0	0	0	1	0	176
12:30 PM	0	84	15	0	7	0	5	0	6	70	0	0	0	0	0	0	187
12:45 PM	0	75	9	0	10	0	9	0	0	68	0	0	0	0	1	0	172
Total	0	341	48	0	30	0	16	0	12	273	0	0	0	0	1	1	722
01:00 PM	0	91	15	0	9	0	4	0	5	79	0	0	0	0	0	0	203
01:15 PM	0	82	27	0	13	0	2	0	3	67	0	0	0	0	1	0	195
01:30 PM	0	77	9	0	11	0	5	0	2	53	0	0	0	0	1	0	158
01:45 PM	1	70	13	0	11	0	6	0	4	69	0	0	0	0	0	0	174
Total	1	320	64	0	44	0	17	0	14	268	0	0	0	0	2	0	730
02:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
*** BREAK ***																	
02:45 PM	0	17	2	0	0	0	2	0	2	11	0	0	0	0	0	0	34
Total	0	17	2	0	0	0	2	0	2	12	0	0	0	0	0	0	35
03:00 PM	2	55	9	0	14	0	2	1	3	54	0	0	0	0	0	0	140
03:15 PM	1	61	5	0	3	0	3	0	4	77	0	0	0	0	0	0	154

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

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File Name : Broadway - Bobby Foster 04282021 DP

Site Code : 00000000

Start Date : 4/29/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

	Broadway From North				Bobby Foster From East				Broadway From South				Driveway From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:30 PM	0	120	15	0	10	0	15	1	7	82	0	1	0	0	0	0	251
03:45 PM	0	105	13	0	10	0	7	0	2	99	0	0	0	0	0	0	236
Total	3	341	42	0	37	0	27	2	16	312	0	1	0	0	0	0	781
04:00 PM	1	120	8	0	19	0	8	0	5	77	0	0	0	0	0	0	238
04:15 PM	0	122	5	0	7	0	14	0	3	76	0	0	0	0	1	0	228
04:30 PM	0	119	6	0	18	0	18	1	3	77	1	0	0	0	0	0	243
04:45 PM	0	106	5	0	8	0	7	0	2	83	0	0	0	0	0	0	211
Total	1	467	24	0	52	0	47	1	13	313	1	0	0	0	1	0	920
05:00 PM	0	117	4	0	11	0	9	0	2	83	0	0	0	0	0	0	226
05:15 PM	0	111	5	0	10	0	1	0	4	50	0	0	0	0	0	0	181
05:30 PM	0	72	5	0	19	0	3	0	2	48	0	0	0	0	0	0	149
05:45 PM	0	83	3	0	5	0	3	0	2	39	0	0	0	0	0	0	135
Total	0	383	17	0	45	0	16	0	10	220	0	0	0	0	0	0	691
Grand Total	12	2888	343	0	285	1	176	4	144	2640	4	1	0	1	10	0	6509
Apprch %	0.4	89.1	10.6	0	61.2	0.2	37.8	0.9	5.2	94.7	0.1	0	0	9.1	90.9	0	
Total %	0.2	44.4	5.3	0	4.4	0	2.7	0.1	2.2	40.6	0.1	0	0	0	0.2	0	
Passenger Vehicles	11	2288	298	0	258	1	155	2	126	2126	3	1	0	1	9	0	5279
% Passenger Vehicles	91.7	79.2	86.9	0	90.5	100	88.1	50	87.5	80.5	75	100	0	100	90	0	81.1
Trucks	1	600	45	0	27	0	21	2	18	514	1	0	0	0	1	0	1230
% Trucks	8.3	20.8	13.1	0	9.5	0	11.9	50	12.5	19.5	25	0	0	0	10	0	18.9

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Rio Rancho, NM 87124

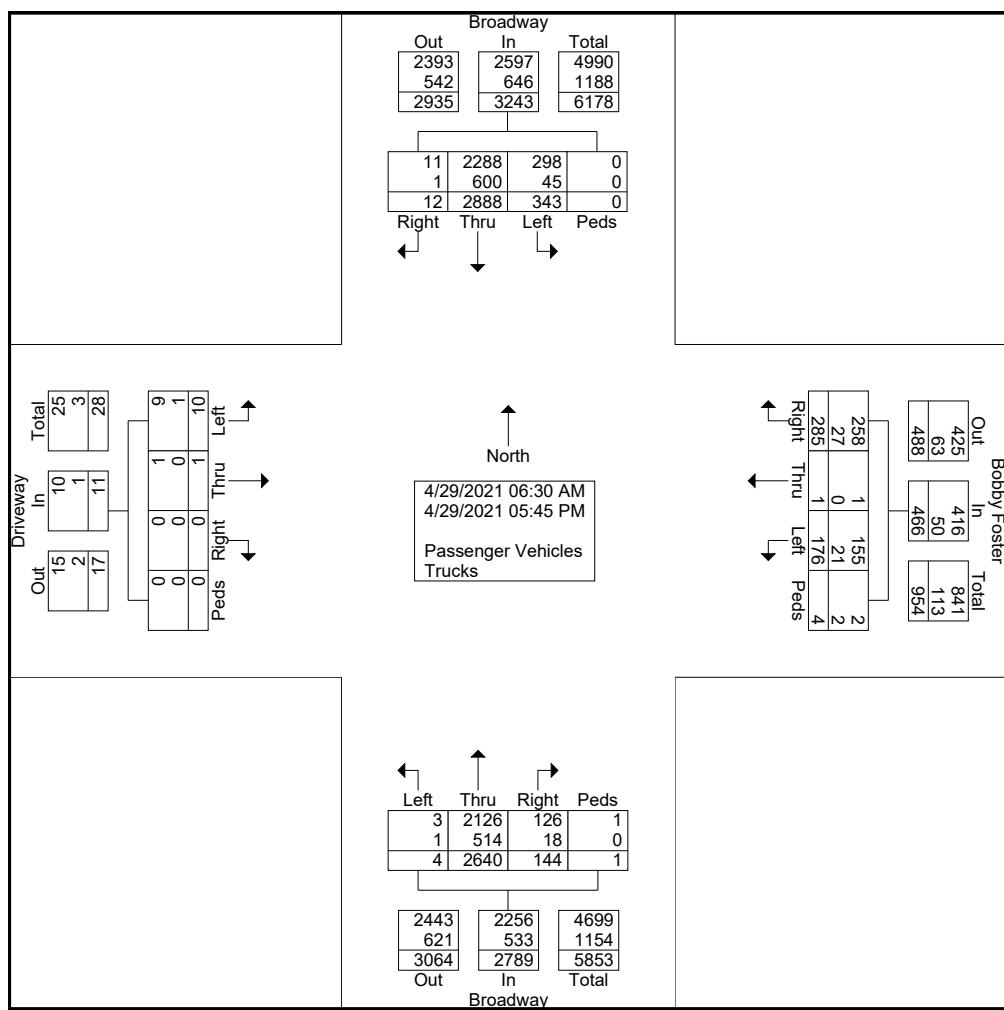
*ADVANCEDDESIGN*

File Name : Broadway - Bobby Foster 04282021 DP

Site Code : 00000000

Start Date : 4/29/2021

Page No : 3



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

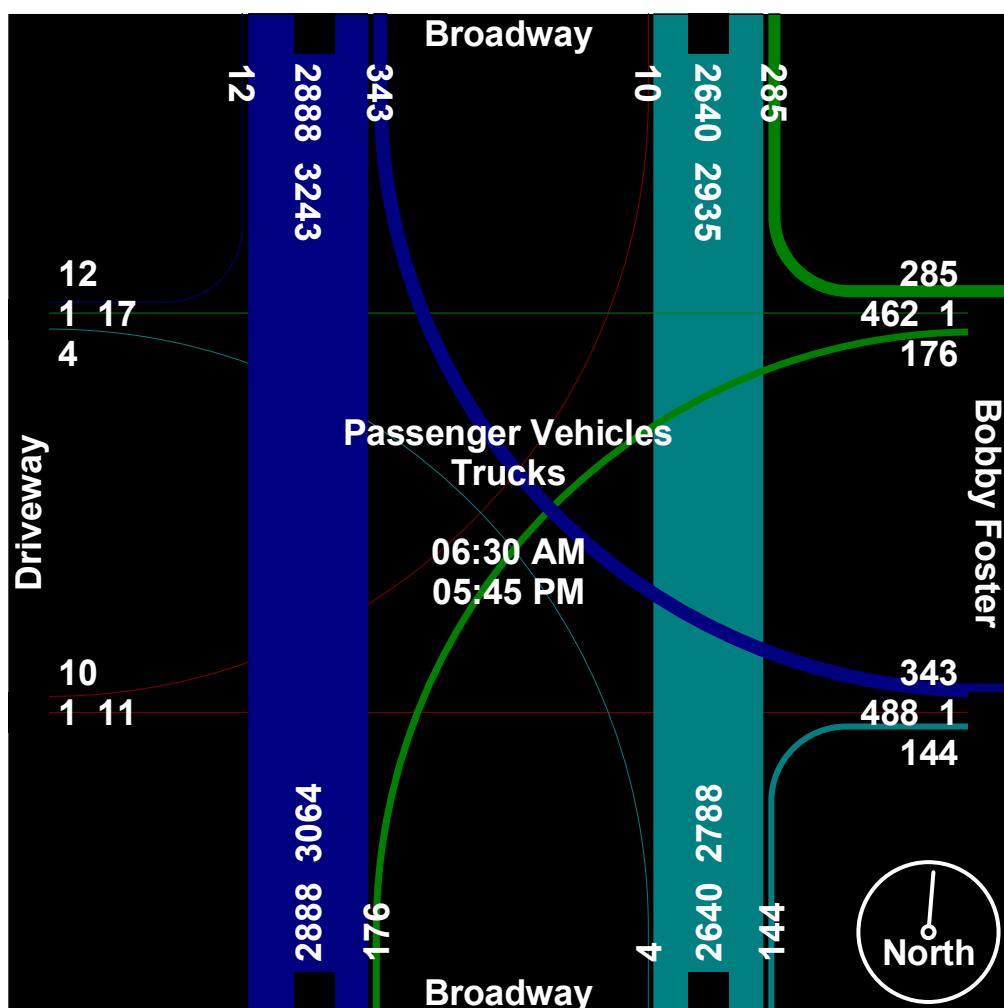
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File Name : Broadway - Bobby Foster 04282021 DP

Site Code : 00000000

Start Date : 4/29/2021

Page No : 4



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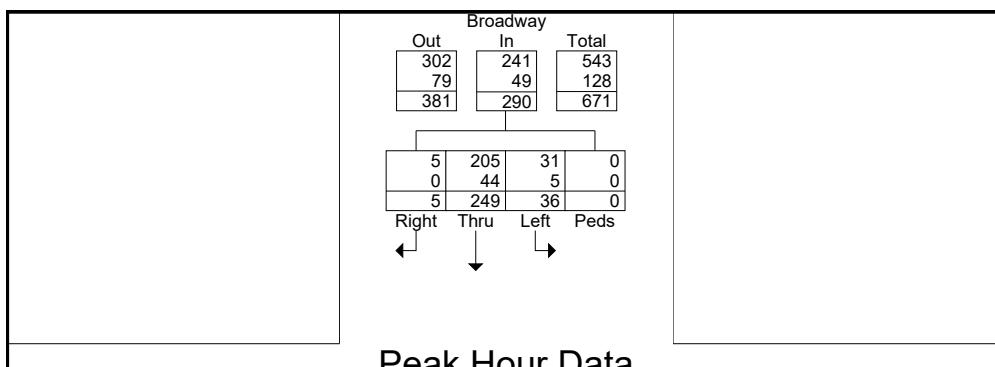
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Site Code : 00000000

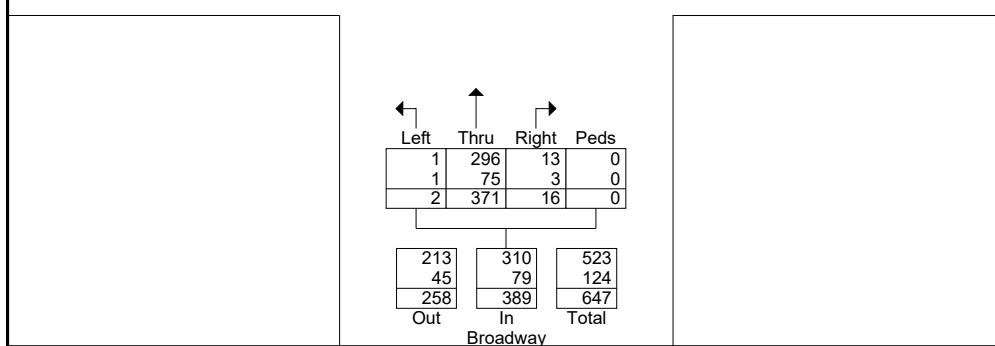
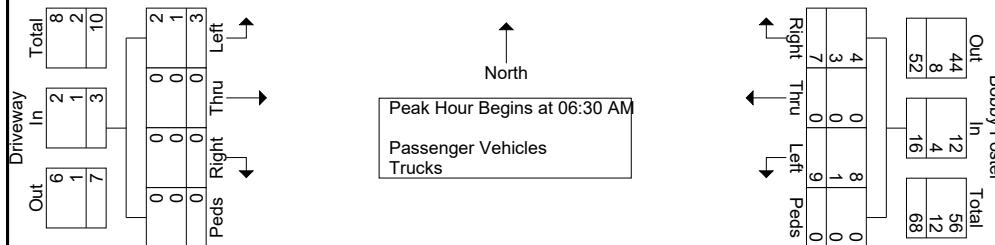
Start Date : 4/29/2021

Page No : 5

	Broadway From North				Bobby Foster From East				Broadway From South				Driveway From West								
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 06:30 AM</b>																					
06:30 AM	5	72	8	0	85	1	0	3	0	4	2	97	0	0	99	0	0	2	0	2	190
06:45 AM	0	70	7	0	77	1	0	1	0	2	4	117	2	0	123	0	0	1	0	1	203
07:00 AM	0	51	14	0	65	3	0	3	0	6	5	67	0	0	72	0	0	0	0	0	143
07:15 AM	0	56	7	0	63	2	0	2	0	4	5	90	0	0	95	0	0	0	0	0	162
Total Volume	5	249	36	0	290	7	0	9	0	16	16	371	2	0	389	0	0	3	0	3	698
% App. Total	1.7	85.9	12.4	0		43.8	0	56.2	0		4.1	95.4	0.5	0		0	0	100	0		
<b>PHF</b>	.250	.865	.643	.000	.853	.583	.000	.750	.000	.667	.800	.793	.250	.000	.791	.000	.000	.375	.000	.375	.860
Passenger Vehicles	5	205	31	0	241	4	0	8	0	12	13	296	1	0	310	0	0	2	0	2	565
% Passenger Vehicles	100	82.3	86.1	0	83.1	57.1	0	88.9	0	75.0	81.3	79.8	50.0	0	79.7	0	0	66.7	0	66.7	80.9
Trucks	0	44	5	0	49	3	0	1	0	4	3	75	1	0	79	0	0	1	0	1	133
% Trucks	0	17.7	13.9	0	16.9	42.9	0	11.1	0	25.0	18.8	20.2	50.0	0	20.3	0	0	33.3	0	33.3	19.1



Peak Hour Data



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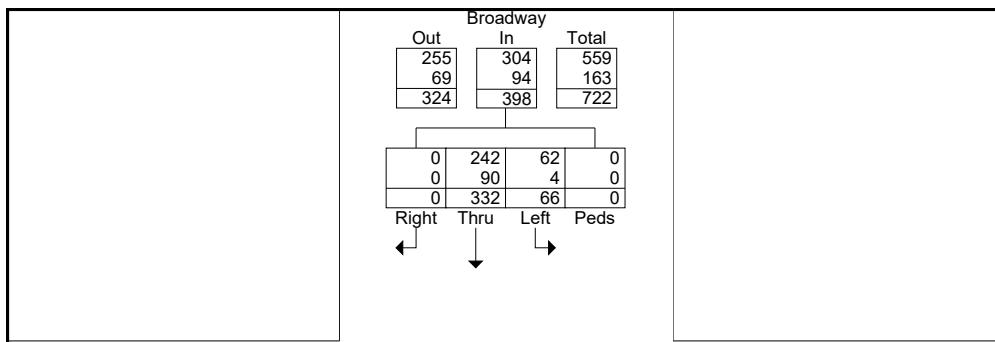
File Name : Broadway - Bobby Foster 04282021 DP

Site Code : 00000000

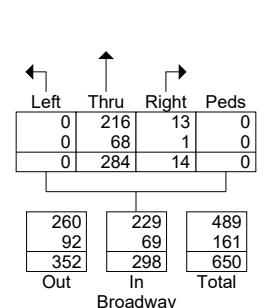
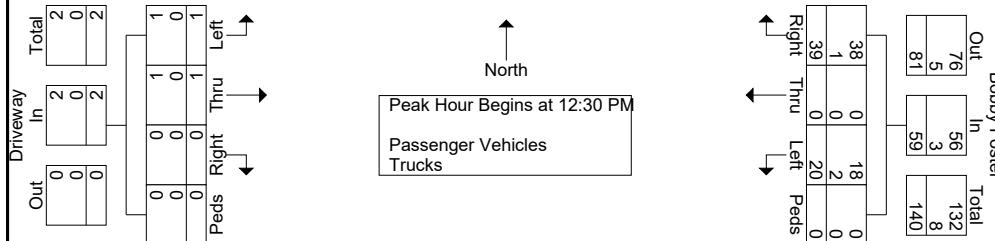
Start Date : 4/29/2021

Page No : 6

	Broadway From North					Bobby Foster From East					Broadway From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 12:30 PM</b>																					
12:30 PM	0	84	15	0	99	7	0	5	0	12	6	70	0	0	76	0	0	0	0	0	187
12:45 PM	0	75	9	0	84	10	0	9	0	19	0	68	0	0	68	0	1	0	0	0	172
01:00 PM	0	91	15	0	106	9	0	4	0	13	5	79	0	0	84	0	0	0	0	0	203
01:15 PM	0	82	27	0	109	13	0	2	0	15	3	67	0	0	70	0	0	1	0	1	195
Total Volume	0	332	66	0	398	39	0	20	0	59	14	284	0	0	298	0	1	1	0	2	757
% App. Total	0	83.4	16.6	0		66.1	0	33.9	0		4.7	95.3	0	0		0	50	50	0	0	
PHF	.000	.912	.611	.000	.913	.750	.000	.556	.000	.776	.583	.899	.000	.000	.887	.000	.250	.250	.000	.500	.932
Passenger Vehicles	0	242	62	0	304	38	0	18	0	56	13	216	0	0	229	0	1	1	0	2	591
% Passenger Vehicles	0	72.9	93.9	0	76.4	97.4	0	90.0	0	94.9	92.9	76.1	0	0	76.8	0	100	100	0	100	78.1
Trucks	0	90	4	0	94	1	0	2	0	3	1	68	0	0	69	0	0	0	0	0	166
% Trucks	0	27.1	6.1	0	23.6	2.6	0	10.0	0	5.1	7.1	23.9	0	0	23.2	0	0	0	0	0	21.9



Peak Hour Data



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

*ADVANCEDDESIGN*

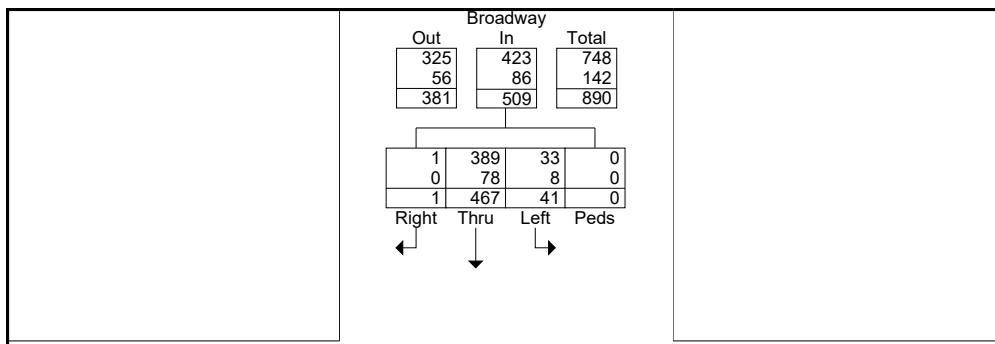
File Name : Broadway - Bobby Foster 04282021 DP

Site Code : 00000000

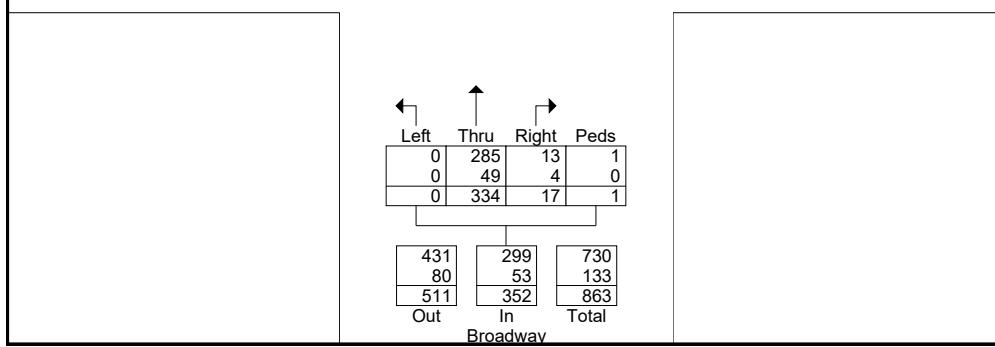
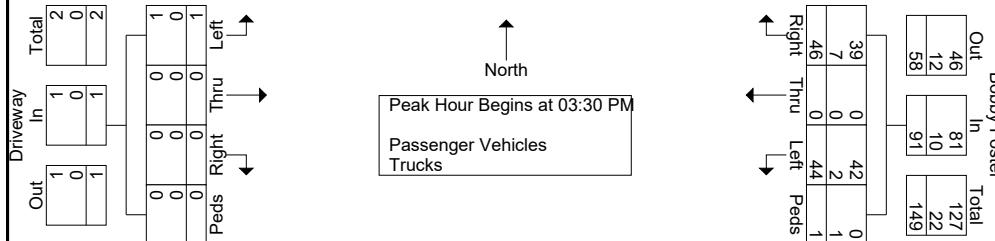
Start Date : 4/29/2021

Page No : 7

	Broadway From North					Bobby Foster From East					Broadway From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 02:00 PM to 06:00 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 03:30 PM</b>																					
03:30 PM	0	120	15	0	135	10	0	15	1	26	7	82	0	1	90	0	0	0	0	0	<b>251</b>
03:45 PM	0	105	13	0	118	10	0	7	0	17	2	99	0	0	101	0	0	0	0	0	236
04:00 PM	1	120	8	0	129	19	0	8	0	27	5	77	0	0	82	0	0	0	0	0	238
04:15 PM	0	122	5	0	127	7	0	14	0	21	3	76	0	0	79	0	0	1	0	1	228
Total Volume	1	467	41	0	509	46	0	44	1	91	17	334	0	1	352	0	0	1	0	1	953
% App. Total	0.2	91.7	8.1	0		50.5	0	48.4	1.1		4.8	94.9	0	0.3		0	0	100	0		
PHF	.250	.957	.683	.000	.943	.605	.000	.733	.250	.843	.607	.843	.000	.250	.871	.000	.000	.250	.000	.250	.949
Passenger Vehicles	1	389	33	0	423	39	0	42	0	81	13	285	0	1	299	0	0	1	0	1	804
% Passenger Vehicles	100	83.3	80.5	0	83.1	84.8	0	95.5	0	89.0	76.5	85.3	0	100	84.9	0	0	100	0	100	84.4
Trucks	0	78	8	0	86	7	0	2	1	10	4	49	0	0	53	0	0	0	0	0	149
% Trucks	0	16.7	19.5	0	16.9	15.2	0	4.5	100	11.0	23.5	14.7	0	0	15.1	0	0	0	0	0	15.6



Peak Hour Data



# **Huitt-Zollars, Inc.**

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
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File Name : Broadway - Bobby Foster 04282021 DP  
Site Code : 00000000  
Start Date : 4/29/2021  
Page No : 8



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
 Rio Rancho, NM 87124  
*ADVANCED DESIGN*

Weather: Overcast  
 Serial Number: 3083  
 Collected By: BTrejo  
 Other:

File Name : UNIVERSITY-RIO BRAVO\_05042021 BT  
 Site Code : 00000000  
 Start Date : 4/28/2021  
 Page No : 1

### Groups Printed- Passenger Vehicles - Trucks

	UNIVERSITY From North			UNIVERSITY From South			RIO BRAVO From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:30 AM	16	4	0	3	9	0	35	64	1	132
06:45 AM	24	8	0	3	35	0	45	61	0	176
Total	40	12	0	6	44	0	80	125	1	308
07:00 AM	16	5	0	5	25	0	35	50	0	136
07:15 AM	17	6	0	4	26	0	53	57	0	163
07:30 AM	15	4	0	7	28	0	46	73	0	173
07:45 AM	19	10	0	8	28	0	46	79	0	190
Total	67	25	0	24	107	0	180	259	0	662
08:00 AM	18	9	0	8	22	0	59	58	0	174
08:15 AM	28	10	0	5	40	0	65	52	0	200
08:30 AM	19	9	0	14	58	0	36	49	0	185
08:45 AM	15	8	0	9	19	0	41	59	0	151
Total	80	36	0	36	139	0	201	218	0	710
09:00 AM	19	10	0	9	30	0	26	43	0	137
09:15 AM	13	8	0	5	18	0	28	31	0	103
*** BREAK ***										
Total	32	18	0	14	48	0	54	74	0	240
*** BREAK ***										
11:00 AM	35	7	0	7	19	0	24	38	0	130
11:15 AM	26	1	0	5	33	0	19	39	0	123
11:30 AM	24	10	0	4	25	0	23	40	0	126
11:45 AM	21	4	0	6	28	0	25	35	0	119
Total	106	22	0	22	105	0	91	152	0	498
12:00 PM	30	4	0	7	34	0	26	33	0	134
12:15 PM	24	12	0	7	18	0	20	45	0	126
12:30 PM	24	5	0	10	25	0	22	41	0	127
12:45 PM	32	7	0	7	29	0	31	36	0	142
Total	110	28	0	31	106	0	99	155	0	529
01:00 PM	26	8	0	6	15	0	27	41	0	123
01:15 PM	23	4	0	5	20	0	33	50	0	135
01:30 PM	32	5	0	6	39	0	25	40	0	147
01:45 PM	25	5	0	9	26	0	26	44	0	135
Total	106	22	0	26	100	0	111	175	0	540
*** BREAK ***										
03:00 PM	50	7	0	4	44	0	29	50	0	184
03:15 PM	43	7	0	6	18	0	25	47	0	146
03:30 PM	52	16	0	14	57	0	19	50	0	208
03:45 PM	43	5	0	11	67	0	19	33	0	178
Total	188	35	0	35	186	0	92	180	0	716

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

*ADVANCEDDESIGN*

File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

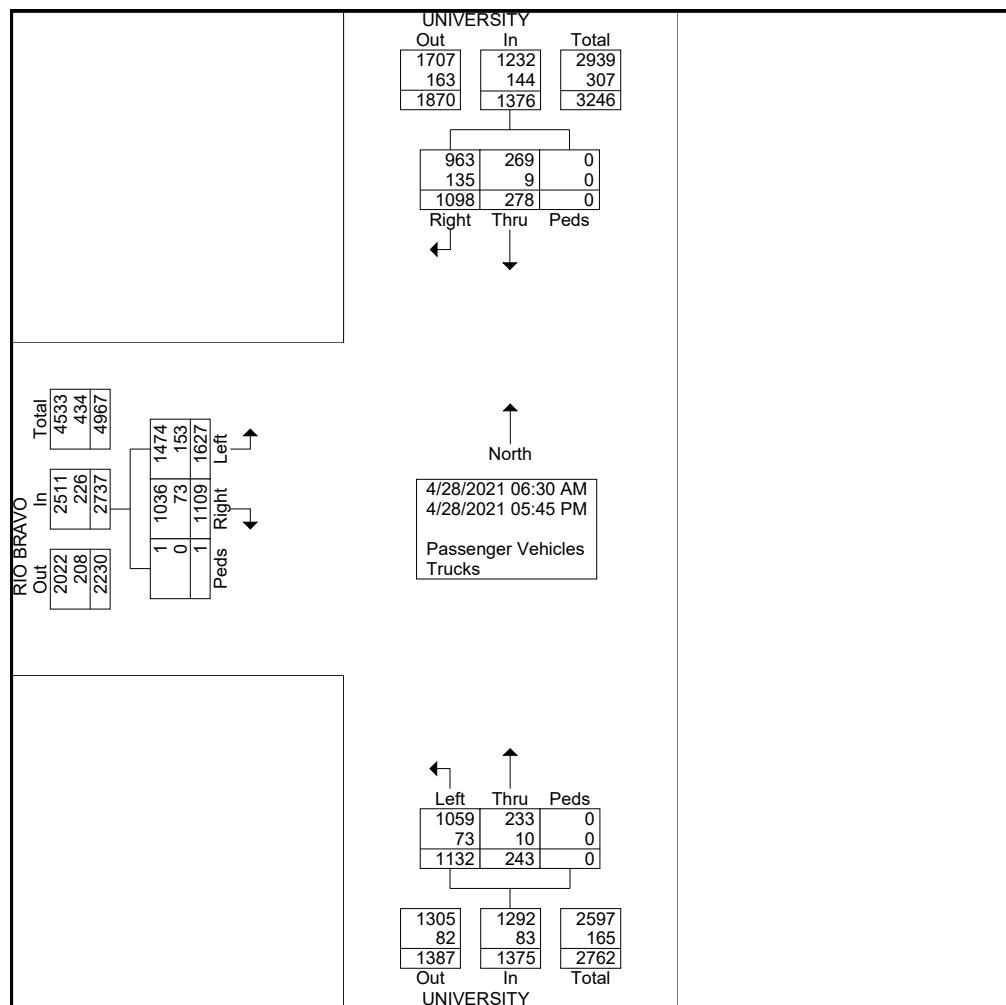
Site Code : 00000000

Start Date : 4/28/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

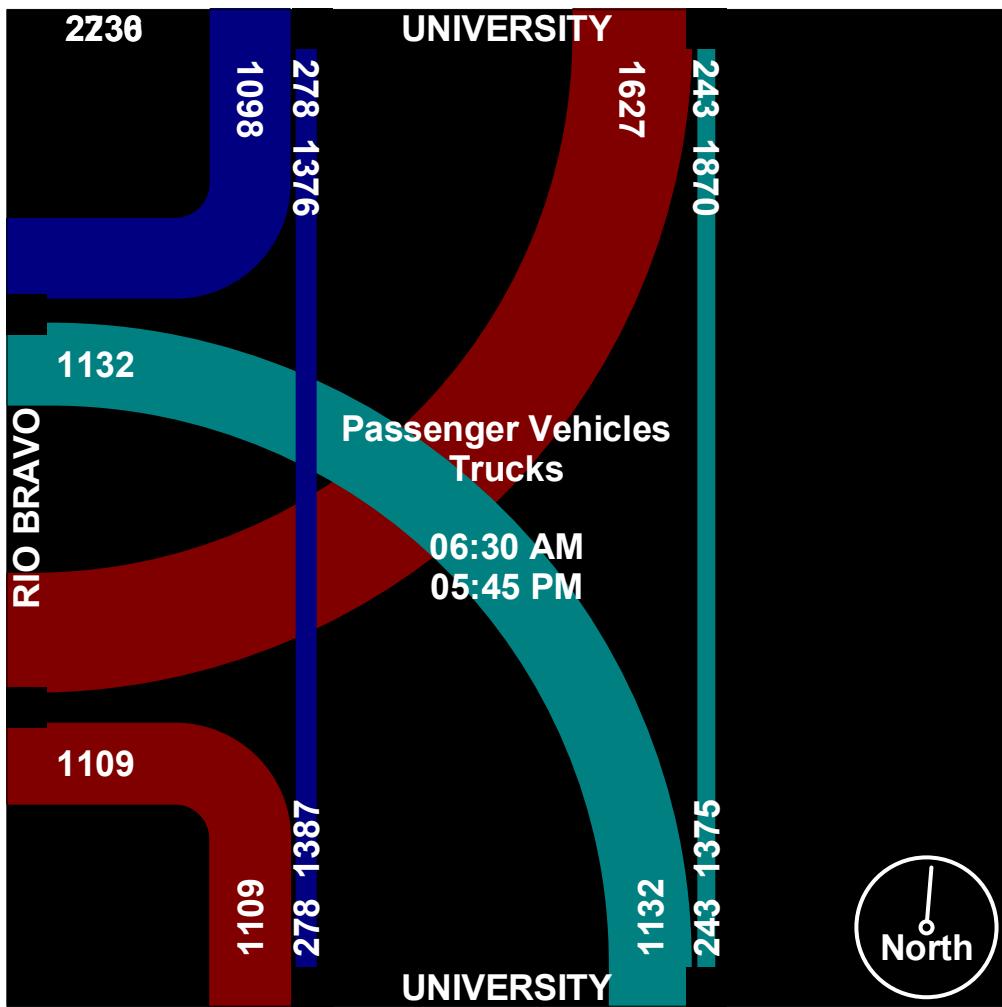
	UNIVERSITY From North			UNIVERSITY From South			RIO BRAVO From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
04:00 PM	33	7	0	3	38	0	17	42	0	140
04:15 PM	40	14	0	9	39	0	22	31	0	155
04:30 PM	63	9	0	6	49	0	25	24	0	176
04:45 PM	55	4	0	3	32	0	27	45	0	166
Total	191	34	0	21	158	0	91	142	0	637
05:00 PM	50	16	0	10	54	0	20	41	0	191
05:15 PM	44	10	0	5	32	0	25	33	0	149
05:30 PM	41	12	0	6	26	0	31	29	0	145
05:45 PM	43	8	0	7	27	0	34	44	0	163
Total	178	46	0	28	139	0	110	147	0	648
Grand Total	1098	278	0	243	1132	0	1109	1627	1	5488
Apprch %	79.8	20.2	0	17.7	82.3	0	40.5	59.4	0	
Total %	20	5.1	0	4.4	20.6	0	20.2	29.6	0	
Passenger Vehicles	963	269	0	233	1059	0	1036	1474	1	5035
% Passenger Vehicles	87.7	96.8	0	95.9	93.6	0	93.4	90.6	100	91.7
Trucks	135	9	0	10	73	0	73	153	0	453
% Trucks	12.3	3.2	0	4.1	6.4	0	6.6	9.4	0	8.3



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
ADVANCED DESIGN

File Name : UNIVERSITY-RIO BRAVO\_05042021 BT  
Site Code : 00000000  
Start Date : 4/28/2021  
Page No : 3



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

*ADVANCEDDESIGN*

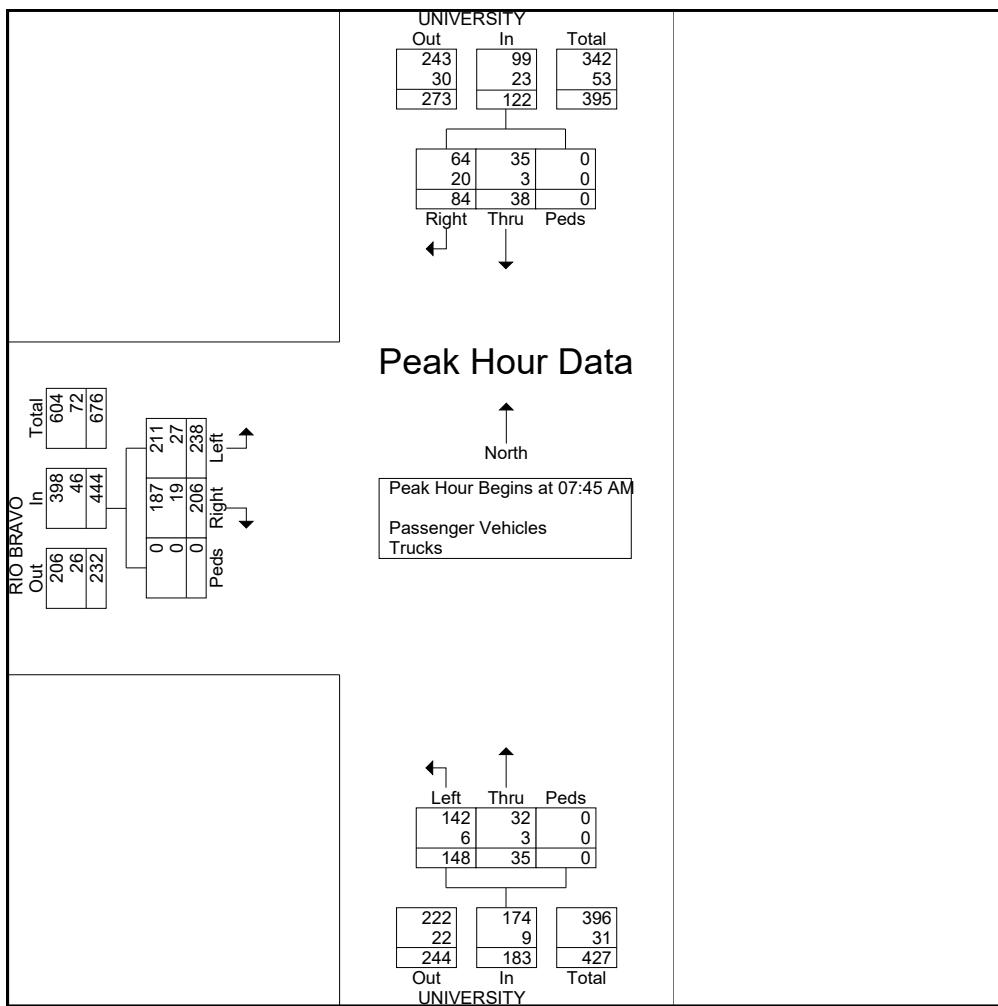
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

Site Code : 00000000

Start Date : 4/28/2021

Page No : 4

	UNIVERSITY From North					UNIVERSITY From South					RIO BRAVO From West				
	Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 07:45 AM															
07:45 AM	19	10	0	29	8	28	0	36	46	79	0	125	190		
08:00 AM	18	9	0	27	8	22	0	30	59	58	0	117	174		
08:15 AM	28	10	0	38	5	40	0	45	65	52	0	117	200		
08:30 AM	19	9	0	28	14	58	0	72	36	49	0	85	185		
Total Volume	84	38	0	122	35	148	0	183	206	238	0	444	749		
% App. Total	68.9	31.1	0		19.1	80.9	0		46.4	53.6	0				
PHF	.750	.950	.000	.803	.625	.638	.000	.635	.792	.753	.000	.888	.936		
Passenger Vehicles	64	35	0	99	32	142	0	174	187	211	0	398	671		
% Passenger Vehicles	76.2	92.1	0	81.1	91.4	95.9	0	95.1	90.8	88.7	0	89.6	89.6		
Trucks	20	3	0	23	3	6	0	9	19	27	0	46	78		
% Trucks	23.8	7.9	0	18.9	8.6	4.1	0	4.9	9.2	11.3	0	10.4	10.4		



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Rio Rancho, NM 87124

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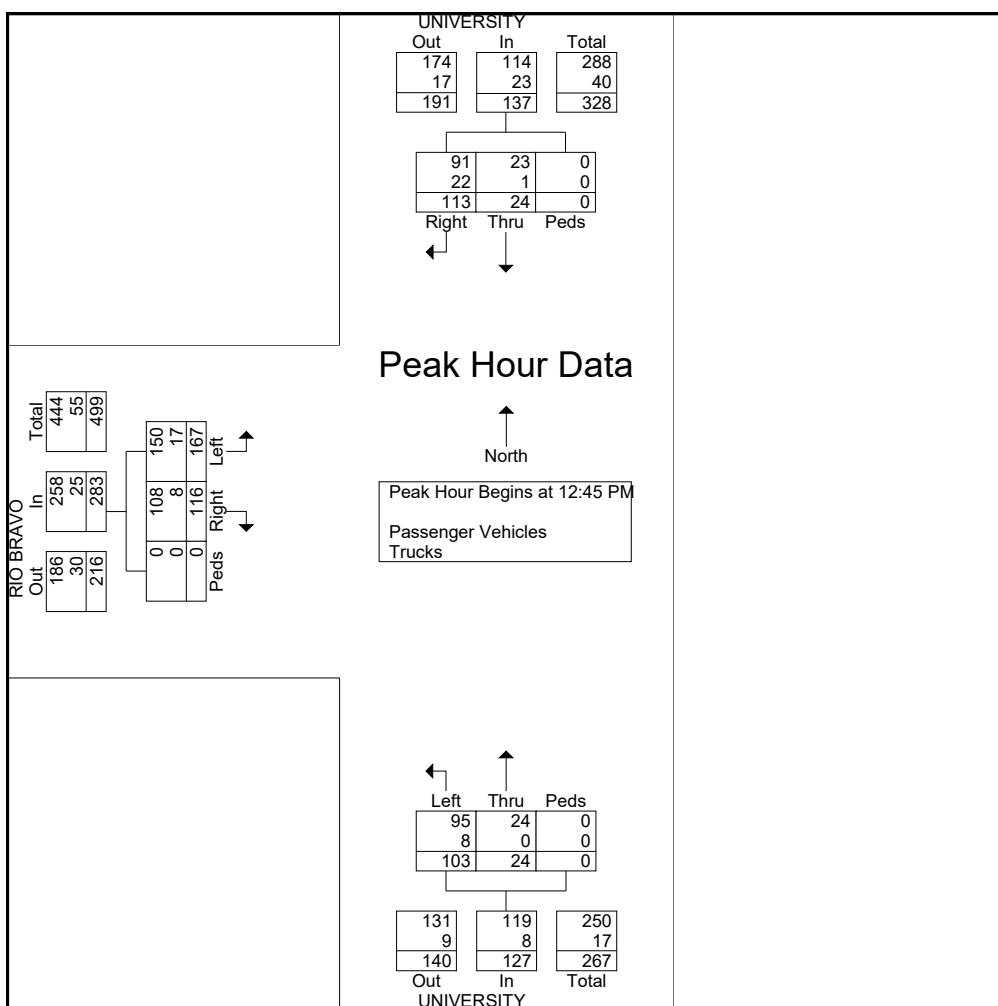
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

Site Code : 00000000

Start Date : 4/28/2021

Page No : 5

Start Time	UNIVERSITY From North				UNIVERSITY From South				RIO BRAVO From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
<b>Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1</b>														
<b>Peak Hour for Entire Intersection Begins at 12:45 PM</b>														
12:45 PM	32	7	0	39	7	29	0	36	31	36	0	67	142	
01:00 PM	26	8	0	34	6	15	0	21	27	41	0	68	123	
01:15 PM	23	4	0	27	5	20	0	25	33	50	0	83	135	
01:30 PM	32	5	0	37	6	39	0	45	25	40	0	65	147	
Total Volume	113	24	0	137	24	103	0	127	116	167	0	283	547	
% App. Total	82.5	17.5	0		18.9	81.1	0		41	59	0			
PHF	.883	.750	.000	.878	.857	.660	.000	.706	.879	.835	.000	.852	.930	
Passenger Vehicles	91	23	0	114	24	95	0	119	108	150	0	258	491	
% Passenger Vehicles	80.5	95.8	0	83.2	100	92.2	0	93.7	93.1	89.8	0	91.2	89.8	
Trucks	22	1	0	23	0	8	0	8	8	17	0	25	56	
% Trucks	19.5	4.2	0	16.8	0	7.8	0	6.3	6.9	10.2	0	8.8	10.2	



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

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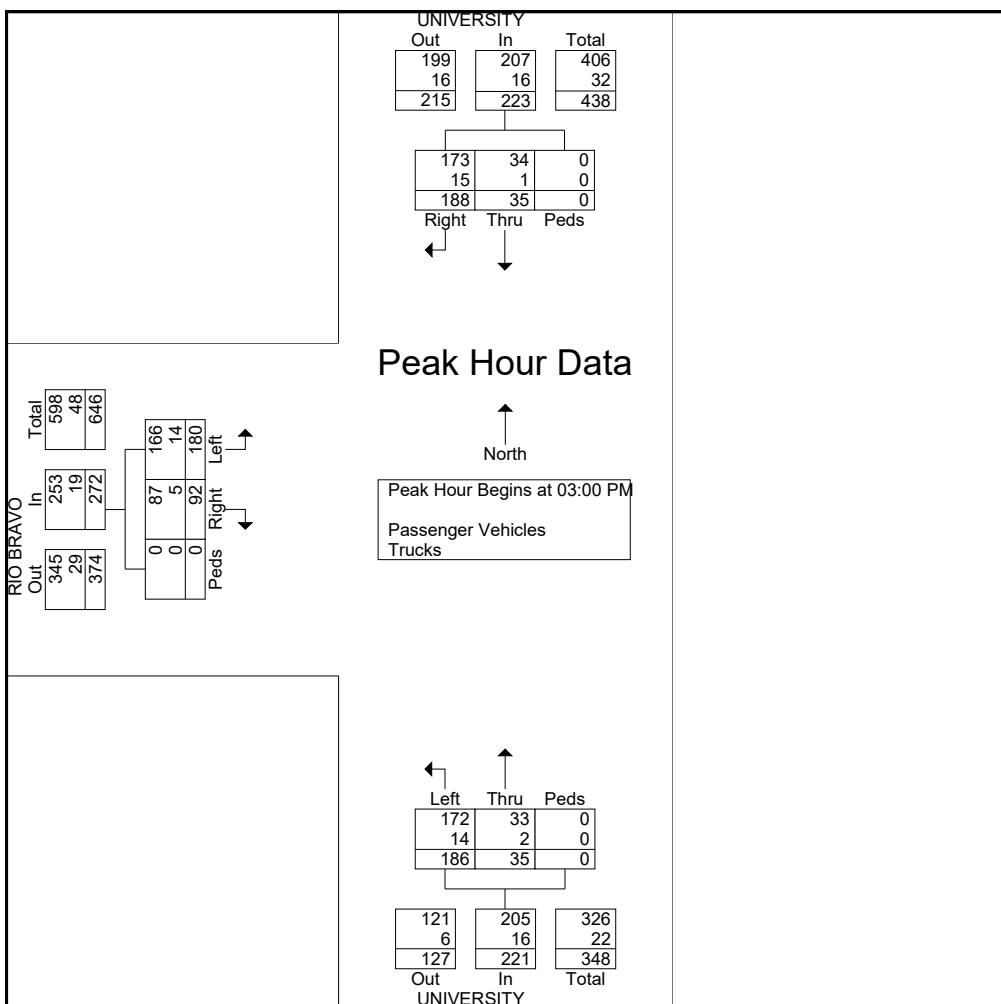
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

Site Code : 00000000

Start Date : 4/28/2021

Page No : 6

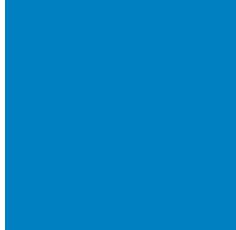
Start Time	UNIVERSITY From North				UNIVERSITY From South				RIO BRAVO From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
<b>Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1</b>														
<b>Peak Hour for Entire Intersection Begins at 03:00 PM</b>														
03:00 PM	50	7	0	57	4	44	0	48	29	50	0	79	184	
03:15 PM	43	7	0	50	6	18	0	24	25	47	0	72	146	
03:30 PM	52	16	0	68	14	57	0	71	19	50	0	69	208	
03:45 PM	43	5	0	48	11	67	0	78	19	33	0	52	178	
Total Volume	188	35	0	223	35	186	0	221	92	180	0	272	716	
% App. Total	84.3	15.7	0		15.8	84.2	0		33.8	66.2	0			
PHF	.904	.547	.000	.820	.625	.694	.000	.708	.793	.900	.000	.861	.861	
Passenger Vehicles	173	34	0	207	33	172	0	205	87	166	0	253	665	
% Passenger Vehicles	92.0	97.1	0	92.8	94.3	92.5	0	92.8	94.6	92.2	0	93.0	92.9	
Trucks	15	1	0	16	2	14	0	16	5	14	0	19	51	
% Trucks	8.0	2.9	0	7.2	5.7	7.5	0	7.2	5.4	7.8	0	7.0	7.1	



**Huitt-Zollars, Inc.**

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
*ADVANCEDDESIGN*

File Name : UNIVERSITY-RIO BRAVO\_05042021 BT  
Site Code : 00000000  
Start Date : 4/28/2021  
Page No : 7



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124

*ADVANCED DESIGN*

Weather: Overcast

Serial Number: 3083/3080

Collected By: BT/JS

Other:

File Name : broadway-rio bravo\_05042021 combined

Site Code : 00000000

Start Date : 5/4/2021

Page No : 1

### Groups Printed- Passenger Vehicles - Trucks

	BROADWAY From North				RIO BRAVO From East				BROADWAY From South				RIO BRAVO From West				Int. Total
	Right	Thru	Left	Peds													
Start Time																	
06:30 AM	5	38	8	0	12	93	74	0	50	32	11	0	31	279	33	0	666
06:45 AM	13	21	10	0	12	127	108	0	54	34	29	0	47	286	31	0	772
Total	18	59	18	0	24	220	182	0	104	66	40	0	78	565	64	0	1438
07:00 AM	10	30	4	0	9	121	66	0	49	21	27	0	23	251	33	0	644
07:15 AM	10	21	14	0	8	105	73	1	73	25	21	0	21	320	44	0	736
07:30 AM	30	29	26	0	5	123	40	0	52	58	14	3	19	328	52	0	779
07:45 AM	18	20	18	0	5	114	49	1	71	41	22	2	29	311	32	0	733
Total	68	100	62	0	27	463	228	2	245	145	84	5	92	1210	161	0	2892
08:00 AM	19	32	13	0	3	117	53	0	46	26	25	1	35	241	27	0	638
08:15 AM	24	28	12	0	2	129	47	0	38	31	15	0	24	233	24	0	607
08:30 AM	18	33	12	0	10	125	39	1	54	40	25	0	32	204	21	0	614
08:45 AM	37	41	12	0	1	136	49	0	55	34	17	1	32	187	21	0	623
Total	98	134	49	0	16	507	188	1	193	131	82	2	123	865	93	0	2482
09:00 AM	24	28	16	0	7	83	43	0	63	29	20	0	30	160	19	0	522
09:15 AM	14	27	7	0	5	113	42	2	42	22	36	0	26	157	18	0	511
*** BREAK ***																	
Total	38	55	23	0	12	196	85	2	105	51	56	0	56	317	37	0	1033
*** BREAK ***																	
11:00 AM	28	44	11	0	8	90	48	0	58	46	40	1	24	115	17	0	530
11:15 AM	25	28	8	0	4	128	63	0	48	25	36	0	32	177	25	0	599
11:30 AM	23	49	11	0	5	121	56	0	62	19	41	0	34	157	17	0	595
11:45 AM	31	38	14	0	2	134	53	0	59	38	57	0	35	128	33	0	622
Total	107	159	44	0	19	473	220	0	227	128	174	1	125	577	92	0	2346
12:00 PM	26	53	14	0	6	158	50	0	46	29	49	0	33	146	16	0	626
12:15 PM	39	52	14	0	3	179	74	0	57	32	58	1	42	155	36	0	742
12:30 PM	26	45	12	0	8	134	58	0	62	31	45	0	29	185	28	0	663
12:45 PM	32	43	15	0	3	147	60	0	66	35	53	0	43	153	26	0	676
Total	123	193	55	0	20	618	242	0	231	127	205	1	147	639	106	0	2707
01:00 PM	30	47	12	0	3	145	59	0	38	35	35	0	27	144	25	0	600
01:15 PM	35	46	9	0	4	121	61	0	61	34	36	0	40	135	22	0	604
01:30 PM	35	44	13	0	3	167	49	0	56	36	43	0	28	157	33	0	664
01:45 PM	24	56	10	0	5	171	59	0	48	35	32	0	38	161	25	0	664
Total	124	193	44	0	15	604	228	0	203	140	146	0	133	597	105	0	2532
*** BREAK ***																	
03:00 PM	41	51	11	0	8	221	78	0	58	33	16	0	23	169	20	0	729
03:15 PM	58	64	17	0	5	233	65	0	69	38	48	3	31	161	39	0	831
03:30 PM	62	71	23	0	4	216	57	0	86	40	50	2	33	179	28	0	851
03:45 PM	68	80	12	0	9	272	95	1	91	47	53	1	26	160	28	0	943
Total	229	266	63	0	26	942	295	1	304	158	167	6	113	669	115	0	3354

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

ADVANCEDDESIGN

File Name : broadway-rio bravo\_05042021 combined

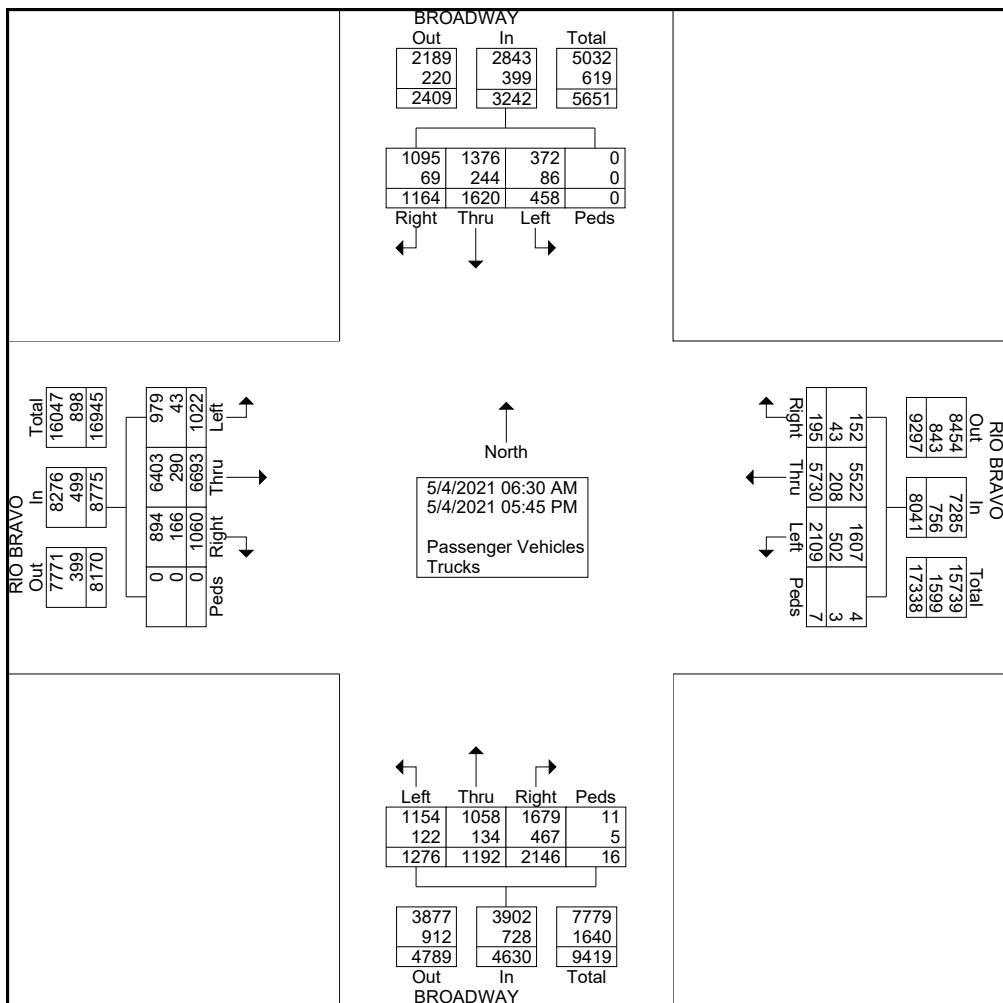
Site Code : 00000000

Start Date : 5/4/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

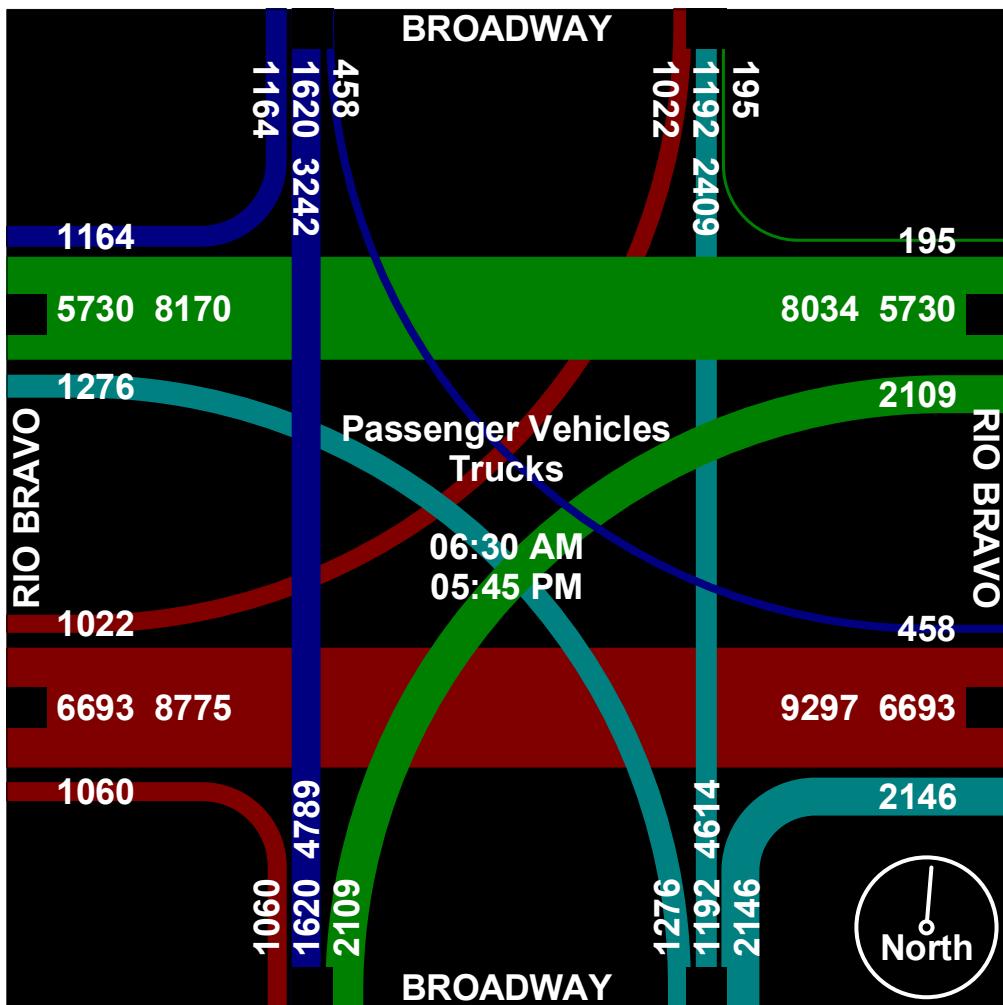
	BROADWAY From North				RIO BRAVO From East				BROADWAY From South				RIO BRAVO From West				Int. Total
	Right	Thru	Left	Peds													
Start Time	Right	Thru	Left	Peds	Int. Total												
04:00 PM	67	66	15	0	5	222	60	0	80	46	50	0	37	176	28	0	852
04:15 PM	61	65	16	0	7	285	74	0	81	44	44	0	30	159	34	0	900
04:30 PM	53	59	7	0	3	228	61	0	76	28	41	0	35	158	47	0	796
04:45 PM	33	61	16	0	7	233	91	1	81	39	51	0	20	131	23	0	787
Total	214	251	54	0	22	968	286	1	318	157	186	0	122	624	132	0	3335
05:00 PM	25	61	6	0	3	261	67	0	94	39	53	1	26	170	22	0	828
05:15 PM	47	64	19	0	7	249	50	0	78	36	51	0	14	141	36	0	792
05:30 PM	29	45	9	0	4	229	38	0	44	14	32	0	13	176	32	0	665
05:45 PM	44	40	12	0	0	0	0	0	0	0	0	0	18	143	27	0	284
Total	145	210	46	0	14	739	155	0	216	89	136	1	71	630	117	0	2569
Grand Total	1164	1620	458	0	195	5730	2109	7	2146	1192	1276	16	1060	6693	1022	0	24688
Apprch %	35.9	50	14.1	0	2.4	71.3	26.2	0.1	46.3	25.7	27.6	0.3	12.1	76.3	11.6	0	
Total %	4.7	6.6	1.9	0	0.8	23.2	8.5	0	8.7	4.8	5.2	0.1	4.3	27.1	4.1	0	
Passenger Vehicles	1095	1376	372	0	152	5522	1607	4	1679	1058	1154	11	894	6403	979	0	22306
% Passenger Vehicles	94.1	84.9	81.2	0	77.9	96.4	76.2	57.1	78.2	88.8	90.4	68.8	84.3	95.7	95.8	0	90.4
Trucks	69	244	86	0	43	208	502	3	467	134	122	5	166	290	43	0	2382
% Trucks	5.9	15.1	18.8	0	22.1	3.6	23.8	42.9	21.8	11.2	9.6	31.2	15.7	4.3	4.2	0	9.6



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
ADVANCED DESIGN

File Name : broadway-rio bravo\_05042021 combined  
Site Code : 00000000  
Start Date : 5/4/2021  
Page No : 3



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

*ADVANCEDDESIGN*

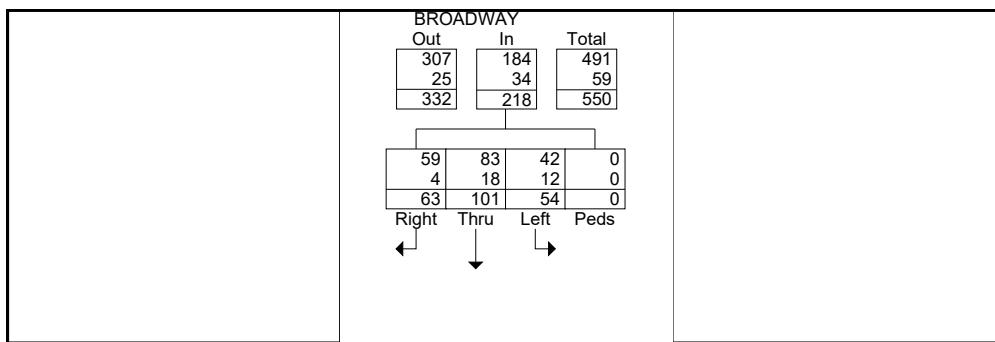
File Name : broadway-rio bravo\_05042021 combined

Site Code : 00000000

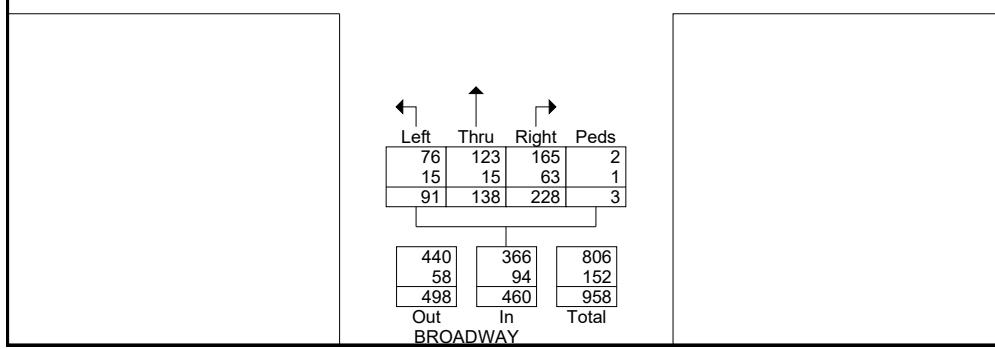
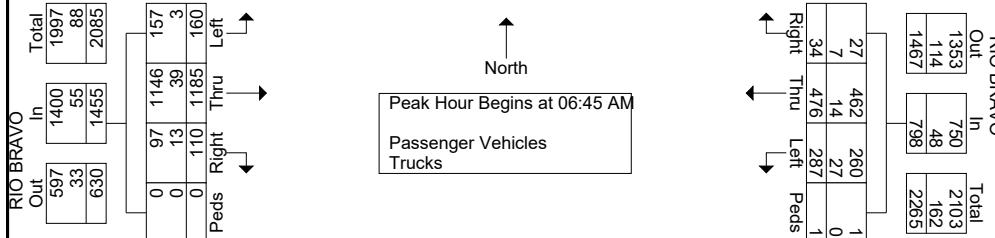
Start Date : 5/4/2021

Page No : 4

	BROADWAY From North					RIO BRAVO From East					BROADWAY From South					RIO BRAVO From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 06:45 AM</b>																					
06:45 AM	13	21	10	0	44	12	127	108	0	247	54	34	29	0	117	47	286	31	0	364	772
07:00 AM	10	30	4	0	44	9	121	66	0	196	49	21	27	0	97	23	251	33	0	307	644
07:15 AM	10	21	14	0	45	8	105	73	1	187	73	25	21	0	119	21	320	44	0	385	736
07:30 AM	30	29	26	0	85	5	123	40	0	168	52	58	14	3	127	19	328	52	0	399	779
Total Volume	63	101	54	0	218	34	476	287	1	798	228	138	91	3	460	110	1185	160	0	1455	2931
% App. Total	28.9	46.3	24.8	0		4.3	59.6	36	0.1		49.6	30	19.8	0.7		7.6	81.4	11	0		
PHF	.525	.842	.519	.000	.641	.708	.937	.664	.250	.808	.781	.595	.784	.250	.906	.585	.903	.769	.000	.912	.941
Passenger Vehicles	59	83	42	0	184	27	462	260	1	750	165	123	76	2	366	97	1146	157	0	1400	2700
% Passenger Vehicles	93.7	82.2	77.8	0	84.4	79.4	97.1	90.6	100	94.0	72.4	89.1	83.5	66.7	79.6	88.2	96.7	98.1	0	96.2	92.1
Trucks	4	18	12	0	34	7	14	27	0	48	63	15	15	1	94	13	39	3	0	55	231
% Trucks	6.3	17.8	22.2	0	15.6	20.6	2.9	9.4	0	6.0	27.6	10.9	16.5	33.3	20.4	11.8	3.3	1.9	0	3.8	7.9



Peak Hour Data



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

**ADVANCEDDESIGN**

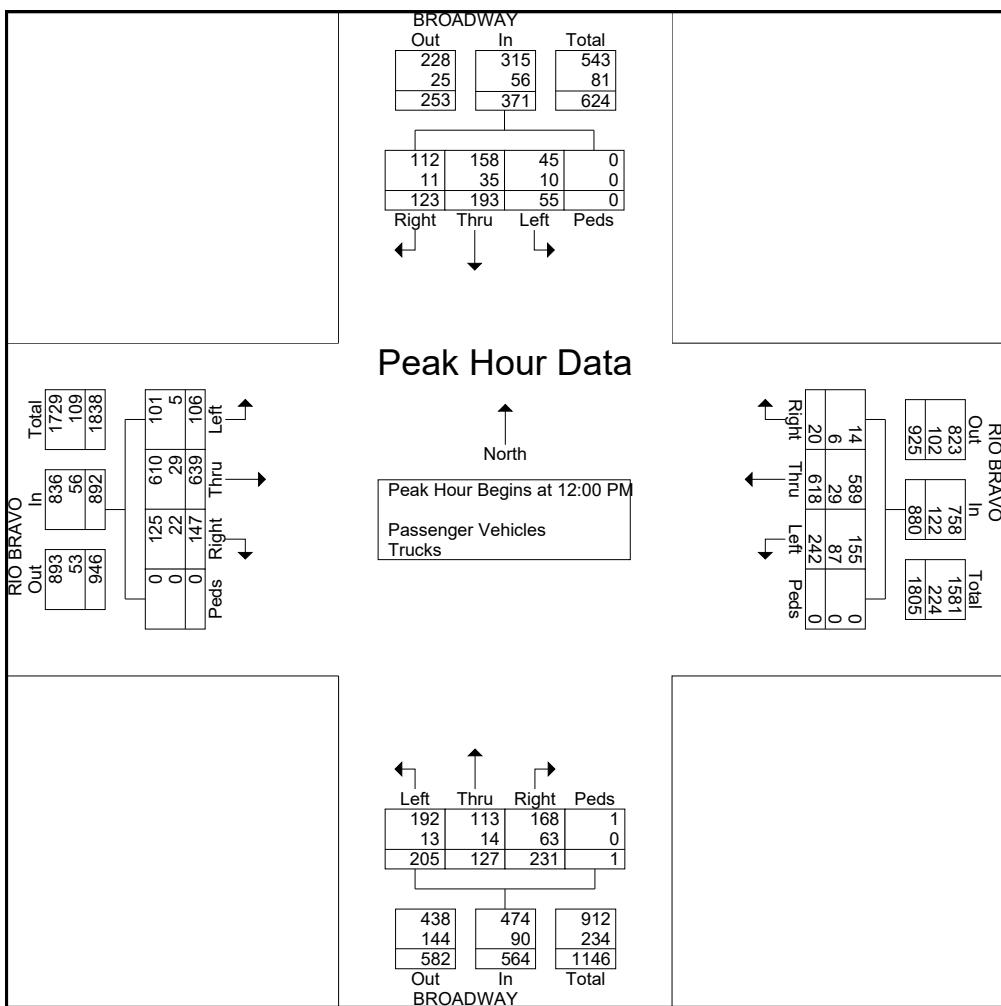
File Name : broadway-rio bravo\_05042021 combined

Site Code : 00000000

Start Date : 5/4/2021

Page No : 5

	BROADWAY From North				RIO BRAVO From East				BROADWAY From South				RIO BRAVO From West								
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 12:00 PM</b>																					
12:00 PM	26	<b>53</b>	14	0	93	6	158	50	0	214	46	29	49	0	124	33	146	16	0	195	626
12:15 PM	<b>39</b>	52	14	0	<b>105</b>	3	<b>179</b>	<b>74</b>	0	<b>256</b>	57	32	<b>58</b>	1	148	42	155	<b>36</b>	0	233	<b>742</b>
12:30 PM	26	45	12	0	83	<b>8</b>	134	58	0	200	62	31	45	0	138	29	<b>185</b>	28	0	<b>242</b>	663
12:45 PM	32	43	<b>15</b>	0	90	3	147	60	0	210	<b>66</b>	<b>35</b>	53	0	<b>154</b>	<b>43</b>	153	26	0	222	676
Total Volume	123	193	55	0	371	20	618	242	0	880	231	127	205	1	564	147	639	106	0	892	2707
% App. Total	33.2	52	14.8	0		2.3	70.2	27.5	0		41	22.5	36.3	0.2		16.5	71.6	11.9	0		
PHF	.788	.910	.917	.000	.883	.625	.863	.818	.000	.859	.875	.907	.884	.250	.916	.855	.864	.736	.000	.921	.912
Passenger Vehicles	112	158	45	0	315	14	589	155	0	758	168	113	192	1	474	125	610	101	0	836	2383
% Passenger Vehicles	91.1	81.9	81.8	0	84.9	70.0	95.3	64.0	0	86.1	72.7	89.0	93.7	100	84.0	85.0	95.5	95.3	0	93.7	88.0
Trucks	11	35	10	0	56	6	29	87	0	122	63	14	13	0	90	22	29	5	0	56	324
% Trucks	8.9	18.1	18.2	0	15.1	30.0	4.7	36.0	0	13.9	27.3	11.0	6.3	0	16.0	15.0	4.5	4.7	0	6.3	12.0



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

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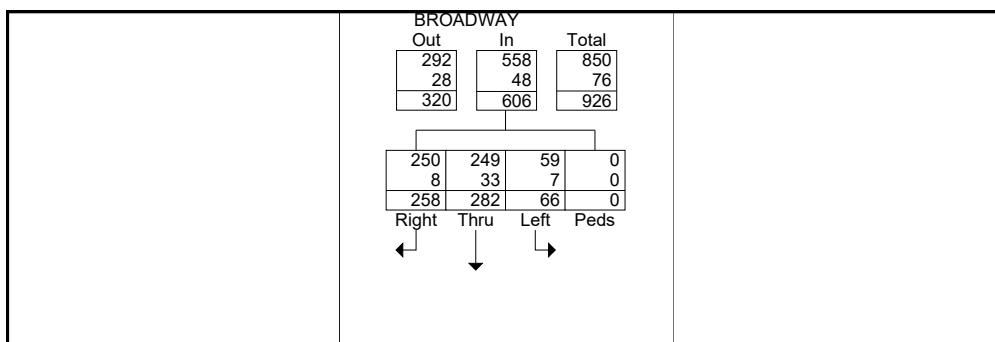
File Name : broadway-rio bravo\_05042021 combined

Site Code : 00000000

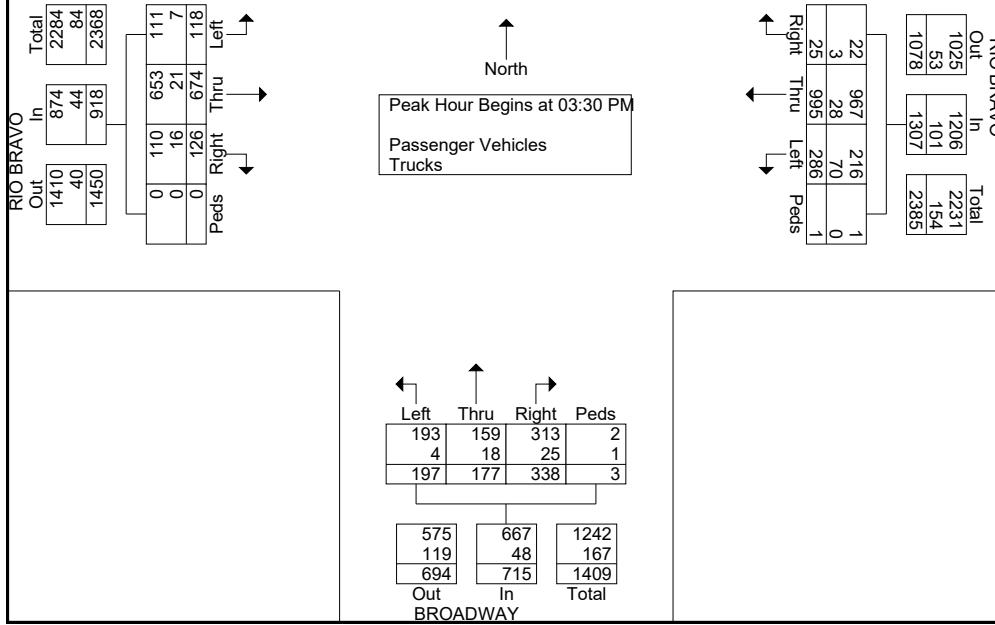
Start Date : 5/4/2021

Page No : 6

	BROADWAY From North				RIO BRAVO From East				BROADWAY From South				RIO BRAVO From West								
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 03:30 PM																					
03:30 PM	62	71	<b>23</b>	0	156	4	216	57	0	277	86	40	50	<b>2</b>	178	33	<b>179</b>	28	0	240	851
03:45 PM	<b>68</b>	<b>80</b>	12	0	<b>160</b>	<b>9</b>	272	<b>95</b>	1	<b>377</b>	<b>91</b>	<b>47</b>	<b>53</b>	1	<b>192</b>	26	160	28	0	214	<b>943</b>
04:00 PM	67	66	15	0	148	5	222	60	0	287	80	46	50	0	176	<b>37</b>	176	28	0	<b>241</b>	852
04:15 PM	61	65	16	0	142	7	<b>285</b>	74	0	366	81	44	44	0	169	30	159	<b>34</b>	0	223	900
Total Volume	258	282	66	0	606	25	995	286	1	1307	338	177	197	3	715	126	674	118	0	918	3546
% App. Total	42.6	46.5	10.9	0		1.9	76.1	21.9	0.1		47.3	24.8	27.6	0.4		13.7	73.4	12.9	0		
PHF	.949	.881	.717	.000	.947	.694	.873	.753	.250	.867	.929	.941	.929	.375	.931	.851	.941	.868	.000	.952	.940
Passenger Vehicles	250	249	59	0	558	22	967	216	1	1206	313	159	193	2	667	110	653	111	0	874	3305
% Passenger Vehicles	96.9	88.3	89.4	0	92.1	88.0	97.2	75.5	100	92.3	92.6	89.8	98.0	66.7	93.3	87.3	96.9	94.1	0	95.2	93.2
Trucks	8	33	7	0	48	3	28	70	0	101	25	18	4	1	48	16	21	7	0	44	241
% Trucks	3.1	11.7	10.6	0	7.9	12.0	2.8	24.5	0	7.7	7.4	10.2	2.0	33.3	6.7	12.7	3.1	5.9	0	4.8	6.8



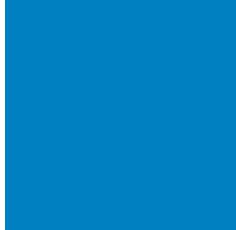
Peak Hour Data



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
*ADVANCEDDESIGN*

File Name : broadway-rio bravo\_05042021 combined  
Site Code : 00000000  
Start Date : 5/4/2021  
Page No : 7



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
 Rio Rancho, NM 87124  
**ADVANCEDDESIGN**

Weather: Overcast  
 Serial Number: 3083/3080  
 Collected By: BT/JS  
 Other:

File Name : 2ND-RIO BRAVO\_05042021 COMBINED  
 Site Code : 00000000  
 Start Date : 4/29/2021  
 Page No : 1

### Groups Printed- Passenger Vehicles - Trucks

Start Time	2ND From North				RIO BRAVO From East				2ND From South				RIO BRAVO From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
06:30 AM	12	15	8	0	7	61	14	0	7	10	13	0	45	288	46	0	526
06:45 AM	17	23	12	0	22	99	23	0	7	8	31	0	98	323	58	0	721
Total	29	38	20	0	29	160	37	0	14	18	44	0	143	611	104	0	1247
07:00 AM	8	14	17	0	8	83	19	0	11	11	31	0	48	246	48	0	544
07:15 AM	10	4	12	0	11	109	14	0	13	5	28	1	41	331	50	0	629
07:30 AM	14	13	19	0	10	108	18	0	10	31	42	0	28	307	51	0	651
07:45 AM	10	16	17	0	14	141	22	0	18	20	43	0	42	401	46	1	791
Total	42	47	65	0	43	441	73	0	52	67	144	1	159	1285	195	1	2615
08:00 AM	18	10	22	0	19	128	22	0	6	11	34	0	46	288	42	0	646
08:15 AM	20	17	11	0	8	120	14	0	7	10	26	0	26	239	54	0	552
08:30 AM	26	16	20	0	22	134	11	0	11	7	16	0	35	282	39	0	619
08:45 AM	30	17	18	0	9	135	5	0	8	12	29	3	18	226	35	0	545
Total	94	60	71	0	58	517	52	0	32	40	105	3	125	1035	170	0	2362
09:00 AM	16	22	14	0	12	136	14	0	8	10	25	0	29	193	26	0	505
09:15 AM	30	15	20	0	12	89	14	7	8	16	38	0	31	156	20	0	456
*** BREAK ***																	
Total	46	37	34	0	24	225	28	7	16	26	63	0	60	349	46	0	961
*** BREAK ***																	
11:00 AM	18	11	20	0	16	142	5	0	13	4	56	0	32	154	36	0	507
11:15 AM	23	18	16	0	19	140	9	0	13	5	38	0	26	169	24	0	500
11:30 AM	29	18	23	0	16	178	11	1	16	9	51	0	34	166	28	0	580
11:45 AM	26	16	20	0	15	207	16	0	12	17	42	0	30	181	15	0	597
Total	96	63	79	0	66	667	41	1	54	35	187	0	122	670	103	0	2184
12:00 PM	32	13	21	0	10	171	19	0	7	10	51	0	36	186	43	0	599
12:15 PM	39	16	16	0	10	185	7	0	10	14	57	0	39	203	24	0	620
12:30 PM	21	18	24	0	20	196	14	0	10	17	53	0	31	182	26	0	612
12:45 PM	30	19	17	0	16	220	13	0	7	8	32	0	33	173	32	0	600
Total	122	66	78	0	56	772	53	0	34	49	193	0	139	744	125	0	2431
01:00 PM	26	18	18	0	17	227	16	0	7	14	51	1	35	195	28	0	653
01:15 PM	41	18	21	0	20	215	25	0	10	12	46	0	47	190	28	0	673
01:30 PM	31	20	18	0	14	187	14	0	17	12	52	0	43	200	26	0	634
01:45 PM	42	24	29	0	10	208	15	0	12	13	53	0	34	194	31	0	665
Total	140	80	86	0	61	837	70	0	46	51	202	1	159	779	113	0	2625
*** BREAK ***																	
03:00 PM	64	16	23	0	31	228	17	0	20	24	48	0	42	202	28	0	743
03:15 PM	58	22	20	0	8	263	12	0	16	12	83	0	35	202	31	0	762
03:30 PM	67	20	25	0	19	269	22	0	18	15	87	0	40	181	36	0	799
03:45 PM	90	21	22	0	22	283	14	0	15	11	65	0	33	189	27	0	792
Total	279	79	90	0	80	1043	65	0	69	62	283	0	150	774	122	0	3096

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

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File Name : 2ND-RIO BRAVO\_05042021 COMBINED

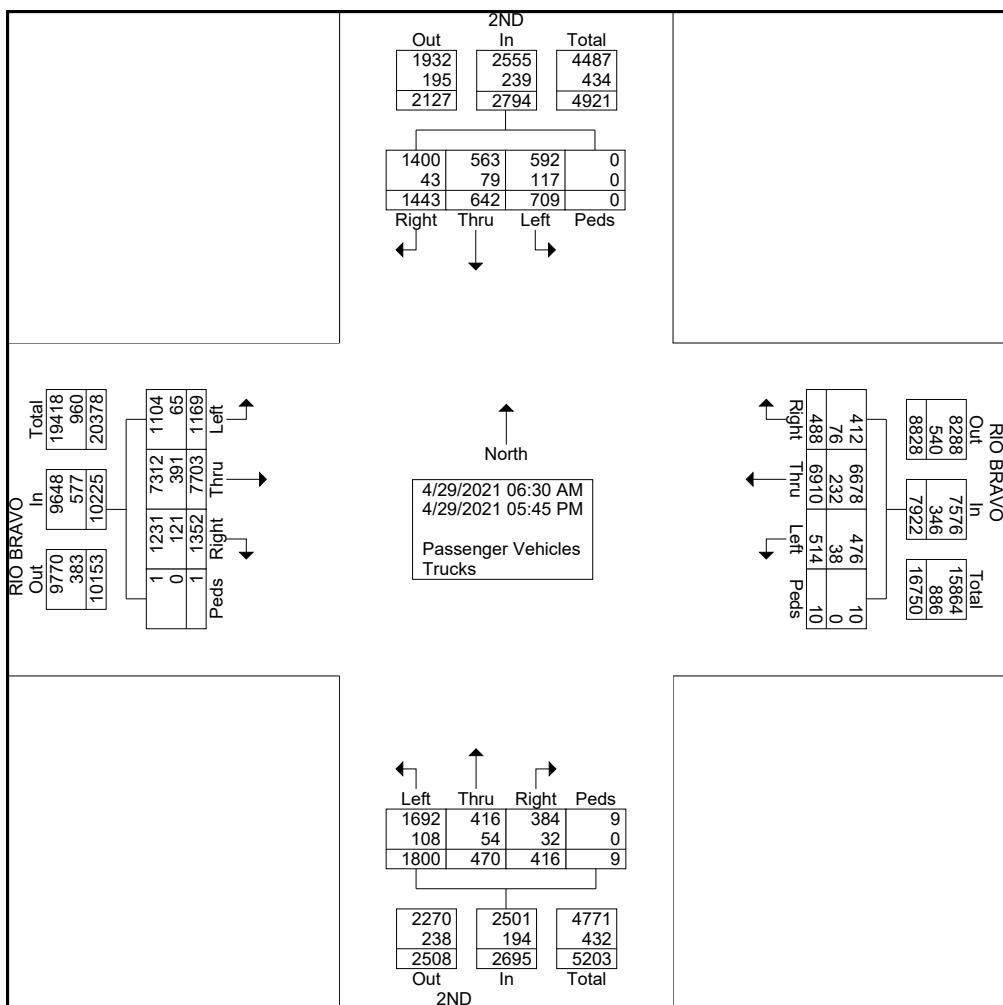
Site Code : 00000000

Start Date : 4/29/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

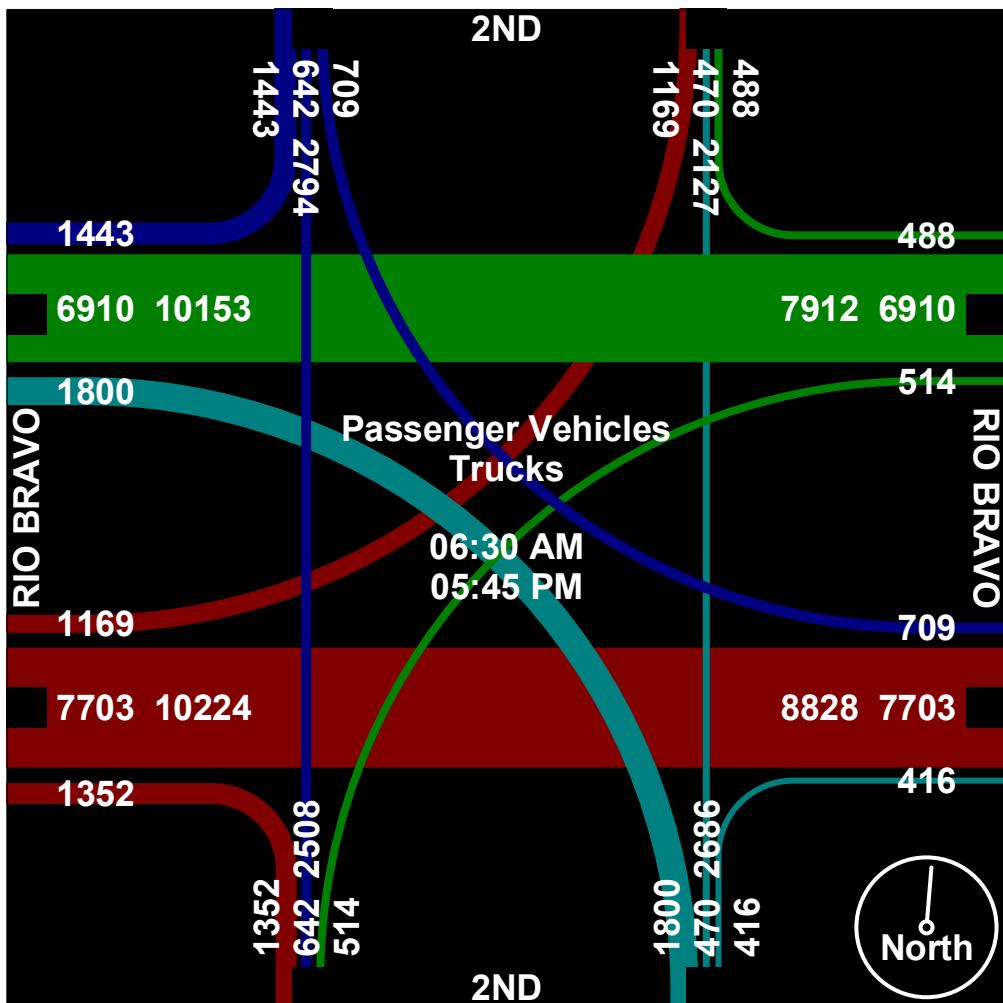
	2ND From North				RIO BRAVO From East				2ND From South				RIO BRAVO From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	66	24	28	0	7	296	10	0	21	17	99	2	37	195	21	0	823
04:15 PM	50	17	28	0	9	379	13	0	13	22	104	0	34	218	24	0	911
04:30 PM	89	28	35	0	15	308	28	1	12	12	83	0	37	187	24	0	859
04:45 PM	65	18	23	0	9	357	11	0	17	28	79	2	40	180	28	0	857
Total	270	87	114	0	40	1340	62	1	63	79	365	4	148	780	97	0	3450
05:00 PM	91	28	16	0	10	286	9	1	20	15	87	0	31	165	22	0	781
05:15 PM	88	24	19	0	7	369	11	0	6	17	71	0	47	187	17	0	863
05:30 PM	83	17	15	0	14	253	13	0	10	11	56	0	35	168	32	0	707
05:45 PM	63	16	22	0	0	0	0	0	0	0	0	0	34	156	23	0	314
Total	325	85	72	0	31	908	33	1	36	43	214	0	147	676	94	0	2665
Grand Total	1443	642	709	0	488	6910	514	10	416	470	1800	9	1352	7703	1169	1	23636
Apprch %	51.6	23	25.4	0	6.2	87.2	6.5	0.1	15.4	17.4	66.8	0.3	13.2	75.3	11.4	0	
Total %	6.1	2.7	3	0	2.1	29.2	2.2	0	1.8	2	7.6	0	5.7	32.6	4.9	0	
Passenger Vehicles	1400	563	592	0	412	6678	476	10	384	416	1692	9	1231	7312	1104	1	22280
% Passenger Vehicles	97	87.7	83.5	0	84.4	96.6	92.6	100	92.3	88.5	94	100	91.1	94.9	94.4	100	94.3
Trucks	43	79	117	0	76	232	38	0	32	54	108	0	121	391	65	0	1356
% Trucks	3	12.3	16.5	0	15.6	3.4	7.4	0	7.7	11.5	6	0	8.9	5.1	5.6	0	5.7



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
ADVANCED DESIGN

File Name : 2ND-RIO BRAVO\_05042021 COMBINED  
Site Code : 00000000  
Start Date : 4/29/2021  
Page No : 3



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

ADVANCEDDESIGN

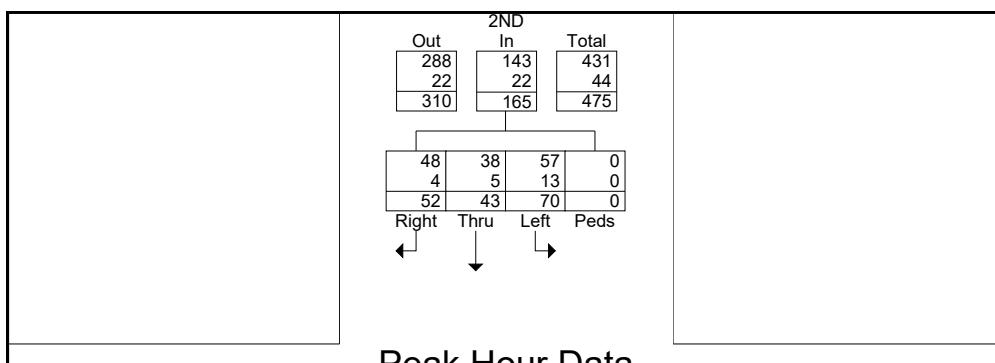
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Site Code : 00000000

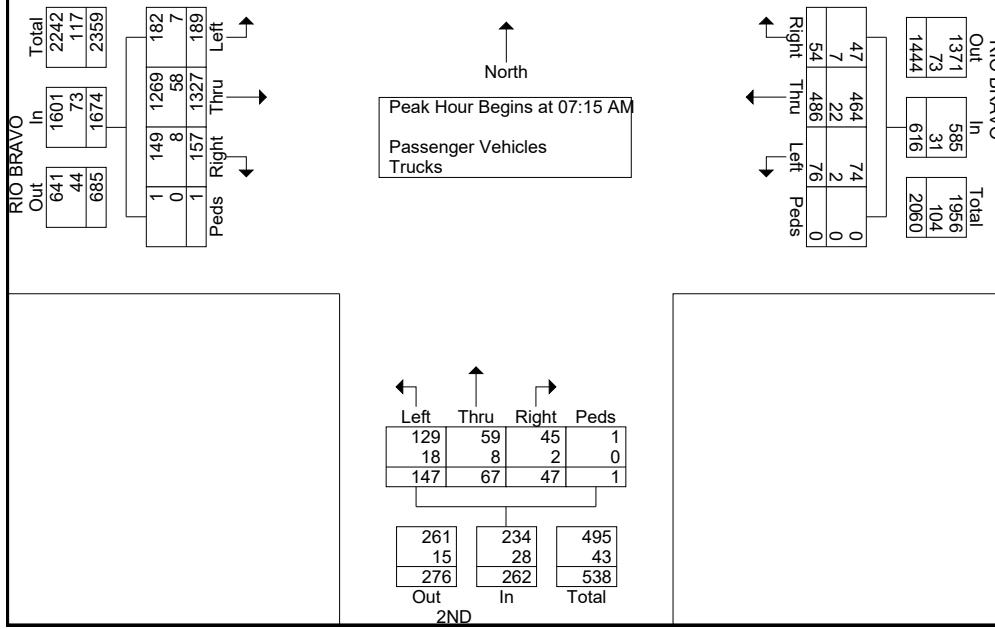
Start Date : 4/29/2021

Page No : 4

	2ND From North				RIO BRAVO From East				2ND From South				RIO BRAVO From West								
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	10	4	12	0	26	11	109	14	0	134	13	5	28	1	47	41	331	50	0	422	629
07:30 AM	14	13	19	0	46	10	108	18	0	136	10	31	42	0	83	28	307	51	0	386	651
07:45 AM	10	16	17	0	43	14	141	22	0	177	18	20	43	0	81	42	401	46	1	490	791
08:00 AM	18	10	22	0	50	19	128	22	0	169	6	11	34	0	51	46	288	42	0	376	646
Total Volume	52	43	70	0	165	54	486	76	0	616	47	67	147	1	262	157	1327	189	1	1674	2717
% App. Total	31.5	26.1	42.4	0		8.8	78.9	12.3	0		17.9	25.6	56.1	0.4		9.4	79.3	11.3	0.1		
PHF	.722	.672	.795	.000	.825	.711	.862	.864	.000	.870	.653	.540	.855	.250	.789	.853	.827	.926	.250	.854	.859
Passenger Vehicles	48	38	57	0	143	47	464	74	0	585	45	59	129	1	234	149	1269	182	1	1601	2563
% Passenger Vehicles	92.3	88.4	81.4	0	86.7	87.0	95.5	97.4	0	95.0	95.7	88.1	87.8	100	89.3	94.9	95.6	96.3	100	95.6	94.3
Trucks	4	5	13	0	22	7	22	2	0	31	2	8	18	0	28	8	58	7	0	73	154
% Trucks	7.7	11.6	18.6	0	13.3	13.0	4.5	2.6	0	5.0	4.3	11.9	12.2	0	10.7	5.1	4.4	3.7	0	4.4	5.7



## Peak Hour Data



# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101

Rio Rancho, NM 87124

ADVANCEDDESIGN

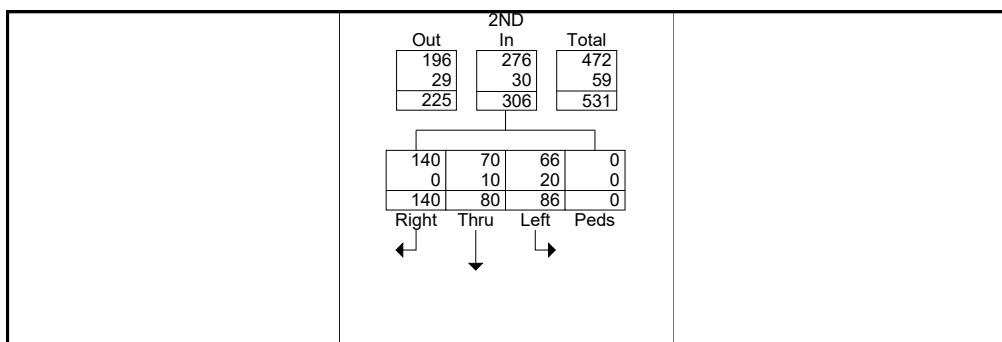
File Name : 2ND-RIO BRAVO\_05042021 COMBINED

Site Code : 00000000

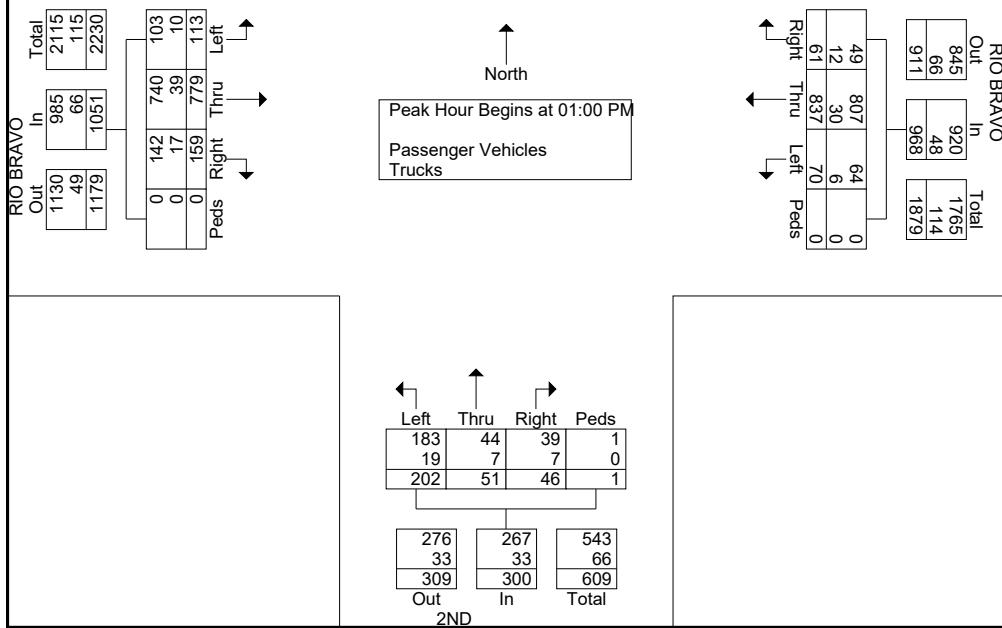
Start Date : 4/29/2021

Page No : 5

	2ND From North				RIO BRAVO From East				2ND From South				RIO BRAVO From West									
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 01:00 PM																						
01:00 PM	26	18	18	0	62	17	227	16	0	260	7	14	51	1	73	35	195	28	0	258	653	
01:15 PM	41	18	21	0	80	20	215	25	0	260	10	12	46	0	68	47	190	28	0	265	673	
01:30 PM	31	20	18	0	69	14	187	14	0	215	17	12	52	0	81	43	200	26	0	269	634	
01:45 PM	42	24	29	0	95	10	208	15	0	233	12	13	53	0	78	34	194	31	0	259	665	
Total Volume	140	80	86	0	306	61	837	70	0	968	46	51	202	1	300	159	779	113	0	1051	2625	
% App. Total	45.8	26.1	28.1	0		6.3	86.5	7.2	0		15.3	17	67.3	0.3		15.1	74.1	10.8	0			
PHF	.833	.833	.741	.000	.805	.763	.922	.700	.000	.931	.676	.911	.953	.250	.926	.846	.974	.911	.000	.977	.975	
Passenger Vehicles	140	70	66	0	276	49	807	64	0	920	39	44	183	1	267	142	740	103	0	985	2448	
% Passenger Vehicles	100	87.5	76.7	0	90.2	80.3	96.4	91.4	0	95.0	84.8	86.3	90.6	100	89.0	89.3	95.0	91.2	0	93.7	93.3	
Trucks	0	10	20	0	30	12	30	6	0	48	7	7	19	0	33	17	39	10	0	66	177	
% Trucks	0	12.5	23.3	0	9.8	19.7	3.6	8.6	0	5.0	15.2	13.7	9.4	0	11.0	10.7	5.0	8.8	0	6.3	6.7	



## Peak Hour Data



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Rio Rancho, NM 87124

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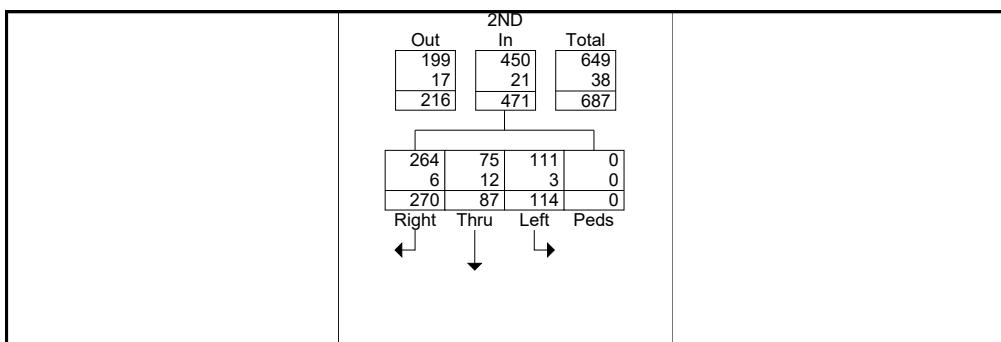
File Name : 2ND-RIO BRAVO\_05042021 COMBINED

Site Code : 00000000

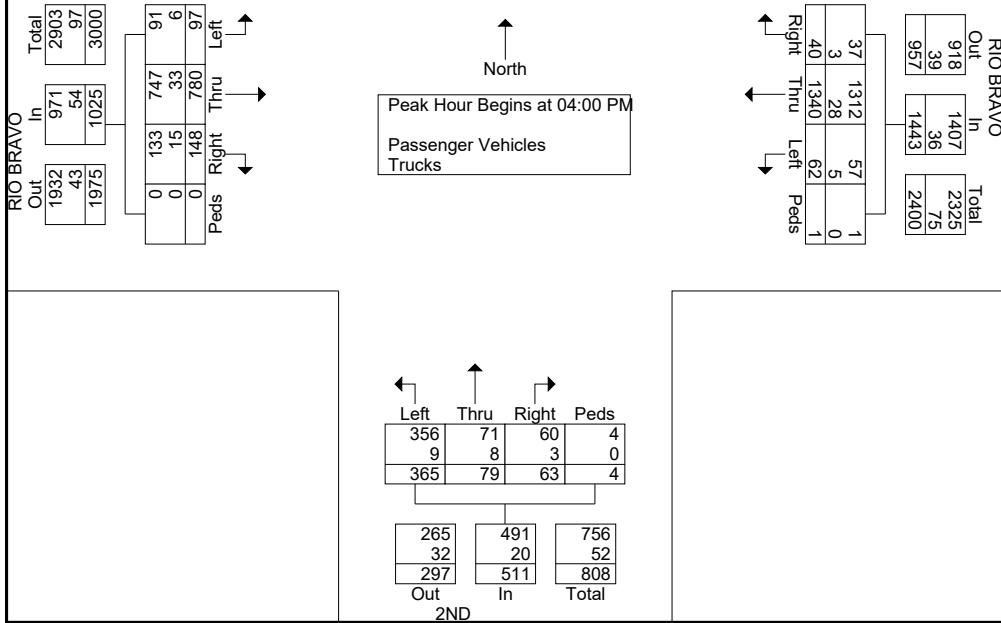
Start Date : 4/29/2021

Page No : 6

	2ND From North				RIO BRAVO From East				2ND From South				RIO BRAVO From West								
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 04:00 PM</b>																					
04:00 PM	66	24	28	0	118	7	296	10	0	313	<b>21</b>	17	99	<b>2</b>	<b>139</b>	37	195	21	0	253	823
04:15 PM	50	17	28	0	95	9	<b>379</b>	13	0	<b>401</b>	13	22	<b>104</b>	0	139	34	<b>218</b>	24	0	<b>276</b>	<b>911</b>
04:30 PM	<b>89</b>	<b>28</b>	<b>35</b>	0	<b>152</b>	<b>15</b>	308	<b>28</b>	1	352	12	12	83	0	107	37	187	24	0	248	859
04:45 PM	65	18	23	0	106	9	357	11	0	377	17	<b>28</b>	79	2	126	<b>40</b>	180	<b>28</b>	0	248	857
Total Volume	270	87	114	0	471	40	1340	62	1	1443	63	79	365	4	511	148	780	97	0	1025	3450
% App. Total	57.3	18.5	24.2	0		2.8	92.9	4.3	0.1		12.3	15.5	71.4	0.8		14.4	76.1	9.5	0		
PHF	.758	.777	.814	.000	.775	.667	.884	.554	.250	.900	.750	.705	.877	.500	.919	.925	.894	.866	.000	.928	.947
Passenger Vehicles	264	75	111	0	450	37	1312	57	1	1407	60	71	356	4	491	133	747	91	0	971	3319
% Passenger Vehicles	97.8	86.2	97.4	0	95.5	92.5	97.9	91.9	100	97.5	95.2	89.9	97.5	100	96.1	89.9	95.8	93.8	0	94.7	96.2
Trucks	6	12	3	0	21	3	28	5	0	36	3	8	9	0	20	15	33	6	0	54	131
% Trucks	2.2	13.8	2.6	0	4.5	7.5	2.1	8.1	0	2.5	4.8	10.1	2.5	0	3.9	10.1	4.2	6.2	0	5.3	3.8



Peak Hour Data



**Huitt-Zollars, Inc.**

333 Rio Rancho Drive NW, Suite 101  
Rio Rancho, NM 87124  
*ADVANCEDDESIGN*

File Name : 2ND-RIO BRAVO\_05042021 COMBINED  
Site Code : 00000000  
Start Date : 4/29/2021  
Page No : 7



# CRASH DATA

2017-2019



# **NMDOT COVID TRAFFIC DATA CALIBRATION METHODOLOGY**

**October 2020**





**SUBJECT:** Alternative methods for Traffic Counts

**DATE:** October 5, 2020

**To:** David Quintana, Chief Engineer

**From:** Afshin Jian, State Traffic Engineer

New Mexico Department of Transportation

A handwritten signature in black ink that reads "Afshin Jian".

**Alternative Means to Develop Base Turning Movements Volumes for Traffic Impact Studies During COVID-19 Times:**

Since February 2020 Governmental policies and social attitudes due to the COVID-19 crisis have impacted traffic volumes and traffic patterns during the AM, Noon, and PM Peak Hour periods. Therefore, traffic counts during this period are not representative of "normal" vehicular traffic volume or patterns. A memo was distributed for guidance on 5/1/2020. To provide more guidance to develop traffic counts and continue development within the State of New Mexico, alternative methods of generating base Turning Movements Volumes (or turning movement counts (TMC)) for Traffic Impact Studies have been developed using recent data and data generated from Big Data models. The "Big Data" models generate traffic counts from anonymized location record from smart phones and other GPS devices. Following are three alternative methods of developing base turning movements volumes based on the levels of data that might be available for any given intersection.

**Method 1 – Use Recent Turning Movement Data**

Recent pre-COVID19 traffic counts are the preferred data source since in most cases the data is still representative of normal traffic conditions and it provides turning movement volumes, not just approach volumes. The New Mexico Department of Transportation has allowed turning movements volumes up to four years old to be utilized as base Turning Movements Volumes for Traffic Impact Studies. Valid data collected is between September 2016 and February, 2020.

**Michelle Lujan Grisham**  
Governor

**Michael R. Sandoval**  
Cabinet Secretary

**Commissioners**

**Jennifer Sandoval**  
Commissioner, Vice-Chairman  
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District 3

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District 4

**Thomas C. Taylor**  
Commissioner  
District 5

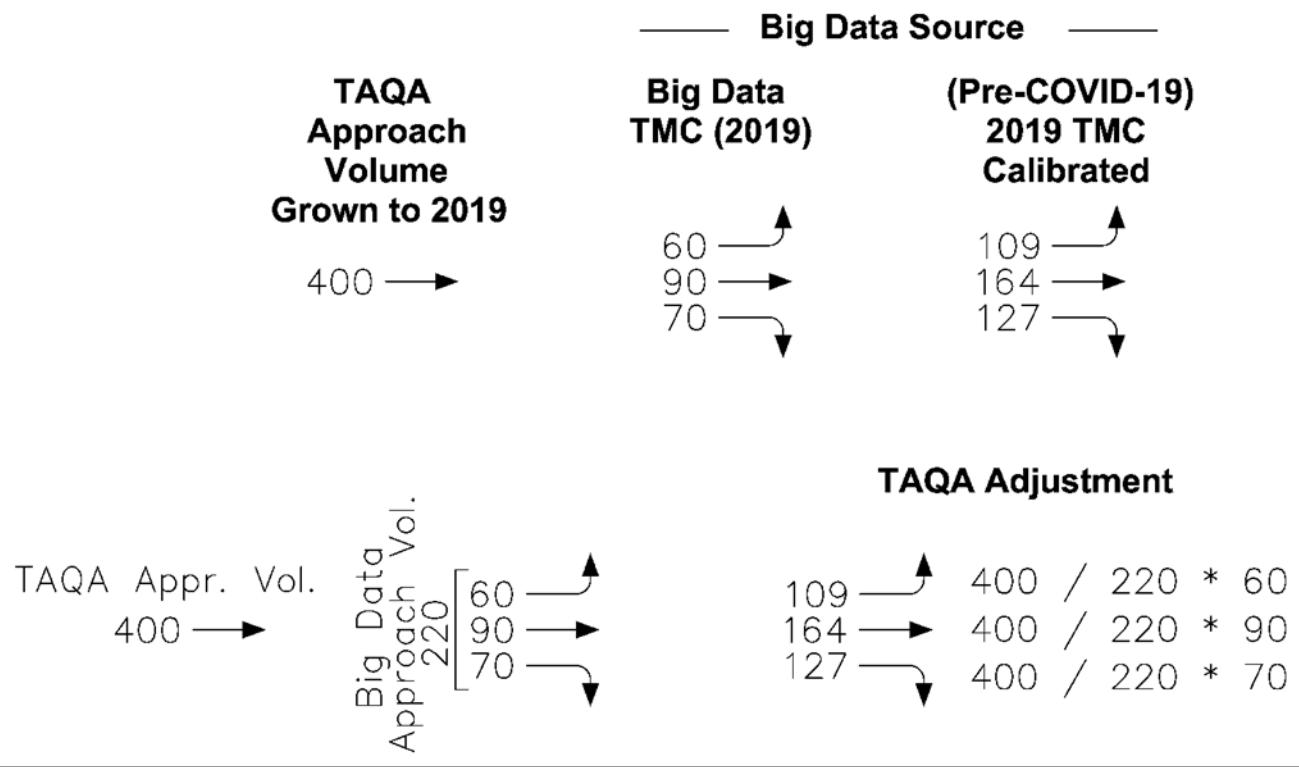
**Charles Lundstrom**  
Commissioner, Secretary  
District 6

### Method 2 – Use Current Big Data Calibrated with Tube Count Data

For Intersections where there is no recent turning movements volumes data, recent tube count data may be available at most or all legs. This is the case for most of the Mid-Region Council of Governments area on major streets intersection from Mid-Region Council of Governments' (MRCOG) Transportation Analysis and Querying Application (TAQA) website. This case might not be available in rest of the state that is not under MRCOG. Tube counts provide approach volumes and departure volumes but do not provide turning movement volumes. The Big Data can be utilized to approximate raw turning movements volumes at these intersections which can be calibrated with recent TAQA data. This method calibrates the turning movements volumes at the intersection to comply with TAQA approach volumes, but does not account for the changes that may occur in traffic patterns (i.e., proportions of left, thru, and right turns) as a result of the temporarily changed traffic conditions. To adjust turning movements volumes at the intersection to account for changed traffic patterns, it is proposed to use Big Data to develop a comparative scenario to establish a turning movements volumes ratio approximating that of pre-COVID-19 turning movements volumes. The pre-COVID-19 ratio of the turning movements volumes for each approach to an intersection can be utilized to re-allocate the left / thru / right volumes at each approach of an intersection to correlate with pre-COVID-19 traffic patterns. The following page demonstrates a generic calculation for a single approach to an intersection which demonstrates the proposed methodology:

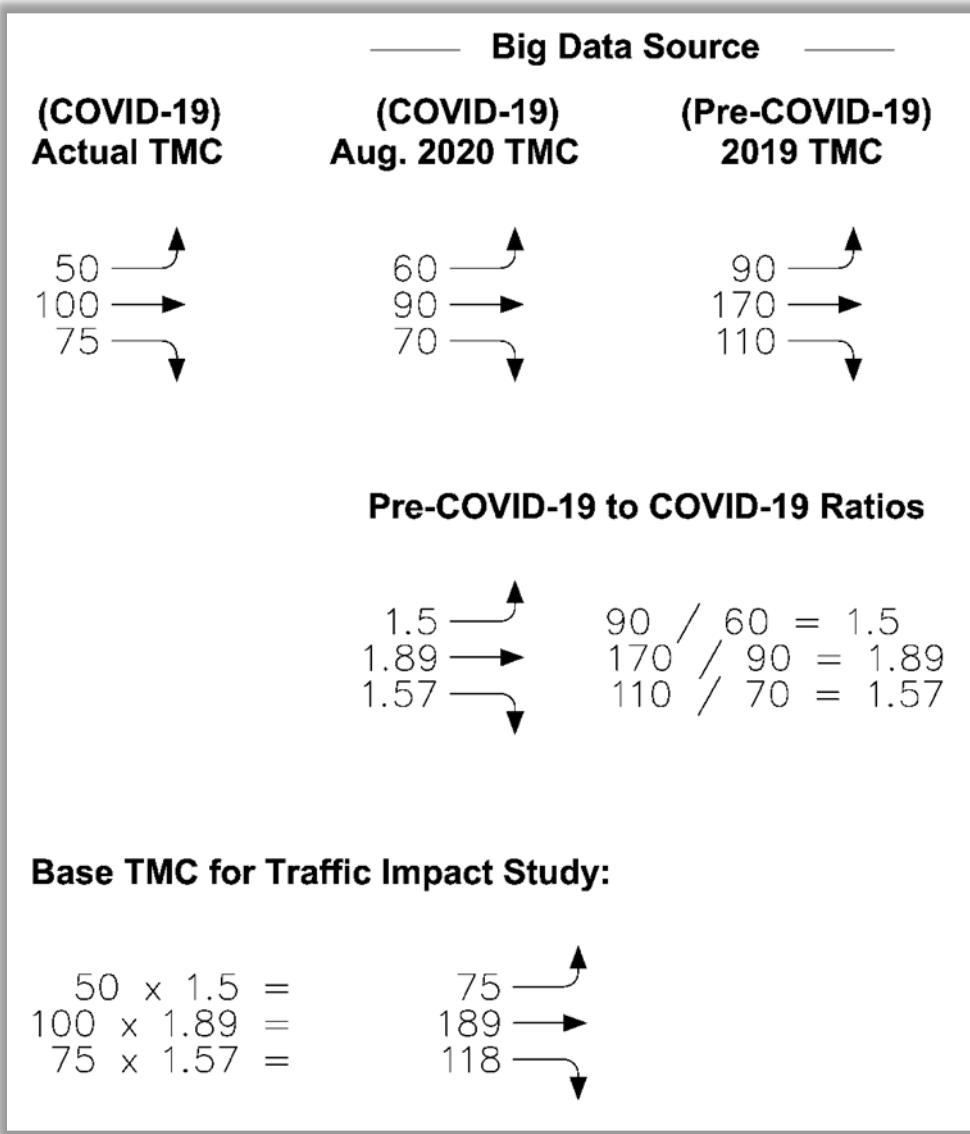
Method 2: User Pre-COVID Big Data Calibrated with Tube Count Data:

## Method 2: Use Big Data Calibrated with Tube Count Data



### Method 3 – Use Big Data Only and Current COVID-19 TMC Volumes

This method is used for intersections where there is no recent traffic data at all. These intersections are mostly in smaller communities in New Mexico where there is no formal data collection program such as the Mid-Region Council of Governments. In such cases, it is proposed to conduct a current turning movements volumes AM / Noon / PM count as needed to acquire current actual volumes (COVID-19 volumes). Subsequently, acquire two sets of turning movements volumes from an approved Big Data source. First, acquire COVID-19 turning movements volumes for the same month as the current actual traffic count was conducted. Next, acquire pre-COVID-19 turning movements volumes for the same intersection. Subsequently, the ratio of pre-COVID-19 to COVID-19 turning movements volumes (from Big Data) can be applied to adjust the current actual volumes to achieve base turning movements volumes for the Traffic Impact Study. The following page demonstrates a generic calculation for a single approach to an intersection which demonstrates the proposed methodology:



Method 3: Use Big Data Only and Current COVID-19 TMC Volumes:

The major concerns regarding Big Data turning movements volumes are:

- 1) The data is not reported in 15-minute increments. At least one company is working on developing the ability to acquire 15-minute volumes.
- 2) The sampling rate for Big Data is approximately 40%.
- 3) The data from Big Data sources is not considered to be demand volumes.

The proposed methodology addresses those issues as described below:

- 1) The existing current proposed field count will provide 15-minute increment volumes that will be proportioned to approximate pre-COVID-19 conditions.
- 2) The sampling rate becomes a non-issue because by dividing the pre-COVID-19 TMC's from Big Data by the COVID-19 TMC's from Big Data sources, the sampling rate is cancelled because it is the same for both pre-COVID and COVID conditions.
- 3) In cases where TAQA data is available, the TAQA adjustment should allow demand volumes to be achieved for the base turning movements volumes. In smaller communities where TAQA type of data is not available, it has been my experience that the adjustments made for demand volumes are not significant (i.e, less than 1% or 2% generally). It seems that adjustments for demand volumes is not as critical at intersections in smaller communities.

To compensate for any uncertainties in this methodology, it might be prudent to include a safety factor to be added to all of the base turning movements volumes as a general rule.

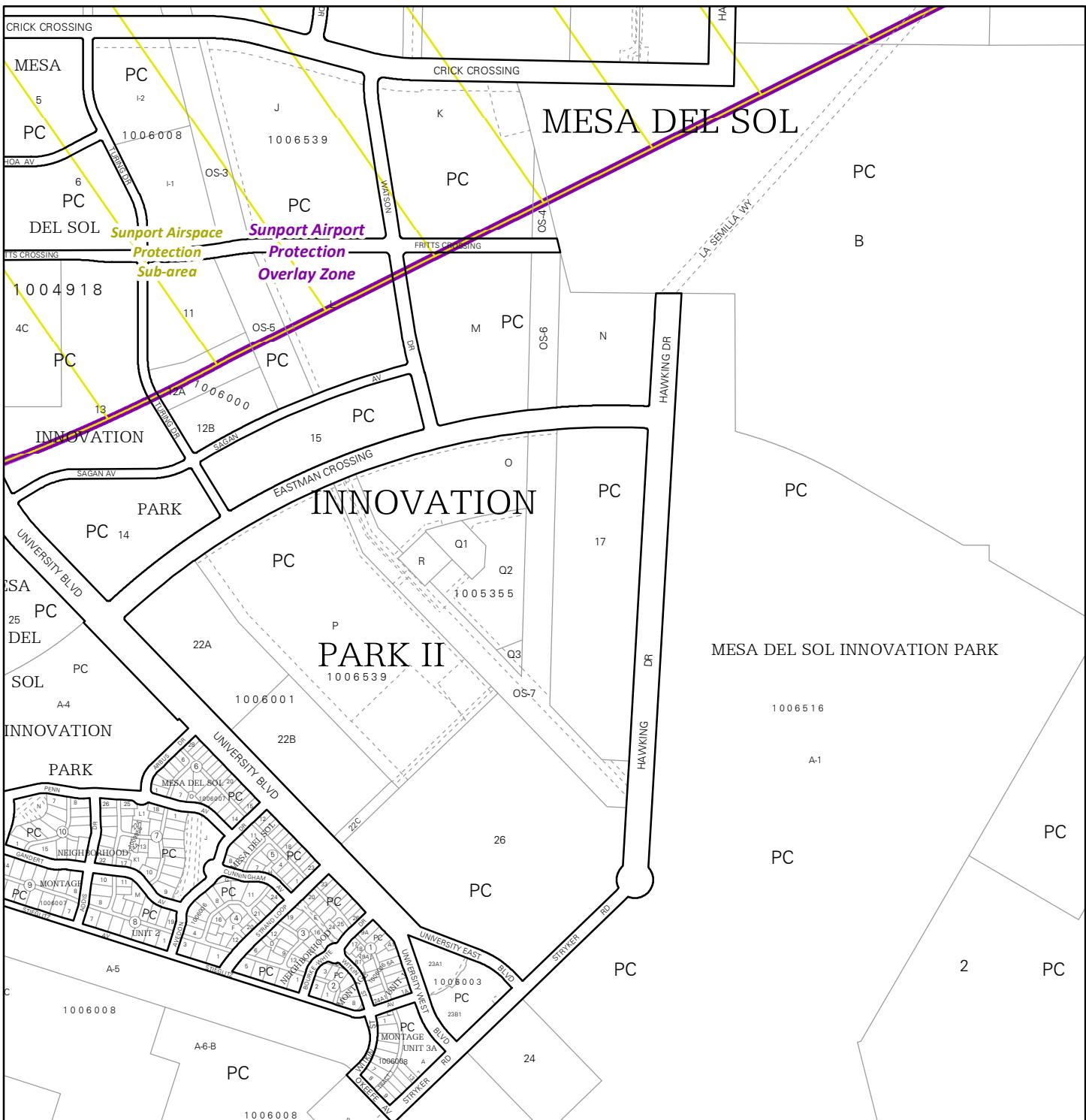
That safety factor would be set and established by the New Mexico Department of Transportation.

In a recent meeting with **Streetlightdata.com** staff, I was informed that there is a four to six week period of time before data would be available on the Streetlightdata.com website application. Therefore, this method, if approved, would still incur a four to six-week delay while awaiting updating / vetting of the Streetlightdata.com data before posting to their website for use by the user.

# CABQ ZONE ATLAS

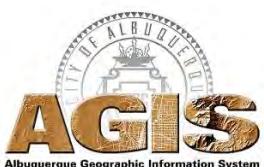
Excerpt





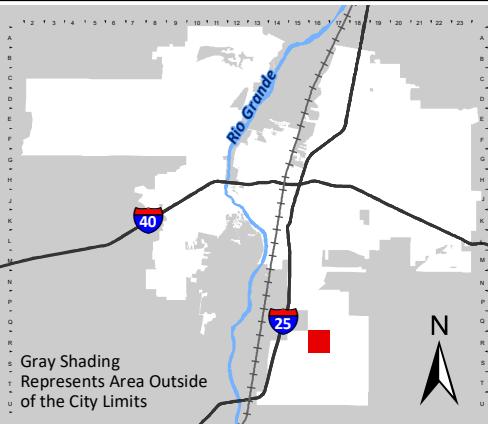
For more details about the Integrated Development Ordinance visit: <http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance>

## IDO Zone Atlas May 2018



IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones  
are established by the  
Integrated Development Ordinance (IDO).



Zone Atlas Page:

**R-16-Z**

- Easement
  - Escarpment
  - Petroglyph National Monument
  - Areas Outside of City Limits
  - Airport Protection Overlay (APO) Zone
  - Character Protection Overlay (CPO) Zone
  - Historic Protection Overlay (HPO) Zone
  - View Protection Overlay (VPO) Zone
- 0 250 500 1,000 Feet

# **TRAFFIC ANALYSIS DETAIL**

## **Synchro Operational Analyses**



# **2026 No-Project Conditions**

## **AM Peak Hour**

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↓					↔		
Traffic Vol, veh/h	0	25	0	0	0	0	0	0	0	37	0	45
Future Vol, veh/h	0	25	0	0	0	0	0	0	0	37	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	31	0	0	0	0	0	0	46	0	56	
Major/Minor	Minor2	Minor1				Major2						
Conflicting Flow All	-	120	28	108	148	-				0	0	0
Stage 1	-	120	-	0	0	-				-	-	-
Stage 2	-	0	-	108	148	-				-	-	-
Critical Hdwy	-	6.6	7	7.6	6.6	-			4.2	-	-	-
Critical Hdwy Stg 1	-	5.6	-	-	-	-			-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.6	5.6	-			-	-	-	-
Follow-up Hdwy	-	4.05	3.35	3.55	4.05	-			2.25	-	-	-
Pot Cap-1 Maneuver	0	763	1031	851	736	0			-	-	-	-
Stage 1	0	788	-	-	-	0			-	-	-	-
Stage 2	0	-	-	877	767	0			-	-	-	-
Platoon blocked, %										-	-	-
Mov Cap-1 Maneuver	-	763	1031	825	736	-			-	-	-	-
Mov Cap-2 Maneuver	-	763	-	825	736	-			-	-	-	-
Stage 1	-	788	-	-	-	-			-	-	-	-
Stage 2	-	-	-	843	767	-			-	-	-	-
Approach	EB	WB				SB						
HCM Control Delay, s	9.9		0									
HCM LOS	A		A									
Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR							
Capacity (veh/h)	763	-	-	-	-							
HCM Lane V/C Ratio	0.04	-	-	-	-							
HCM Control Delay (s)	9.9	0	-	-	-							
HCM Lane LOS	A	A	-	-	-							
HCM 95th %tile Q(veh)	0.1	-	-	-	-							

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	0	1	0	0	0	0	1	0	0	0	0
Future Vol, veh/h	61	0	1	0	0	0	0	1	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	84	0	1	0	0	0	0	1	0	0	0	0
Major/Minor												
Minor2		Minor1			Major1							
Conflicting Flow All	1	1	0	-	1	1	0	0	0	0	0	0
Stage 1	0	0	-	-	1	-	-	-	-	-	-	-
Stage 2	1	1	-	-	0	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	-	6.55	6.25	4.15	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	-	4.045	3.345	2.245	-	-	-	-	-
Pot Cap-1 Maneuver	1014	889	-	0	889	1075	-	-	-	-	-	-
Stage 1	-	-	-	0	889	-	-	-	-	-	-	-
Stage 2	1014	889	-	0	-	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1014	889	-	-	889	1075	-	-	-	-	-	-
Mov Cap-2 Maneuver	1014	889	-	-	889	-	-	-	-	-	-	-
Stage 1	-	-	-	-	889	-	-	-	-	-	-	-
Stage 2	1014	889	-	-	-	-	-	-	-	-	-	-
Approach												
EB			WB			NB						
HCM Control Delay, s			0			0						
HCM LOS	-		A									
Minor Lane/Major Mvmt												
Capacity (veh/h)	-	-	-	-	-	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	-	0	-	-	-	-	-	-
HCM Lane LOS	A	-	-	-	-	A	-	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-	-	-	-	-	-

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑↑		↑	↑↑	
Traffic Vol, veh/h	31	0	10	0	0	24	19	42	1	84	72	40
Future Vol, veh/h	31	0	10	0	0	24	19	42	1	84	72	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	0	130	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	35	0	11	0	0	27	21	47	1	94	81	45
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	358	382	63	319	404	24	126	0	0	48	0	0
Stage 1	292	292	-	90	90	-	-	-	-	-	-	-
Stage 2	66	90	-	229	314	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	565	543	979	603	527	1037	1436	-	-	1536	-	-
Stage 1	683	662	-	899	813	-	-	-	-	-	-	-
Stage 2	928	813	-	744	647	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	519	502	979	562	487	1037	1436	-	-	1536	-	-
Mov Cap-2 Maneuver	519	502	-	562	487	-	-	-	-	-	-	-
Stage 1	673	622	-	886	801	-	-	-	-	-	-	-
Stage 2	891	801	-	690	608	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	11.5		8.6		2.3		3.2					
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1436	-	-	519	979	-	1037	1536	-	-		
HCM Lane V/C Ratio	0.015	-	-	0.067	0.011	-	0.026	0.061	-	-		
HCM Control Delay (s)	7.5	-	-	12.4	8.7	0	8.6	7.5	-	-		
HCM Lane LOS	A	-	-	B	A	A	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.2	0	-	0.1	0.2	-	-		

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		T	↑↑	↑↑	
Traffic Vol, veh/h	20	11	19	133	232	25
Future Vol, veh/h	20	11	19	133	232	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	22	12	21	149	261	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	392	145	289	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	577	867	1248	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	567	867	1248	-	-	-
Mov Cap-2 Maneuver	567	-	-	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	10.9	1	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1248	-	646	-	-	
HCM Lane V/C Ratio	0.017	-	0.054	-	-	
HCM Control Delay (s)	7.9	-	10.9	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

## Lanes, Volumes, Timings

2026 No-Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑		↑↑	↑↑	↑
Traffic Volume (vph)	20	17	100	8	50	80	99	100	2	147	175	50
Future Volume (vph)	20	17	100	8	50	80	99	100	2	147	175	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	200		200	325		0	325		325
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3529	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3529	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176			176			3			176
Link Speed (mph)		40			35			35			35	
Link Distance (ft)		1786			774			1252			1357	
Travel Time (s)		30.4			15.1			24.4			26.4	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	24	139	11	69	111	138	142	0	204	243	69
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	10.4	22.6		10.4	22.6	22.6
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	5.2	6.5	6.5	5.2	6.5	6.5	6.2	13.4		6.2	9.3	9.3
Actuated g/C Ratio	0.15	0.19	0.19	0.15	0.19	0.19	0.18	0.39		0.18	0.27	0.27
v/c Ratio	0.11	0.04	0.32	0.04	0.10	0.25	0.44	0.10		0.33	0.26	0.12
Control Delay	17.4	14.5	4.7	17.0	14.5	3.0	23.4	12.1		16.7	12.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	17.4	14.5	4.7	17.0	14.5	3.0	23.4	12.1		16.7	12.8	0.5
LOS	B	B	A	B	B	A	C	B		B	B	A
Approach Delay			7.8			8.0			17.7			12.7
Approach LOS			A			A			B			B

## Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 34.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 12.3

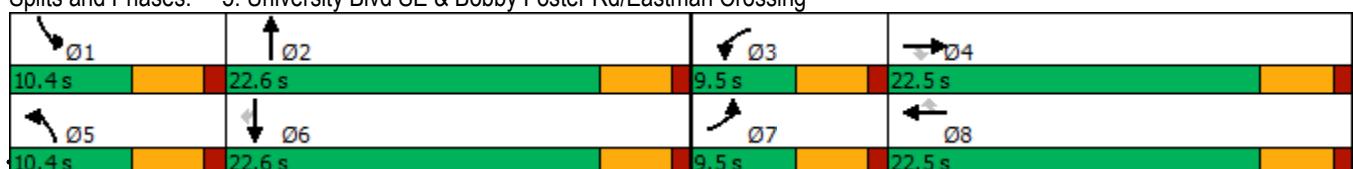
Intersection LOS: B

Intersection Capacity Utilization 29.3%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Synchro 10 Report

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	R	U	↑
Traffic Vol, veh/h	15	109	199	10	70	334
Future Vol, veh/h	15	109	199	10	70	334
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	18	131	240	12	84	402
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	816	246	0	0	252	0
Stage 1	246	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	342	785	-	-	1296	-
Stage 1	788	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	320	785	-	-	1296	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.9	0		1.4		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	668	1296	-	
HCM Lane V/C Ratio	-	-	0.224	0.065	-	
HCM Control Delay (s)	-	-	11.9	8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.9	0.2	-	

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	10	114	236	30	97	390
Future Vol, veh/h	10	114	236	30	97	390
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	12	139	288	37	118	476
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1019	307	0	0	325	0
Stage 1	307	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	259	726	-	-	1218	-
Stage 1	739	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	234	726	-	-	1218	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.9	0	1.6			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	234	726	1218	-
HCM Lane V/C Ratio	-	-	0.052	0.191	0.097	-
HCM Control Delay (s)	-	-	21.2	11.1	8.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.7	0.3	-

# **2026 No-Project Conditions**

## **PM Peak Hour**

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↓					↔		
Traffic Vol, veh/h	0	23	0	0	23	0	0	0	0	47	1	20
Future Vol, veh/h	0	23	0	0	23	0	0	0	0	47	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	26	0	0	26	0	0	0	0	52	1	22
Major/Minor	Minor2	Minor1				Major2						
Conflicting Flow All	-	116	12	118	127	-				0	0	0
Stage 1	-	116	-	0	0	-				-	-	-
Stage 2	-	0	-	118	127	-				-	-	-
Critical Hdwy	-	6.6	7	7.6	6.6	-			4.2	-	-	-
Critical Hdwy Stg 1	-	5.6	-	-	-	-			-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.6	5.6	-			-	-	-	-
Follow-up Hdwy	-	4.05	3.35	3.55	4.05	-			2.25	-	-	-
Pot Cap-1 Maneuver	0	767	1056	837	756	0			-	-	-	-
Stage 1	0	792	-	-	-	0			-	-	-	-
Stage 2	0	-	-	865	783	0			-	-	-	-
Platoon blocked, %										-	-	-
Mov Cap-1 Maneuver	-	767	1056	816	756	-			-	-	-	-
Mov Cap-2 Maneuver	-	767	-	816	756	-			-	-	-	-
Stage 1	-	792	-	-	-	-			-	-	-	-
Stage 2	-	-	-	837	783	-			-	-	-	-
Approach	EB	WB				SB						
HCM Control Delay, s	9.9		9.9									
HCM LOS	A		A									
Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR							
Capacity (veh/h)	767	756	-	-	-							
HCM Lane V/C Ratio	0.033	0.034	-	-	-							
HCM Control Delay (s)	9.9	9.9	-	-	-							
HCM Lane LOS	A	A	-	-	-							
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-							

Intersection													
Int Delay, s/veh	0												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	70	0	0	0	0	0	0	0	0	0	0	0	
Future Vol, veh/h	70	0	0	0	0	0	0	0	0	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73	
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5	
Mvmt Flow	96	0	0	0	0	0	0	0	0	0	0	0	
Major/Minor													
Minor2		Minor1			Major1								
Conflicting Flow All	0	0	-	-	0	0	0	0	0	0	0	0	
Stage 1	0	0	-	-	0	-	-	-	-	-	-	-	
Stage 2	0	0	-	-	0	-	-	-	-	-	-	-	
Critical Hdwy	7.15	6.55	-	-	6.55	6.25	4.15	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.55	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.15	5.55	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.545	4.045	-	-	4.045	3.345	2.245	-	-	-	-	-	
Pot Cap-1 Maneuver	-	-	0	0	-	-	-	-	-	-	-	-	
Stage 1	-	-	0	0	-	-	-	-	-	-	-	-	
Stage 2	-	-	0	0	-	-	-	-	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	
Approach													
EB		WB			NB								
HCM Control Delay, s			0			0							
HCM LOS	-		A										
Minor Lane/Major Mvmt													
Capacity (veh/h)	-	-	-	-	-	-	-	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	-	-	0	-	-	-	-	-	
HCM Lane LOS	A	-	-	-	-	-	A	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-	-	-	-	-	-	

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗		↖ ↗	↖ ↗		↖ ↗	↖ ↗		↖ ↗	↖ ↗	
Traffic Vol, veh/h	64	0	25	1	0	75	12	54	1	34	57	48
Future Vol, veh/h	64	0	25	1	0	75	12	54	1	34	57	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	0	130	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	67	0	26	1	0	79	13	57	1	36	60	51
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	213	242	56	186	267	29	111	0	0	58	0	0
Stage 1	158	158	-	84	84	-	-	-	-	-	-	-
Stage 2	55	84	-	102	183	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	717	652	989	749	631	1029	1455	-	-	1523	-	-
Stage 1	820	759	-	906	817	-	-	-	-	-	-	-
Stage 2	942	817	-	884	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	645	630	989	711	610	1029	1455	-	-	1523	-	-
Mov Cap-2 Maneuver	645	630	-	711	610	-	-	-	-	-	-	-
Stage 1	813	741	-	898	810	-	-	-	-	-	-	-
Stage 2	862	810	-	840	722	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	10.5		8.8		1.3		1.8					
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1455	-	-	645	989	711	1029	1523	-	-		
HCM Lane V/C Ratio	0.009	-	-	0.104	0.027	0.001	0.077	0.023	-	-		
HCM Control Delay (s)	7.5	-	-	11.2	8.7	10.1	8.8	7.4	-	-		
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	0.2	0.1	-	-		

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		T	↑↑	↑↑	
Traffic Vol, veh/h	30	21	10	209	118	23
Future Vol, veh/h	30	21	10	209	118	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	31	22	10	215	122	24

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	262	73	146	0	-
Stage 1	134	-	-	-	-
Stage 2	128	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-
Pot Cap-1 Maneuver	696	964	1412	-	-
Stage 1	869	-	-	-	-
Stage 2	875	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	691	964	1412	-	-
Mov Cap-2 Maneuver	691	-	-	-	-
Stage 1	863	-	-	-	-
Stage 2	875	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1412	-	782	-	-
HCM Lane V/C Ratio	0.007	-	0.067	-	-
HCM Control Delay (s)	7.6	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

## Lanes, Volumes, Timings

2026 No-Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑		↑↑	↑↑	↑
Traffic Volume (vph)	73	75	56	5	20	106	120	117	2	89	105	23
Future Volume (vph)	73	75	56	5	20	106	120	117	2	89	105	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	200		200	325		0	325		325
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3532	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3532	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176			176			2			176
Link Speed (mph)		40			35			35			35	
Link Distance (ft)		1786			774			1252			1357	
Travel Time (s)		30.4			15.1			24.4			26.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	81	60	5	22	114	129	128	0	96	113	25
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	10.2	23.3		9.7	22.8	22.8
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	5.1	9.7	9.7	5.1	6.1	6.1	5.8	16.1		5.3	10.0	10.0
Actuated g/C Ratio	0.13	0.25	0.25	0.13	0.16	0.16	0.15	0.42		0.14	0.26	0.26
v/c Ratio	0.34	0.09	0.11	0.02	0.04	0.29	0.49	0.09		0.20	0.12	0.05
Control Delay	21.4	12.2	0.4	17.2	15.7	3.5	25.6	13.7		17.7	15.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	21.4	12.2	0.4	17.2	15.7	3.5	25.6	13.7		17.7	15.1	0.2
LOS	C	B	A	B	B	A	C	B		B	B	A
Approach Delay			12.3			5.9			19.6			14.6
Approach LOS			B			A			B			B

## Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 38.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 14.1

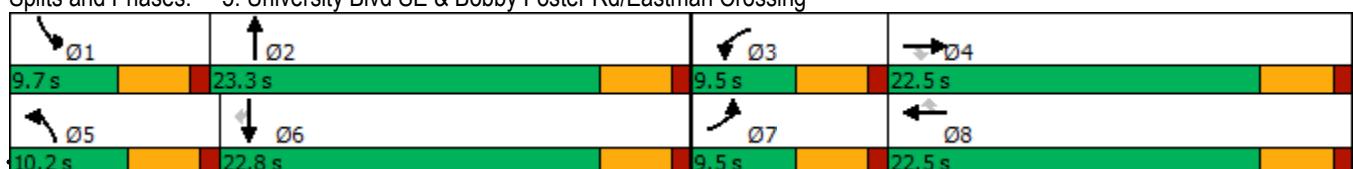
Intersection LOS: B

Intersection Capacity Utilization 31.5%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Synchro 10 Report

HCM 6th TWSC  
6: University Blvd SE & Fritts Crossing SE

2026 No-Project  
PM Peak Hour

Intersection						
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	R	W	B
Traffic Vol, veh/h	15	82	274	34	97	277
Future Vol, veh/h	15	82	274	34	97	277
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	15	85	282	35	100	286
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	786	300	0	0	317	0
Stage 1	300	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	357	733	-	-	1226	-
Stage 1	745	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	328	733	-	-	1226	-
Mov Cap-2 Maneuver	328	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	12	0		2.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	615	1226	-	
HCM Lane V/C Ratio	-	-	0.163	0.082	-	
HCM Control Delay (s)	-	-	12	8.2	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.6	0.3	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	15	130	399	36	124	350
Future Vol, veh/h	15	130	399	36	124	350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	19	163	499	45	155	438
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1270	522	0	0	544	0
Stage 1	522	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	183	549	-	-	1010	-
Stage 1	589	-	-	-	-	-
Stage 2	462	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	155	549	-	-	1010	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.1	0	2.4			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	549	1010	-
HCM Lane V/C Ratio	-	-	0.121	0.296	0.153	-
HCM Control Delay (s)	-	-	31.4	14.3	9.2	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	1.2	0.5	-

**2026 With Project Conditions**

**AM Peak Hour**

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	25	0	0	10	0	0	0	0	422	0	45
Future Vol, veh/h	0	25	0	0	10	0	0	0	0	422	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	31	0	0	12	0	0	0	0	521	0	56
Major/Minor												
Minor2		Minor1				Major2						
Conflicting Flow All	-	1070	28	1058	1098	-				0	0	0
Stage 1	-	1070	-	0	0	-				-	-	-
Stage 2	-	0	-	1058	1098	-				-	-	-
Critical Hdwy	-	6.6	7	7.6	6.6	-			4.2	-	-	-
Critical Hdwy Stg 1	-	5.6	-	-	-	-			-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.6	5.6	-			-	-	-	-
Follow-up Hdwy	-	4.05	3.35	3.55	4.05	-			2.25	-	-	-
Pot Cap-1 Maneuver	0	215	1031	175	207	0			-	-	-	-
Stage 1	0	289	-	-	-	0			-	-	-	-
Stage 2	0	-	-	235	281	0			-	-	-	-
Platoon blocked, %										-	-	-
Mov Cap-1 Maneuver	-	215	1031	156	207	-			-	-	-	-
Mov Cap-2 Maneuver	-	215	-	156	207	-			-	-	-	-
Stage 1	-	289	-	-	-	-			-	-	-	-
Stage 2	-	-	-	210	281	-			-	-	-	-
Approach												
EB			WB				SB					
HCM Control Delay, s	24.5			23.5								
HCM LOS	C			C								
Minor Lane/Major Mvmt												
Capacity (veh/h)	215	207	-	-	-	-						
HCM Lane V/C Ratio	0.144	0.06	-	-	-	-						
HCM Control Delay (s)	24.5	23.5	-	-	-	-						
HCM Lane LOS	C	C	-	-	-	-						
HCM 95th %tile Q(veh)	0.5	0.2	-	-	-	-						

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	417	1	0	10	134	0	1	0	0	0	0
Future Vol, veh/h	29	417	1	0	10	134	0	1	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	40	571	1	0	14	184	0	1	0	0	0	0
Major/Minor												
Minor2		Minor1			Major1							
Conflicting Flow All	100	1	0	-	1	1	0	0	0			
Stage 1	0	0	-	-	1	-	-	-	-			
Stage 2	100	1	-	-	0	-	-	-	-			
Critical Hdwy	7.15	6.55	6.25	-	6.55	6.25	4.15	-	-			
Critical Hdwy Stg 1	-	-	-	-	5.55	-	-	-	-			
Critical Hdwy Stg 2	6.15	5.55	-	-	-	-	-	-	-			
Follow-up Hdwy	3.545	4.045	3.345	-	4.045	3.345	2.245	-	-			
Pot Cap-1 Maneuver	874	889	-	0	889	1075	-	-	-			
Stage 1	-	-	-	0	889	-	-	-	-			
Stage 2	899	889	-	0	-	-	-	-	-			
Platoon blocked, %							-	-	-			
Mov Cap-1 Maneuver	716	889	-	-	889	1075	-	-	-			
Mov Cap-2 Maneuver	716	889	-	-	889	-	-	-	-			
Stage 1	-	-	-	-	889	-	-	-	-			
Stage 2	734	889	-	-	-	-	-	-	-			
Approach												
EB			WB			NB						
HCM Control Delay, s				9.2								
HCM LOS	-			A								
Minor Lane/Major Mvmt												
NBL		NBT		NBR		EBLn1WBLn1						
Capacity (veh/h)	-	-	-	-	-	1060						
HCM Lane V/C Ratio	-	-	-	-	-	0.186						
HCM Control Delay (s)	0	-	-	-	-	9.2						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	0.7						

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑↑		↑	↑↑	
Traffic Vol, veh/h	31	0	10	3	0	7	19	150	13	20	454	40
Future Vol, veh/h	31	0	10	3	0	7	19	150	13	20	454	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	0	130	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	35	0	11	3	0	8	21	169	15	22	510	45
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	704	803	278	518	818	92	555	0	0	184	0	0
Stage 1	577	577	-	219	219	-	-	-	-	-	-	-
Stage 2	127	226	-	299	599	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	318	310	710	434	304	938	991	-	-	1367	-	-
Stage 1	462	492	-	755	713	-	-	-	-	-	-	-
Stage 2	855	708	-	677	481	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	307	299	710	415	293	938	991	-	-	1367	-	-
Mov Cap-2 Maneuver	307	299	-	415	293	-	-	-	-	-	-	-
Stage 1	452	484	-	739	698	-	-	-	-	-	-	-
Stage 2	830	693	-	656	473	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	16.2		10.3			0.9			0.3			
HCM LOS	C		B									
Minor Lane/Major Mvmt			NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	991		-	-	307	710	415	938	1367	-	-	-
HCM Lane V/C Ratio	0.022		-	-	0.113	0.016	0.008	0.008	0.016	-	-	-
HCM Control Delay (s)	8.7		-	-	18.2	10.2	13.7	8.9	7.7	-	-	-
HCM Lane LOS	A		-	-	C	B	B	A	A	-	-	-
HCM 95th %tile Q(veh)	0.1		-	-	0.4	0	0	0	0.1	-	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	11	3	0	7	19	259	13	20	579	25
Future Vol, veh/h	20	0	11	3	0	7	19	259	13	20	579	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	125	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	22	0	12	3	0	8	21	291	15	22	651	28
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	897	1057	340	711	1064	153	679	0	0	306	0	0
Stage 1	709	709	-	341	341	-	-	-	-	-	-	-
Stage 2	188	348	-	370	723	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	230	219	647	314	217	856	889	-	-	1230	-	-
Stage 1	384	428	-	639	630	-	-	-	-	-	-	-
Stage 2	787	625	-	614	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	221	210	647	298	208	856	889	-	-	1230	-	-
Mov Cap-2 Maneuver	221	210	-	298	208	-	-	-	-	-	-	-
Stage 1	375	420	-	624	615	-	-	-	-	-	-	-
Stage 2	761	610	-	591	414	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	19.2		11.6			0.6			0.3			
HCM LOS	C		B									
Minor Lane/Major Mvmt			NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR	
Capacity (veh/h)	889		-	-	288	298	856	1230	-	-	-	-
HCM Lane V/C Ratio	0.024		-	-	0.121	0.011	0.009	0.018	-	-	-	-
HCM Control Delay (s)	9.1		-	-	19.2	17.2	9.2	8	-	-	-	-
HCM Lane LOS	A		-	-	C	C	A	A	-	-	-	-
HCM 95th %tile Q(veh)	0.1		-	-	0.4	0	0	0.1	-	-	-	-

## Lanes, Volumes, Timings

2026 With Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑		↑↑	↑↑	↑
Traffic Volume (vph)	20	200	100	25	50	124	99	175	26	147	506	50
Future Volume (vph)	20	200	100	25	50	124	99	175	26	147	506	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	200		200	325		0	325		325
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3472	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3472	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153			172			23			153
Link Speed (mph)		40			35			35			35	
Link Distance (ft)		1786			774			1252			1357	
Travel Time (s)		30.4			15.1			24.4			26.4	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	278	139	35	69	172	138	279	0	204	703	69
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	9.9	22.5	22.5	10.0	22.6	22.6	16.0	29.2		13.3	26.5	26.5
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	6.3	10.7	10.7	6.4	10.7	10.7	9.8	17.8		8.8	16.8	16.8
Actuated g/C Ratio	0.12	0.21	0.21	0.12	0.21	0.21	0.19	0.35		0.17	0.33	0.33
v/c Ratio	0.13	0.38	0.31	0.16	0.09	0.37	0.41	0.23		0.35	0.61	0.11
Control Delay	30.1	22.9	6.4	30.2	21.8	7.4	27.8	13.2		25.9	19.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	30.1	22.9	6.4	30.2	21.8	7.4	27.8	13.2		25.9	19.2	0.4
LOS	C	C	A	C	C	A	C	B		C	B	A
Approach Delay		18.2			13.9			18.1			19.3	
Approach LOS		B			B			B			B	

## Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 51.4

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 18.1

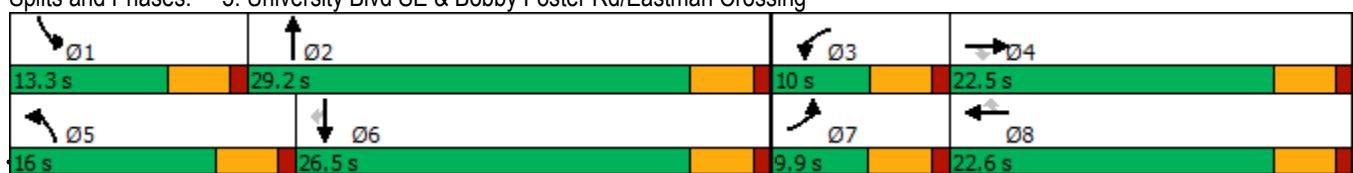
Intersection LOS: B

Intersection Capacity Utilization 44.2%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Synchro 10 Report

Intersection

Int Delay, s/veh 2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	R	U	↑
Traffic Vol, veh/h	15	109	274	10	70	664
Future Vol, veh/h	15	109	274	10	70	664
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	18	131	330	12	84	800

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	1304	336	0	0
Stage 1	336	-	-	-
Stage 2	968	-	-	-
Critical Hdwy	6.45	6.25	-	4.15
Critical Hdwy Stg 1	5.45	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-
Follow-up Hdwy	3.545	3.345	-	2.245
Pot Cap-1 Maneuver	174	699	-	1200
Stage 1	717	-	-	-
Stage 2	364	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	162	699	-	1200
Mov Cap-2 Maneuver	162	-	-	-
Stage 1	717	-	-	-
Stage 2	339	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	499	1200	-
HCM Lane V/C Ratio	-	-	0.299	0.07	-
HCM Control Delay (s)	-	-	15.3	8.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	10	114	311	30	97	721
Future Vol, veh/h	10	114	311	30	97	721
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	12	139	379	37	118	879
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1513	398	0	0	416	0
Stage 1	398	-	-	-	-	-
Stage 2	1115	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	130	645	-	-	1127	-
Stage 1	672	-	-	-	-	-
Stage 2	309	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	116	645	-	-	1127	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	14.3	0	1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	116	645	1127	-
HCM Lane V/C Ratio	-	-	0.105	0.216	0.105	-
HCM Control Delay (s)	-	-	39.6	12.1	8.6	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.8	0.4	-

Intersection

Intersection Delay, s/veh 10.5

Intersection LOS B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑ ↘	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗
Traffic Vol, veh/h	20	397	5	5	139	13
Future Vol, veh/h	20	397	5	5	139	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	22	432	5	5	151	14
Number of Lanes	1	0	1	1	1	0
Approach	EB	WB	NB			
Opposing Approach	WB	EB				
Opposing Lanes	2	1				
Conflicting Approach Left		NB				
Conflicting Lanes Left	0	1				
Conflicting Approach Right	NB					
Conflicting Lanes Right	1	0				
HCM Control Delay	10.9	8.4				
HCM LOS	B	A				

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	91%	0%	100%	0%
Vol Thru, %	0%	5%	0%	100%
Vol Right, %	9%	95%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	152	417	5	5
LT Vol	139	0	5	0
Through Vol	0	20	0	5
RT Vol	13	397	0	0
Lane Flow Rate	165	453	5	5
Geometry Grp	2	5	7	7
Degree of Util (X)	0.233	0.5	0.009	0.008
Departure Headway (Hd)	5.071	3.974	5.874	5.369
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	707	911	610	667
Service Time	3.109	1.99	3.607	3.102
HCM Lane V/C Ratio	0.233	0.497	0.008	0.007
HCM Control Delay	9.7	10.9	8.7	8.1
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.9	2.9	0	0

## Intersection

Int Delay, s/veh 0.7

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations ↑↑ ↗ ↑ ↗ ↗

Traffic Vol, veh/h 66 33 0 20 10 0

Future Vol, veh/h 66 33 0 20 10 0

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - 0 - 0 0

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 5 5 5 5 5 5

Mvmt Flow 72 36 0 22 11 0

Major/Minor Major1 Major2 Minor1

Conflicting Flow All 0 0 108 0 112 54

Stage 1 - - - - 90 -

Stage 2 - - - - 22 -

Critical Hdwy - - 4.175 - 6.675 6.975

Critical Hdwy Stg 1 - - - - 5.875 -

Critical Hdwy Stg 2 - - - - 5.475 -

Follow-up Hdwy - - 2.2475 - 3.5475 3.3475

Pot Cap-1 Maneuver - - 1461 - 871 993

Stage 1 - - - - 916 -

Stage 2 - - - - 992 -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver - - 1461 - 871 993

Mov Cap-2 Maneuver - - - - 871 -

Stage 1 - - - - 916 -

Stage 2 - - - - 992 -

Approach EB WB NB

HCM Control Delay, s 0 0 9.2

HCM LOS A

Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT

Capacity (veh/h) 871 - - - 1461 -

HCM Lane V/C Ratio 0.012 - - - - -

HCM Control Delay (s) 9.2 0 - - 0 -

HCM Lane LOS A A - - A -

HCM 95th %tile Q(veh) 0 - - - 0 -

# **2026 With Project Conditions**

## **PM Peak Hour**

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	23	0	0	30	0	0	0	0	435	1	10
Future Vol, veh/h	0	23	0	0	30	0	0	0	0	435	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	26	0	0	33	0	0	0	0	483	1	11
Major/Minor												
Minor2		Minor1				Major2						
Conflicting Flow All	-	973	6	980	978	-				0	0	0
Stage 1	-	973	-	0	0	-				-	-	-
Stage 2	-	0	-	980	978	-				-	-	-
Critical Hdwy	-	6.6	7	7.6	6.6	-			4.2	-	-	-
Critical Hdwy Stg 1	-	5.6	-	-	-	-			-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.6	5.6	-			-	-	-	-
Follow-up Hdwy	-	4.05	3.35	3.55	4.05	-			2.25	-	-	-
Pot Cap-1 Maneuver	0	246	1065	200	244	0			-	-	-	-
Stage 1	0	322	-	-	-	0			-	-	-	-
Stage 2	0	-	-	262	320	0			-	-	-	-
Platoon blocked, %										-	-	-
Mov Cap-1 Maneuver	-	246	1065	184	244	-			-	-	-	-
Mov Cap-2 Maneuver	-	246	-	184	244	-			-	-	-	-
Stage 1	-	322	-	-	-	-			-	-	-	-
Stage 2	-	-	-	241	320	-			-	-	-	-
Approach												
EB			WB				SB					
HCM Control Delay, s	21.3			22.1								
HCM LOS	C			C								
Minor Lane/Major Mvmt												
Capacity (veh/h)	246	244	-	-	-	-						
HCM Lane V/C Ratio	0.104	0.137	-	-	-	-						
HCM Control Delay (s)	21.3	22.1	-	-	-	-						
HCM Lane LOS	C	C	-	-	-	-						
HCM 95th %tile Q(veh)	0.3	0.5	-	-	-	-						

Intersection															
Int Delay, s/veh	0														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Vol, veh/h	45	413	0	0	30	542	0	0	0	0	0	0			
Future Vol, veh/h	45	413	0	0	30	542	0	0	0	0	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0			
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop			
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None			
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-			
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-			
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-			
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73			
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5			
Mvmt Flow	62	566	0	0	41	742	0	0	0	0	0	0			
Major/Minor															
Minor2		Minor1			Major1										
Conflicting Flow All	392	0	-	-	0	0	0	0	0	0	0	0			
Stage 1	0	0	-	-	0	-	-	-	-	-	-	-			
Stage 2	392	0	-	-	0	-	-	-	-	-	-	-			
Critical Hdwy	7.15	6.55	-	-	6.55	6.25	4.15	-	-	-	-	-			
Critical Hdwy Stg 1	-	-	-	-	5.55	-	-	-	-	-	-	-			
Critical Hdwy Stg 2	6.15	5.55	-	-	-	-	-	-	-	-	-	-			
Follow-up Hdwy	3.545	4.045	-	-	4.045	3.345	2.245	-	-	-	-	-			
Pot Cap-1 Maneuver	562	-	0	0	-	-	-	-	-	-	-	-			
Stage 1	-	-	0	0	-	-	-	-	-	-	-	-			
Stage 2	627	-	0	0	-	-	-	-	-	-	-	-			
Platoon blocked, %															
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-			
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-			
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-			
Stage 2	627	-	-	-	-	-	-	-	-	-	-	-			
Approach															
EB			WB			NB									
HCM Control Delay, s	0														
HCM LOS	-														
Minor Lane/Major Mvmt															
Capacity (veh/h)	-	-	-	-	-	-	-	-	-	-	-	-			
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-	-	-	-	-			
HCM Control Delay (s)	0	-	-	-	-	-	-	-	-	-	-	-			
HCM Lane LOS	A	-	-	-	-	-	-	-	-	-	-	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-	-	-	-	-	-			

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑↑		↑	↑↑	
Traffic Vol, veh/h	64	0	25	1	0	29	12	574	1	12	420	48
Future Vol, veh/h	64	0	25	1	0	29	12	574	1	12	420	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	0	130	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	67	0	26	1	0	31	13	604	1	13	442	51
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	822	1125	247	878	1150	303	493	0	0	605	0	0
Stage 1	494	494	-	631	631	-	-	-	-	-	-	-
Stage 2	328	631	-	247	519	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	261	199	744	237	192	684	1046	-	-	949	-	-
Stage 1	518	537	-	428	465	-	-	-	-	-	-	-
Stage 2	651	465	-	726	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	244	194	744	224	187	684	1046	-	-	949	-	-
Mov Cap-2 Maneuver	244	194	-	224	187	-	-	-	-	-	-	-
Stage 1	512	529	-	423	459	-	-	-	-	-	-	-
Stage 2	614	459	-	691	516	-	-	-	-	-	-	-
Approach	EB	WB			NB			SB				
HCM Control Delay, s	21	10.9			0.2			0.2				
HCM LOS	C	B										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBln1	EBln2	WBln1	WBln2	SBL	SBT	SBR		
Capacity (veh/h)	1046	-	-	244	744	224	684	949	-	-		
HCM Lane V/C Ratio	0.012	-	-	0.276	0.035	0.005	0.045	0.013	-	-		
HCM Control Delay (s)	8.5	-	-	25.3	10	21.1	10.5	8.8	-	-		
HCM Lane LOS	A	-	-	D	B	C	B	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	1.1	0.1	0	0.1	0	-	-		

## Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔			↔	↑	↖	↑↑	↑↑		↖	↑↑	
Traffic Vol, veh/h	30	0	21	1	0	29	10	685	1	12	468	23
Future Vol, veh/h	30	0	21	1	0	29	10	685	1	12	468	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	0	125	-	-	115	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	31	0	22	1	0	30	10	706	1	12	482	24

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	891	1245	253	992	1257	354	506	0	0	707	0	0
Stage 1	518	518	-	727	727	-	-	-	-	-	-	-
Stage 2	373	727	-	265	530	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	6.6	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	4.05	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	232	169	737	196	166	634	1034	-	-	868	-	-
Stage 1	501	524	-	375	420	-	-	-	-	-	-	-
Stage 2	612	420	-	709	517	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	217	165	737	187	162	634	1034	-	-	868	-	-
Mov Cap-2 Maneuver	217	165	-	187	162	-	-	-	-	-	-	-
Stage 1	496	517	-	371	416	-	-	-	-	-	-	-
Stage 2	578	416	-	679	510	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.2	11.4	0.1	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1034	-	-	306	187	634	868	-	-
HCM Lane V/C Ratio	0.01	-	-	0.172	0.006	0.047	0.014	-	-
HCM Control Delay (s)	8.5	-	-	19.2	24.4	11	9.2	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0.1	0	-	-

## Lanes, Volumes, Timings

2026 With Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑		↑↑	↑↑	↑
Traffic Volume (vph)	73	75	115	25	125	156	250	495	2	126	357	40
Future Volume (vph)	73	75	115	25	125	156	250	495	2	126	357	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325			200		200	325		0	325		325
Storage Lanes	1			1		1			0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3536	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3536	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			218			1			218
Link Speed (mph)		40			35			35			35	
Link Distance (ft)		1786			774			1252			1357	
Travel Time (s)		30.4			15.1			24.4			26.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	81	124	27	134	168	269	534	0	135	384	43
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	10.0	22.6	22.6	9.9	22.5	22.5	19.0	31.2		11.3	23.5	23.5
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	5.7	11.8	11.8	5.6	7.9	7.9	12.9	20.9		6.8	11.6	11.6
Actuated g/C Ratio	0.11	0.22	0.22	0.10	0.15	0.15	0.24	0.39		0.13	0.22	0.22
v/c Ratio	0.41	0.10	0.24	0.15	0.26	0.40	0.63	0.39		0.31	0.50	0.08
Control Delay	34.4	20.6	1.6	28.1	24.3	5.2	28.6	15.1		26.9	22.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	34.4	20.6	1.6	28.1	24.3	5.2	28.6	15.1		26.9	22.3	0.3
LOS	C	C	A	C	C	A	C	B		C	C	A
Approach Delay					14.9			19.6			21.7	
Approach LOS					B			B			C	

## Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 53.9

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 18.9

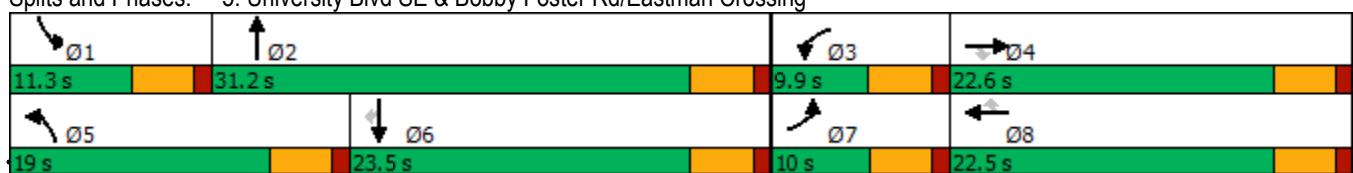
Intersection LOS: B

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Synchro 10 Report

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	T	R	W	B
Traffic Vol, veh/h	15	82	635	34	97	529
Future Vol, veh/h	15	82	635	34	97	529
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	15	85	655	35	100	545
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1418	673	0	0	690	0
Stage 1	673	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	149	450	-	-	891	-
Stage 1	501	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	132	450	-	-	891	-
Mov Cap-2 Maneuver	132	-	-	-	-	-
Stage 1	501	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20.7	0	1.5			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBR	WBL	Ln1	SBL	SBT
Capacity (veh/h)	-	-	328	891	-	-
HCM Lane V/C Ratio	-	-	0.305	0.112	-	-
HCM Control Delay (s)	-	-	20.7	9.6	-	-
HCM Lane LOS	-	-	C	A	-	-
HCM 95th %tile Q(veh)	-	-	1.3	0.4	-	-

Intersection						
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	15	130	695	36	124	602
Future Vol, veh/h	15	130	695	36	124	602
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	19	163	869	45	155	753
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1955	892	0	0	914	0
Stage 1	892	-	-	-	-	-
Stage 2	1063	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.245	-
Pot Cap-1 Maneuver	69	336	-	-	734	-
Stage 1	395	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	54	336	-	-	734	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	33.5	0	1.9			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	54	336	734	-
HCM Lane V/C Ratio	-	-	0.347	0.484	0.211	-
HCM Control Delay (s)	-	-	103.6	25.4	11.2	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	1.2	2.5	0.8	-

**Intersection**

Intersection Delay, s/veh 31.6

Intersection LOS D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑ ↘		↑ ↗	↑ ↗		
Traffic Vol, veh/h	13	400	10	20	552	0
Future Vol, veh/h	13	400	10	20	552	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	14	435	11	22	600	0
Number of Lanes	1	0	1	1	1	0
Approach	EB	WB		NB		
Opposing Approach	WB		EB			
Opposing Lanes	2		1		0	
Conflicting Approach Left			NB		EB	
Conflicting Lanes Left	0		1		1	
Conflicting Approach Right	NB			WB		
Conflicting Lanes Right	1		0		2	
HCM Control Delay	18.6		10.4		42.4	
HCM LOS	C		B		E	

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	100%	0%	100%	0%
Vol Thru, %	0%	3%	0%	100%
Vol Right, %	0%	97%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	552	413	10	20
LT Vol	552	0	10	0
Through Vol	0	13	0	20
RT Vol	0	400	0	0
Lane Flow Rate	600	449	11	22
Geometry Grp	2	5	7	7
Degree of Util (X)	0.923	0.667	0.023	0.043
Departure Headway (Hd)	5.538	5.352	7.653	7.14
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	654	673	465	498
Service Time	3.572	3.408	5.439	4.926
HCM Lane V/C Ratio	0.917	0.667	0.024	0.044
HCM Control Delay	42.4	18.6	10.6	10.3
HCM Lane LOS		E	C	B
HCM 95th-tile Q	12.2	5.1	0.1	0.1

## Intersection

Int Delay, s/veh 2.1

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations ↑↑ ↗ ↑ ↗ ↗

Traffic Vol, veh/h 26 13 0 60 30 0

Future Vol, veh/h 26 13 0 60 30 0

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - 0 - 0 0

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 5 5 5 5 5 5

Mvmt Flow 28 14 0 65 33 0

Major/Minor Major1 Major2 Minor1

Conflicting Flow All 0 0 42 0 100 21

Stage 1 - - - - 35 -

Stage 2 - - - - 65 -

Critical Hdwy - - 4.175 - 6.675 6.975

Critical Hdwy Stg 1 - - - - 5.875 -

Critical Hdwy Stg 2 - - - - 5.475 -

Follow-up Hdwy - - 2.2475 - 3.5475 3.3475

Pot Cap-1 Maneuver - - 1546 - 885 1043

Stage 1 - - - - 975 -

Stage 2 - - - - 949 -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver - - 1546 - 885 1043

Mov Cap-2 Maneuver - - - - 885 -

Stage 1 - - - - 975 -

Stage 2 - - - - 949 -

Approach EB WB NB

HCM Control Delay, s 0 0 9.2

HCM LOS A

Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT

Capacity (veh/h) 885 - - - 1546 -

HCM Lane V/C Ratio 0.037 - - - - -

HCM Control Delay (s) 9.2 0 - - 0 -

HCM Lane LOS A A - - A -

HCM 95th %tile Q(veh) 0.1 - - - 0 -

# **Buildout With Project Conditions**

## **AM Peak Hour**

Lanes, Volumes, Timings  
1: University Blvd SE & Stryker Rd

Buildout With Project  
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	51	0	0	0	0	0	0	66	349	0
Future Volume (vph)	0	0	51	0	0	0	0	0	0	66	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	0	0	1863	0	0	0	0	0	3511	0
Flt Permitted												0.992
Satd. Flow (perm)	0	1611	0	0	1863	0	0	0	0	0	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		435										
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		518			474			764			758	
Travel Time (s)		10.1			9.2			14.9			14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	0	0	0	0	0	0	451	0
Turn Type		NA								Split	NA	
Protected Phases		4			8					6	6	
Permitted Phases			8									
Total Split (s)		26.0		26.0	26.0					39.0	39.0	
Total Lost Time (s)		4.5			4.5						4.5	
Act Effct Green (s)		5.6									25.3	
Actuated g/C Ratio		0.19									0.84	
v/c Ratio		0.08									0.15	
Control Delay		0.3									2.1	
Queue Delay		0.0									0.0	
Total Delay		0.3									2.1	
LOS		A									A	
Approach Delay		0.3									2.1	
Approach LOS		A									A	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 30.2

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.15

Intersection Signal Delay: 1.9

Intersection LOS: A

Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: University Blvd SE & Stryker Rd



Lanes, Volumes, Timings  
2: University Blvd SE & Stryker Rd

Buildout With Project  
AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	46	0	0	0	113	0	1200	120	0	0	0
Future Volume (vph)	0	46	0	0	0	113	0	1200	120	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	0	0	1611	0	0	3490	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	3490	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					45			28				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		474			880			736			768	
Travel Time (s)		9.2			17.1			14.3			15.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	50	0	0	123	0	0	1434	0	0	0	0
Turn Type		NA			NA			NA				
Protected Phases		4			8			2				
Permitted Phases		4				2						
Total Split (s)	22.6	22.6			22.6		37.4	37.4				
Total Lost Time (s)		4.5			4.5			4.5				
Act Effct Green (s)		8.1			8.1			34.0				
Actuated g/C Ratio		0.17			0.17			0.72				
v/c Ratio		0.16			0.39			0.57				
Control Delay		18.8			16.7			6.0				
Queue Delay		0.0			0.0			0.0				
Total Delay		18.8			16.7			6.0				
LOS		B			B			A				
Approach Delay		18.8			16.7			6.0				
Approach LOS		B			B			A				

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 47.2

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 7.2

Intersection LOS: A

Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: University Blvd SE & Stryker Rd



## Lanes, Volumes, Timings

Buildout With Project

## 3: University Blvd SE &amp; Strand Loop SE/Gate A

AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑↑		↑	↑↑	
Traffic Volume (vph)	132	0	136	3	0	7	109	1109	13	20	261	10
Future Volume (vph)	132	0	136	3	0	7	109	1109	13	20	261	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	115		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			80			80		
Satd. Flow (prot)	1770	1583	0	0	1770	1583	1770	3532	0	1770	3518	0
Flt Permitted	0.756				0.663		0.950			0.950		
Satd. Flow (perm)	1408	1583	0	0	1235	1583	1770	3532	0	1770	3518	0
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)		605				127			2		6	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		485			304			432			470	
Travel Time (s)		11.0			6.9			8.4			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	148	0	0	3	8	118	1219	0	22	295	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Total Split (s)	26.0	26.0		26.0	26.0	26.0	19.0	53.0		11.0	45.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)	12.3	12.3			12.3	12.3	10.0	31.2		6.6	22.4	
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.18	0.55		0.12	0.40	
v/c Ratio	0.47	0.18			0.01	0.02	0.38	0.63		0.11	0.21	
Control Delay	28.5	0.5			23.7	0.1	29.4	11.8		33.1	13.1	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	28.5	0.5			23.7	0.1	29.4	11.8		33.1	13.1	
LOS	C	A			C	A	C	B		C	B	
Approach Delay		14.3				6.6			13.3		14.5	
Approach LOS		B				A			B		B	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 56.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 13.6

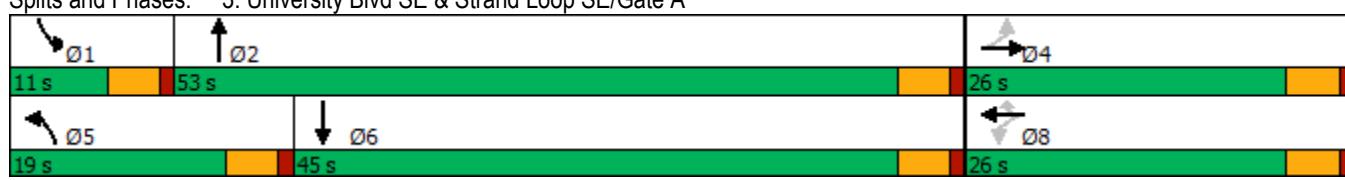
Intersection LOS: B

Intersection Capacity Utilization 60.5%

ICU Level of Service B

Analysis Period (min) 15

## Splits and Phases: 3: University Blvd SE &amp; Strand Loop SE/Gate A



## Lanes, Volumes, Timings

Buildout With Project

4: University Blvd SE &amp; Avedon Ave SE/Gate B

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	0	78	3	0	7	73	1300	13	20	284	11
Future Volume (vph)	132	0	78	3	0	7	73	1300	13	20	284	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	125	0	115	0	115	0
Storage Lanes	0	0	0	0	0	1	1	0	1	0	1	0
Taper Length (ft)	25			25			80			25		
Satd. Flow (prot)	0	1717	0	0	1770	1583	1770	3536	0	1770	3518	0
Flt Permitted		0.808			0.635		0.557			0.126		
Satd. Flow (perm)	0	1430	0	0	1183	1583	1038	3536	0	235	3518	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34				18			2		8	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		260			279			470			1252	
Travel Time (s)		5.9			6.3			9.2			24.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	228	0	0	3	8	79	1427	0	22	321	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	31.0	31.0		31.0	31.0	31.0	59.0	59.0		59.0	59.0	
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)		14.7			14.7	14.7	38.3	38.3		38.3	38.3	
Actuated g/C Ratio		0.24			0.24	0.24	0.61	0.61		0.61	0.61	
v/c Ratio		0.63			0.01	0.02	0.12	0.66		0.15	0.15	
Control Delay		27.7			21.3	5.6	6.6	10.2		9.5	5.7	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		27.7			21.3	5.6	6.6	10.2		9.5	5.7	
LOS	C			C	A	A	B		A	A		
Approach Delay		27.7				9.9		10.0			6.0	
Approach LOS		C			A		B			A		

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 62.5

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 11.3

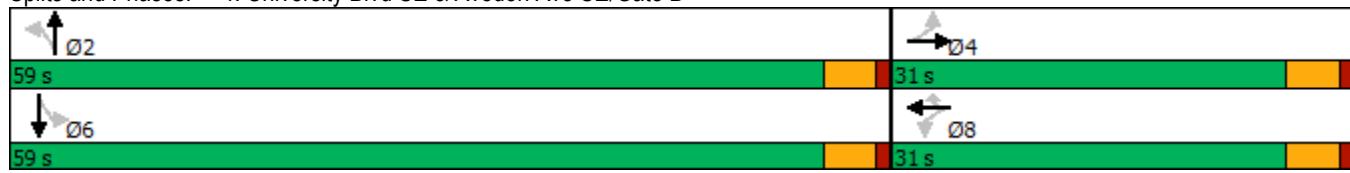
Intersection LOS: B

Intersection Capacity Utilization 70.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: University Blvd SE &amp; Avedon Ave SE/Gate B



## Lanes, Volumes, Timings

Buildout With Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	129	139	129	19
Traffic Volume (vph)	155	909	89	106	292	103	169	1340	129	139	129	19
Future Volume (vph)	155	909	89	106	292	103	169	1340	129	139	129	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		300	200		200	325		0	325		325
Storage Lanes	2		1	2		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3493	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1770	3493	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			193			12			193
Link Speed (mph)			40			35			35			35
Link Distance (ft)			1786			774			1252			1357
Travel Time (s)			30.4			15.1			24.4			26.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	988	97	115	317	112	184	1597	0	151	140	21
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	14.6	35.4	35.4	9.6	30.4	30.4	24.8	54.8		10.2	40.2	40.2
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	9.5	30.9	30.9	5.1	26.5	26.5	16.1	50.3		5.7	39.9	39.9
Actuated g/C Ratio	0.09	0.28	0.28	0.05	0.24	0.24	0.15	0.46		0.05	0.36	0.36
v/c Ratio	0.57	0.99	0.18	0.72	0.37	0.21	0.71	1.00		0.85	0.11	0.03
Control Delay	56.0	67.2	1.9	77.1	36.5	0.9	59.4	51.7		90.1	24.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	56.0	67.2	1.9	77.1	36.5	0.9	59.4	51.7		90.1	24.7	0.1
LOS	E	E	A	E	D	A	E	D		F	C	A
Approach Delay			60.6			37.8			52.5			54.7
Approach LOS			E			D			D			D

## Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 53.2

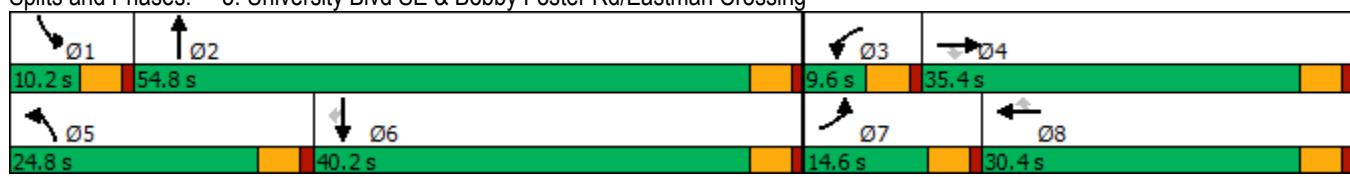
Intersection LOS: D

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Lanes, Volumes, Timings  
6: University Blvd SE & Fritts Crossing SE

Buildout With Project  
AM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑		Y	↑↑
Traffic Volume (vph)	35	99	1347	429	48	380
Future Volume (vph)	35	99	1347	429	48	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1655	0	3412	0	1770	3539
Flt Permitted	0.987				0.085	
Satd. Flow (perm)	1655	0	3412	0	158	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	44		113			
Link Speed (mph)	25		35		35	
Link Distance (ft)	832		739		284	
Travel Time (s)	22.7		14.4		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	0	1930	0	52	413
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Total Split (s)	22.6		47.4		47.4	47.4
Total Lost Time (s)	4.5		4.5		4.5	4.5
Act Effct Green (s)	9.6		48.7		48.7	48.7
Actuated g/C Ratio	0.15		0.77		0.77	0.77
v/c Ratio	0.51		0.73		0.43	0.15
Control Delay	25.3		8.2		21.3	3.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	25.3		8.2		21.3	3.3
LOS	C	A		C	A	
Approach Delay	25.3		8.2			5.4
Approach LOS	C	A			A	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 63.3

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 8.7

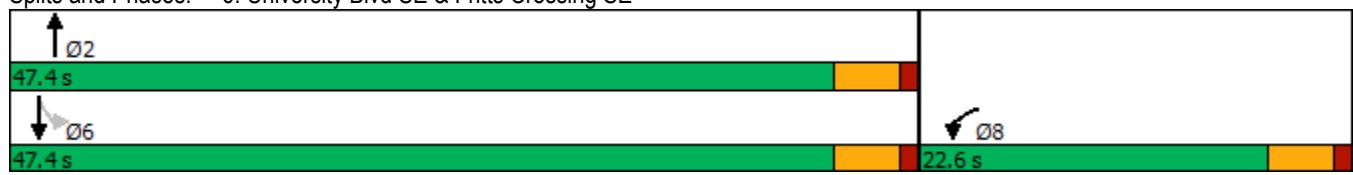
Intersection LOS: A

Intersection Capacity Utilization 66.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: University Blvd SE & Fritts Crossing SE



## Lanes, Volumes, Timings

## 7: University Blvd SE &amp; Crick Ave SE

Buildout With Project

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑↑	↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (vph)	100	100	70	400	99	443	88	727	650	934	143	210
Future Volume (vph)	100	100	70	400	99	443	88	727	650	934	143	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			350			180		500	600		0
Storage Lanes	1			2			1		1	2		0
Taper Length (ft)	25			25			25			120		
Satd. Flow (prot)	1770	1747	0	3433	1863	1583	1770	3539	1583	3433	3224	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1747	0	3433	1863	1583	1770	3539	1583	3433	3224	0
Right Turn on Red			Yes				Yes					Yes
Satd. Flow (RTOR)		25				482			336		228	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		276			576			790			926	
Travel Time (s)		5.4			11.2			15.4			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	185	0	435	108	482	96	790	707	1015	383	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8				2		
Total Split (s)	15.3	22.5		20.0	27.2	27.2	17.6	38.1	38.1	39.4	59.9	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	10.2	14.9		15.5	20.2	20.2	10.9	33.6	33.6	34.9	57.6	
Actuated g/C Ratio	0.09	0.13		0.13	0.17	0.17	0.09	0.29	0.29	0.30	0.49	
v/c Ratio	0.71	0.76		0.96	0.34	0.72	0.58	0.78	1.02	0.99	0.22	
Control Delay	77.0	62.2		83.7	45.7	10.5	65.5	44.9	61.6	67.5	7.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	77.0	62.2		83.7	45.7	10.5	65.5	44.9	61.6	67.5	7.5	
LOS	E	E		F	D	B	E	D	E	E	A	
Approach Delay			67.7			45.3			53.5		51.0	
Approach LOS			E			D			D		D	

## Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 117

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 51.7

Intersection LOS: D

Intersection Capacity Utilization 87.7%

ICU Level of Service E

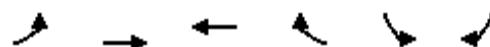
Analysis Period (min) 15

Splits and Phases: 7: University Blvd SE &amp; Crick Ave SE



Lanes, Volumes, Timings  
8: Eastman Crossing/Gate D & Watson Dr SE

Buildout With Project  
AM Peak Hour

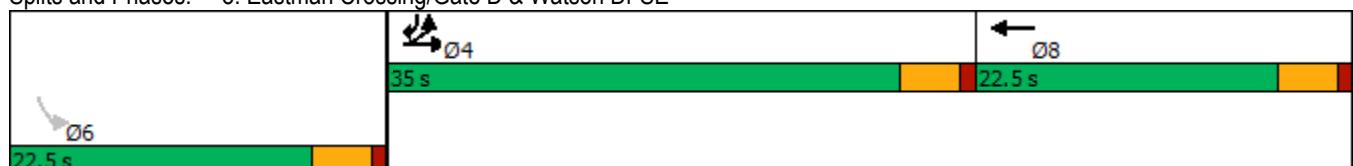


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↔	↑↓		↑	↑
Traffic Volume (vph)	850	33	10	0	0	350
Future Volume (vph)	850	33	10	0	0	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1681	1692	3539	0	1863	1583
Flt Permitted	0.950	0.956				
Satd. Flow (perm)	1681	1692	3539	0	1863	1583
Right Turn on Red			Yes		Yes	
Satd. Flow (RTOR)					1058	
Link Speed (mph)		35	30		25	
Link Distance (ft)		411	915		1159	
Travel Time (s)		8.0	20.8		31.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)	48%					
Lane Group Flow (vph)	480	480	11	0	0	380
Turn Type	Split	NA	NA		Perm	Over
Protected Phases	4	4	8			4
Permitted Phases					6	
Total Split (s)	35.0	35.0	22.5		22.5	35.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Act Effct Green (s)	20.3	20.3	6.0			20.3
Actuated g/C Ratio	0.55	0.55	0.16			0.55
v/c Ratio	0.52	0.52	0.02			0.28
Control Delay	8.0	8.0	18.5			0.5
Queue Delay	0.0	0.0	0.0			0.0
Total Delay	8.0	8.0	18.5			0.5
LOS	A	A	B			A
Approach Delay		8.0	18.5	0.5		
Approach LOS		A	B		A	

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	37.2
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.52
Intersection Signal Delay: 6.0	Intersection LOS: A
Intersection Capacity Utilization 34.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Eastman Crossing/Gate D & Watson Dr SE



## Lanes, Volumes, Timings

Buildout With Project

## 9: Mesa Del Sol Blvd &amp; Gate E/Eastman Crossing

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑↑		↑	↑↑	↑
Traffic Volume (vph)	4	1	4	22	4	39	21	1742	188	105	675	8
Future Volume (vph)	4	1	4	22	4	39	21	1742	188	105	675	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	125			0	200		0	200		200
Storage Lanes	1	0	1			0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1639	0	1770	1608	0	1770	3486	0	1770	3539	1583
Flt Permitted	0.870			0.870			0.950			0.950		
Satd. Flow (perm)	1621	1639	0	1621	1608	0	1770	3486	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			42			21				73
Link Speed (mph)	30			35			35			35		
Link Distance (ft)	419			491			470			342		
Travel Time (s)	9.5			9.6			9.2			6.7		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	5	0	24	46	0	23	2097	0	114	734	9
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	22.6	22.6		22.6	22.6		10.0	56.2		11.2	57.4	57.4
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	6.9	6.9		6.9	6.9		5.5	56.5		6.7	65.5	65.5
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.07	0.71		0.08	0.82	0.82
v/c Ratio	0.03	0.03		0.17	0.26		0.19	0.85		0.77	0.25	0.01
Control Delay	33.0	23.6		35.9	16.4		39.0	14.6		69.2	3.7	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	33.0	23.6		35.9	16.4		39.0	14.6		69.2	3.7	0.0
LOS	C	C		D	B		D	B		E	A	A
Approach Delay		27.8			23.1			14.9			12.4	
Approach LOS		C			C			B			B	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 79.5

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 14.4

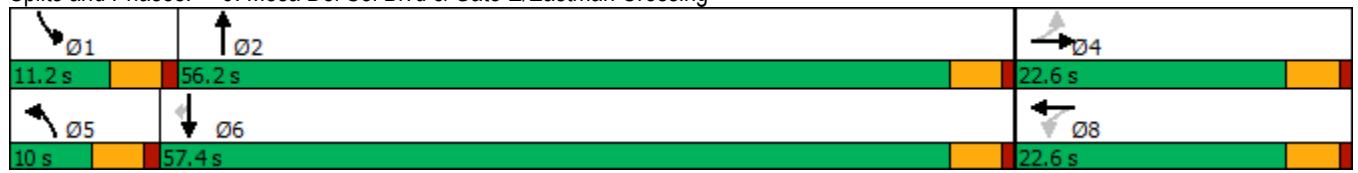
Intersection LOS: B

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

## Splits and Phases: 9: Mesa Del Sol Blvd &amp; Gate E/Eastman Crossing



Intersection

Intersection Delay, s/veh 8.1

Intersection LOS A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations



Traffic Vol, veh/h 20

50

5

5

150

13

Future Vol, veh/h 20

50

5

5

150

13

Peak Hour Factor 0.92

0.92

0.92

0.92

0.92

0.92

Heavy Vehicles, % 2

2

2

2

2

2

Mvmt Flow 22

54

5

5

163

14

Number of Lanes 1

0

1

1

1

0

Approach	EB	WB	NB
----------	----	----	----

Opposing Approach WB

EB

Opposing Lanes 2

1

0

Conflicting Approach Left NB

EB

Conflicting Lanes Left 0

1

1

Conflicting Approach Right NB

WB

Conflicting Lanes Right 1

0

2

HCM Control Delay 7.4

8

8.4

HCM LOS A

A

A

Lane	NBLn1	EBLn1	WBLn1	WBLn2
------	-------	-------	-------	-------

Vol Left, % 92%

0%

100%

0%

Vol Thru, % 0%

29%

0%

100%

Vol Right, % 8%

71%

0%

0%

Sign Control Stop

Stop

Stop

Stop

Traffic Vol by Lane 163

70

5

5

LT Vol 150

0

5

0

Through Vol 0

20

0

5

RT Vol 13

50

0

0

Lane Flow Rate 177

76

5

5

Geometry Grp 2

5

7

7

Degree of Util (X) 0.208

0.085 0.008 0.008

Departure Headway (Hd) 4.22

4.031 5.506 5.004

Convergence, Y/N Yes

Yes Yes Yes Yes

Cap 847

894 654 719

Service Time 2.264

2.032 3.208 2.705

HCM Lane V/C Ratio 0.209

0.085 0.008 0.007

HCM Control Delay 8.4

7.4 8.3 7.7

HCM Lane LOS A

A A A A

HCM 95th-tile Q 0.8

0.3 0 0

## Lanes, Volumes, Timings

Buildout With Project

## 11: Gate G/Hawking Dr SE &amp; Crick Ave SE

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓		↑	↑		↑	↑	
Traffic Volume (vph)	156	1495	15	10	404	575	3	2	5	150	8	37
Future Volume (vph)	156	1495	15	10	404	575	3	2	5	150	8	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300			150		0	0	0	0	0	0	0
Storage Lanes	1			1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3536	0	1770	3228	0	1770	1663	0	1770	1635	0
Flt Permitted	0.950			0.950			0.725			0.753		
Satd. Flow (perm)	1770	3536	0	1770	3228	0	1350	1663	0	1403	1635	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)		2			547			5			40	
Link Speed (mph)		35			35			30			35	
Link Distance (ft)		2075			1380			306			1115	
Travel Time (s)		40.4			26.9			7.0			21.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	1641	0	11	1064	0	3	7	0	163	49	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2				6	
Total Split (s)	19.4	42.0		9.6	32.2		23.4	23.4		23.4	23.4	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	10.9	36.1		5.3	22.0		12.3	12.3		12.3	12.3	
Actuated g/C Ratio	0.18	0.61		0.09	0.37		0.21	0.21		0.21	0.21	
v/c Ratio	0.52	0.76		0.07	0.69		0.01	0.02		0.56	0.13	
Control Delay	30.3	13.6		31.5	10.5		20.7	15.2		30.7	10.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.3	13.6		31.5	10.5		20.7	15.2		30.7	10.4	
LOS	C	B		C	B		C	B		C	B	
Approach Delay		15.1			10.7			16.8			26.0	
Approach LOS		B			B			B			C	

## Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 59.3

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.3

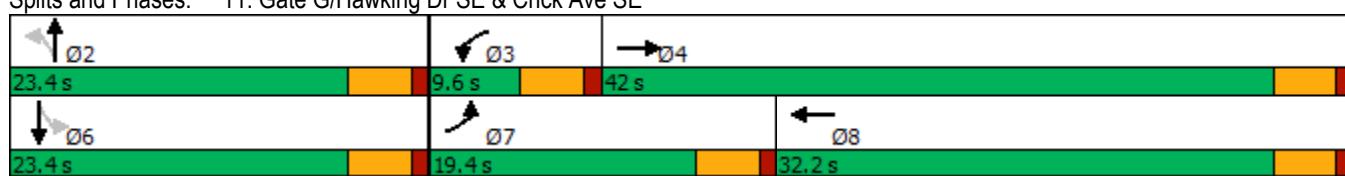
Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

## Splits and Phases: 11: Gate G/Hawking Dr SE &amp; Crick Ave SE



Lanes, Volumes, Timings  
12: Gate H/Molina Rd & Crick Ave SE

Buildout With Project  
AM Peak Hour

	↑	→	↓	↖	←	↗	↙	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓		↑	↑↓		↓	↔	
Traffic Volume (vph)	14	1550	20	13	1030	104	3	2	5	23	0	32
Future Volume (vph)	14	1550	20	13	1030	104	3	2	5	23	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0	0	0	0	0	0
Storage Lanes	1		0	1		0	1		0	0	0	0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3532	0	1770	3490	0	1770	1663	0	0	1681	0
Flt Permitted	0.195			0.132			0.718				0.862	
Satd. Flow (perm)	363	3532	0	246	3490	0	1337	1663	0	0	1479	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)		3			28			5			35	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		1380			1210			256			1120	
Travel Time (s)		26.9			23.6			5.8			30.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	1707	0	14	1233	0	3	7	0	0	60	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases		4			8			2			6	
Total Split (s)	37.4	37.4		37.4	37.4		22.6	22.6		22.6	22.6	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5		
Act Effct Green (s)	30.3	30.3		30.3	30.3		6.6	6.6			6.6	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.14	0.14			0.14	
v/c Ratio	0.06	0.73		0.09	0.53		0.02	0.03			0.25	
Control Delay	3.7	7.6		4.5	5.1		18.0	13.7			13.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	3.7	7.6		4.5	5.1		18.0	13.7			13.8	
LOS	A	A		A	A		B	B			B	
Approach Delay		7.6			5.1			15.0			13.8	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 46

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 6.7

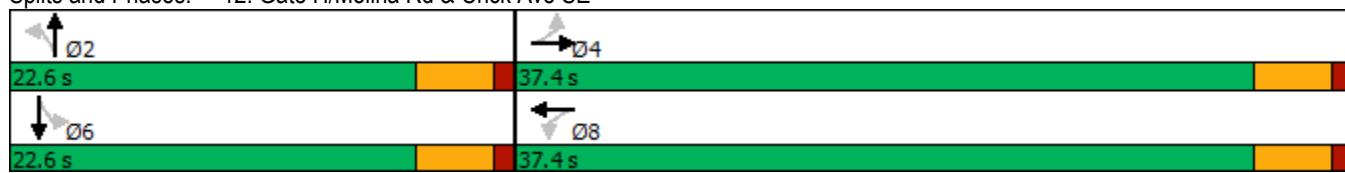
Intersection LOS: A

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Gate H/Molina Rd & Crick Ave SE



Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑↑	↑	↑	↑
Traffic Vol, veh/h	930	33	0	400	7	3
Future Vol, veh/h	930	33	0	400	7	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1011	36	0	435	8	3
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	1047	0	1247	524
Stage 1	-	-	-	-	1029	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	660	-	166	498
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	797	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	660	-	166	498
Mov Cap-2 Maneuver	-	-	-	-	166	-
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	797	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	23.1			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	166	498	-	-	660	-
HCM Lane V/C Ratio	0.046	0.007	-	-	-	-
HCM Control Delay (s)	27.7	12.3	-	-	0	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

# **Buildout With Project Conditions**

## **PM Peak Hour**

Lanes, Volumes, Timings  
1: University Blvd SE & Stryker Rd

Builldout With Project  
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	15	6	200	200	0	0	0	0	137	1213	137
Future Volume (vph)	0	15	6	200	200	0	0	0	0	137	1213	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1786	0	0	1818	0	0	0	0	0	3472	0
Flt Permitted						0.830					0.995	
Satd. Flow (perm)	0	1786	0	0	1546	0	0	0	0	0	3472	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		7									25	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		518			474			764			758	
Travel Time (s)		10.1			9.2			14.9			14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	0	0	434	0	0	0	0	1616	0	
Turn Type		NA		Perm	NA					Split	NA	
Protected Phases		4			8					6	6	
Permitted Phases			8									
Total Split (s)		26.0		26.0	26.0					39.0	39.0	
Total Lost Time (s)		4.5		4.5							4.5	
Act Effct Green (s)		20.1		20.1							33.0	
Actuated g/C Ratio		0.32		0.32							0.53	
v/c Ratio		0.04		0.87							0.87	
Control Delay		12.3		40.9							19.7	
Queue Delay		0.0		0.0							0.0	
Total Delay		12.3		40.9							19.7	
LOS		B		D							B	
Approach Delay		12.3		40.9							19.7	
Approach LOS		B		D							B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 62.2

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 24.0

Intersection LOS: C

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: University Blvd SE & Stryker Rd



Lanes, Volumes, Timings  
2: University Blvd SE & Stryker Rd

Builldout With Project  
PM Peak Hour

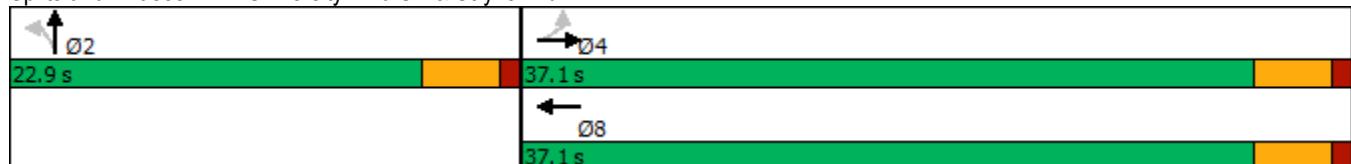


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↓			↔				
Traffic Volume (vph)	0	108	0	0	400	368	0	261	40	0	0	0
Future Volume (vph)	0	108	0	0	400	368	0	261	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	0	0	1742	0	0	3468	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1742	0	0	3468	0	0	0	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)					121			29				
Link Speed (mph)		35			35			35		35		
Link Distance (ft)		474			880			736		768		
Travel Time (s)		9.2			17.1			14.3		15.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	835	0	0	327	0	0	0	0
Turn Type		NA			NA			NA				
Protected Phases		4			8			2				
Permitted Phases		4				2						
Total Split (s)	37.1	37.1			37.1		22.9	22.9				
Total Lost Time (s)		4.5			4.5			4.5				
Act Effct Green (s)		25.0			25.0			9.7				
Actuated g/C Ratio		0.57			0.57			0.22				
v/c Ratio		0.11			0.80			0.42				
Control Delay		4.8			14.1			16.5				
Queue Delay		0.0			0.0			0.0				
Total Delay		4.8			14.1			16.5				
LOS		A			B			B				
Approach Delay		4.8			14.1			16.5				
Approach LOS		A			B			B				

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	44.1
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	13.9
Intersection Capacity Utilization	59.5%
Analysis Period (min)	15

Splits and Phases: 2: University Blvd SE & Stryker Rd



## Lanes, Volumes, Timings

Buildout With Project

## 3: University Blvd SE &amp; Strand Loop SE/Gate A

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑↑		↑	↑↑	
Traffic Volume (vph)	40	0	40	1	0	29	65	628	7	6	1563	164
Future Volume (vph)	40	0	40	1	0	29	65	628	7	6	1563	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	130	0	0	115	0	0
Storage Lanes	1	0	0	0	0	1	1	0	0	1	0	0
Taper Length (ft)	25			25			80			80		
Satd. Flow (prot)	1770	1583	0	0	1770	1583	1770	3532	0	1770	3490	0
Flt Permitted	0.757				0.729		0.950			0.950		
Satd. Flow (perm)	1410	1583	0	0	1358	1583	1770	3532	0	1770	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		115				73		2			21	
Link Speed (mph)		30			30		35			35		
Link Distance (ft)		485			304		432			470		
Travel Time (s)		11.0			6.9		8.4			9.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	43	0	0	1	32	71	691	0	7	1877	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Total Split (s)	22.6	22.6		22.6	22.6	22.6	10.0	57.8		9.6	57.4	
Total Lost Time (s)	4.5	4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)	8.1	8.1			8.1	8.1	5.9	59.6		5.4	54.1	
Actuated g/C Ratio	0.11	0.11			0.11	0.11	0.08	0.80		0.07	0.73	
v/c Ratio	0.28	0.16			0.01	0.13	0.51	0.24		0.05	0.74	
Control Delay	38.2	1.2			32.0	2.4	51.6	3.5		37.2	11.4	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	1.1	
Total Delay	38.2	1.2			32.0	2.4	51.6	3.5		37.2	12.5	
LOS	D	A			C	A	D	A		D	B	
Approach Delay		19.7				3.3		8.0			12.6	
Approach LOS		B				A		A			B	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 74.1

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 11.4

Intersection LOS: B

Intersection Capacity Utilization 70.4%

ICU Level of Service C

Analysis Period (min) 15

## Splits and Phases: 3: University Blvd SE &amp; Strand Loop SE/Gate A



## Lanes, Volumes, Timings

Buildout With Project

4: University Blvd SE &amp; Avedon Ave SE/Gate B

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	0	40	1	0	29	80	611	6	9	1682	7
Future Volume (vph)	40	0	40	1	0	29	80	611	6	9	1682	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	115		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			80			25		
Satd. Flow (prot)	0	1694	0	0	1770	1583	1770	3532	0	1770	3536	0
Flt Permitted		0.842			0.715		0.097			0.397		
Satd. Flow (perm)	0	1462	0	0	1332	1583	181	3532	0	740	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32				32			3			1
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		260			279			470			1252	
Travel Time (s)		5.9			6.3			9.2			24.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	1	32	87	671	0	10	1836	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	22.6	22.6		22.6	22.6	22.6	67.4	67.4		67.4	67.4	
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)		8.8			8.8	8.8	71.0	71.0		71.0	71.0	
Actuated g/C Ratio	0.10			0.10	0.10	0.83	0.83		0.83	0.83		
v/c Ratio	0.48			0.01	0.17	0.58	0.23		0.02	0.63		
Control Delay	33.7			32.0	13.9	25.6	2.5		2.6	5.0		
Queue Delay	0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay	33.7			32.0	13.9	25.6	2.5		2.6	5.0		
LOS	C			C	B	C	A		A	A		
Approach Delay	33.7				14.5			5.1		5.0		
Approach LOS	C			B			A			A		

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 85.5

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 6.1

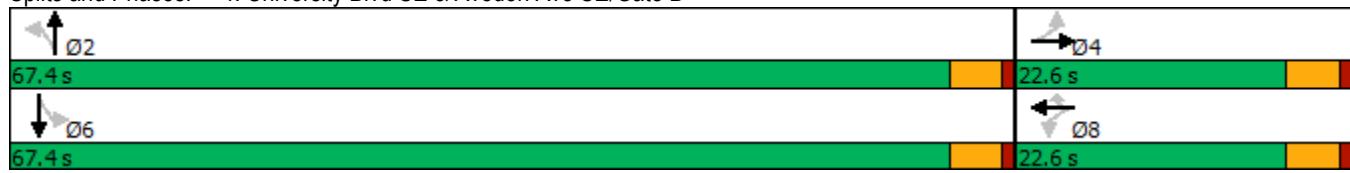
Intersection LOS: A

Intersection Capacity Utilization 73.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: University Blvd SE &amp; Avedon Ave SE/Gate B



## Lanes, Volumes, Timings

Buildout With Project

## 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	74	32	1207	438
Traffic Volume (vph)	112	737	26	393	1208	86	40	375	74	32	1207	438
Future Volume (vph)	112	737	26	393	1208	86	40	375	74	32	1207	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		300	200		200	325		0	325		325
Storage Lanes	2		1	2		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	3451	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1770	3451	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			104			24			159
Link Speed (mph)			40			35			35			35
Link Distance (ft)			1786			774			1252			1357
Travel Time (s)			30.4			15.1			24.4			26.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	801	28	427	1313	93	43	488	0	35	1312	476
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Total Split (s)	9.5	35.3	35.3	19.2	45.0	45.0	9.5	46.0		9.5	46.0	46.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	5.0	30.8	30.8	14.7	40.6	40.6	5.0	43.4		5.0	41.6	41.6
Actuated g/C Ratio	0.05	0.28	0.28	0.14	0.38	0.38	0.05	0.40		0.05	0.38	0.38
v/c Ratio	0.77	0.79	0.05	0.91	0.99	0.14	0.52	0.35		0.22	0.96	0.67
Control Delay	81.7	43.0	0.2	72.2	56.9	4.3	74.5	22.8		54.1	50.8	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	81.7	43.0	0.2	72.2	56.9	4.3	74.5	22.8		54.1	50.8	23.9
LOS	F	D	A	E	E	A	E	C		D	D	C
Approach Delay			46.7			57.8			27.0			43.9
Approach LOS			D			E		C				D

## Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 108.1

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 47.6

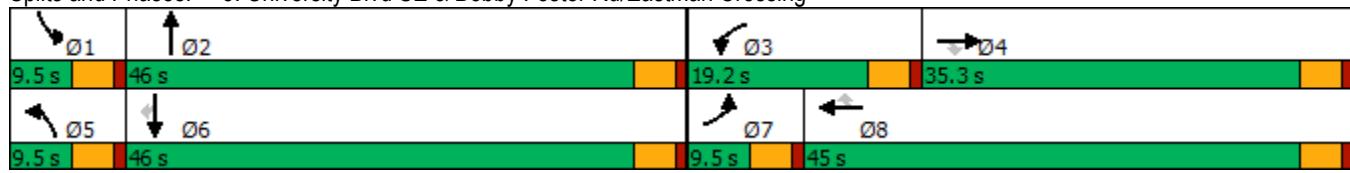
Intersection LOS: D

Intersection Capacity Utilization 82.2%

ICU Level of Service E

Analysis Period (min) 15

## Splits and Phases: 5: University Blvd SE &amp; Bobby Foster Rd/Eastman Crossing



Lanes, Volumes, Timings  
6: University Blvd SE & Fritts Crossing SE

Builldout With Project  
PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑		Y	↑↑
Traffic Volume (vph)	227	321	430	22	21	1481
Future Volume (vph)	227	321	430	22	21	1481
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1681	0	3514	0	1770	3539
Flt Permitted	0.980				0.461	
Satd. Flow (perm)	1681	0	3514	0	859	3539
Right Turn on Red		Yes			Yes	
Satd. Flow (RTOR)	112		11			
Link Speed (mph)	25		35		35	
Link Distance (ft)	832		739		284	
Travel Time (s)	22.7		14.4		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	596	0	491	0	23	1610
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Total Split (s)	29.0		41.0		41.0	41.0
Total Lost Time (s)	4.5		4.5		4.5	4.5
Act Effct Green (s)	23.0		34.9		34.9	34.9
Actuated g/C Ratio	0.34		0.52		0.52	0.52
v/c Ratio	0.92		0.27		0.05	0.87
Control Delay	39.4		9.4		8.7	21.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	39.4		9.4		8.7	21.3
LOS	D		A		A	C
Approach Delay	39.4		9.4			21.1
Approach LOS	D		A			C

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 67

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 23.0

Intersection LOS: C

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: University Blvd SE & Fritts Crossing SE



## Lanes, Volumes, Timings

7: University Blvd SE &amp; Crick Ave SE

Buildout With Project

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑↑	↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (vph)	25	183	25	477	400	855	67	384	480	469	852	44
Future Volume (vph)	25	183	25	477	400	855	67	384	480	469	852	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			350		0	180		500	600		0
Storage Lanes	1			2		1	1		1	2		0
Taper Length (ft)	25			25			25			120		
Satd. Flow (prot)	1770	1829	0	3433	1863	1583	1770	3539	1583	3433	3514	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1829	0	3433	1863	1583	1770	3539	1583	3433	3514	0
Right Turn on Red			Yes				Yes					Yes
Satd. Flow (RTOR)		6				458			522		5	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		276			576			790			926	
Travel Time (s)		5.4			11.2			15.4			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	226	0	518	435	929	73	417	522	510	974	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8				2		
Total Split (s)	9.5	36.0		30.5	57.0	57.0	11.0	29.5	29.5	24.0	42.5	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	5.1	29.9		21.7	50.9	50.9	6.6	22.7	22.7	19.0	35.1	
Actuated g/C Ratio	0.05	0.27		0.19	0.46	0.46	0.06	0.20	0.20	0.17	0.31	
v/c Ratio	0.34	0.46		0.78	0.51	0.96	0.70	0.58	0.71	0.87	0.88	
Control Delay	67.2	37.8		52.0	25.4	36.5	88.8	44.6	9.4	63.1	46.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	67.2	37.8		52.0	25.4	36.5	88.8	44.6	9.4	63.1	46.8	
LOS	E	D		D	C	D	F	D	A	E	D	
Approach Delay		40.9				38.2			29.7		52.4	
Approach LOS		D			D			C			D	

## Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 111.6

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 41.1

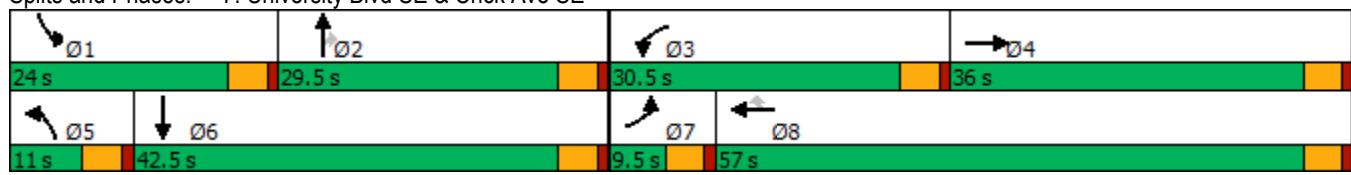
Intersection LOS: D

Intersection Capacity Utilization 79.0%

ICU Level of Service D

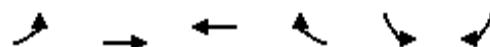
Analysis Period (min) 15

Splits and Phases: 7: University Blvd SE &amp; Crick Ave SE



Lanes, Volumes, Timings  
8: Eastman Crossing/Gate D & Watson Dr SE

Builldout With Project  
PM Peak Hour

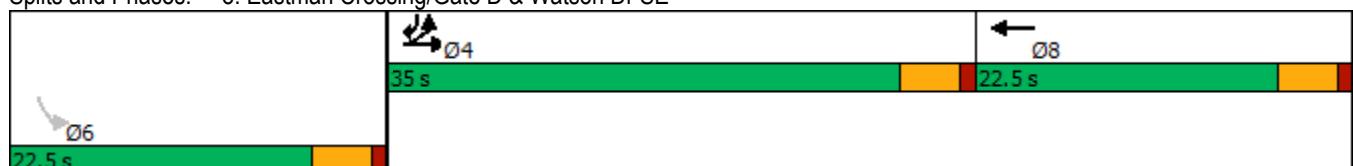


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↓	↑↑		↑	↑
Traffic Volume (vph)	523	4	25	5	9	975
Future Volume (vph)	523	4	25	5	9	975
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1681	1686	3458	0	1770	1583
Flt Permitted	0.950	0.953			0.950	
Satd. Flow (perm)	1681	1686	3458	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			1014
Link Speed (mph)		35	30		25	
Link Distance (ft)		433	915		1159	
Travel Time (s)		8.4	20.8		31.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	284	288	32	0	10	1060
Turn Type	Split	NA	NA		Perm	Over
Protected Phases	4	4	8			4
Permitted Phases				6		
Total Split (s)	35.0	35.0	22.5		22.5	35.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Act Effct Green (s)	22.5	22.5	6.4		6.3	22.5
Actuated g/C Ratio	0.54	0.54	0.15		0.15	0.54
v/c Ratio	0.32	0.32	0.06		0.04	0.80
Control Delay	7.2	7.2	19.3		21.9	7.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	7.2	7.2	19.3		21.9	7.2
LOS	A	A	B		C	A
Approach Delay			7.2	19.3	7.4	
Approach LOS			A	B		A

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	41.9
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	7.5
Intersection Capacity Utilization	72.0%
Analysis Period (min)	15

Splits and Phases: 8: Eastman Crossing/Gate D & Watson Dr SE



## Lanes, Volumes, Timings

Buildout With Project

## 9: Mesa Del Sol Blvd &amp; Gate E/Eastman Crossing

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑↑		↑	↑↑	↑
Traffic Volume (vph)	13	4	13	340	3	85	5	1053	200	25	1588	5
Future Volume (vph)	13	4	13	340	3	85	5	1053	200	25	1588	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	200		0	200		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1645	0	1770	1593	0	1770	3454	0	1770	3539	1583
Flt Permitted	0.695			0.746			0.950			0.950		
Satd. Flow (perm)	1295	1645	0	1390	1593	0	1770	3454	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				92			36			73
Link Speed (mph)		30				35			35			35
Link Distance (ft)		419				491			470			342
Travel Time (s)		9.5				9.6			9.2			6.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	18	0	370	95	0	5	1362	0	27	1726	5
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases		4			8							6
Total Split (s)	29.4	29.4		29.4	29.4		9.5	51.0		9.6	51.1	51.1
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Act Effct Green (s)	24.8	24.8		24.8	24.8		5.0	45.6		5.1	47.4	47.4
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.06	0.55		0.06	0.57	0.57
v/c Ratio	0.04	0.04		0.89	0.18		0.05	0.71		0.25	0.85	0.01
Control Delay	23.5	13.6		55.5	7.0		40.8	16.7		45.4	21.0	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	23.5	13.6		55.5	7.0		40.8	16.7		45.4	21.0	0.0
LOS	C	B		E	A		D	B		D	C	A
Approach Delay		18.0			45.6			16.8			21.4	
Approach LOS		B			D			B			C	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 83

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 22.7

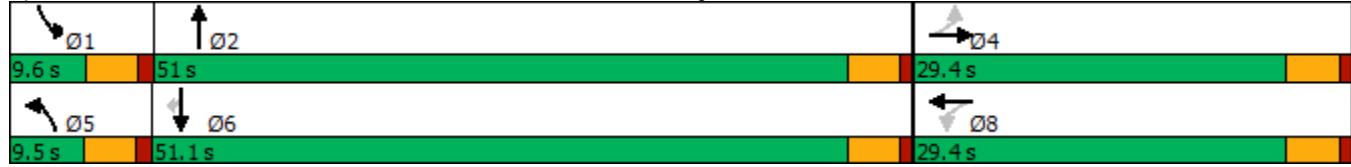
Intersection LOS: C

Intersection Capacity Utilization 76.9%

ICU Level of Service D

Analysis Period (min) 15

## Splits and Phases: 9: Mesa Del Sol Blvd &amp; Gate E/Eastman Crossing



Intersection

Intersection Delay, s/veh 10

Intersection LOS A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations



Traffic Vol, veh/h 13

0

10

20

322

0

Future Vol, veh/h 13

0

10

20

322

0

Peak Hour Factor 0.92

0.92

0.92

0.92

0.92

0.92

Heavy Vehicles, % 2

2

2

2

2

2

Mvmt Flow 14

0

11

22

350

0

Number of Lanes 1

0

1

1

1

0

Approach	EB	WB	NB
----------	----	----	----

Opposing Approach WB

EB

Opposing Lanes 2

1

0

Conflicting Approach Left NB

EB

Conflicting Lanes Left 0

1

1

Conflicting Approach Right NB

WB

Conflicting Lanes Right 1

0

2

HCM Control Delay 8

8.4

10.2

HCM LOS A

A

B

Lane	NBLn1	EBLn1	WBLn1	WBLn2
------	-------	-------	-------	-------

Vol Left, % 100% 0% 100% 0%

Vol Thru, % 0% 100% 0% 100%

Vol Right, % 0% 0% 0% 0%

Sign Control Stop Stop Stop Stop

Traffic Vol by Lane 322 13 10 20

LT Vol 322 0 10 0

Through Vol 0 13 0 20

RT Vol 0 0 0 0

Lane Flow Rate 350 14 11 22

Geometry Grp 2 5 7 7

Degree of Util (X) 0.41 0.019 0.018 0.032

Departure Headway (Hd) 4.214 4.897 5.867 5.363

Convergence, Y/N Yes Yes Yes Yes

Cap 851 735 614 672

Service Time 2.266 2.899 3.567 3.063

HCM Lane V/C Ratio 0.411 0.019 0.018 0.033

HCM Control Delay 10.2 8 8.7 8.2

HCM Lane LOS B A A A

HCM 95th-tile Q 2 0.1 0.1 0.1

## Lanes, Volumes, Timings

Buildout With Project

## 11: Gate G/Hawking Dr SE &amp; Crick Ave SE

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓		↑	↑		↑	↑	
Traffic Volume (vph)	51	900	8	2	576	30	20	3	7	243	3	750
Future Volume (vph)	51	900	8	2	576	30	20	3	7	243	3	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300			150			0	0		0	0	0
Storage Lanes	1			1			0	1		0	1	0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3536	0	1770	3511	0	1770	1660	0	1770	1585	0
Flt Permitted	0.950			0.950			0.123			0.750		
Satd. Flow (perm)	1770	3536	0	1770	3511	0	229	1660	0	1397	1585	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)		1				7			8			256
Link Speed (mph)		35				35			30			35
Link Distance (ft)		2075				1380			306			1115
Travel Time (s)		40.4				26.9			7.0			21.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	987	0	2	659	0	22	11	0	264	818	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8				2			6
Permitted Phases							2					6
Total Split (s)	9.6	26.3		9.6	26.3		39.1	39.1		39.1	39.1	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	5.2	24.9		5.2	21.4		32.5	32.5		32.5	32.5	
Actuated g/C Ratio	0.08	0.36		0.08	0.31		0.48	0.48		0.48	0.48	
v/c Ratio	0.41	0.76		0.01	0.60		0.20	0.01		0.40	0.92	
Control Delay	42.7	25.8		33.0	23.8		17.7	7.4		14.6	30.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.7	25.8		33.0	23.8		17.7	7.4		14.6	30.5	
LOS	D	C		C	C		B	A		B	C	
Approach Delay		26.7				23.8			14.3		26.6	
Approach LOS		C				C			B		C	

## Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 68.3

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 25.8

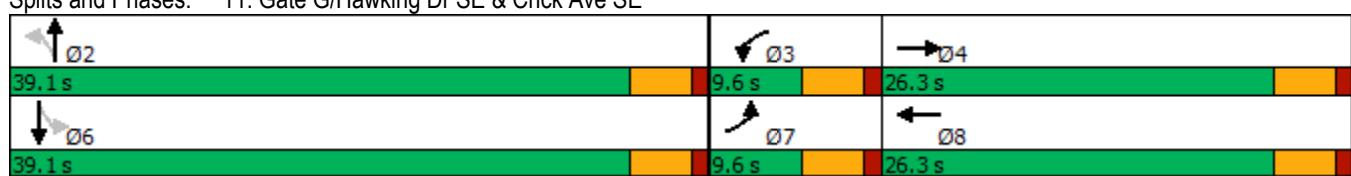
Intersection LOS: C

Intersection Capacity Utilization 87.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Gate G/Hawking Dr SE &amp; Crick Ave SE



Lanes, Volumes, Timings  
12: Gate H/Molina Rd & Crick Ave SE

Builldout With Project  
PM Peak Hour

	→	→	→	←	←	↑	↑	↑	↓	↓	←	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↓	↓	
Traffic Volume (vph)	109	1190	8	3	301	15	20	3	7	15	2	114
Future Volume (vph)	109	1190	8	3	301	15	20	3	7	15	2	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0	0	0
Storage Lanes	1		0	1		0	1		0	0	0	0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3536	0	1770	3514	0	1770	1660	0	0	1633	0
Flt Permitted	0.546			0.165			0.827				0.962	
Satd. Flow (perm)	1017	3536	0	307	3514	0	1540	1660	0	0	1581	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)		2				12			8			124
Link Speed (mph)		35				35			30			25
Link Distance (ft)		1380				1210			256			1120
Travel Time (s)		26.9				23.6			5.8			30.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1302	0	3	343	0	22	11	0	0	142	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4				8			2			6
Permitted Phases		4				8			2			6
Total Split (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Act Effct Green (s)	24.3	24.3		24.3	24.3		7.0	7.0			7.0	
Actuated g/C Ratio	0.60	0.60		0.60	0.60		0.17	0.17			0.17	
v/c Ratio	0.19	0.62		0.02	0.16		0.08	0.04			0.38	
Control Delay	4.5	6.5		3.7	3.6		18.1	12.8			9.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	4.5	6.5		3.7	3.6		18.1	12.8			9.2	
LOS	A	A		A	A		B	B			A	
Approach Delay		6.4				3.6			16.3		9.2	
Approach LOS		A				A			B		A	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 40.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 6.2

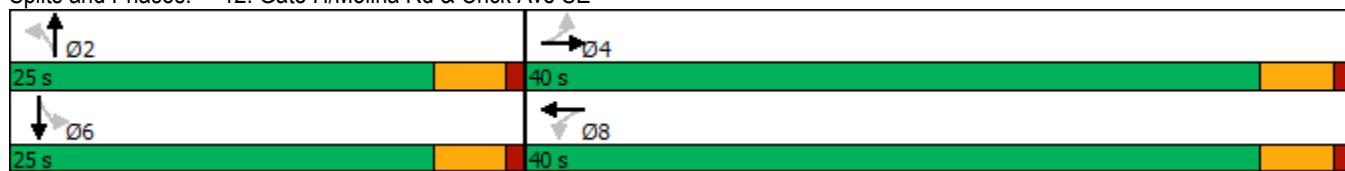
Intersection LOS: A

Intersection Capacity Utilization 63.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Gate H/Molina Rd & Crick Ave SE



Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↔↑	↖	↗	
Traffic Vol, veh/h	625	13	0	1050	20	10
Future Vol, veh/h	625	13	0	1050	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	679	14	0	1141	22	11
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	693	0	1257	347
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	571	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	898	-	163	649
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	529	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	898	-	163	649
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	529	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	23.9			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	163	649	-	-	898	-
HCM Lane V/C Ratio	0.133	0.017	-	-	-	-
HCM Control Delay (s)	30.5	10.6	-	-	0	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-

# **APPENDIX E**

**Bernalillo County  
Regional Outdoor Sports Complex  
Site Development Plan**

**SHEET INDEX:**

AS100	AREA PLAN
AS101	SITE PLAN
AS102	PHASING PLAN
AS401	SITE ENLARGEMENT PLAN - PHASE I
AS402	SITE ENLARGEMENT PLAN - PHASE II
LI101	IRRIGATION PLAN
LP101	PLANTING PLAN
A100	ARCHITECTURAL DESIGN GUIDELINES
DMP001	DRAINAGE MANAGEMENT PLAN - EXISTING CONDITIONS
DMP002	DRAINAGE MANAGEMENT PLAN - PROPOSED CONDITIONS
GP01	GRADING PLAN NORTH
GP02	GRADING PLAN SOUTH
UP01	UTILITY PLAN

**APPROVED PLAN INFORMATION:**

DRB 99-6, CASE #2-97-141  
DATE OF LAST REVISION: JULY 2009

# BERNALILLO COUNTY REGIONAL OUTDOOR SPORTS COMPLEX



PROJECT INFO

DATE 10/30/2019

PROJECT NO. 17-0090.001

ISSUE PURPOSE

ADMINISTRATIVE  
AMENDMENT

**LANDSCAPE ARCHITECT**

DEKKER/PERICH/SABATINI  
7601 JEFFERSON ST NE, SUITE 100  
ALBUQUERQUE, NM 87109  
PHONE: 505.761.9700  
FAX: 505.761.4222

**CIVIL ENGINEER**

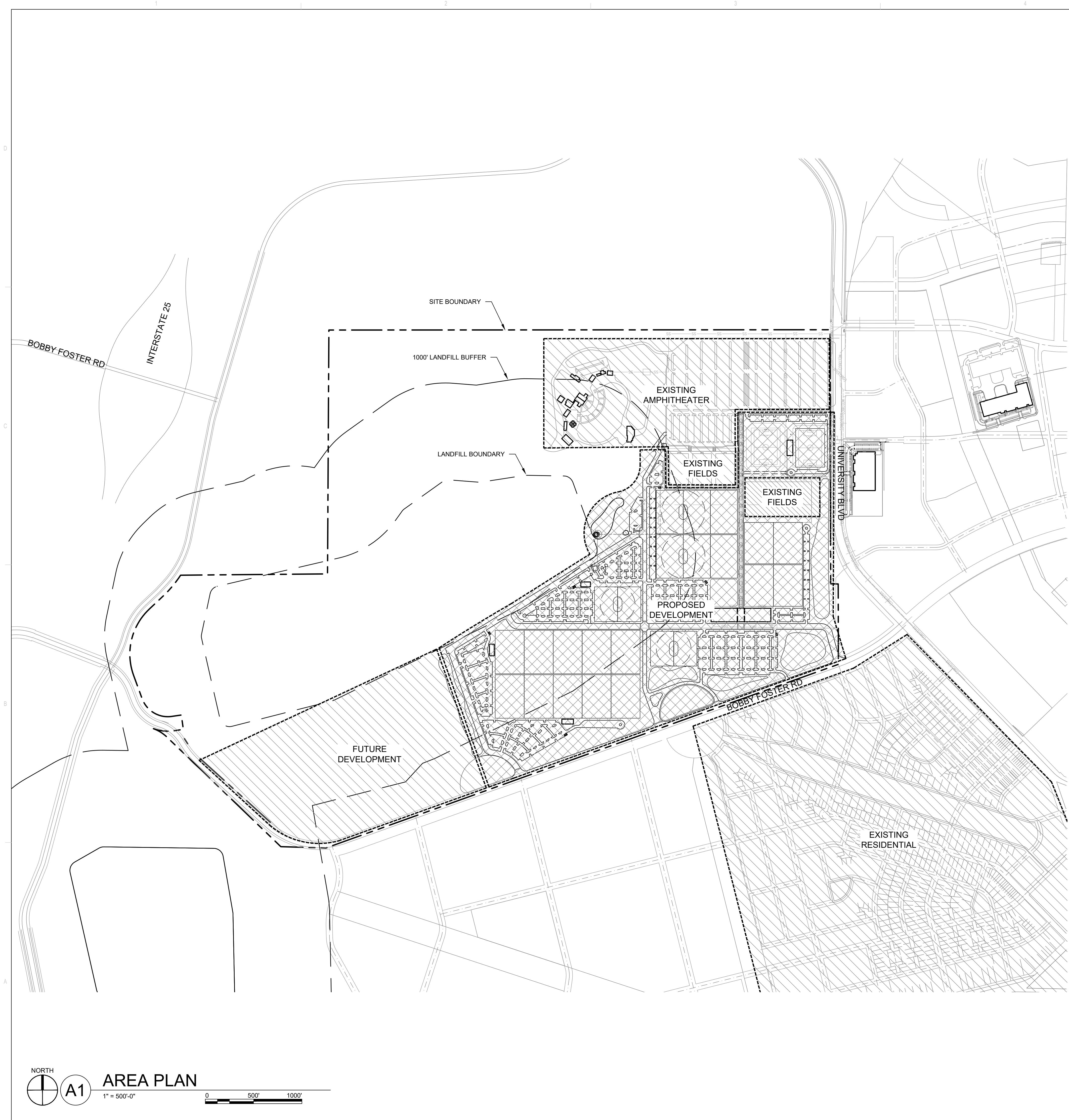
BOHANNON HUSTON INC.  
7500 JEFFERSON ST NE  
ALBUQUERQUE, NM 87109  
PHONE: (505) 823-1000  
FAX: (505) 761-4222

**OWNER**

BERNALILLO COUNTY PARKS & RECREATION DEPT.  
111 UNION SQ SE, SUITE 200  
ALBUQUERQUE, NM 87102  
PHONE: (505) 314-0404  
FAX: (505) 314-0436

## SITE INFORMATION

- PARCEL ACREAGE = 629.67 ACRES
  - DEVELOPED ACREAGE = 80.87
  - PROPOSED DEVELOPED ACREAGE =200.87 ACRES
  - CASE NUMBER: Z-97-141



## VICINITY MAP

The diagram illustrates the site boundary of the proposed development, which is bounded by several major roads. The boundary is defined by a thick black line. The surrounding roads are labeled as follows:

- BROADWAY BLVD SE
- INTERSTATE 25
- BOBBY FOSTER RD
- UNIVERSITY BLVD SE
- CRICK AVE SE
- MESA DEL SOL

A dashed line extends from the top right corner of the site boundary towards the University Boulevard label, indicating the exact location of the boundary line relative to the road.

DRAWN BY	BG
REVIEWED BY	KR
DATE	10/30/19
PROJECT NO.	17-0090.001
DRAWING NAME	

AREA PLAN

EEET NO.  
**AS100**  
OF

## GENERAL SHEET NOTES

- A. SITE DIMENSIONS COMPLY WITH CITY OF ALBUQUERQUE INTEGRATED DEVELOPMENT ORDINANCE (IDO) SECTION 14-16-5. DEVELOPMENT STANDARDS SHALL INCLUDE 5-2 (G) LANDFILL BUFFERS IF/WHEN STRUCTURES ARE LOCATED WITHIN LANDFILL BUFFERS.
- B. SITE PLAN SHALL COMPLY WITH ADA STANDARDS & GUIDELINES AND BUILT ACCORDING TO THE CITY OF ALBUQUERQUE STANDARDS.
- C. PARKING LOTS SHALL INTEGRATE LOW-IMPACT DESIGN TO MITIGATE STORMWATER DISCHARGE VOLUMES AND SUPPLEMENT IRRIGATION DEMAND.
- D. STREETS, PARKING SPACES AND ASSOCIATED DRIVES TO BE ASPHALT UNLESS NOTED OTHERWISE. PVIOUS PAVING, BASE COURSE, OR OTHER PVIOUS PAVING MATERIALS ARE ENCOURAGED AND PREFERRED.
- E. EXISTING METHANE MONITORING WELLS WILL BE MAPPED AND PROPERLY HANDLED DURING THE DESIGN PHASE, INCLUDING POTENTIAL PLUGGING AND ABANDONMENT.
- F. THE OWNER SHALL CONDUCT A GEOTECHNICAL INVESTIGATION PRIOR TO THE DESIGN PHASE, WHICH WILL INCLUDE THE TESTING OF SOILS FOR TRACE METALS ASSOCIATED WITH PAST SLUDGE DRYING AREAS AND THE CLEARANCE OF LAND USES THROUGH NMED.
- G. LIMITS OF EXISTING LANDFILL SHALL BE IDENTIFIED PRIOR TO DESIGN. FINAL ALIGNMENTS OF ROADS MAY BE MODIFIED TO ADDRESS LANDFILL LIMITS.
- H. TRANSIT STOPS SHALL BE COORDINATED BY PHASE TO ADHERE TO CABQ TRANSIT MASTER PLANNING AND SERVICE EXPANSION AS NECESSARY.

## PARKING COUNT

- A. REQUIRED PARKING SPACES AND STANDARD DRIVE DIMENSIONS SHALL BE IN ACCORDANCE WITH IDO STANDARDS AND TO BE DETERMINED AS DEVELOPMENT OCCURS.
- B. PARKING TO BE SHARED WITH EXISTING ISLETA AMPHITHEATER.

## SHEET KEYED NOTES

1. MULTI-USE TURF GRASS ATHLETIC FIELD
2. EXISTING TURF GRASS ATHLETIC FIELD
3. TURF GRASS USL PRACTICE FIELD
4. EXISTING PARKING, 4,154 SPACES
5. PARKING
6. RV PARKING
7. UNDEVELOPABLE AREA (FORMER LANDFILL)
8. PARK
9. STORMWATER RETENTION AREA
10. MAINTENANCE YARD
11. SPORT FIELD LIGHTING
12. REST AREA WITH SHADE AND RESTROOMS
13. SPORT LIFESTYLE CENTER
14. INDOOR SYNTHETIC TURF PRACTICE FACILITY
15. VEHICULAR ROADWAY
16. PEDESTRIAN WALK
17. EXISTING ISLETA AMPHITHEATER
18. PROPERTY LINE
19. EXISTING WELL WATER TANK
20. SYNTHETIC TURF MULTI-USE FIELD
21. EXISTING NON-POTABLE WELL
22. REMOTE CONTROL CAR PARK
23. TRASH ENCLOSURE, SEE A2/A\$402
24. EXISTING EASEMENT
25. TRANSIT STOP
26. 100' LANDFILL BUFFER
27. EXISTING ROAD TO REMAIN

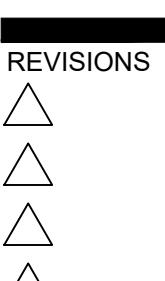
## SITE INFORMATION

	RECREATION AMENITIES	PARKING REQUIRED	PARKING PROVIDED
SPORTS LIFESTYLE CENTER	86,600 SF	2 SPACES / 1000 SF = 174 SPACES	752 (PHASES III & IV)
INDOOR PRACTICE FACILITY	112,134 SF	2 SPACES / 1000 SF = 225 SPACES	4,154 (SHARED) + 178 (PHASE I)
MAINT. FACILITY	3,000 SF	N/A	10
CLUBHOUSE	13,000 SF	2 SPACES / 1000 SF = 26 SPACES	4,154 (SHARED) + 24 = 4,178
OUTDOOR PRACTICE FACILITY	120,000 SF	4 SPACES / 1,000 SF = 480 SPACES	4,154 (SHARED) + 154 = 4,308
SPORTS FIELDS *	3,565,621 SF (30 FIELDS)	50 SPACES / FIELD = 1,550 SPACES	4,154 (SHARED) + 3970 (ALL PHASES)
<b>TOTAL PARKING</b>			<b>8139</b>

\* PARKING REQUIREMENT APPROVED BY BERNALILLO COUNTY PARKS & RECREATION

## LEGAL DESCRIPTION

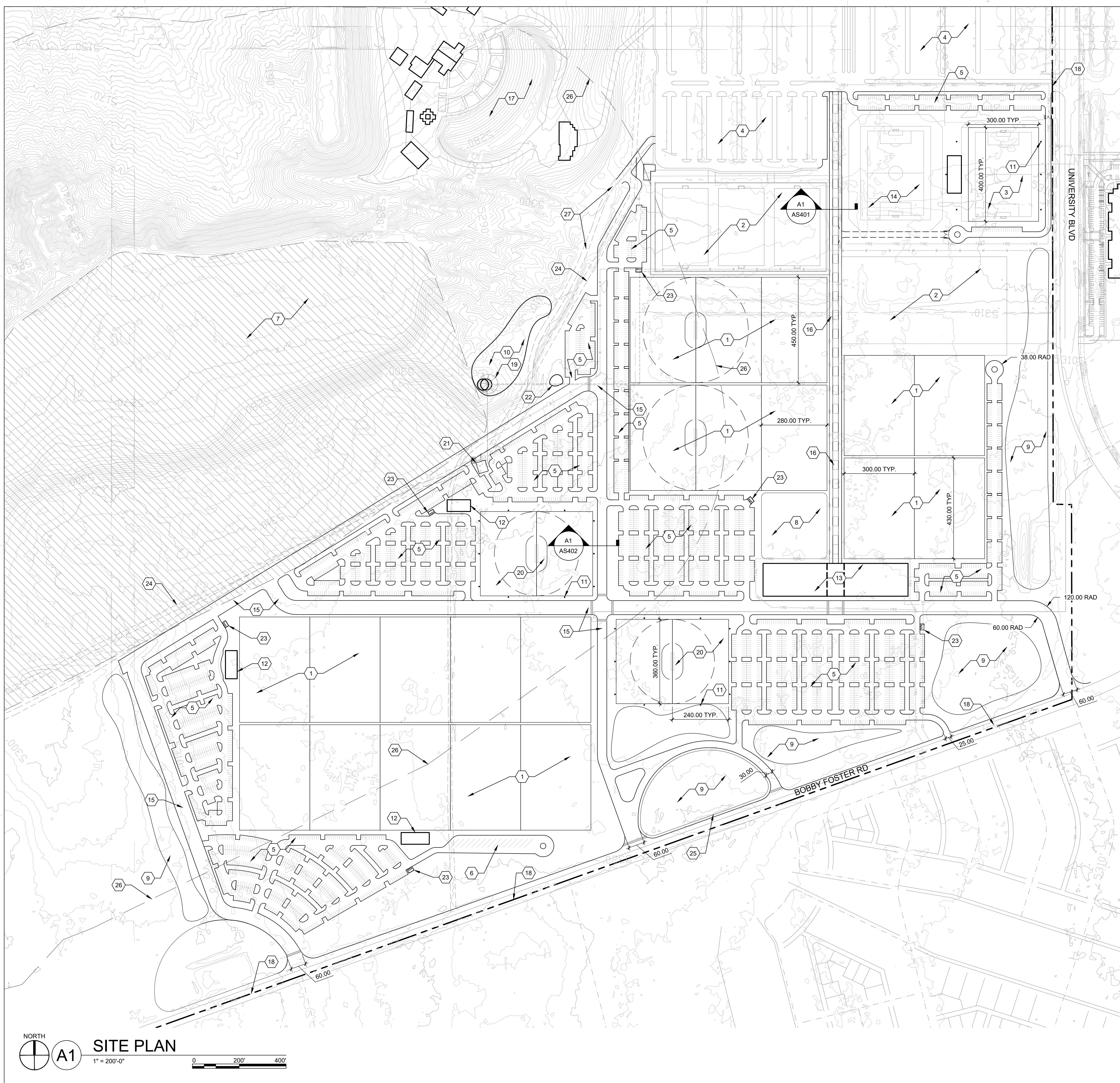
- A. THAT CERTAIN PARCEL SITUATE WITHIN SECTION 21, AND THE EAST HALF OF SECTION 20, TOWNSHIP 9 NORTH, RANGE 3 EAST, BERNALILLO COUNTY, NEW MEXICO CONSISTING OF 643 ACRES ±.



DRAWN BY BG  
REVIEWED BY KR  
DATE 10/30/19  
PROJECT NO. 17-0090.001  
DRAWING NAME

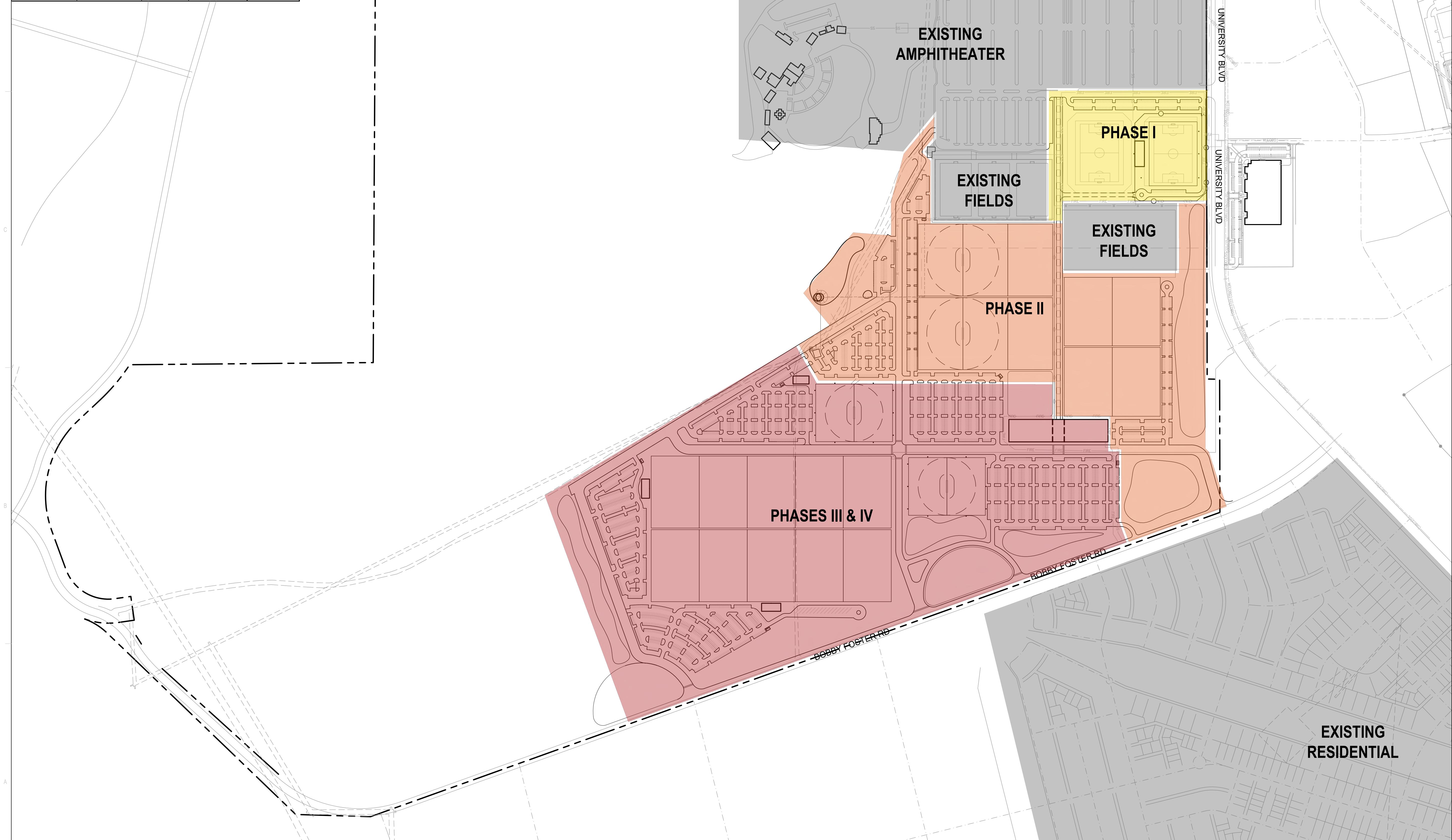
## SITE PLAN

SHEET NO. AS101 OF



**PARKING COUNT**

PHASE	TOTAL PARKING SPACES PROVIDED	ADA SPACES PROVIDED	ADA VAN SPACES PROVIDED	MOTORCYCLE SPACES PROVIDED
I	178	8	2	5
II	951	20	4	8
III & IV	2841	39	7	12
<b>TOTAL:</b>	<b>3970</b>	<b>67</b>	<b>13</b>	<b>25</b>
PROPOSED RV PARKING	15	0	0	0
EXISTING PARKING SPACES	4154	54	0	0
<b>GRAND TOTAL:</b>	<b>8139</b>	<b>121</b>	<b>13</b>	<b>25</b>



A1

**PHASING PLAN**

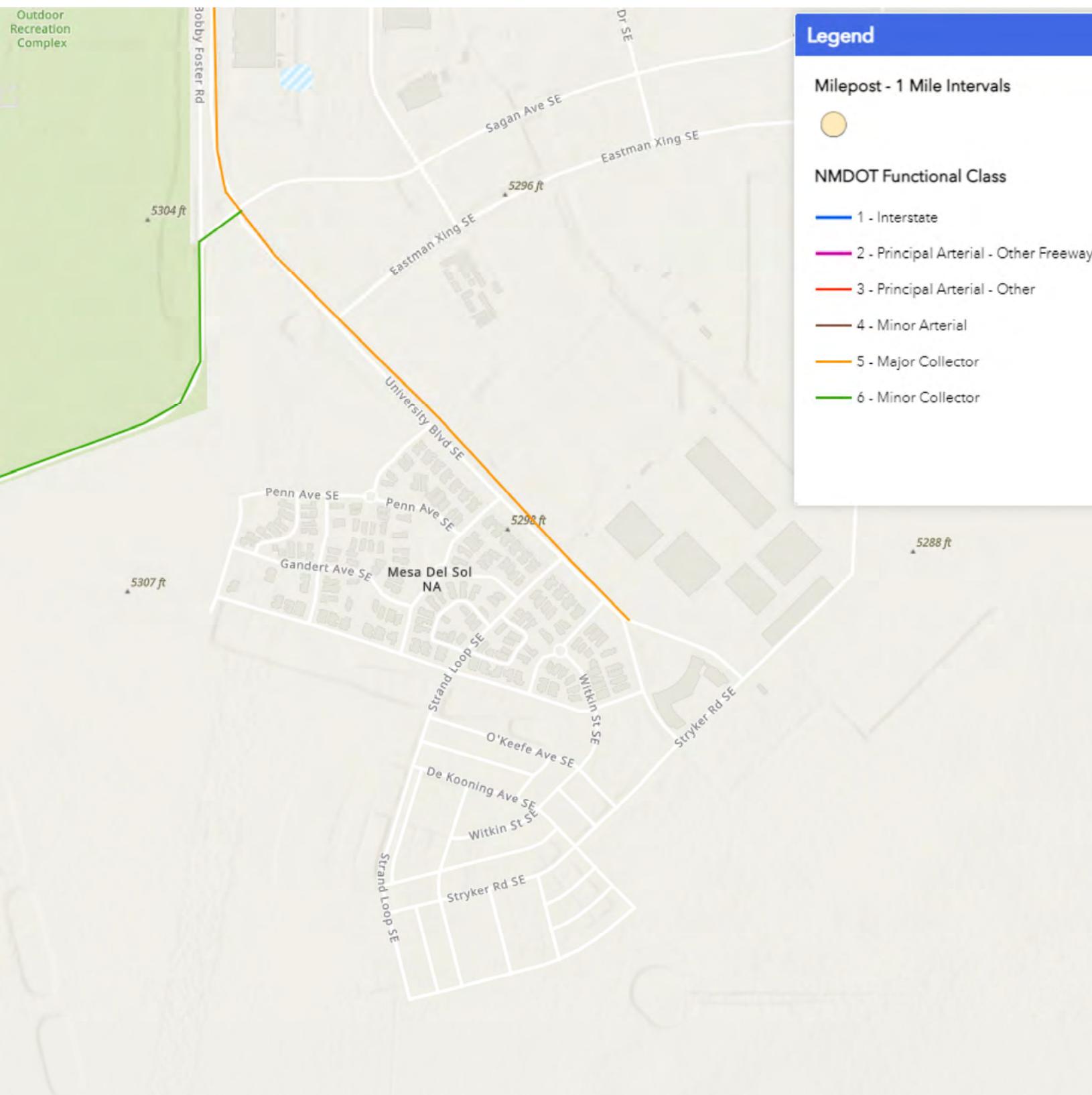
1' = 300'-0"

0 300' 600'

# **APPENDIX F**

## **NMDOT Roadway Functional Class Map**

Outdoor  
Recreation  
Complex



# **APPENDIX G**

**2021 AM and PM  
Turning Movement Counts**

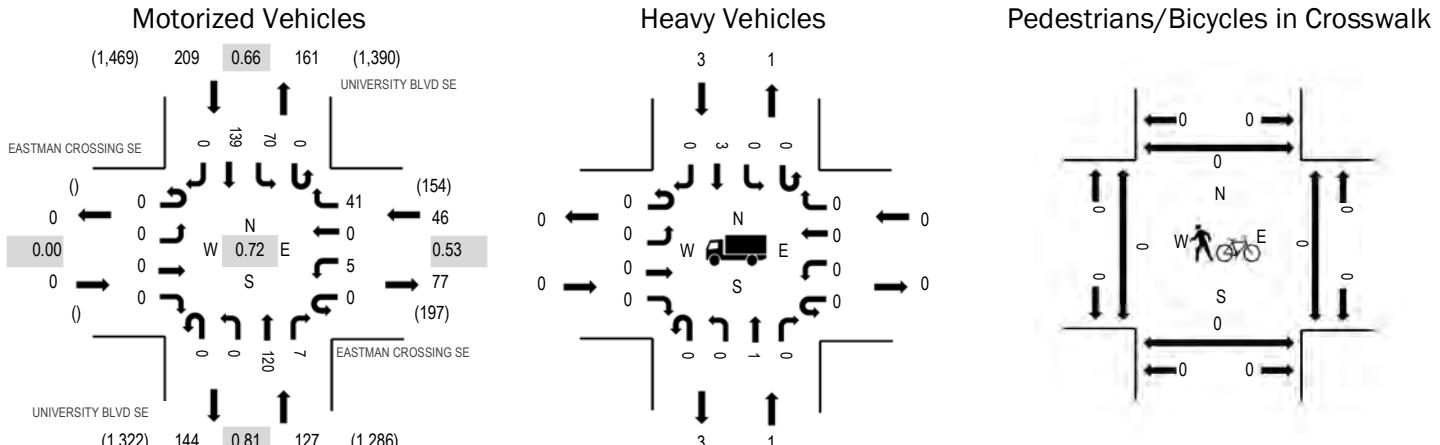
**Location:** 4 UNIVERSITY BLVD SE & EASTMAN CROSSING SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.53
NB	0.8%	0.81
SB	1.4%	0.66
All	1.0%	0.72

### Traffic Counts - Motorized Vehicles

Interval Start Time	EASTMAN CROSSING SE				EASTMAN CROSSING SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Total	Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound												
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
7:00 AM	0	0	0	0	0	1	0	1	0	0	22	0	0	4	26	0	54	292	
7:15 AM	0	0	0	0	0	0	0	1	0	0	35	1	0	0	24	28	0	89	317
7:30 AM	0	0	0	0	0	1	0	1	0	0	29	0	0	0	7	39	0	77	360
7:45 AM	0	0	0	0	0	0	0	0	0	0	25	0	0	0	6	41	0	72	382
8:00 AM	0	0	0	0	0	2	0	9	0	0	25	2	0	0	16	25	0	79	370
8:15 AM	0	0	0	0	0	2	0	17	0	0	27	5	0	0	41	40	0	132	348
8:30 AM	0	0	0	0	0	1	0	15	0	0	43	0	0	0	7	33	0	99	273
8:45 AM	0	0	0	0	0	0	0	1	0	0	22	0	0	0	1	36	0	60	217
9:00 AM	0	0	0	0	0	0	0	0	0	0	24	0	0	0	1	32	0	57	199
9:15 AM	0	0	0	0	0	0	0	1	0	0	28	0	0	0	0	28	0	57	199
9:30 AM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	1	21	0	43	187
9:45 AM	0	0	0	0	0	1	0	0	0	0	25	0	0	0	0	16	0	42	182
10:00 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	2	29	0	57	191
10:15 AM	0	0	0	0	0	0	0	2	0	0	25	1	0	0	0	17	0	45	182
10:30 AM	0	0	0	0	0	0	0	2	0	0	18	2	0	0	0	16	0	38	189
10:45 AM	0	0	0	0	0	0	0	2	0	0	26	0	0	0	1	22	0	51	221
11:00 AM	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	23	0	48	254
11:15 AM	0	0	0	0	0	0	0	1	0	0	18	1	0	0	1	31	0	52	282
11:30 AM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	0	44	0	70	297
11:45 AM	0	0	0	0	0	2	0	0	0	0	32	2	0	0	1	47	0	84	289
12:00 PM	0	0	0	0	0	1	0	1	0	0	27	0	0	0	1	46	0	76	264
12:15 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	34	0	67	243
12:30 PM	0	0	0	0	0	1	0	4	0	0	27	0	0	0	1	29	0	62	239
12:45 PM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	0	33	0	59	218
1:00 PM	0	0	0	0	0	0	0	0	0	0	20	1	0	0	1	33	0	55	209
1:15 PM	0	0	0	0	0	0	0	0	0	0	32	0	0	0	1	30	0	63	200
1:30 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	10	0	41	185

1:45 PM	0	0	0	0	0	0	1	0	0	29	0	0	1	19	0	50	197	
2:00 PM	0	0	0	0	0	0	1	0	0	21	0	0	2	22	0	46	196	
2:15 PM	0	0	0	0	0	0	1	0	0	26	0	0	1	20	0	48	227	
2:30 PM	0	0	0	0	0	1	0	1	0	0	17	1	0	4	29	0	53	252
2:45 PM	0	0	0	0	0	0	0	0	0	25	3	0	1	20	0	49	283	
3:00 PM	0	0	0	0	0	0	0	4	0	0	35	5	0	13	20	0	77	305
3:15 PM	0	0	0	0	0	0	0	4	0	0	27	1	0	16	25	0	73	292
3:30 PM	0	0	0	0	0	5	0	24	0	0	23	1	0	7	24	0	84	281
3:45 PM	0	0	0	0	0	0	0	17	0	0	29	0	0	0	25	0	71	258
4:00 PM	0	0	0	0	0	0	0	9	0	0	25	0	0	0	30	0	64	246
4:15 PM	0	0	0	0	0	1	0	5	0	0	32	0	0	1	23	0	62	250
4:30 PM	0	0	0	0	0	0	0	0	0	0	35	0	0	0	26	0	61	237
4:45 PM	0	0	0	0	0	0	0	1	0	0	29	0	0	0	29	0	59	218
5:00 PM	0	0	0	0	0	0	0	2	0	0	43	0	0	1	22	0	68	215
5:15 PM	0	0	0	0	0	0	0	1	0	0	20	0	0	0	28	0	49	193
5:30 PM	0	0	0	0	0	0	0	0	0	0	19	0	0	0	23	0	42	185
5:45 PM	0	0	0	0	0	1	0	1	0	0	28	0	0	0	26	0	56	184
6:00 PM	0	0	0	0	0	1	0	0	0	0	23	0	0	0	22	0	46	168
6:15 PM	0	0	0	0	0	0	0	0	0	0	19	1	0	0	21	0	41	
6:30 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	20	0	41	
6:45 PM	0	0	0	0	0	0	1	0	0	0	20	1	0	0	18	0	40	
Count Total	0	0	0	0	0	21	0	133	0	0	1,257	29	0	168	1,301	0	2,909	
Peak Hour	0	0	0	0	0	5	0	41	0	0	120	7	0	70	139	0	382	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk					
	EB	NB	WB	SB		EB	NB	WB	SB	Total	
7:00 AM	0	0	0	0	0	7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	0	1	9:00 AM	0	0	0	0	0
9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	1	1	9:45 AM	0	0	0	0	0
10:00 AM	0	3	0	0	3	10:00 AM	0	0	0	0	0
10:15 AM	0	0	0	0	0	10:15 AM	0	0	0	0	0
10:30 AM	0	0	0	0	0	10:30 AM	0	0	0	0	0
10:45 AM	0	0	0	1	1	10:45 AM	0	0	0	0	0
11:00 AM	0	0	0	1	1	11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	1	0	1
11:30 AM	0	1	0	0	1	11:30 AM	0	0	0	0	0
11:45 AM	0	1	0	0	1	11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	1	1	12:30 PM	0	0	0	0	0
12:45 PM	0	1	0	0	1	12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	1	1	1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	1	1	1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	1	1	1:45 PM	0	0	1	0	1
2:00 PM	0	0	0	1	1	2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0
2:45 PM	0	0	0	1	1	2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0

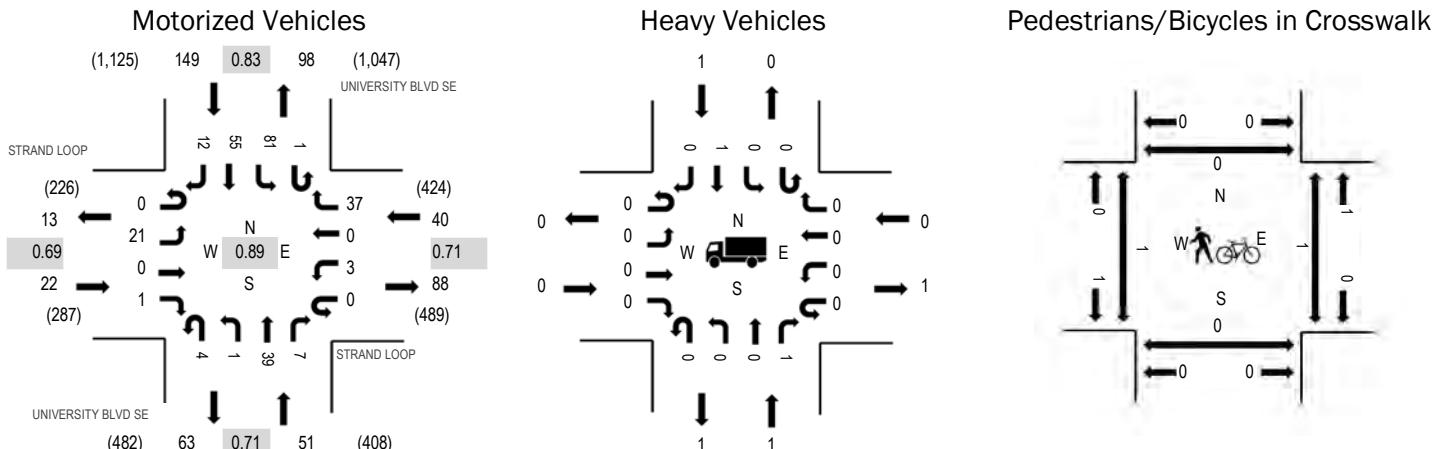
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3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
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4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	2	0	2
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	0	0	5:30 PM	0	0	4	0	4
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0	6:00 PM	0	0	0	0	0
6:15 PM	0	0	0	0	0	6:15 PM	0	0	2	0	2
6:30 PM	0	0	0	0	0	6:30 PM	0	0	0	0	0
6:45 PM	0	0	0	0	0	6:45 PM	0	0	0	0	0
Count Total	0	9	0	13	22	Count Total	0	0	13	0	13
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

**Location:** 5 UNIVERSITY BLVD SE & STRAND LOOP AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 11:45 AM - 12:45 PM

**Peak 15-Minutes:** 11:45 AM - 12:00 PM

**Peak Hour**


Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.69
WB	0.0%	0.71
NB	2.0%	0.71
SB	0.7%	0.83
All	0.8%	0.89

**Traffic Counts - Motorized Vehicles**

Interval Start Time	STRAND LOOP Eastbound				STRAND LOOP Westbound				UNIVERSITY BLVD SE Northbound				UNIVERSITY BLVD SE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	8	0	0	0	1	0	7	1	0	4	0	0	8	12	4	45	209
7:15 AM	0	11	0	0	0	0	0	11	0	0	6	0	0	11	11	2	52	213
7:30 AM	0	7	0	0	0	0	0	6	0	0	2	0	1	13	14	10	53	222
7:45 AM	0	7	0	0	0	0	0	10	0	0	2	0	0	16	18	6	59	235
8:00 AM	0	9	0	0	0	0	0	4	0	0	6	1	2	13	10	4	49	223
8:15 AM	0	7	0	0	0	1	0	6	0	0	7	0	0	15	20	5	61	227
8:30 AM	0	13	0	0	0	0	0	14	0	0	9	0	0	13	11	6	66	208
8:45 AM	0	3	0	0	0	0	0	8	0	0	4	1	0	14	11	6	47	184
9:00 AM	0	6	0	0	0	4	0	9	0	0	4	2	0	15	8	5	53	174
9:15 AM	0	8	0	0	0	0	0	5	0	0	5	1	0	14	8	1	42	172
9:30 AM	0	6	0	0	0	1	0	4	0	0	9	1	0	7	11	3	42	174
9:45 AM	0	5	0	0	0	0	0	5	0	0	9	0	0	9	5	4	37	166
10:00 AM	0	3	0	0	0	0	0	14	0	0	7	1	1	12	7	6	51	172
10:15 AM	0	2	0	0	0	0	0	14	0	0	9	1	0	9	9	0	44	159
10:30 AM	0	5	0	0	0	1	0	5	0	0	5	1	0	6	9	2	34	164
10:45 AM	0	3	0	0	0	0	0	7	0	0	12	1	1	7	8	4	43	183
11:00 AM	0	7	1	0	0	1	0	6	0	0	5	0	1	4	10	3	38	214
11:15 AM	0	2	1	0	0	1	0	1	1	0	14	0	0	18	8	3	49	250
11:30 AM	0	6	0	0	0	0	0	4	0	0	5	2	0	22	8	6	53	253
11:45 AM	0	5	0	0	0	1	0	15	1	1	5	2	0	30	10	4	74	262
12:00 PM	0	5	0	1	0	2	0	7	0	0	12	0	1	22	19	5	74	237
12:15 PM	0	5	0	0	0	0	0	6	1	0	9	2	0	18	11	0	52	207
12:30 PM	0	6	0	0	0	0	0	9	2	0	13	3	0	11	15	3	62	208
12:45 PM	0	3	0	2	0	1	0	8	0	0	8	0	0	12	11	4	49	185
1:00 PM	0	5	0	0	0	1	0	7	0	0	7	0	0	11	10	3	44	178
1:15 PM	0	6	0	0	0	0	0	7	0	0	9	4	1	7	15	4	53	165
1:30 PM	0	5	0	1	0	0	0	13	0	0	9	0	1	4	4	2	39	148

1:45 PM	0	6	0	0	0	0	0	9	0	0	9	1	0	9	4	4	42	144
2:00 PM	0	3	0	0	0	0	0	9	1	0	6	0	0	7	4	1	31	143
2:15 PM	0	2	0	1	0	0	0	4	0	0	13	0	0	4	5	7	36	162
2:30 PM	0	4	0	0	0	0	0	2	0	0	9	0	0	13	7	0	35	175
2:45 PM	0	4	0	0	0	1	0	4	0	0	12	0	0	6	10	4	41	178
3:00 PM	0	12	0	0	0	1	0	4	0	0	13	0	1	8	10	1	50	186
3:15 PM	0	11	0	0	0	0	0	6	0	0	11	0	0	11	7	3	49	180
3:30 PM	0	7	0	0	0	0	0	5	0	0	5	0	0	6	7	8	38	186
3:45 PM	0	3	0	0	0	5	0	12	1	0	13	0	0	4	3	8	49	197
4:00 PM	0	3	0	1	0	2	0	12	1	0	4	0	0	4	8	9	44	202
4:15 PM	0	9	0	2	0	0	0	8	0	0	12	0	0	2	17	5	55	209
4:30 PM	0	7	0	2	0	0	0	13	1	0	9	0	1	6	7	3	49	188
4:45 PM	0	5	0	1	0	0	0	14	1	0	9	0	0	10	4	10	54	176
5:00 PM	0	9	0	0	0	1	0	18	0	0	7	1	1	4	5	5	51	171
5:15 PM	0	4	0	0	0	0	0	4	0	0	9	0	0	2	6	9	34	157
5:30 PM	0	2	0	0	0	0	0	8	0	0	7	0	0	2	8	10	37	155
5:45 PM	0	5	0	1	0	2	1	11	0	0	8	4	0	4	4	9	49	151
6:00 PM	0	5	0	0	0	0	0	11	0	0	5	0	0	5	5	6	37	135
6:15 PM	0	4	0	0	0	0	0	12	0	0	1	0	0	2	6	7	32	
6:30 PM	0	4	0	0	0	0	0	8	0	0	5	1	2	3	3	7	33	
6:45 PM	0	5	1	0	0	1	0	9	0	0	3	0	0	3	8	3	33	
Count Total	0	272	3	12	0	28	1	395	11	1	366	30	14	456	431	224	2,244	
Peak Hour	0	21	0	1	0	3	0	37	4	1	39	7	1	81	55	12	262	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	1
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0
8:00 AM	0	1	0	2	3	8:00 AM	0	0	0	0
8:15 AM	0	0	0	1	1	8:15 AM	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0
8:45 AM	0	0	1	0	1	8:45 AM	0	0	0	0
9:00 AM	0	0	1	0	1	9:00 AM	1	2	0	0
9:15 AM	0	0	0	0	0	9:15 AM	1	0	0	0
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0
9:45 AM	0	1	0	1	2	9:45 AM	1	0	0	0
10:00 AM	0	1	2	0	3	10:00 AM	2	1	0	0
10:15 AM	0	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	0	0	0	0	0	10:30 AM	1	0	0	0
10:45 AM	0	0	0	1	1	10:45 AM	2	0	0	0
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	0	0
11:30 AM	0	0	1	0	1	11:30 AM	0	0	0	0
11:45 AM	0	0	0	0	0	11:45 AM	0	0	0	0
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	1	0	1	0
12:30 PM	0	1	0	1	2	12:30 PM	0	0	0	0
12:45 PM	0	0	1	0	1	12:45 PM	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0
1:15 PM	0	0	0	0	0	1:15 PM	1	0	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	1	0
1:45 PM	0	0	0	1	1	1:45 PM	2	0	1	0
2:00 PM	0	0	0	1	1	2:00 PM	0	0	0	0
2:15 PM	0	0	0	0	0	2:15 PM	1	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	2	0	0	0
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0

3:30 PM	0	0	0	0	0	3:30 PM	1	0	0	0	1
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	1	1
4:00 PM	0	0	0	0	0	4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	2	0	0	1	3
5:45 PM	0	0	0	0	0	5:45 PM	2	0	0	1	3
6:00 PM	0	0	0	0	0	6:00 PM	1	0	0	0	1
6:15 PM	0	0	0	0	0	6:15 PM	1	0	0	0	1
6:30 PM	0	0	0	0	0	6:30 PM	1	0	0	0	1
6:45 PM	0	0	0	0	0	6:45 PM	2	1	0	0	3
Count Total	0	5	6	10	21	Count Total	29	5	3	4	41
Peak Hour	0	1	0	1	2	Peak Hour	1	0	1	0	2

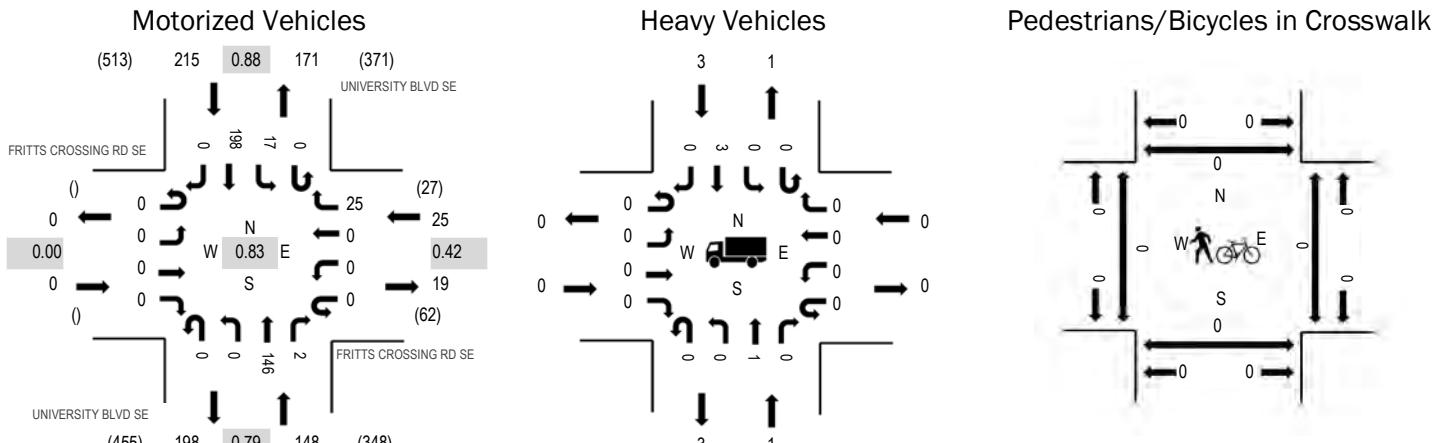
**Location:** 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE AM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 07:45 AM - 08:45 AM

**Peak 15-Minutes:** 08:15 AM - 08:30 AM

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.42
NB	0.7%	0.79
SB	1.4%	0.88
All	1.0%	0.83

### Traffic Counts - Motorized Vehicles

Interval Start Time	FRITTS CROSSING RD SE				FRITTS CROSSING RD SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Rolling Hour		
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru
7:00 AM	0	0	0	0	0	1	0	0	1	0	25	0	0	1	29	0	57	307	
7:15 AM	0	0	0	0	0	0	0	0	0	0	27	0	0	0	3	54	0	84	343
7:30 AM	0	0	0	0	0	0	0	1	0	0	30	0	0	0	8	42	0	81	376
7:45 AM	0	0	0	0	0	0	0	2	0	0	30	0	0	0	5	48	0	85	388
8:00 AM	0	0	0	0	0	0	0	6	0	0	31	1	0	0	3	52	0	93	365
8:15 AM	0	0	0	0	0	0	15	0	0	0	38	1	0	0	3	60	0	117	331
8:30 AM	0	0	0	0	0	0	0	2	0	0	47	0	0	0	6	38	0	93	275
8:45 AM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	5	35	0	62	226
9:00 AM	0	0	0	0	0	0	0	0	0	0	23	0	0	0	3	33	0	59	216
9:15 AM	0	0	0	0	0	0	0	0	0	0	28	0	0	0	7	26	0	61	
9:30 AM	0	0	0	0	0	0	0	0	0	0	20	0	0	0	5	19	0	44	
9:45 AM	0	0	0	0	0	0	0	0	0	0	24	0	0	0	11	17	0	52	
Count Total	0	0	0	0	0	1	0	26	1	0	345	2	0	0	60	453	0	888	
Peak Hour	0	0	0	0	0	0	0	25	0	0	146	2	0	0	17	198	0	388	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1	7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	1	2	8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	1	0	0	1	9:00 AM	0	0	0	0	0

9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	1	1	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0	9:45 AM	0	0	0	0	0
Count Total	0	3	0	4	7	Count Total	0	0	0	0	0
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

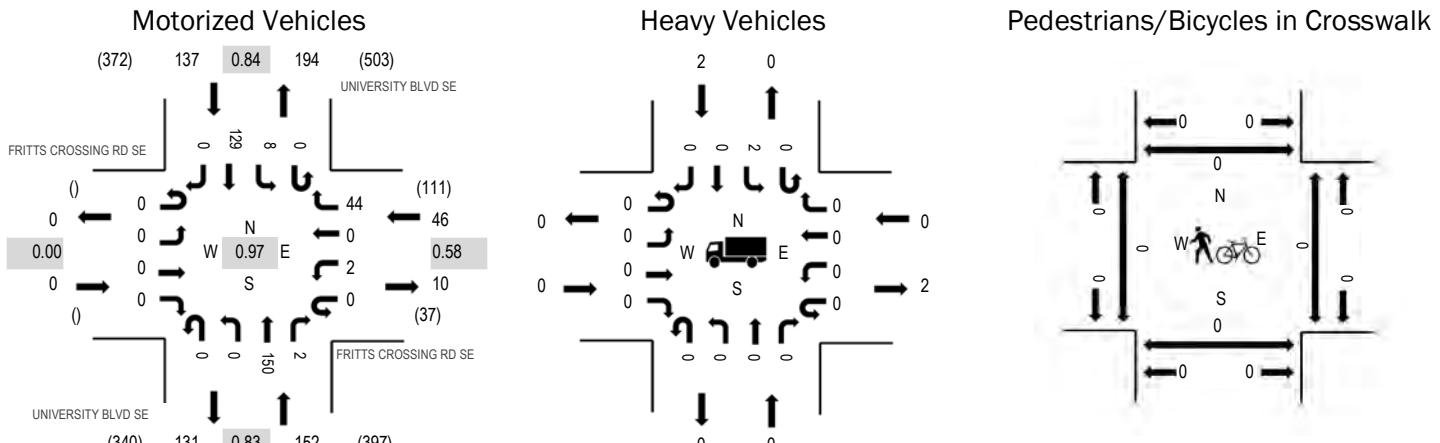
**Location:** 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE PM

**Date:** Wednesday, April 21, 2021

**Peak Hour:** 03:00 PM - 04:00 PM

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

### Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.58
NB	0.0%	0.83
SB	1.5%	0.84
All	0.6%	0.97

### Traffic Counts - Motorized Vehicles

Interval Start Time	FRITTS CROSSING RD SE				FRITTS CROSSING RD SE				UNIVERSITY BLVD SE				UNIVERSITY BLVD SE				Rolling Hour	
	Eastbound		Westbound		Northbound		Southbound		U-Turn		Left		Thru		Right			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	0	0	0	0	0	0	6	0	0	36	1	0	1	35	0	79	335
3:15 PM	0	0	0	0	0	1	0	10	0	0	33	1	0	2	39	0	86	316
3:30 PM	0	0	0	0	0	0	0	20	0	0	35	0	0	1	30	0	86	287
3:45 PM	0	0	0	0	0	1	0	8	0	0	46	0	0	4	25	0	84	277
4:00 PM	0	0	0	0	0	0	0	4	0	0	29	0	0	0	27	0	60	267
4:15 PM	0	0	0	0	0	1	0	6	0	0	29	0	0	1	20	0	57	272
4:30 PM	0	0	0	0	0	0	0	11	0	0	40	0	0	1	24	0	76	274
4:45 PM	0	0	0	0	0	0	0	9	0	0	34	0	0	3	28	0	74	267
5:00 PM	0	0	0	0	0	0	0	6	0	0	38	0	0	1	20	0	65	278
5:15 PM	0	0	0	0	0	0	0	6	0	0	19	0	0	2	32	0	59	
5:30 PM	0	0	0	0	0	0	0	4	0	0	24	0	0	11	30	0	69	
5:45 PM	0	0	0	0	0	0	0	18	0	0	32	0	0	8	27	0	85	
Count Total	0	0	0	0	0	3	0	108	0	0	395	2	0	35	337	0	880	
Peak Hour	0	0	0	0	0	2	0	44	0	0	150	2	0	8	129	0	335	

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles				Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB		EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	1	1	0	0	0	0	0
3:45 PM	0	0	0	1	1	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0
4:15 PM	0	0	1	1	2	4:15 PM	0	0	0	0
4:30 PM	0	0	1	1	2	4:30 PM	0	0	0	0
4:45 PM	0	0	1	0	1	4:45 PM	0	1	0	1
5:00 PM	0	0	1	0	1	5:00 PM	0	0	0	0

5:15 PM	0	0	0	0	0	5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	0	0	2	0	2
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	0	4	4	8	Count Total	0	2	2	0	4
Peak Hour	0	0	0	2	2	Peak Hour	0	0	0	0	0

# **APPENDIX H**

## **NIA for the Proposed Charter School**

**Memorandum**

To: Brennon Williams – Planning Department Director  
(Albuquerque, New Mexico)

From: Roxanne Medina, PE, PTOE (Huitt-Zollars)

Subject: Montage Units Charter School Neighborhood Impact Assessment (NIA)

Date: August 25, 2021

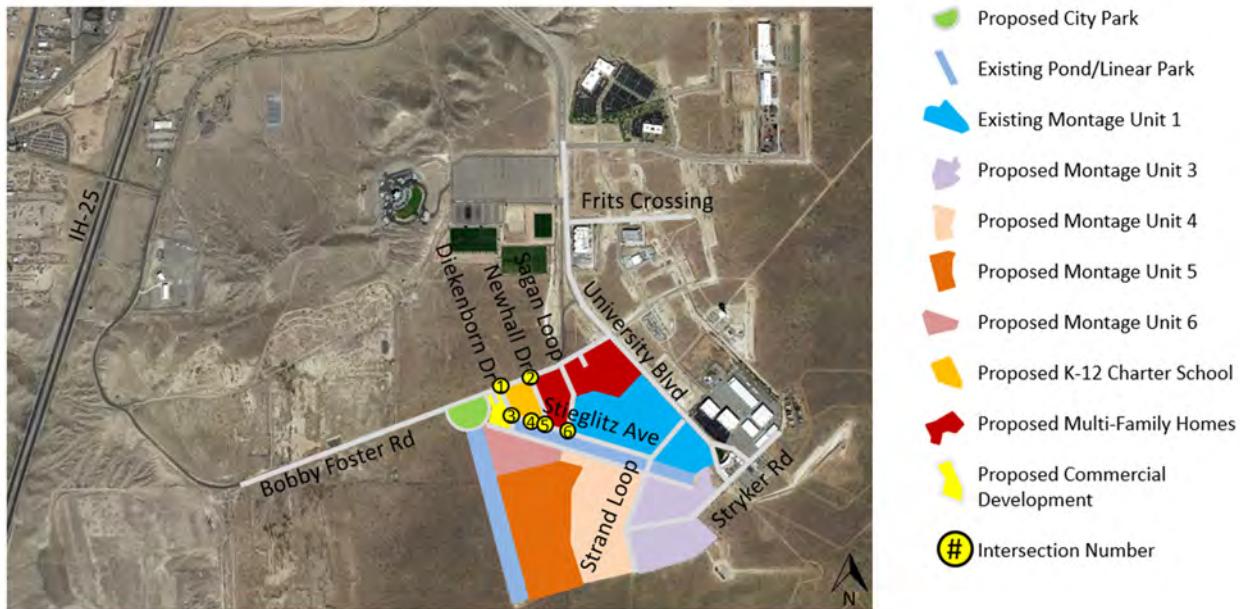
**SECTION 1 - INTRODUCTION**

The City of Albuquerque, New Mexico amended Ordinance Chapter 6, Article 5, Part 4, Section 3 ROA 1994 with Bill F/S 0-13-61 on January 22, 2014. This ordinance requires a Neighborhood Impact Assessment (NIA) to mitigate impacts of a Public, Private, or Charter School prior to approval of a Curb-cut application. This technical memorandum analyzes the impacts of the proposed K-12 Charter School in the proposed Montage Units subdivision in Albuquerque, New Mexico.

**1.1 Site Location / Study Area**

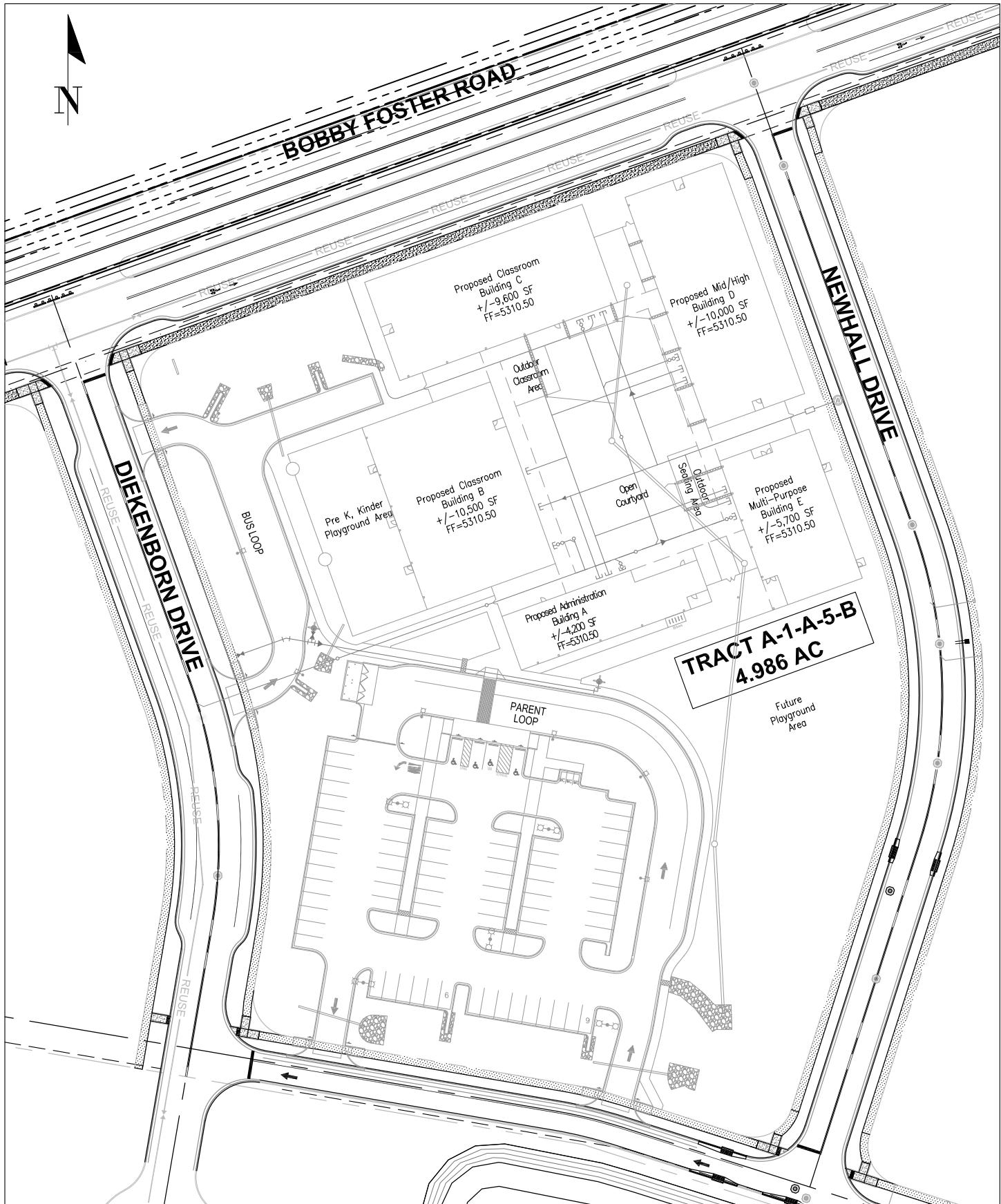
The proposed Charter School, The International School at Mesa del Sol, is an Albuquerque Public School locally authorized charter that will be located on the south side of Bobby Foster Rd and west of University Blvd. The charter school is currently located at 2660 Eastman Crossing which is 0.50 miles east of the proposed site. The student population comes from all over the metro areas representing the 21 zip codes in and around Albuquerque with the mission of empower students within an inclusive environment that fosters authentic experiences. The proposed site is approximately 4.99 acres and is expected to service 200 students from K-12. Currently, the sites for the proposed development is vacant. **Figure 1** identifies the project areas in relation to the surrounding roadway network. The proposed development will abut two new roads including Newhall Dr and Diebenkorn Dr, and two existing roadway, Stieglitz Ave and Bobby Foster Rd. Bobby Foster Rd will be widened and realigned to connect at the intersection of University Blvd and Eastman Crossing. The proposed charter school will connect to Diebenkorn Dr with two connections (one entrance and one exit) to Diebenkorn Dr for a bus loop and two connection to Stieglitz Ave (one entrance and one exit) for a parent loop and parking lot access. Surrounding streets and subdivisions are also identified **Figure 1**. **Figure 2** shows the proposed site plan for the Charter School Site development.

## LEGEND



**Figure 1 - Study Area**

Six major intersections around the development were investigated for this study. **Table 1** lists the intersections investigated, the numbering convention used in this report, and the intersection control type. The study intersections are also identified with corresponding intersection numbers in **Figure 1**.



**Table 1 – Intersections Identified for Impact Analysis Numbering and Control Type**

Intersection Numbering	Location	Control Type
1	Bobby Foster Rd and Diebenkorn Dr	Unsignalized
2	Bobby Foster Rd and Newhall Dr	Unsignalized
3	Stieglitz Ave and Diebenkorn Dr	Unsignalized
4	Stieglitz Ave and Entrance Driveway	Unsignalized
5	Stieglitz Ave and Newhall Dr	Unsignalized
6	Stieglitz Ave and Sagan Loop	Unsignalized

Intersection 1 will be an unsignalized three-leg intersection at Bobby Foster Rd and Diebenkorn Dr. Northbound Diebenkorn Dr will include one stop controlled shared left-through-right turn lane. Eastbound Bobby Foster Rd will include one through lane, and one shared through-right turn lane. Westbound Bobby Foster Rd will include one through lane, and one shared through-left turn lane.

Intersection 2 will be an unsignalized three-leg intersection at Bobby Foster Rd and Newhall Dr. Northbound Newhall Dr will include one stop controlled shared left-through-right turn lane. Eastbound Bobby Foster Rd will include one through lane, and one shared through-right turn lane. Westbound Bobby Foster Rd will include one through lane, and one shared through-left turn lane.

Intersection 3 is an unsignalized three-leg intersection at Stieglitz Ave and Diebenkorn Dr. It includes one stop controlled westbound shared left-right-turn lane on Stieglitz Ave. Northbound Diebenkorn Dr includes a through lane. Southbound Diebenkorn Dr includes one through lane.

Intersection 4 is an unsignalized three-leg intersection at Stieglitz Ave and the entrance driveway to the proposed parent loop/parking lot at the Charter School. It includes one westbound shared through-right-turn lane on Stieglitz Ave. The eastbound and southbound lanes only have one receiving lane each and no outbound lanes.

Intersection 5 is an unsignalized three-leg intersection at Stieglitz Ave and Newhall Dr. It includes one stop controlled southbound shared left-right turn lane on Newhall Dr. Westbound Stieglitz Ave includes a shared through-right-turn lane. Since Stieglitz Ave is a one-way roadway, eastbound Stieglitz Ave only has one receiving lane each.

Intersection 6 is an unsignalized four-leg intersection at Stieglitz Ave and Sagan Loop. It includes one stop controlled westbound shared left-through-right-turn lane on Stieglitz Ave. Eastbound Stieglitz Ave only has one receiving lane each and no outbound lanes. Northbound Sagan Loop includes one shared through-left-turn lane. Southbound Sagan Loop includes one shared through-right-turn lane.

## 1.2 Existing Zoning

The proposed developments are classified as PC according to the City of Albuquerque Zoning Map, which is provided in **Figure 3**. Zoning PC represents a Planned Community zone. To the south, east, and west of the proposed development are also classified as PC zones. To the north of the proposed development is a park and open space zone.

Montage Units Albuquerque, New Mexico



**Figure 3 - Study Area Zoning Map**

## 1.3 Existing Developments

Surrounding the proposed development are mainly undeveloped lots, one residential development to the southeast (Montage Unit 1), and one commercial service development (Albuquerque Studios) to the southeast. To the east of the proposed Charter School there are plans for a multi-family home development and to the south are plans for four detached single-family developments (Montage Units 3-6). To the west of the proposed Charter School is a proposed 14,000 sf commercial development. The Montage Units and Multi-Family developments are within the project area and incorporated into this study since trips from these developments will have the Charter School as a destination. The Montage Unit 1, Montage Unit 3, Montage Unit 4, Montage Unit 5, Montage Unit 6, and Multi-Family developments are estimated to have 200, 150, 200, 175, 85, and 288 units, respectively.

## SECTION 2 - METHODOLOGY

To determine the neighborhood impacts of the proposed charter school, a queue analysis; a pedestrian and bicycle circulation and routes analysis; a pedestrian and vehicle conflict analysis; and a transit route analysis were conducted. The following sections summarize the methodology for each analysis. At the time of this study, there are no other proposed schools in the project area. The charter school brings a K-12 International Baccalaureate (IB) curriculum to the students of Albuquerque. To be conservative in the analyses, it was assumed that the students of the charter school would live in the proposed Montage Unit developments near the school.

### 2.1 Queue/Noise and Air Quality Impact Analysis

Since noise and air quality are correlated to queued vehicles, a queue analysis was conducted in this study. This analysis checked that the proposed queue length within the school site parent drop off area and the bus loop, shown in **Figure 2**, were not exceeded by the queue expected during the highest peak hour. The expected queue length at the parent drop off area was calculated using a service rate for drop off and an arrival distribution from data collected in a traffic modeling study for Mountain View Middle School in Holden, Massachusetts by the Worcester Polytechnic Institute. This data is provided in **Appendix A**. The service time for each vehicle was calculated from when a car dropping off a student parked until the car began to move. If more than one vehicle was dropping off a student, the service time was calculated from when the first vehicle stopped until the last vehicle departed. The average service time of 19 seconds per vehicle was used in this study. For the arrival distribution, the percent of vehicles arriving every five minutes prior to the school start was determined. **Table 2** below shows the percent distribution of vehicles arriving during the peak hour.

**Table 2 – Percent Distribution for a School during the Peak Hour**

Time Prior to School Start	% Distribution
> 45 min prior	*-
45 min prior	7%
40 min prior	7%
35 min prior	6%
30 min prior	7%
25 min prior	13%
20 min prior	19%
15 min prior	20%
10 min prior	16%
5 min prior	4%

\*-No data available

For the bus loop, the existing queue length was calculated assuming the three busses that currently service the charter school arrived at the same time. This queue length was checked against the proposed bus loop length shown in **Figure 2**.

## 2.2 Pedestrian and Bicycle Circulation and Routes Analysis

Since the average American will more likely walk rather than drive within a distance of 0.25 mile, routes within a 0.25-mile radius to and from the proposed charter school will be evaluated using the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design, and Operation of Pedestrian Facilities. Routes will be evaluated to determine whether sidewalks, bike routes, and other safety features to keep pedestrians safe are present.

## 2.3 Pedestrian and Vehicle Conflict Analysis

To determine the pedestrian and vehicle conflicts, the Pedestrian Level of Service (LOS), and control delay were determined.

Pedestrian LOS at two-way stopped controlled (TWSC) intersections is a measure of pedestrians crossing a traffic stream not controlled by a stop sign. The LOS describes the quality of traffic operation on roadway facilities. The traffic capacity of intersections was evaluated to determine the LOS for the AM and PM peak-hours. The Highway Capacity Manual defines the LOS and is widely used for traffic engineering studies. LOS range from A (best) to F (poorest). **Table 3** outlines the LOS definitions for pedestrians at a TWSC intersection.

**Table 3 – Level of Service Intersection Standards (Adapted from the HCM 6<sup>th</sup> Edition)**

LOS	Control Delay (sec/pedestrian group)	Traffic Flow Characteristics
A	0-5	Usually no conflicting traffic.
B	>5-10	Occasionally some delay due to conflicting traffic.
C	>10-20	Delay noticeable to pedestrians, but not inconveniencing.
D	>20-30	Delay noticeable and irritating, increased likelihood of risk taking.
E	>30-45	Delay approaches tolerance level, risk-taking behavior likely.
F	>45	Delay exceeds tolerance level, high likelihood of pedestrian risk taking.

< = less than

> = greater than

Control delay is calculated for the entire crosswalk for each crosswalk not controlled by a stop sign. When a median is present, each crosswalk is the sum of both crosswalk segments. Pedestrian delay at each crosswalk segment is calculated by taking a weighted average of the pedestrian group delay at each segment, respectively. Using the delay criteria in **Table 3**, a LOS value may be assigned to each crosswalk not controlled by a stop sign for each of the study intersections.

For this study, Synchro 11 software was used to analyze the traffic conditions for the 2022 Build Out scenario.

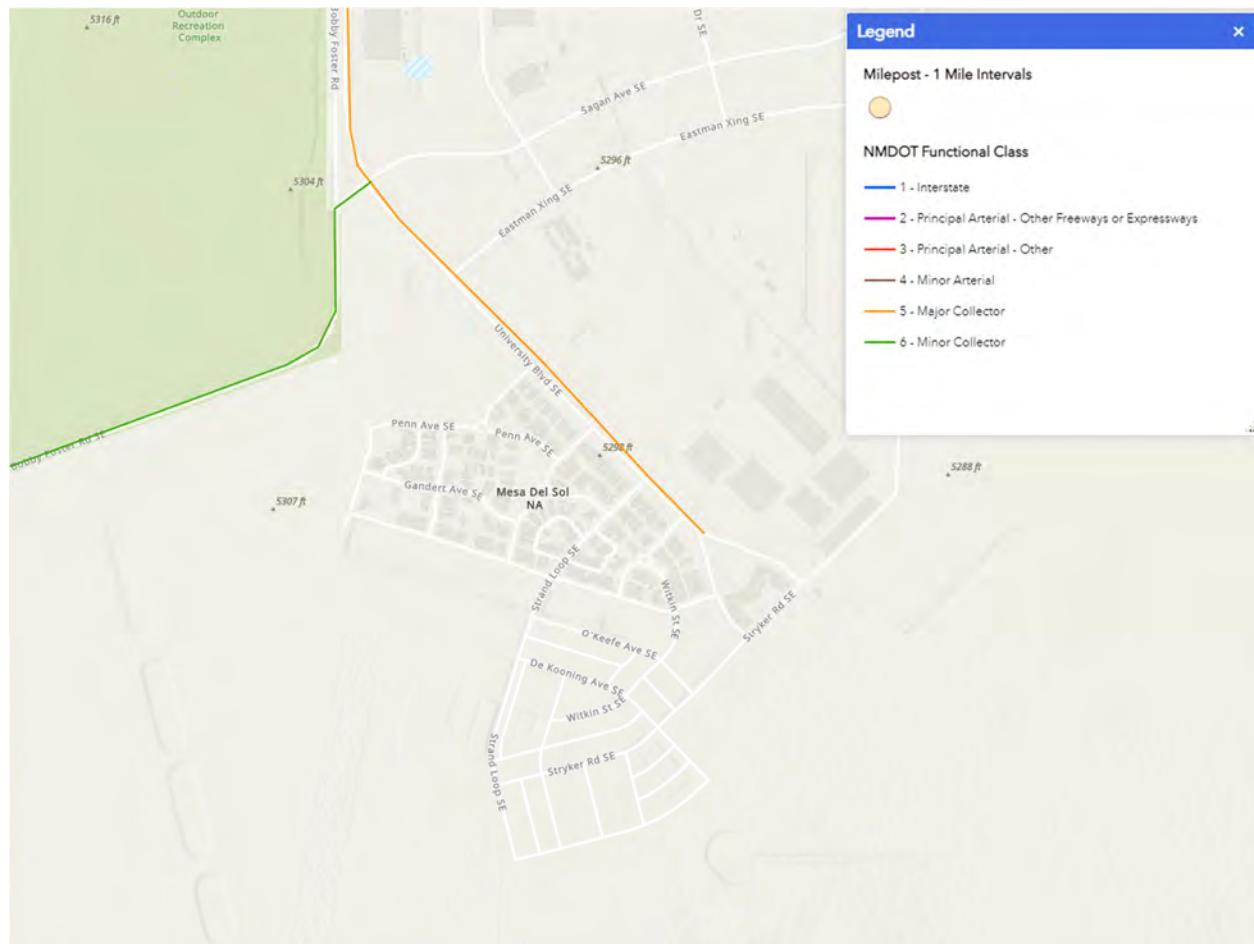
## **2.4 Consistency with Existing or Planned Transit Routes and Stops Analysis**

To consistent with transit routes and stops, an analysis of all transit routes existing or planned will be evaluated. ABQ ride was contacted on June 9, 2021 to collect data on existing and planned routes along the project area. The findings on existing and planned routes are presented in Section 3.2.2.

## SECTION 3 – EXISTING AND PROPOSED TRANSPORTATION SYSTEMS

### 3.1 Thoroughfare Systems

For the proposed charter school, access from the residential developments will be provided via Steglitz Ave, which directly abuts the proposed development and is classified as a Residential Street according to the NMDOT Roadway Functional Class Map provided in **Figure 4**.



**Figure 4 – NMDOT Roadway Functional Class Map of the Project Area**

The roadways that are included in the intersection analysis of this project can be classified as Principal Arterial, Minor Arterial, Major Collector, Minor Collector, and Residential according to the NMDOT Roadway Functional Class Map. These roadways range in size from 1 to 2 lanes, and with a speed limit of 30 MPH. These roadways are identified in **Figure 1**. The characteristics of the roadways analyzed in this study are shown in **Table 4**. It is important to note that Bobby Foster Rd is proposed to be a four-lane divided roadway, but is analyzed as a two-lane undivided roadway since the date of the realignment of Bobby Foster Rd is yet to be determined.

**Table 4 – Analyzed Roadway Characteristics**

Roadway	Number of Lanes	Classification	Speed Limit
Bobby Foster Rd	2	Minor Collector	30
Diebenkorn Dr	2	Residential	30
Newhall Dr	2	Residential	30
Sagan Loop	2	Residential	30
Stieglitz Ave	1	Residential	30

### 3.2 Other Transportation Facilities

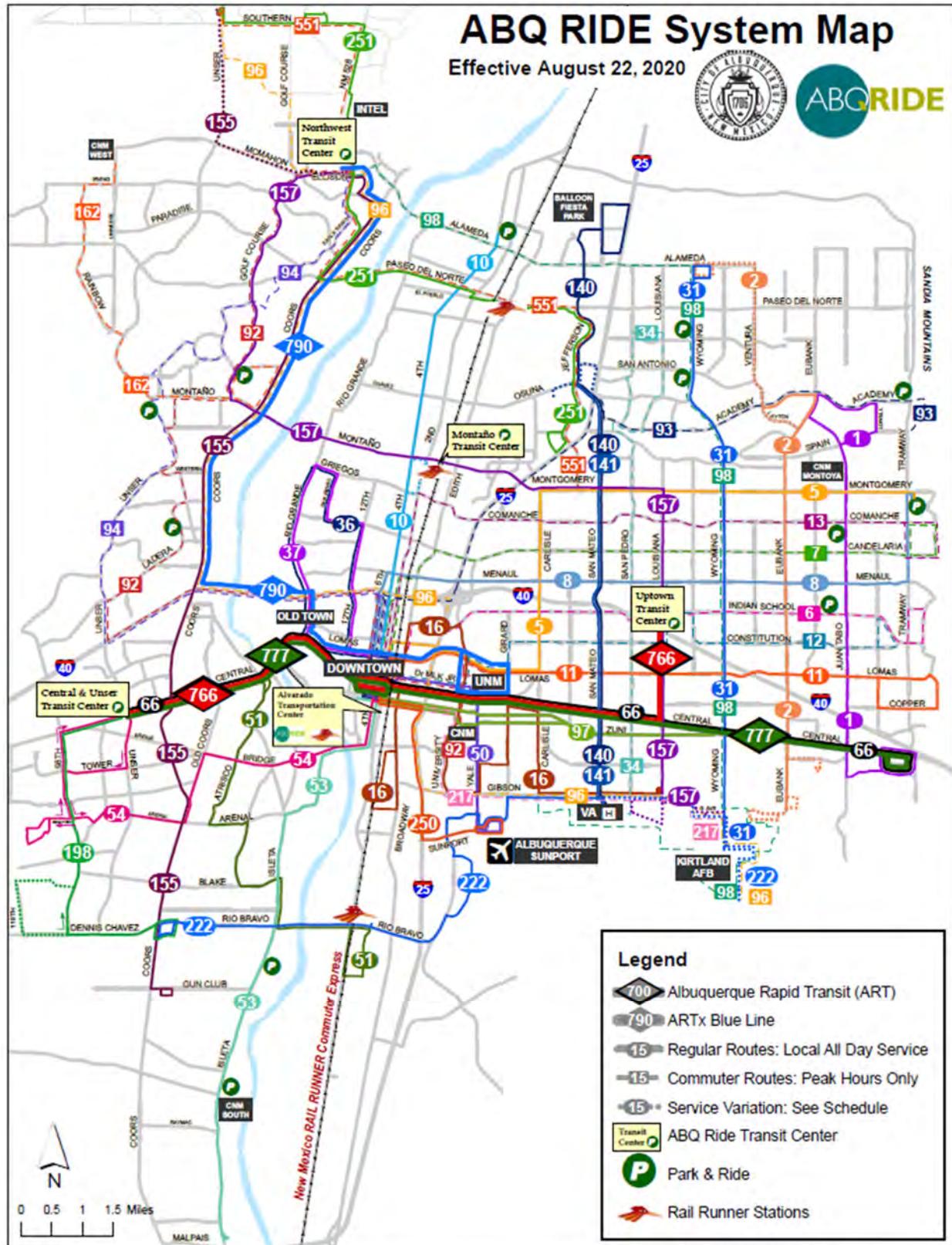
This section describes the pedestrian and transit facilities in the area.

#### 3.2.1 Pedestrian Facilities

At the time of this study, only Montage Unit 1 was complete. All other developments in the project area were planned or under construction. To analyze the pedestrian facilities, the completed development and the site plan for the proposed charter school (**Figure 2**) were used to describe the facilities. Sidewalks and crosswalks are proposed for all roadways in the project area. Bike lanes are proposed along Bobby Foster Rd, and Sagan Loop.

#### 3.2.2 ABQ Ride

Currently, ABQ Ride does not provide service to the project area. **Figure 5** shows the current system map for ABQ Ride. After contacting ABQ Ride on June 9, 2021, they do not plan to expand their routes at this time to service the project area.



## **Figure 5 – ABQ Ride System Map**

## SECTION 4 – SITE TRIP GENERATION ANALYSIS

### 4.1 Existing Traffic Volumes

Since the project area is still under construction at the time of this report, there were no existing traffic counts collected at the study intersections. Therefore, all traffic data analyzed during this report was composed of generated using the *ITE Trip Generation Manual, 10<sup>th</sup> Edition*. The average trip rates for the peak hour of the adjacent street traffic were used for this study. These trips represent the highest peak hour vehicle trip ends generated by the development for the peak hour between 7 to 9 AM and the peak hour between 4 to 6 PM. A peak hour factor (PHF) of 0.59 was used in this study for all turning movements. The PHF was estimated using the data collected in the traffic modeling study for Mountain View Middle School in Holden, Massachusetts by the Worcester Polytechnic Institute. The PHF is a traffic parameter used to describe the relationship between the peak 15-minute flow rate within the peak hour and the total peak hour volume. A high PHF (closer to 1) indicates that traffic is spread out relatively evenly throughout the peak hour. A low PHF (closer to 0) indicates that traffic is concentrated within the peak 15 minutes.

### 4.2 Vehicle Trip Generation

#### 4.2.1 Charter School

The proposed charter school development is expected to be a K-12 charter school. The applicable Land Use Code 536 was used to generate trips for this development. The number of students used to determine the number of generated trips, was 200 students. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 536. The generated trips for the AM and PM peak hour are shown in **Table 5**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 5**.

**Table 5 – Proposed Development Peak Hour Generated Trips, Land Use Code 536**

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Charter School	AM Peak	156	61%	95	39%	61
	PM Peak	34	43%	15	57%	19

#### 4.2.2 Montage Units 1, 3, 4, 5, and 6

The proposed Montage Units 1, 3, 4, 5, and 6 residential development are categorized as single family (Land Use Code 210). The number of dwelling units used to determine the number of generated trips, was 200, 150, 200, 175, and 85 units, respectively. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 210. The generated trips for the AM and PM peak hour are shown in **Table 6**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 6**.

**Table 6 – Proposed Development Peak Hour Generated Trips, Land Use Code 210**

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Montage Unit 1	AM Peak	147	25%	37	75%	110
	PM Peak	198	63%	125	37%	73
Montage Unit 3	AM Peak	111	25%	28	75%	83
	PM Peak	150	63%	95	37%	55
Montage Unit 4	AM Peak	147	25%	37	75%	110
	PM Peak	198	63%	125	37%	73
Montage Unit 5	AM Peak	129	25%	32	75%	97
	PM Peak	174	63%	110	37%	64
Montage Unit 6	AM Peak	85	25%	16	75%	49
	PM Peak	87	63%	55	37%	32

#### 4.2.3 Multi-Family Homes

For the Multi-Family housing development, the applicable Land Use Code 221 was used. The number of units used to determine the number of generated trips was 288 units. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 221. The generated trips for the AM and PM peak hour are shown in **Table 7**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 7**.

**Table 7 – Proposed Development Peak Hour Generated Trips, Land Use Code 221**

Development		Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Multi-Family Housing	AM Peak	96	26%	25	74%	71
	PM Peak	122	61%	74	39%	48

#### 4.2.4 Commercial Development

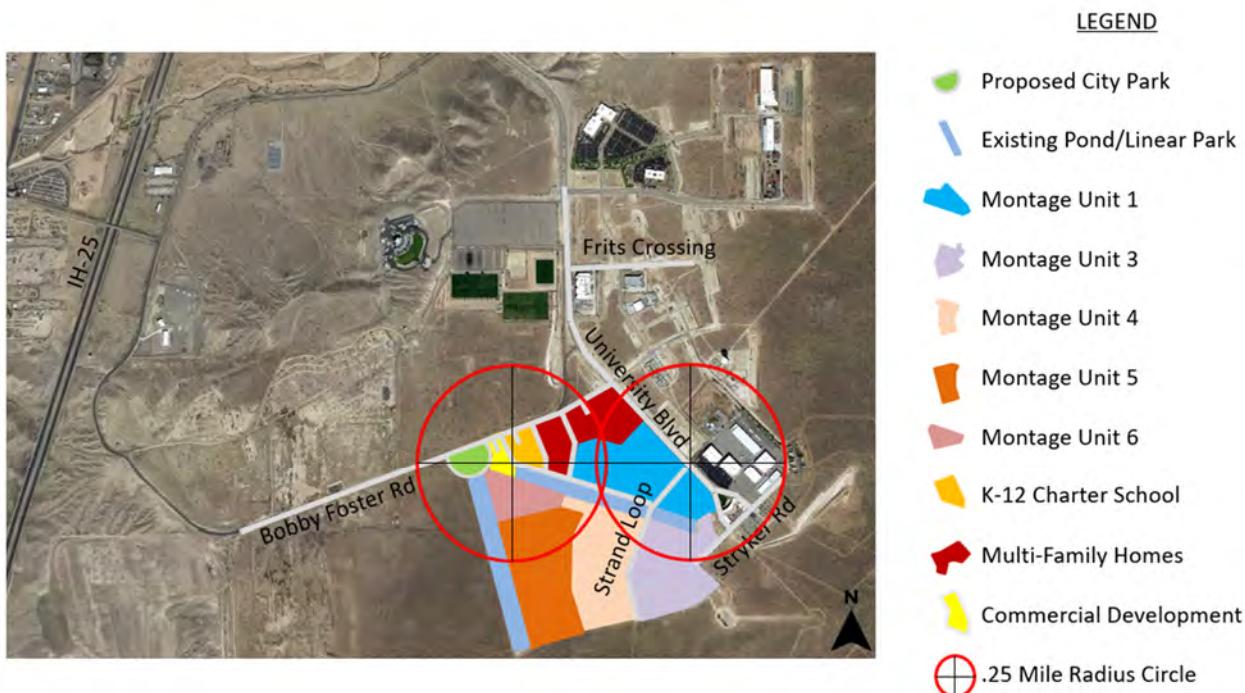
For the commercial development, the applicable Land Use Code 820 was used. The area used to determine the number of generated trips was 14,000 sf. Trip generation for the developments were calculated using the fitted curve equations for Land Use Code 820. The generated trips for the AM and PM peak hour are shown in **Table 8**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facility are also presented in **Table 8**.

**Table 8 – Proposed Development Peak Hour Generated Trips, Land Use Code 820**

Development	Total Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Commercial Development	AM Peak	159	62%	99	38% 60
	PM Peak	127	48%	61	52% 66

### 4.3 Trip Adjustments

According to the *ITE Trip Generation Manual*, internal capture occurs at a site when two or more land uses have a possibility of interacting with each other, particularly where the trip can be made by walking. This can result in the total generation of trips being reduced. Assuming that within a 0.25 mile radius of the charter school, the commercial development, and the Albuquerque studios trips to these locations can be reduced due to walking, the generated trips in Section 4.2 were reduced. **Figure 6** shows the 0.25 mile radius in the project area from the charter school, the commercial development, and the Albuquerque studios.



**Figure 6 – 0.25 Mile Radius Site Map**

The following assumptions were used to adjust the generated trips for internal capture near the charter school and commercial development:

1. 20% of Montage Unit 1 is within the 0.25-mile radius.
2. 10% of Montage Unit 4 is within the 0.25-mile radius.
3. 25% of Montage Unit 5 is within the 0.25-mile radius.
4. 100% of Montage Unit 6 is within the 0.25-mile radius.
5. 50% of the Multi-Family Housing are within the 0.25-mile radius.

The following assumptions were used to adjust the generated trips for internal capture near the Albuquerque studios:

1. 90% of Montage Unit 1 is within the 0.25-mile radius.
2. 40% of Montage Unit 3 is within the 0.25-mile radius.
3. 10% of Montage Unit 4 is within the 0.25-mile radius.
4. 25% of the Multi-Family Housing are within the 0.25-mile radius.
5. Assume 50% of people working at Albuquerque Studios live in the project area.

Following the assumptions, a 30% trip reduction was applied to the proposed charter school and commercial development. For the Montage Unit 1, 3, 4, 5, 6, and Multi-Family housing, a reduction of 45%, 20%, 5%, 0%, 13%, and 25% were used, respectively. **Table 9** shows the adjusted trip generation for the Montage Units, the multi-family housing, the charter school, and the commercial development.

**Table 9 – Proposed Development Peak Hour Generated Trips, Land Use Code 210**

Development		Adjusted Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Montage Unit 1	AM Peak	81	25%	20	75%	61
	PM Peak	109	63%	69	37%	40
Montage Unit 3	AM Peak	89	25%	22	75%	67
	PM Peak	120	63%	76	37%	44
Montage Unit 4	AM Peak	140	25%	35	75%	105
	PM Peak	188	63%	119	37%	69
Montage Unit 5	AM Peak	129	25%	32	75%	97
	PM Peak	174	63%	110	37%	64
Montage Unit 6	AM Peak	57	25%	14	75%	43
	PM Peak	76	63%	48	37%	28
Multi-Family Housing	AM Peak	72	26%	19	74%	54
	PM Peak	91	61%	56	39%	35
Charter School	AM Peak	109	61%	67	39%	43
	PM Peak	24	43%	10	57%	14
Commercial Development	AM Peak	111	62%	69	38%	42
	PM Peak	88	48%	42	52%	46

#### 4.4 Trip Distributions

Traffic generated by the developments under construction had to be distributed and assigned to the study area intersections so that the analyses could be conducted. The distribution of the generated traffic through the study area intersections was determined by considering factors such as the existing and proposed traffic connectivity, capacity, and congestion of the surrounding roadway network. Engineering judgment was applied to these factors when developing assumptions for the analysis.

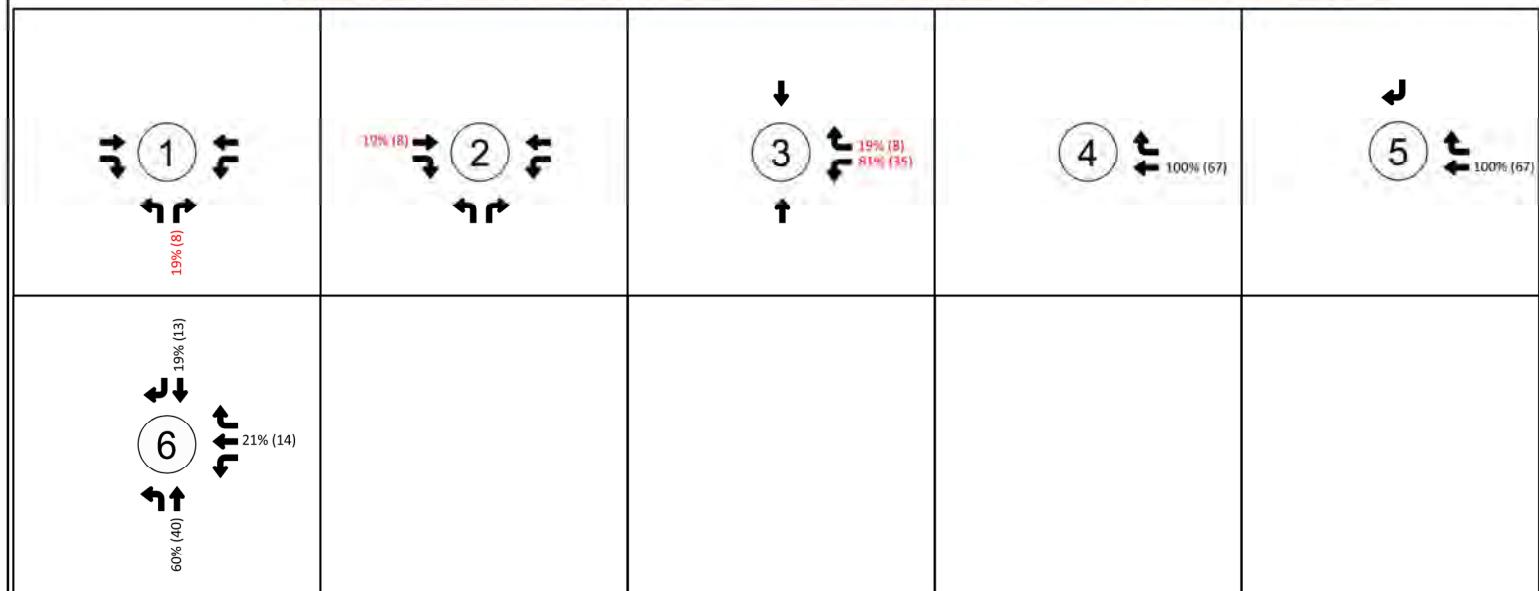
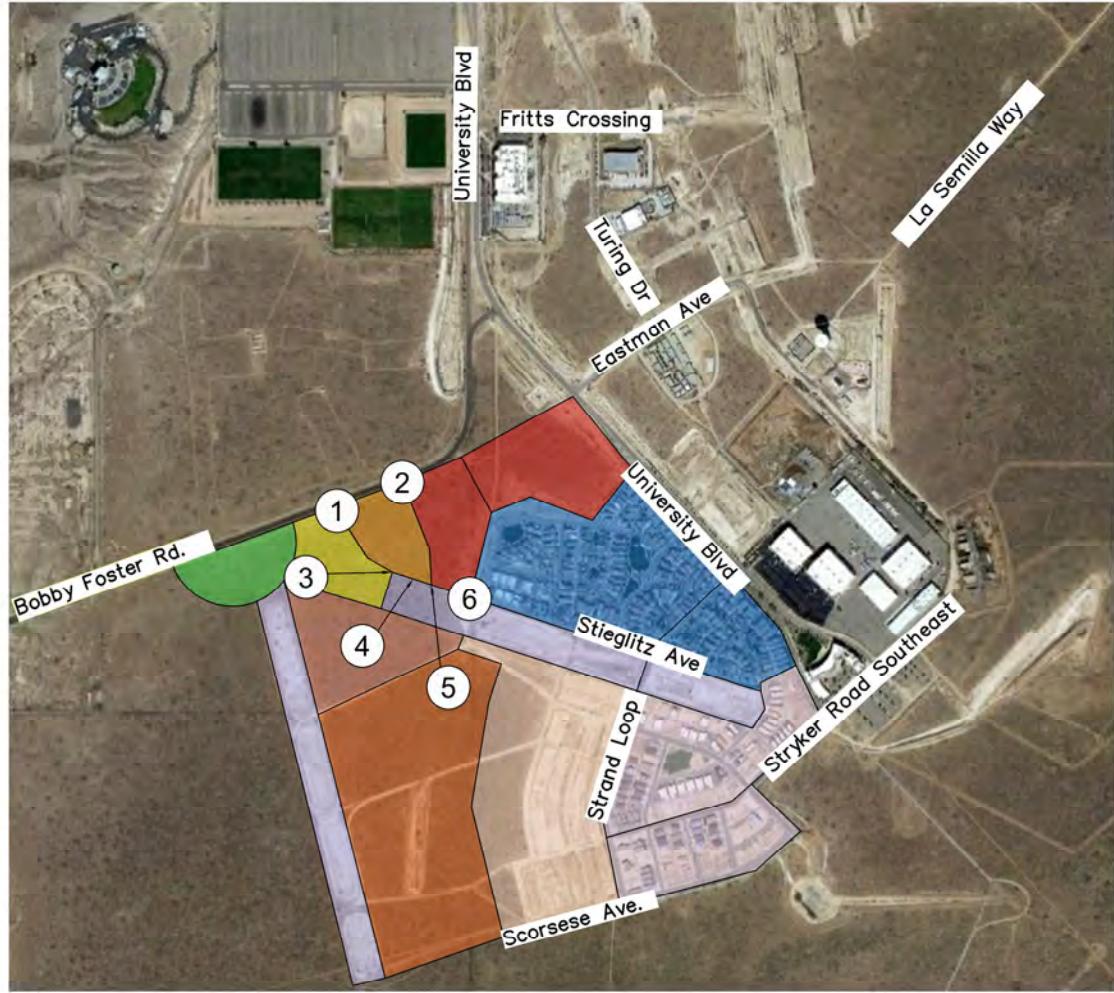
#### 4.4.1 Charter School

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. It was assumed that traffic entering and exiting to the charter school were routed through the shortest path moved.
3. For the charter school development trips, it was assumed that the remaining adjusted trips will be proportionate to the number of residential units outside of the 0.25-mile radius.
  - a. 21% will originate from Montage Unit 1
  - b. 20% will originate from Montage Unit 3
  - c. 23% will originate from Montage Unit 4
  - d. 17% will originate from Montage Unit 5
  - e. 0% will originate from Montage Unit 6
  - f. 19% will originate from the Multi-Family Housing
4. In the PM peak hour, it was assumed that the trips would follow the AM peak trip distribution percentage.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 7 and 8** summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

N



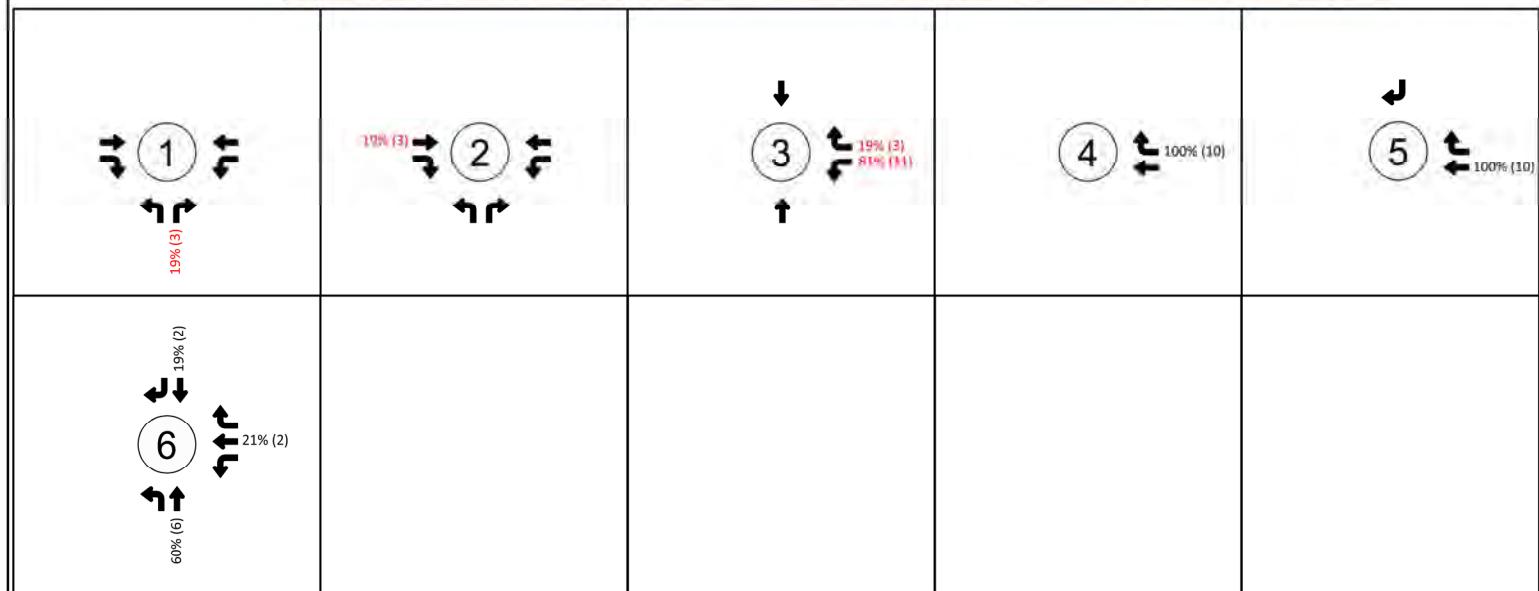
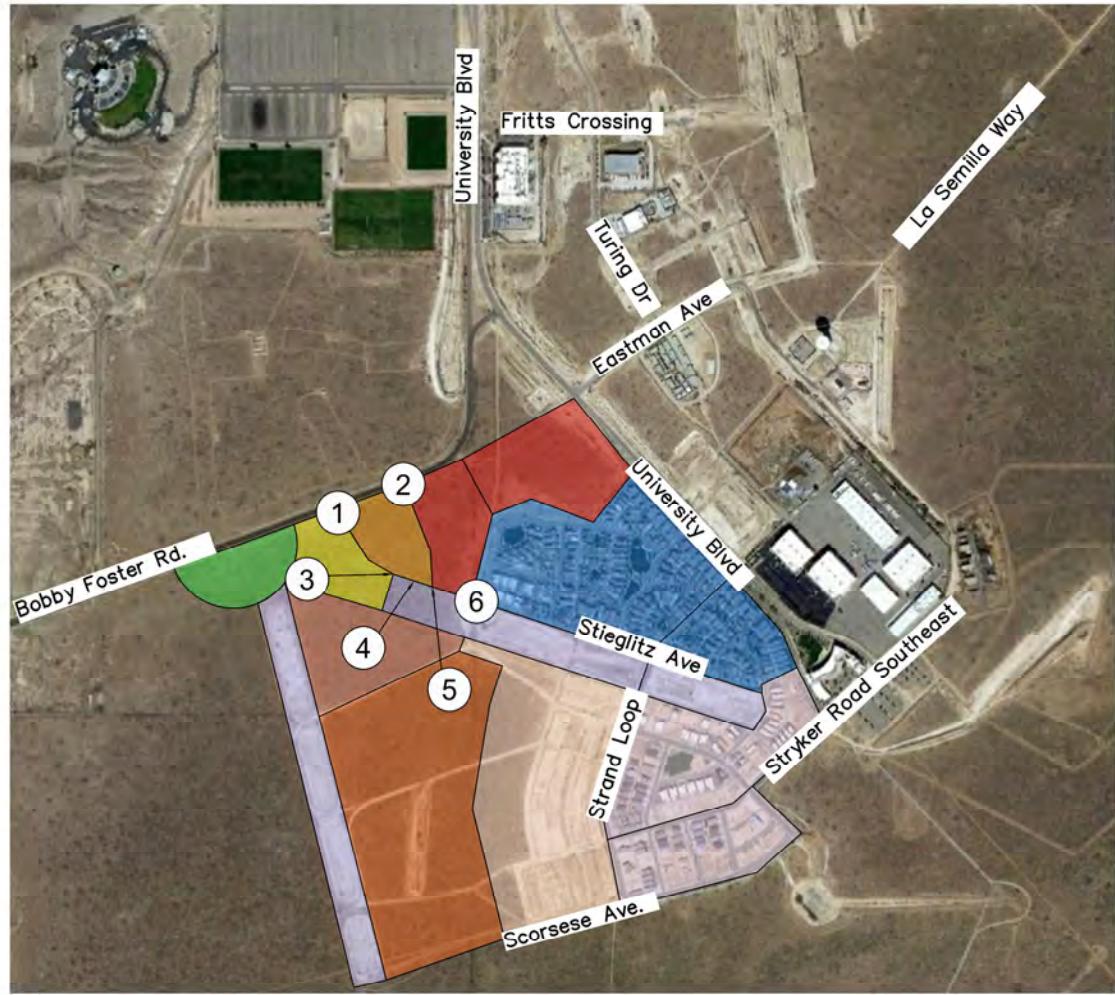
### Legend



Intersection  
number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)



### Legend



Intersection  
number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

#### 4.4.2 Commercial Development

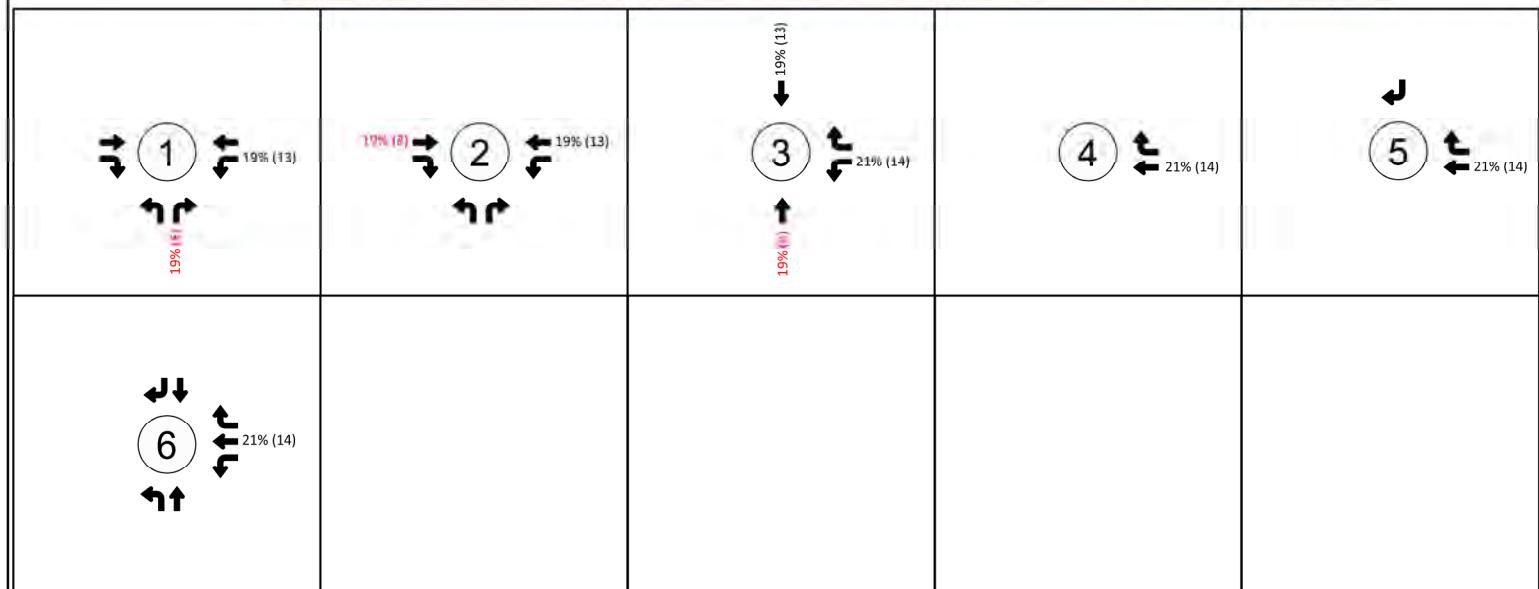
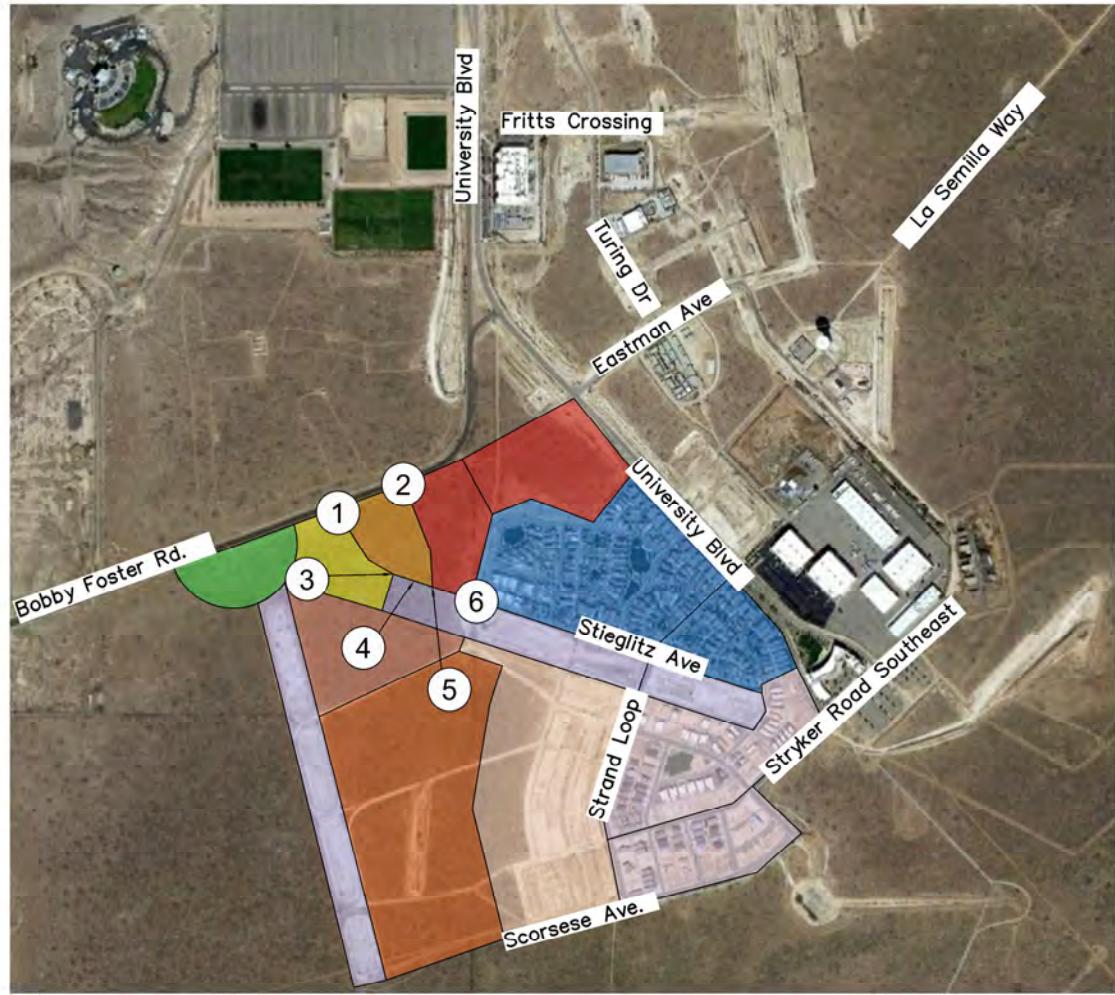
The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. It was assumed that the entrance to the commercial development was located south of Intersection 3.
3. It was assumed that traffic entering and exiting to the commercial development were routed through the shortest path.
4. For the commercial development trips, it was assumed that the remaining adjusted trips will be proportionate to the residential units outside of the 0.25-mile radius.
  - a. 21% will originate from Montage Unit 1
  - b. 20% will originate from Montage Unit 3
  - c. 23% will originate from Montage Unit 4
  - d. 17% will originate from Montage Unit 5
  - e. 0% will originate from Montage Unit 6
  - f. 19% will originate from the Multi-Family Housing

In the PM peak hour, it was assumed that the trips would follow the AM peak trip distribution percentage.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 9 and 10** summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

N



### Legend

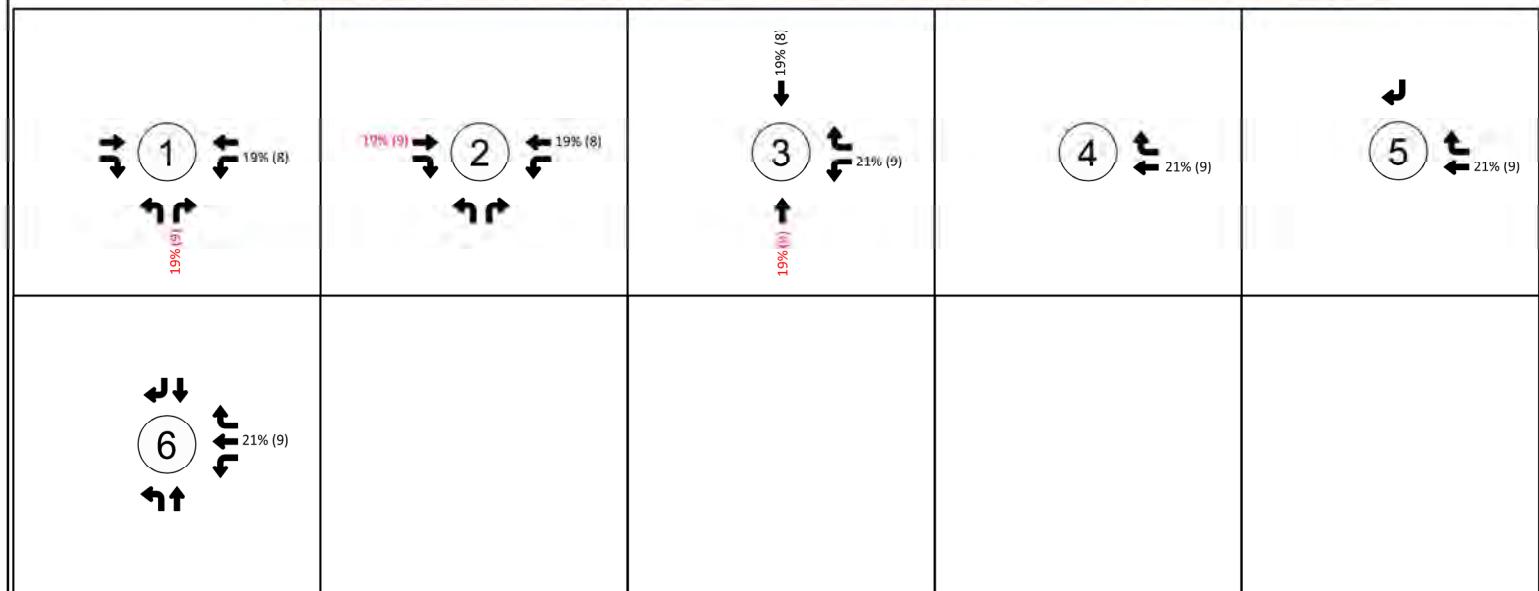
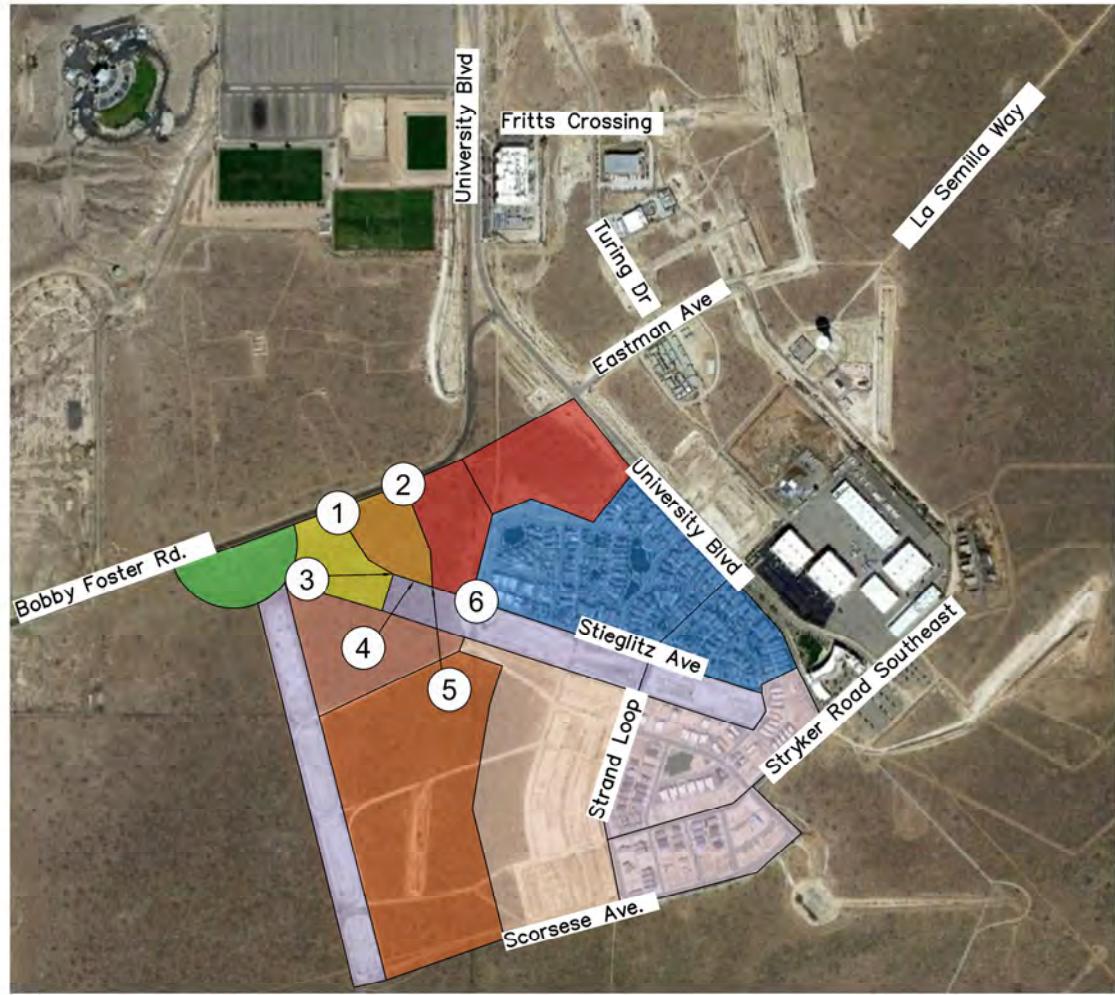


Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

N



### Legend



Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

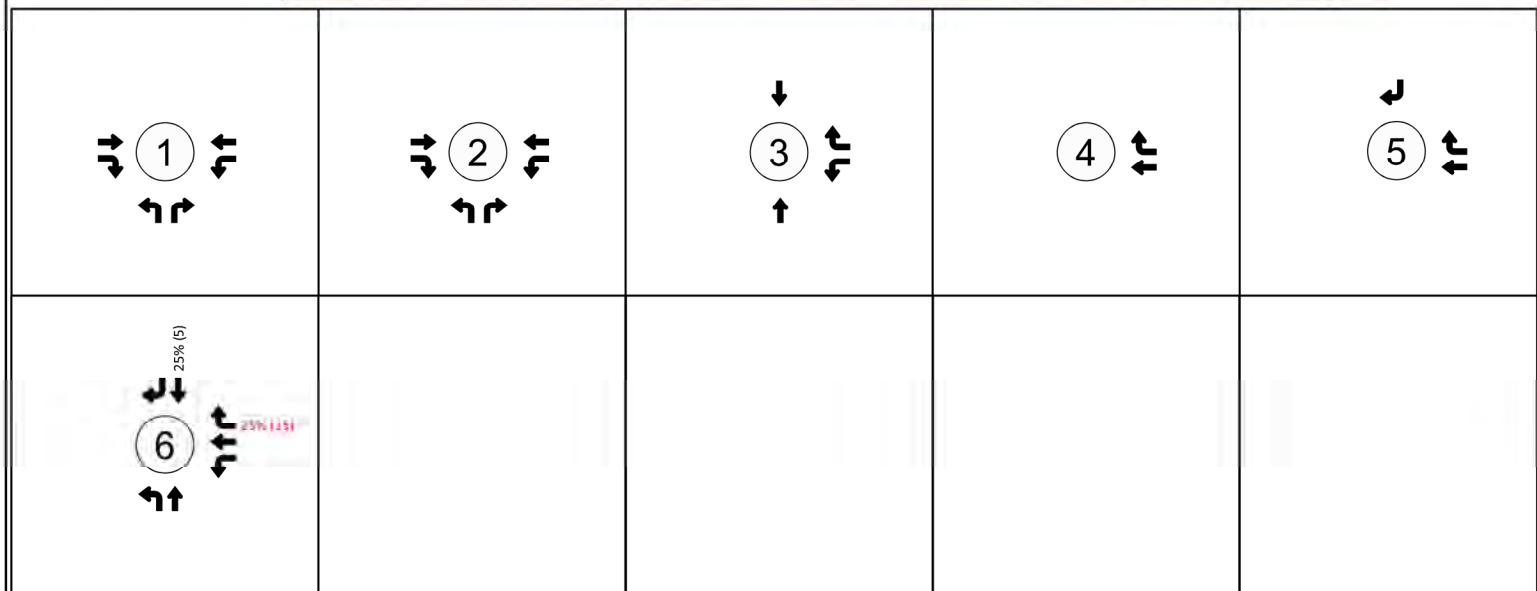
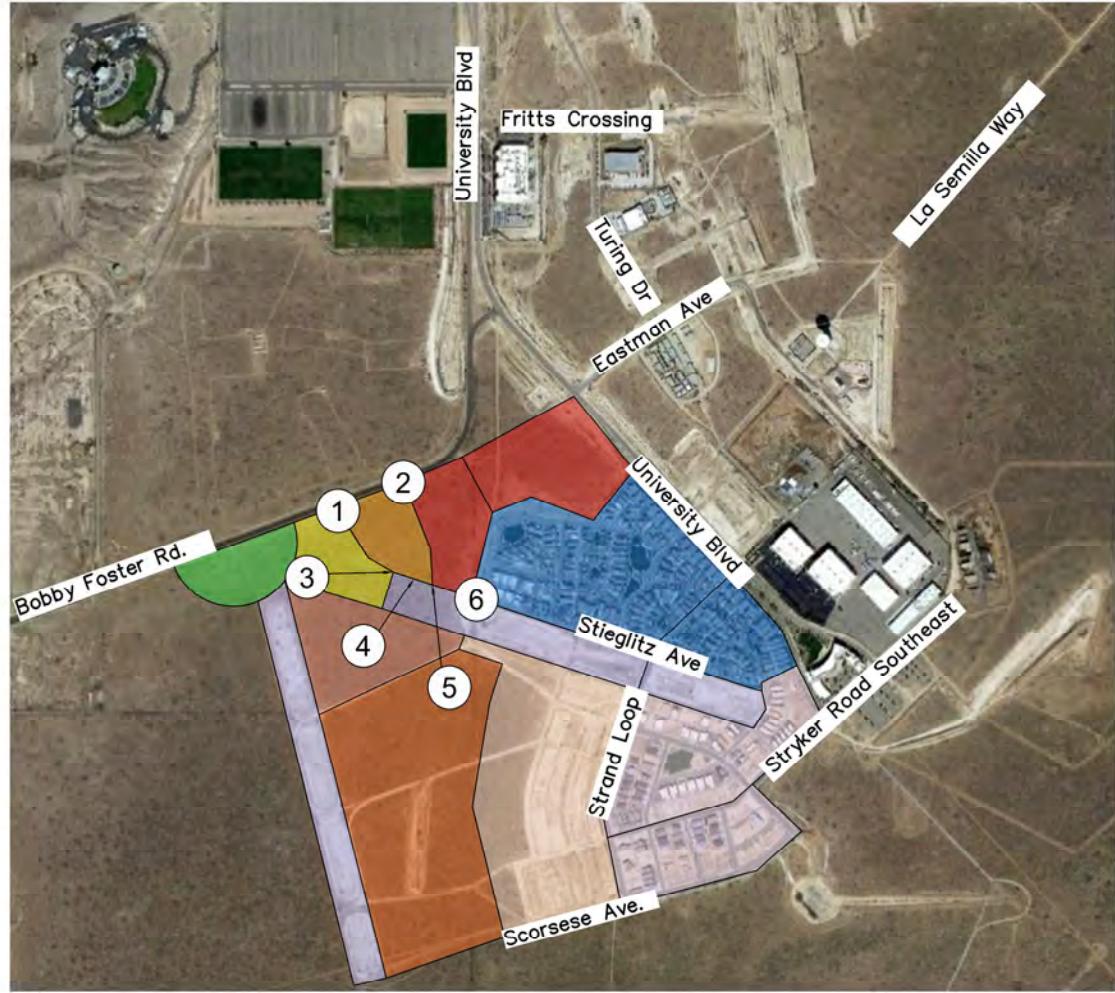
#### 4.4.3 Montage Unit 1

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. Assumed trips to Albuquerque studios were removed through internal capture.
3. Of the remaining trips, assumed that 25% of trips will pass by Intersection 6 exiting and entering the project area.
4. In the PM peak hour, it was assumed that outbound traffic would return to its place of origin.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 11** and **12** summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

N



### Legend

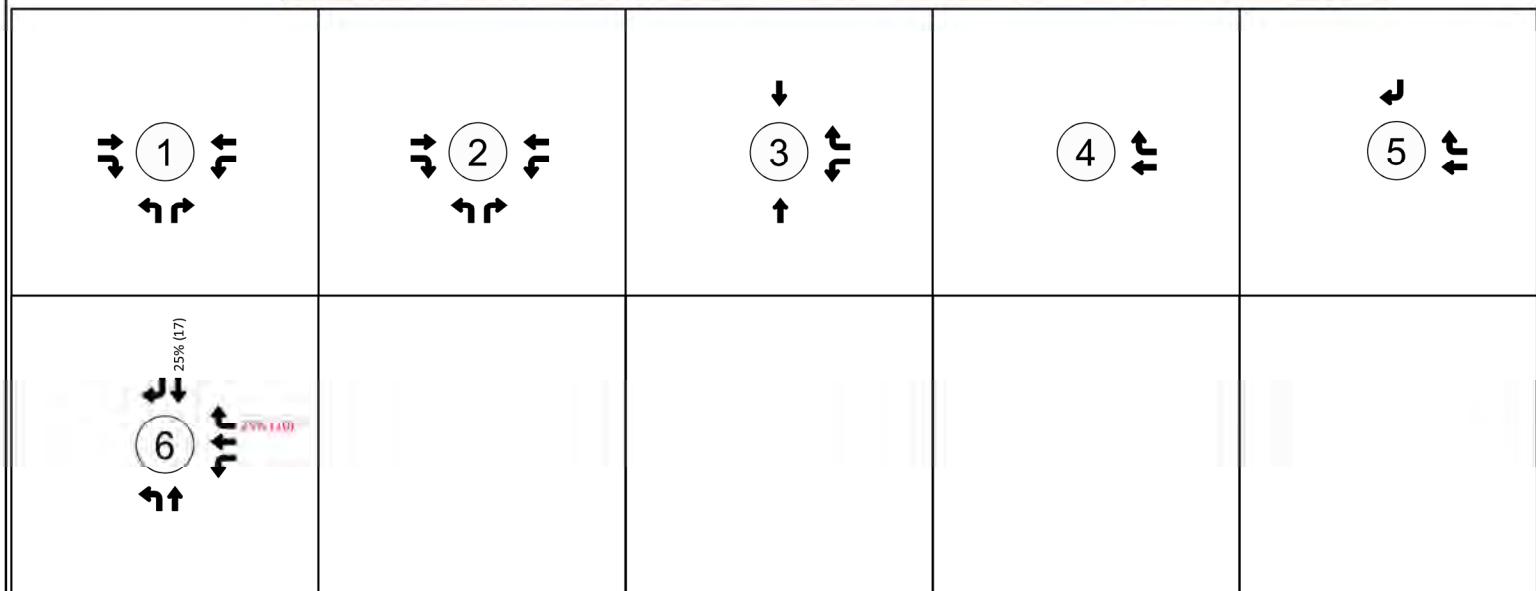
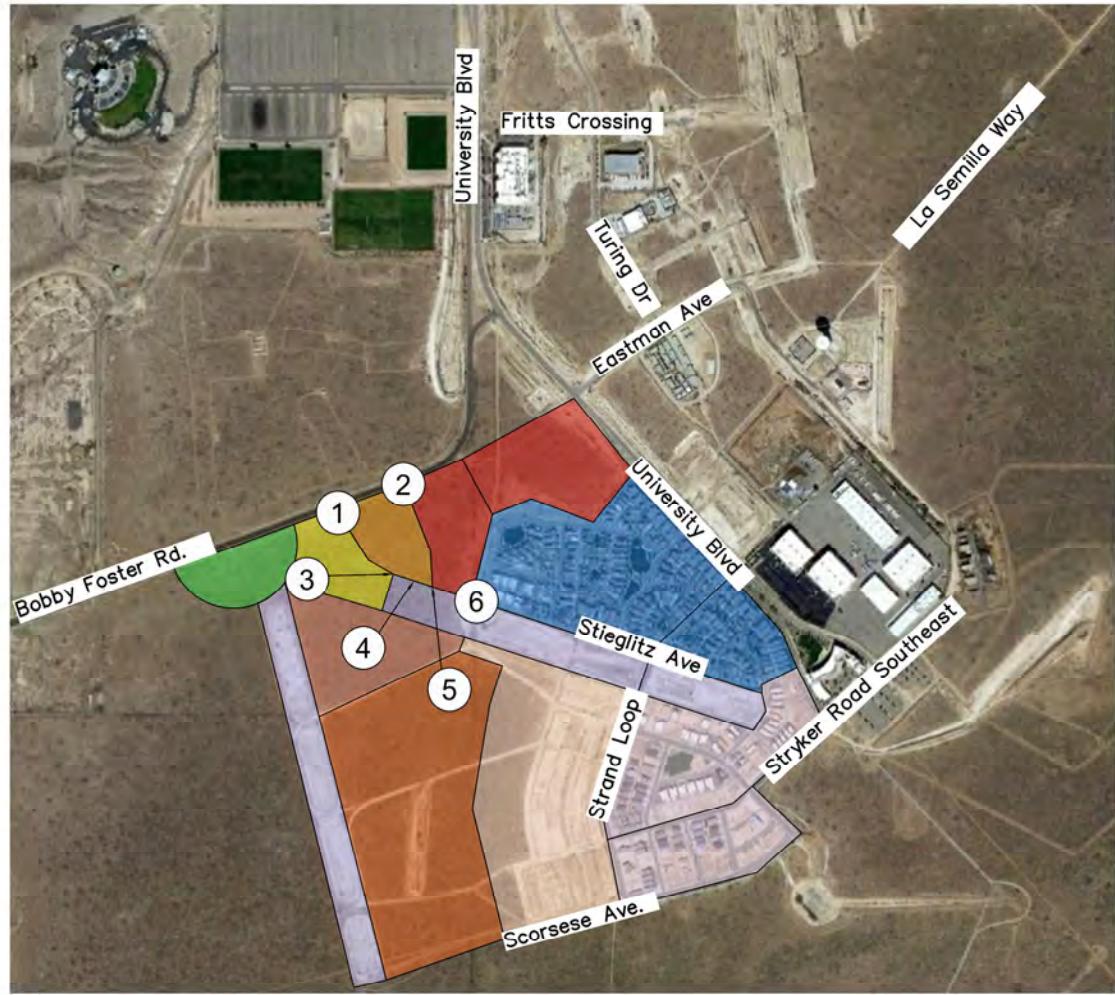


Intersection  
number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

N



### Legend



Intersection  
number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

#### 4.4.4 Montage Unit 3 & 4

Since the remaining trips from Montage Unit 3 and 4 are expected to exit through University Blvd through the shortest path, Montage Unit 3 and 4 will not affect the NIA study intersections apart from the trips already mentioned in Sections 4.4.1 and 4.4.2.

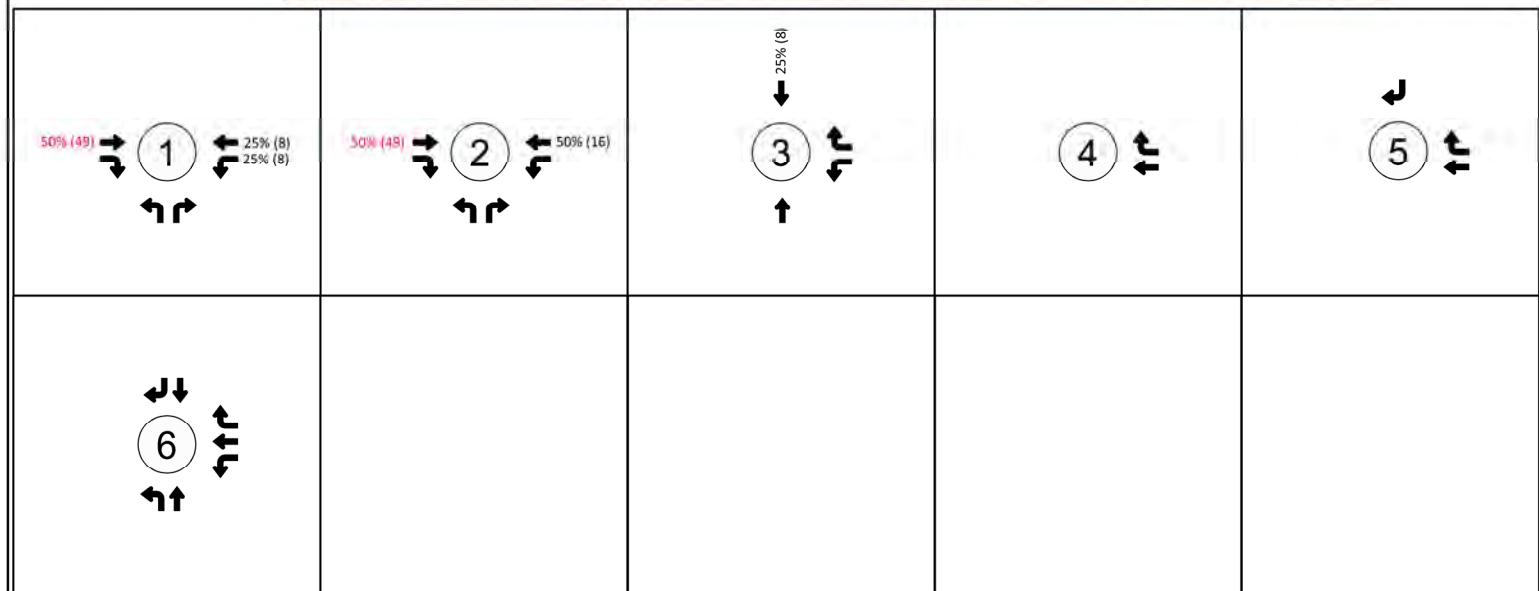
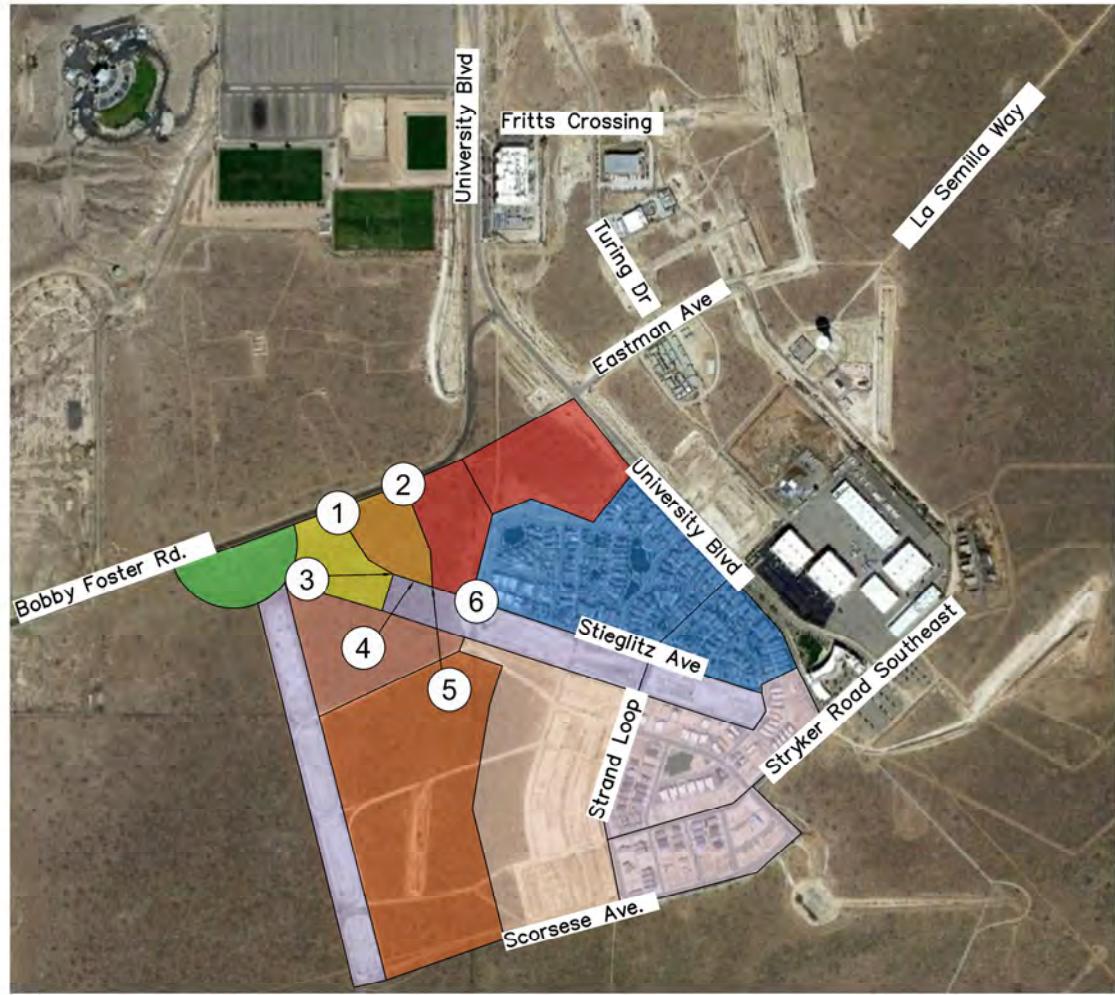
#### 4.4.6 Montage Unit 5

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. It was assumed that 50% of remaining trips would travel to Albuquerque studios and not affect the NIA intersections, and 50% would exit through University Blvd.
3. Of the 50% exit through University Blvd, it is assumed that all trips will exit the subdivision east of Intersection 1 to avoid the traffic from the school in the AM Peak hour.
4. It was assumed that 25% will enter the subdivision through Intersection 1 and 25% will enter east of Intersection 1 AM Peak hour.
5. In the PM peak hour, it was assumed that 25% will exit the subdivision east of Intersection 1 and 25% will exit through Intersection 1.
6. It was assumed that 25% will enter the subdivision through Intersection 1 and 25% will enter east of Intersection 1 PM Peak hour.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 13 and 14** summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

N



### Legend

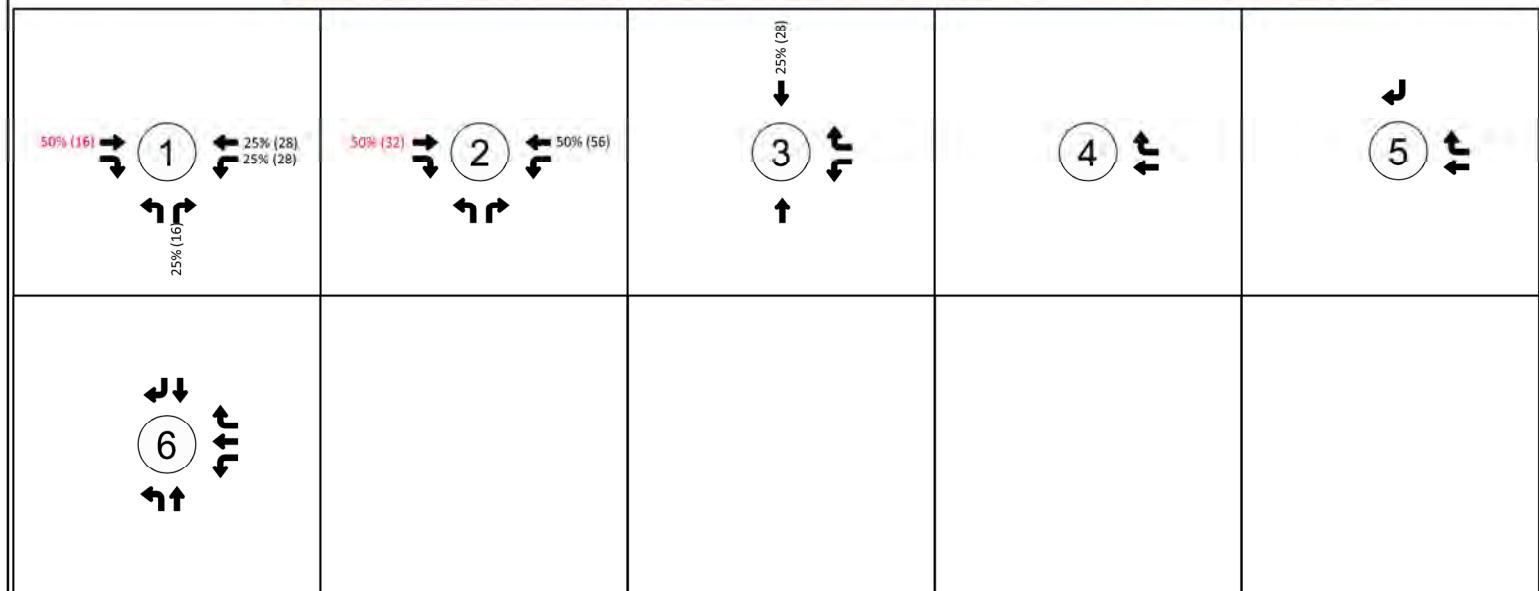
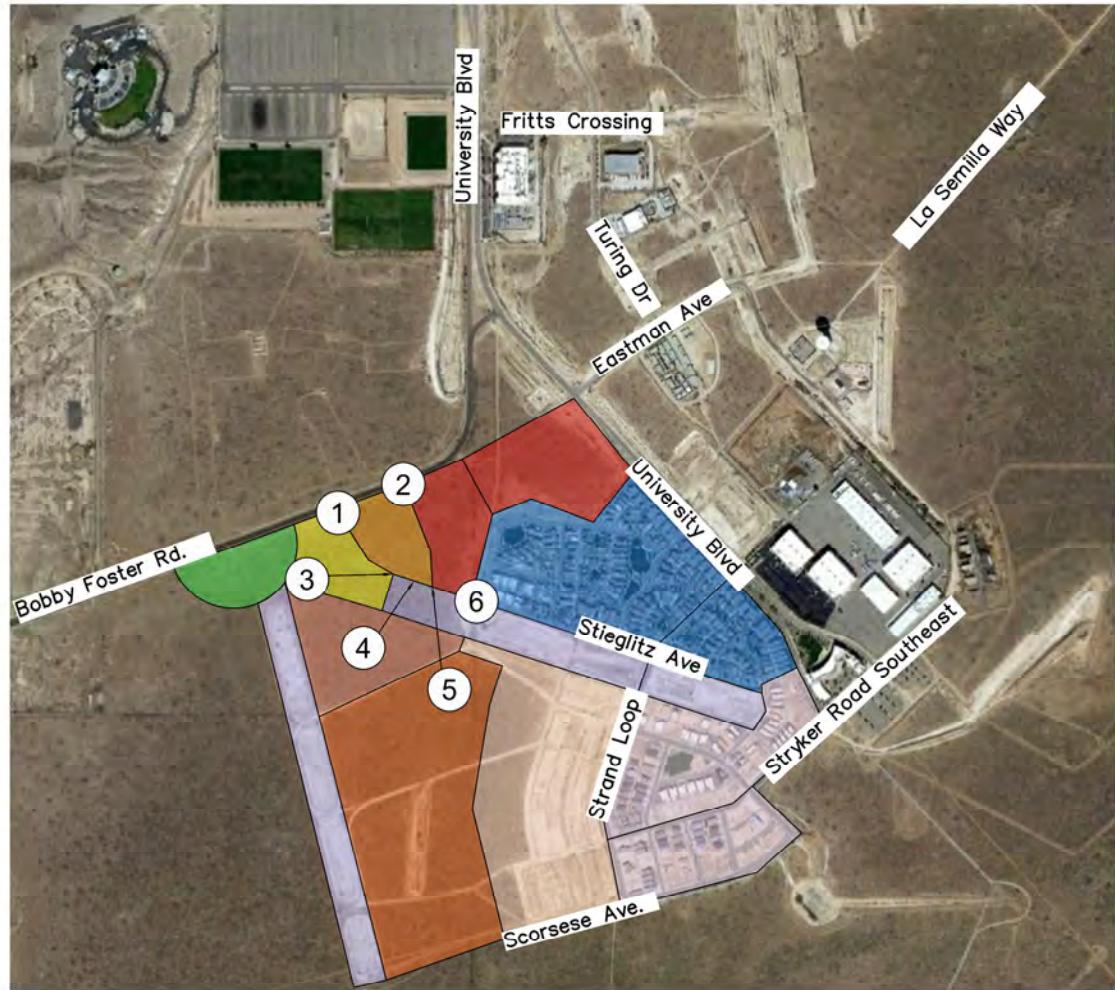


Intersection  
number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

N



### Legend



Intersection  
number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

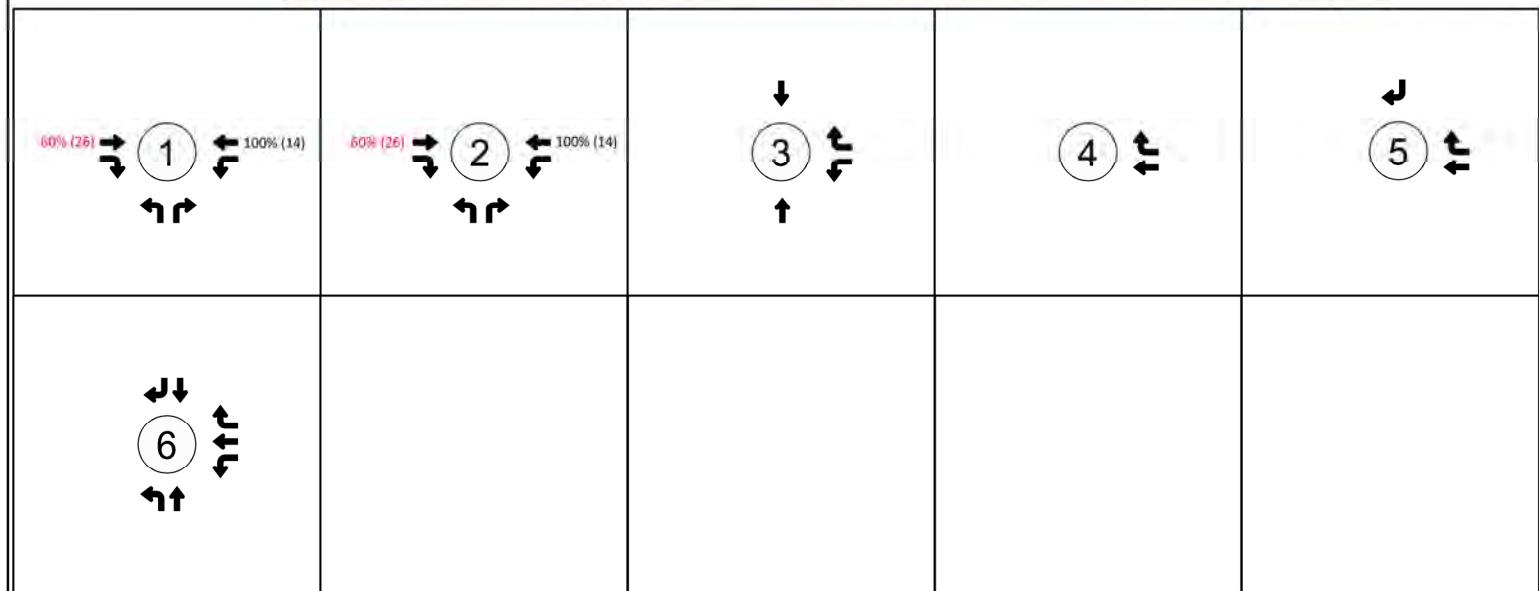
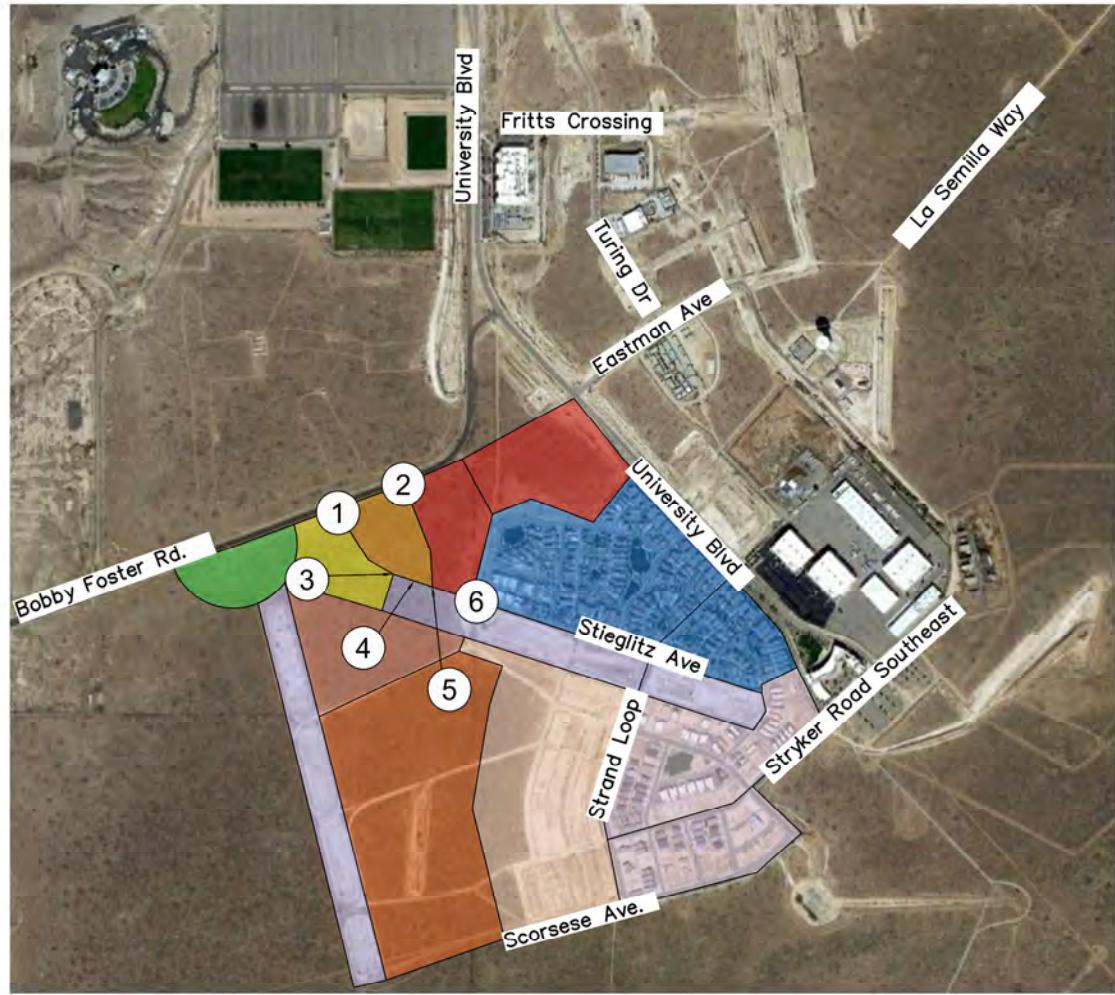
#### 4.4.7 Montage Unit 6

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diebenkorn Dr, and the unnamed roadway around the proposed city park west of the proposed commercial development.
2. It was assumed that 40% of remaining trips would travel to Albuquerque studios and not affect the NIA intersections, and 50% would exit through University Blvd.
3. Of the 60% exit through University Blvd, it is assumed that all trips will exit the subdivision east of Intersection 1 to avoid the traffic from the school in the AM Peak hour.
4. It was assumed that 100% will enter the subdivision east of Intersection 1 during the AM Peak hour.
5. In the PM peak hour, it was assumed that 50% will exit the subdivision east of Intersection 1 and 50% will exit through Intersection 1.
6. It was assumed that 30% will enter the subdivision through Intersection 1 and 30% will enter east of Intersection 1 PM Peak hour.

Considering the factors stated in above, the generated trips were distributed through the study area, and the turning movement volumes were calculated. **Figures 15 and 16** summarize the trip distribution and number of generated trips for the study intersections for the AM and PM peak hours, respectively.

N



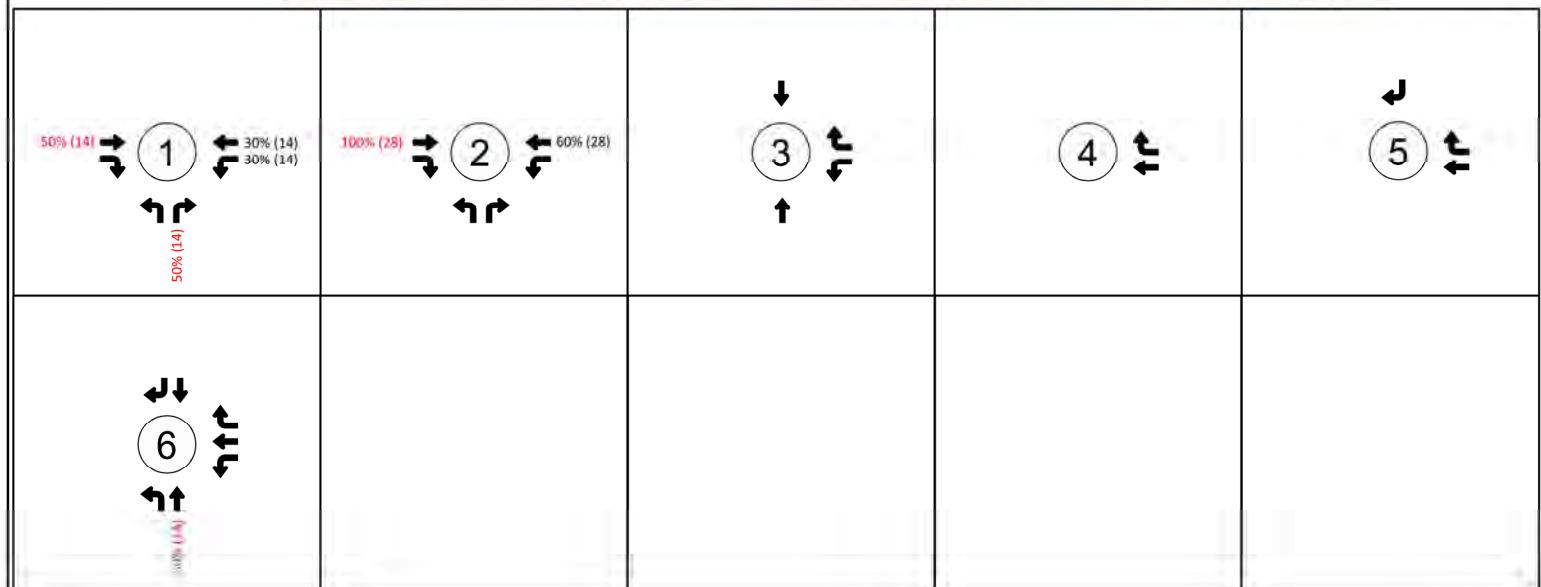
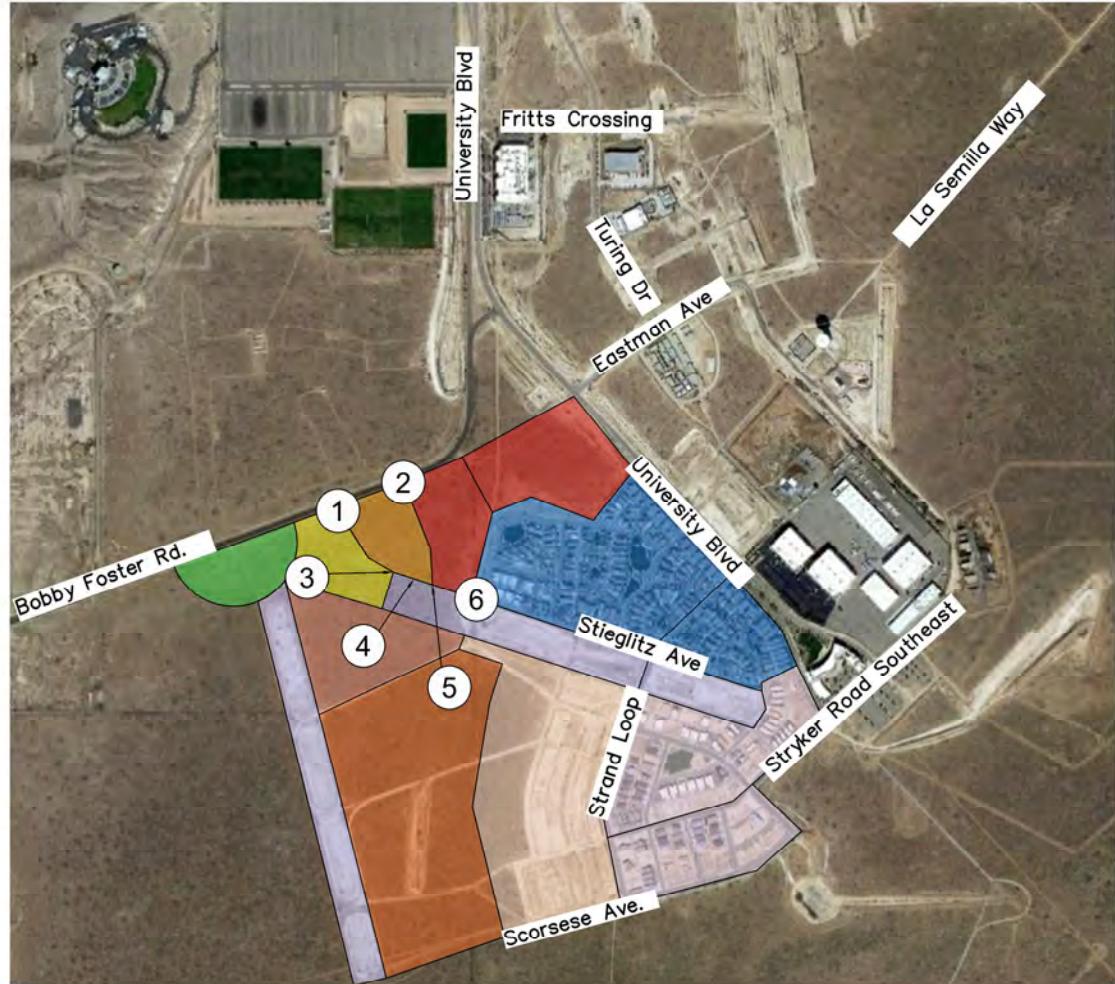
### Legend



Intersection  
number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)



# Legend

#

## Intersection number

**PM Entering = Distribution (Generated Trips)**  
**PM Exiting = Distribution (Generated Trips)**

**HUITT-ZOLLARS**  
5822 Cromo Drive  
Suite 210  
El Paso, Texas 79912  
915.587.4339  
Firm No. F-761  
[www.huitt-zollars.com](http://www.huitt-zollars.com)

# Montage Units Charter School Neighborhood Impact Analysis Montage Unit 6

Figure  
Number  
16

#### *4.4.8 Multi-Family Housing*

Since the remaining trips from the Multi-Family Housing are expected to exit through University Blvd through the shortest path, the Multi-Family Housing will not affect the NIA study intersections apart from the trips already mentioned in Sections 4.4.1 and 4.4.2.

#### **4.5 Turning Movements**

Combining the trip distributions from Section 4.4, the total turning movements were calculated and presented in **Table 10**.

**Table 10 – Peak Hour Turning Movements**

No.	Intersection	Peak Hour	Southbound			Westbound			Northbound			Eastbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Bobby Foster Rd & Diebenkorn Dr	AM PHV	-	-	-	21	22	-	0	-	16	-	74	0
		AM PHF	-	-	0.59	0.59	-	0.00	-	0.59	-	0.59	0.00	0.00
		PM PHV	-	-	50	42	-	0	-	41	-	30	0	0
		PM PHF	-	-	0.59	0.59	-	0.00	-	0.59	-	0.59	0.00	0.00
2	Bobby Foster Rd & Newhall Dr	AM PHV	-	-	0	43	-	0	-	0	-	90	0	0
		AM PHF	-	-	0.00	0.59	-	0.00	-	0.00	-	0.59	0.00	0.00
		PM PHV	-	-	0	92	-	0	-	0	-	74	0	0
		PM PHF	-	-	0.00	0.59	-	0.00	-	0.00	-	0.59	0.00	0.00
3	Stieglitz Ave & Diebenkorn Dr	AM PHV	-	21	-	49	-	8	-	8	-	-	-	-
		AM PHF	-	0.59	-	0.59	-	0.59	-	0.59	-	-	-	-
		PM PHV	-	35	-	20	-	3	-	23	-	-	-	-
		PM PHF	-	0.59	-	0.59	-	0.59	-	0.59	-	-	-	-
4	Stieglitz Ave & Entrance Driveaway	AM PHV	-	-	-	-	-	14	67	-	-	-	-	-
		AM PHF	-	-	-	-	-	0.59	0.59	-	-	-	-	-
		PM PHV	-	-	-	-	-	9	10	-	-	-	-	-
		PM PHF	-	-	-	-	-	0.59	0.59	-	-	-	-	-
5	Stieglitz Ave & Newhall Dr	AM PHV	-	-	0	-	-	81	0	-	-	-	-	-
		AM PHF	-	-	0.00	-	-	0.59	0.00	-	-	-	-	-
		PM PHV	-	-	0	-	-	19	0	-	-	-	-	-
		PM PHF	-	-	0.00	-	-	0.59	0.00	-	-	-	-	-
6	Stieglitz Ave & Segant Loop	AM PHV	-	0	13	0	29	0	40	0	-	-	-	-
		AM PHF	-	0.00	0.59	0.00	0.59	0.00	0.59	0.00	-	-	-	-
		PM PHV	-	0	2	0	11	0	6	0	-	-	-	-
		PM PHF	-	0.00	0.59	0.00	0.59	0.00	0.59	0.00	-	-	-	-

## 4.6 Generated Pedestrian Trips

To calculate the generated pedestrian trips, the reduction in vehicular generated trips within the 0.25-mile radius of the charter school and commercial development were converted to pedestrian trips. **Table 11** shows the pedestrian trips generated by the charter school and commercial development during the AM and PM peak.

**Table 11 – Pedestrian Generated Trips by Peak Hours**

Development		Pedestrian Generated Trips	% Entering	Trips Entering	% Exiting	Exiting Trips
Charter School	AM Peak	47	61%	29	39%	18
	PM Peak	10	43%	4	57%	6
Commercial Development	AM Peak	48	62%	30	38%	18
	PM Peak	38	48%	18	52%	20

To distribute the trips, within the study intersections, the shortest path from the subdivisions to the charter school or commercial development was used. The pedestrian generated trips were distributed using a weighted average of the units of the subdivision within the 0.25-mile radius. The pedestrians originated as follows:

1. 10% from Montage Unit 1
2. 10% from Montage Unit 4
3. 10% from Montage Unit 5
4. 30% from Montage Unit 6
5. 40% from the Multi-Family Housing

**Table 12** shows the pedestrian movements through the study intersections.

**Table 12 – Pedestrian Movements by Peak Hours**

No.	Intersection	Peak Hour	Southbound		Westbound		Northbound		Eastbound	
			CW	CCW	CW	CCW	CW	CCW	CW	CCW
1	Bobby Foster Rd & Diebenkorn Dr	AM PHV	3	6	-	-	-	-	-	-
		PM PHV	4	3	-	-	-	-	-	-
2	Bobby Foster Rd & Newhall Dr	AM PHV	6	11	-	-	-	-	-	-
		PM PHV	5	4	-	-	-	-	-	-
3	Stieglitz Ave & Diebenkorn Dr	AM PHV	-	-	-	-	20	19	-	-
		PM PHV	-	-	-	-	4	3	-	-
4	Stieglitz Ave & Entrance Driveway	AM PHV	-	-	-	-	8	12	-	-
		PM PHV	-	-	-	-	8	8	-	-
5	Stieglitz Ave & Newhall Dr	AM PHV	-	-	-	-	16	24	-	-
		PM PHV	-	-	-	-	5	4	-	-
6	Stieglitz Ave & Sagan Loop	AM PHV	-	-	4	6	8	12	-	-
		PM PHV	-	-	2	3	4	6	-	-

## SECTION 5 – ANALYSIS

### 5.1 Queue/Noise and Air Quality Impact Analysis

#### 5.1.1 Parent Drop Off Area (Parent Loop)

To be conservative, the total, unadjusted, 156 generated AM Peak hour vehicle trips for the charter school were used to conduct the queue analysis. Table 13 shows the 156 trips distributed according to the arrival distribution discussed in the methodology.

**Table 13 – Trip Distribution for a School during the Peak Hour**

Time Prior to School Start	% Distribution	Trips
> 45 min prior	*_-	0
45 min prior	7%	11
40 min prior	7%	11
35 min prior	6%	10
30 min prior	7%	11
25 min prior	13%	21
20 min prior	19%	30
15 min prior	20%	31
10 min prior	16%	25
5 min prior	4%	6

To conduct the queue analysis, the following four scenarios were analyzed:

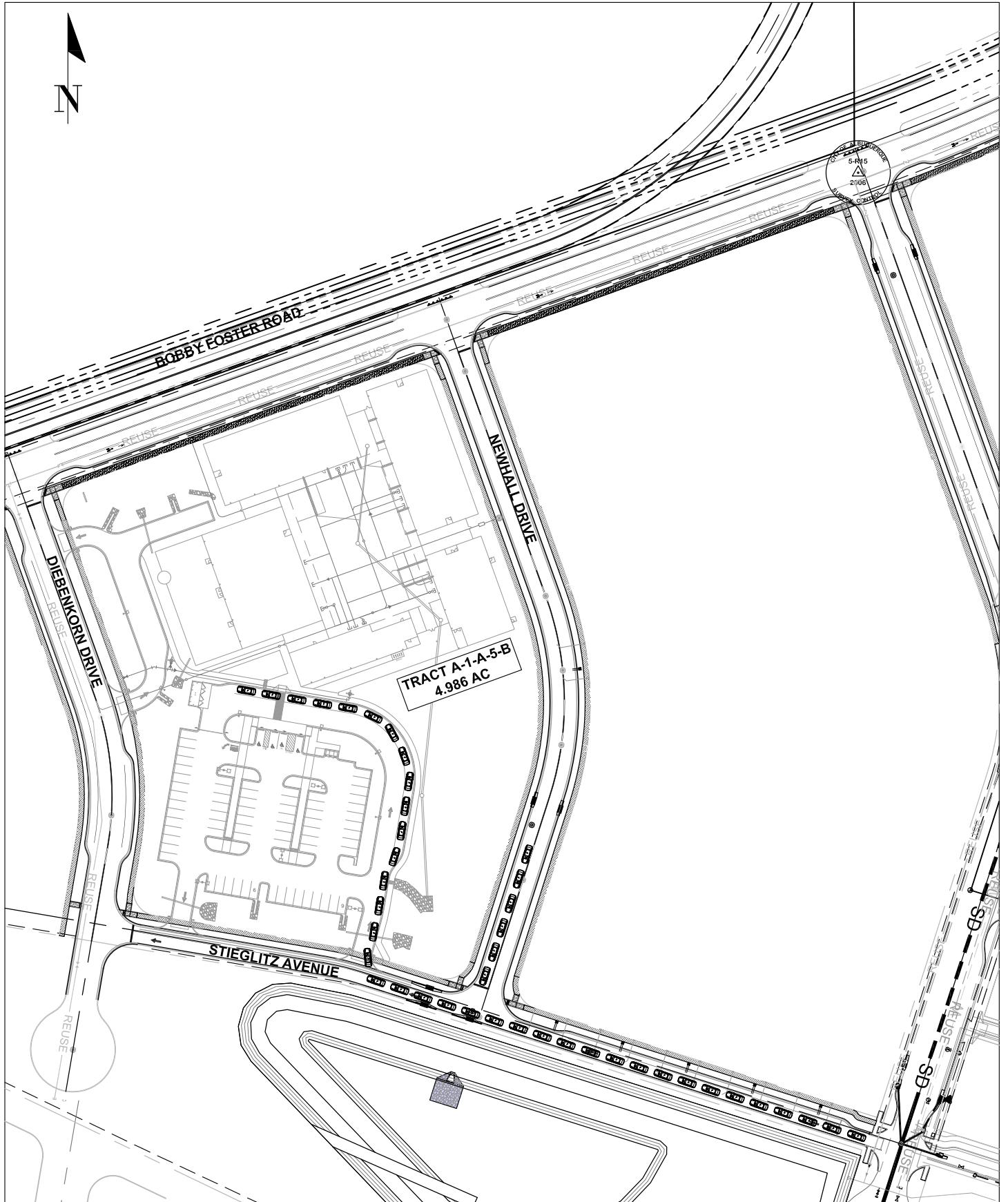
1. One vehicle at a time can drop off students at a time with a 19 seconds per vehicle processing rate. (Only the first car in the queue would be able to drop off)
2. Two vehicles at a time can drop off students at a time with a 19 seconds per vehicle processing rate. (Only the first two car in the queue would be able to drop off)
3. Two vehicles at a time can drop off students at a time with a 30 seconds per vehicle processing rate.
4. Two vehicles at a time can drop off students at a time with a 40 seconds per vehicle processing rate.

Using the arrival rates and the processing rate, a queue can be calculated. If the arrival rate exceeds the processing rate, the vehicles that were not processed will begin to form the queue. **Table 14** shows the results for the queue analyses for the four scenarios.

**Table 14 – Queue Analyses Results for the Scenarios**

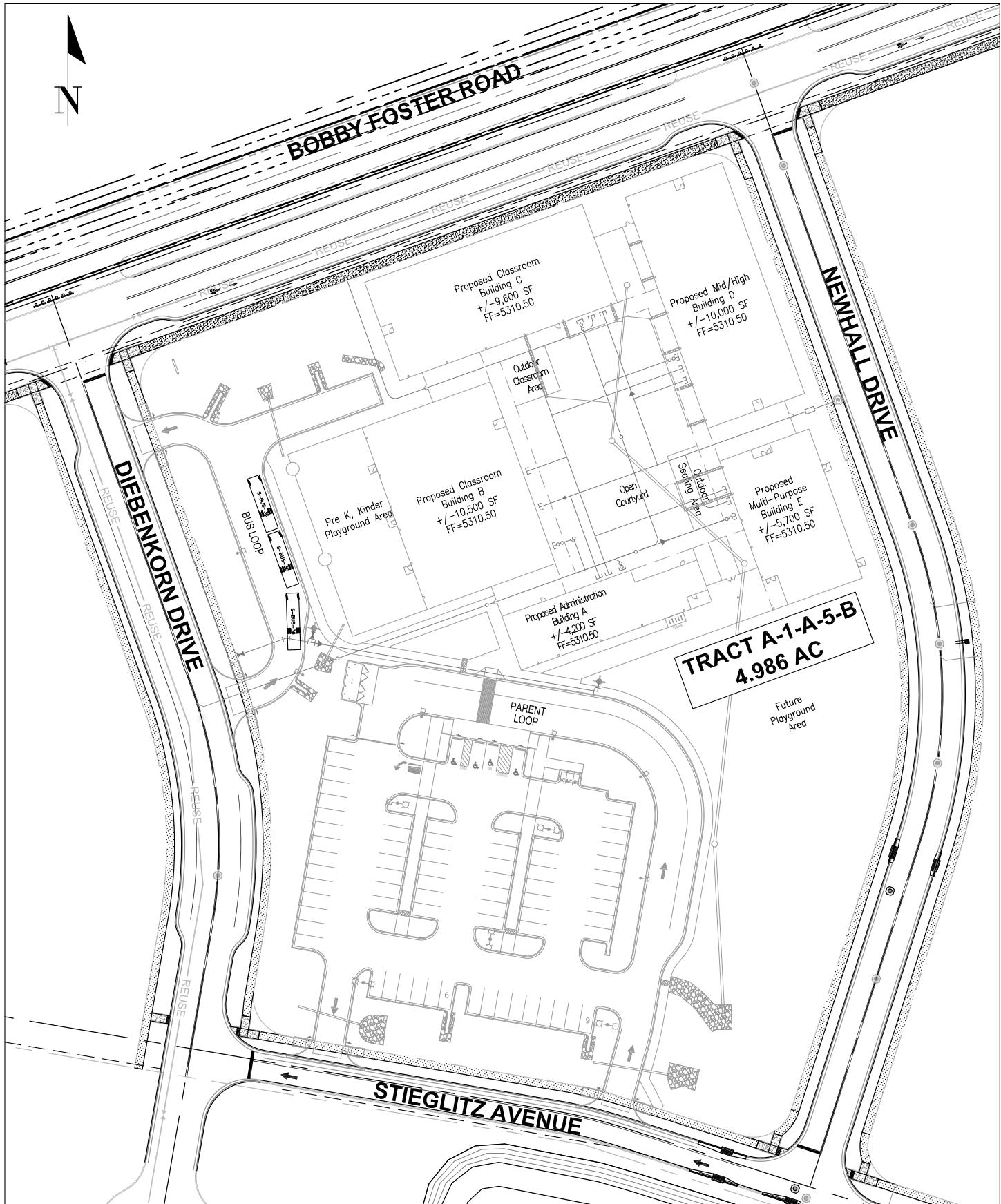
Time Prior to School Start	Trips	Cars Queued			
		Scenario 1	Scenario 2	Scenario 3	Scenario 4
>45 min prior	0	0	0	0	0
45 min prior	11	0	0	0	0
40 min prior	11	0	0	0	0
35 min prior	10	0	0	0	0
30 min prior	11	0	0	0	0
25 min prior	21	5	0	0	0
20 min prior	30	19	0	0	0
15 min prior	31	34	0	1	6
10 min prior	25	43	0	0	21
5 min prior	6	33	0	0	37

The length from the drop off point in the front of the school to Stieglitz Ave is 430 ft and assuming 25 ft length per vehicle, once the queue exceeds 17 vehicles, the network streets will start to become affected by the queue. **Figure 17**, displays the maximum queue for Scenario 1, which would affect the intersections of Stieglitz Ave and Newhall Dr. It is important to note that the queue from Scenario 1 is not the expected, but was presented as the worst-case scenario. If recommendations provided in **Section 6.1** are followed, the expected queue is expected to be similar to Scenarios 2 and 3.



### *5.1.2 Bus Loop*

To analyze the bus loop, the length from the drop off point to Diebenkorn Dr was compared to the length of the three busses that currently service the charter school. The length of the drop off point is 165 ft. Assuming a standard school bus of 36 ft, should all three busses arrive at the same time, the queue would not exceed the bus loop. **Figure 18** shows the three buses queued in the proposed bus loop.



## 5.2 Pedestrian and Bicycle Circulation and Routes Analysis

According to the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, the following is recommended for schools:

1. Pedestrian and bicycle access is available from all directions.
2. Pedestrian and bicycle routes in surrounding streets connect to school.
3. Effective traffic control devices are provided.
4. A school walk route and safety program exist and safety patrols are provided within the vicinity.
5. Building is accessible to pedestrians from all sides.
6. Bus zones be separate from auto drop-off zones.
7. School facilities, including playgrounds, field, and meeting rooms, are available for community use.

Within a 0.25-mile radius of the school, the routes to and from the charter school were evaluated using **Figure 2**. Sidewalks and crosswalks are expected to be provided at all intersection. The current site plane for the school shows Diebenkorn Dr and Sagan Loop ending in a cul-de-sac. Stop bars are shown at Intersection 1, 2, 3, 5, and 6. The site plan does show the school to be accessible from all sides to pedestrians. Bus zones are shown separate from the school parking/parent drop off loop. Since it is a new development, a walk route and safety program does not exist at the time of this study. A few bike routes were seen on Bobby Foster Rd and Sagan Loop.

## 5.3 Pedestrian and Vehicle Conflict Analysis

A traffic analysis was performed for the 2022 Build Out scenario to determine the pedestrian and vehicle conflicts. The following section describes the Synchro results for Build Out scenario.

**Table 15** summarizes the intersection results for the 2022 AM and PM peak hour Build Out scenario. The Synchro results for the AM and PM peak hour analyses are included in **Appendix B**. All intersections experience LOS A, which usually means no conflicts between pedestrians and vehicles. This means that pedestrians are able to find adequate gaps to cross the intersections and not wait a long to cross the intersections.

**Table 15 – Operational Measures for Build Scenarios**

Intersection Number	Location	AM Peak		PM Peak	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Bobby Foster Rd & Diebenkorn Dr	1.34	A	0.74	A
2	Bobby Foster Rd & Newhall Dr	1.66	A	1.66	A
3	Stieglitz Ave & Diebenkorn Dr	0.61	A	1.27	A
4	Stieglitz Ave & Entrance Driveway	0.15	A	0.10	A
5	Stieglitz Ave & Newhall Dr	0.91	A	0.20	A
6	Stieglitz Ave & Sagan Loop	0.00	A	0.00	A

#### **5.4 Consistency with Existing or Planned Transit Routes and Stops Analysis**

According to ABQ Ride, no transit routes are existing or planned within the project area; therefore, no other evaluations were conducted in the project area for this study.

## **SECTION 6 – EVALUATION OF REASONABLE ALTERNATIVES**

### **6.1 Queue/Noise and Air Quality Impact Analysis**

To avoid queues disrupting the roadway network, it is recommended that the 100 ft in front of the school should be used to drop off students at the parent loop. Vehicles behind this should be forced into a queue and only allowed to drop off students in the designated zone. It is also recommended that faculty from the school assist in the drop off procedures to keep the processing rates between 19 to 30 seconds per vehicle. Furthermore, it is recommended that carpooling be encouraged to reduce the number of vehicular trips to the school. Currently, the school provides the students and parents with a handbook that encourages the use of carpools and signs up interested parents. In addition to the carpool policy, it is recommended that a No-Idle policy for vehicles waiting be developed. These policies/practices, in order to be successful, need to be accepted by the school, aided by the parents, and monitored for compliance by the campus.

### **6.2 Pedestrian and Bicycle Circulation and Routes Analysis**

It is recommended that a walk route and safety program be developed prior to opening the school. It is also recommended that Diebenkorn Dr and Sagan Loop be connected to the through streets as the residential developments are built. More bike routes or shared use paths are recommended in the project area.

### **6.3 Pedestrian and Vehicle Conflict Analysis**

Since the intersections experience a LOS A, no alternatives are recommended.

### **6.4 Consistency with Existing or Planned Transit Routes and Stops Analysis**

No alternatives presented as a result of no transit routes existing or planned within the project area, according to ABQ.

# **APPENDIX A**

**Data from Mountain View Middle School  
Holden, Massachusetts**

# Appendix A

Table A.1: Day 1 Arrivals

Time	Buses	Employees	Parents	Total
7:30-7:35	0	5	10	15
7:35-7:40	0	2	7	9
7:40-7:45	0	6	8	14
7:45-7:50	2	5	9	16
7:50-7:55	5	7	17	29
7:55-8:00	4	5	18	27
8:00-8:05	3	5	20	28
8:05-8:10	0	2	21	23
8:10-8:15	0	1	11	12
Totals	14	38	121	173

Table A.2: Day 2 Arrivals

Time	Buses	Employees	Parents	Total
7:30-7:35	0	6	4	10
7:35-7:40	0	6	6	12
7:40-7:45	0	5	8	13
7:45-7:50	1	5	10	16
7:50-7:55	6	1	12	19
7:55-8:00	6	10	23	39
8:00-8:05	3	4	20	27
8:05-8:10	0	0	21	21
8:10-8:15	0	0	4	4
Totals	16	37	108	161

Table A.3: Day 3 Arrivals

Time	Buses	Employees	Parents	Total
7:30-7:35	0	9	14	23
7:35-7:40	0	3	7	10
7:40-7:45	0	3	5	8
7:45-7:50	1	4	7	12
7:50-7:55	6	7	10	23
7:55-8:00	6	7	30	43
8:00-8:05	1	4	21	26
8:05-8:10	0	2	19	21
8:10-8:15	0	1	6	7
Totals	14	40	119	173

Table A.4: Average Parent Arrivals (per minute)

Time	Day 1	Day 2	Day 3	Average
7:30-7:35	2.00	0.80	2.80	1.87
7:35-7:40	1.40	1.20	1.40	1.33
7:40-7:45	1.60	1.60	1.00	1.40
7:45-7:50	1.80	2.00	1.40	1.73
7:50-7:55	3.40	2.40	2.00	2.60
7:55-8:00	3.60	4.60	6.00	4.73
8:00-8:05	4.00	4.00	4.20	4.07
8:05-8:10	4.20	4.20	3.80	4.07
8:10-8:15	2.20	0.80	1.20	1.40

Table A.5: Day 1 Drop-Off Times

Time	Service Times								
	No. of cars	1	4	2	1	1	1	1	1
7:30-7:35	No. of cars	16	18	15	18	15	30	30	17
7:35-7:40	No. of cars	20	35	17	12	23			
7:40-7:45	No. of cars	28	11	31	9	11			
7:45-7:50	No. of cars	18	15	11	8	25	9	12	
7:50-7:55	No. of cars	14	16	35	18	24	26	20	35
7:55-8:00	No. of cars	35	10	29	24	15	40	20	1
8:00-8:05	No. of cars	17	15	15	27	10	11	16	31
8:05-8:10	No. of cars	38	25	10	15	23	23	32	
8:10-8:15	No. of cars	18	14	8	12	15	13	22	

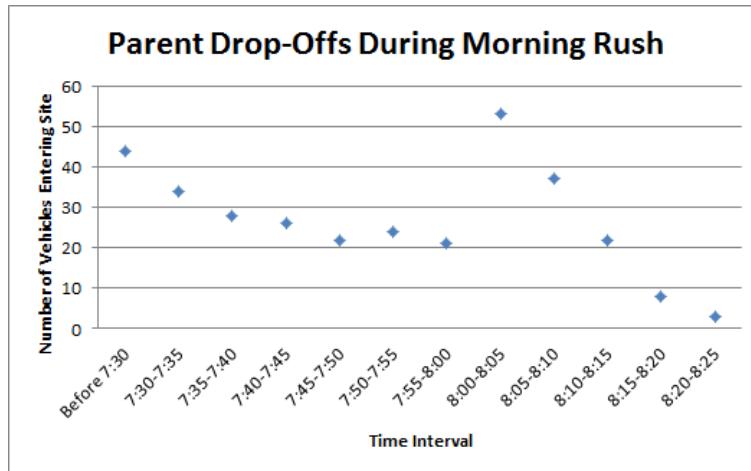


Figure A.1: Data Collected by Nitsch Engineering

Table A.6: Day 2 Drop-Off Times

Time	Service Times				
	No. of cars	1	1	1	1
7:30-7:35	Service Times (s)	16	8	15	10
7:35-7:40	No. of cars	1	3	1	1
	Service Times (s)	14	39	5	8
					25
7:40-7:45	No. of cars	1	1	1	2
	Service Times (s)	14	25	13	23
				22	10
7:45-7:50	No. of cars	3	2	1	1
	Service Times (s)	46	17	19	8
					39
7:50-7:55	No. of cars	2	3	1	2
	Service Times (s)	30	23	28	20
				17	12
7:55-8:00	No. of cars	1	3	2	3
	Service Times (s)	10	37	23	8
				11	36
				39	23
				18	17
8:00-8:05	No. of cars	3	3	4	3
	Service Times (s)	27	15	23	35
				17	31
				17	8
8:05-8:10	No. of cars	1	3	3	2
	Service Times (s)	9	33	20	18
				24	40
				12	25
8:10-8:15	No. of cars	1	1	1	
	Service Times (s)	6	14	23	

Table A.7: Day 3 Drop-Off Times

Time	Service Times									
	No. of cars	1	3	2	1	1				
7:30-7:35	Service Times (s)	13	26	23	4	7	15			
7:35-7:40	No. of cars	2	1	2	1					
	Service Times (s)	28	17	29	16					
7:40-7:45	No. of cars	3	1	1						
	Service Times (s)	21	9	22						
7:45-7:50	No. of cars	1	2	2	1					
	Service Times (s)	13	30	15	17					
7:50-7:55	No. of cars	1	1	3	4	3				
	Service Times (s)	18	23	52	38	22	20			
7:55-8:00	No. of cars	3	4	4	3	3				
	Service Times (s)	20	30	17	23	30	40			
8:00-8:05	No. of cars	3	3	2	2	4				
	Service Times (s)	24	20	16	12	30	35	22	17	30
8:05-8:10	No. of cars	2	3	2	1	1	1	1		
	Service Times (s)	13	25	14	8	8	10	10		
8:10-8:15	No. of cars	1	1	1	1	1	1			
	Service Times (s)	7	8	8	10	5	8			

Table A.8: Arrivals

Time	Buses	Employees	Parents	Total
7:30-7:35	0	5	10	15
7:35-7:40	0	5	21	26
7:40-7:45	0	2	12	14
7:45-7:50	4	2	15	21
7:50-7:55	4	6	24	34
7:55-8:00	5	10	29	44
8:00-8:05	1	5	35	41
8:05-8:10	0	1	27	28
8:10-8:15	0	0	6	6
Totals	14	36	179	229

Table A.9: Average Arrivals of Parents

Time	Arrivals (per minute)
7:30-7:35	2
7:35-7:40	4.2
7:40-7:45	2.4
7:45-7:50	3
7:50-7:55	4.8
7:55-8:00	5.8
8:00-8:05	7
8:05-8:10	5.4
8:10-8:15	1.2

Table A.10: Rainy Day Drop-Off Times

Time	No. of cars	Service Times											
		1	1	1	2	1	1	1	2	2	1	1	2
7:30-7:35	No. of cars	1	1	1	2	1	1	1	2	2	1	1	2
	Svc Time(s)	17	10	8	30	21	8	12	25				
7:35-7:40	No. of cars	3	2	1	3	3	2	1	2				
	Svc Time(s)	23	22	11	26	24	8	12	22				
7:40-7:45	No. of cars	2	3	1	1	1	1	2	2	2	1	1	1
	Svc Time(s)	20	25	10	10	8	17	20	16	12	18		
7:45-7:50	No. of cars	1	2	2	3	2	2	2	2				
	Svc Time(s)	11	30	16	30	14	8	20					
7:50-7:55	No. of cars	2	1	2	3	1	1	1	2	4	3	2	
	Svc Time(s)	18	13	17	30	19	14	25	30	22	22	19	
7:55-8:00	No. of cars	4	2	3	3	3	3	2	1	2	3	1	3
	Svc Time(s)	42	13	20	18	20	14	23	10	8	14	5	34
8:00-8:05	No. of cars	3	4	2	4	4	3	5	3				
	Svc Time(s)	21	30	13	18	18	12	20	18				
8:05-8:10	No. of cars	3	3	1	1	4	2	3	3	1	3	1	2
	Svc Time(s)	15	24	11	9	28	17	13	11	8	22	19	43
8:10-8:15	No. of cars												
	Svc Time(s)												

# **APPENDIX B**

**Synchro Reports:  
2022 Build Out  
AM and PM Peak Hours**

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Approach

Approach Direction	EB
Median Present?	Yes
Approach Delay(s)	0.8
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	74	22
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.12	0.07
Prob of Blocked Lane	0.06	0.03
Delay for adq Gap	3.59	5.82
Avg Ped Delay (s)	0.44	0.38

---

Approach

Approach Direction	WB
Median Present?	Yes
Approach Delay(s)	1.5
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	22	74
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.04	0.20
Prob of Blocked Lane	0.02	0.11
Delay for adq Gap	3.32	6.64
Avg Ped Delay (s)	0.13	1.34

**Approach**

Approach Direction EB

Median Present? Yes

Approach Delay(s) 1.3

Level of Service A

**Crosswalk**

Length (ft) 12 28

Lanes Crossed 2 2

Veh Vol Crossed 90 43

Ped Vol Crossed 0 0

Yield Rate(%) 0 0

Ped Platooning No No

Critical Headway (s) 6.43 11.00

Prob of Delayed X-ing 0.15 0.12

Prob of Blocked Lane 0.08 0.06

Delay for adq Gap 3.67 6.13

Avg Ped Delay (s) 0.55 0.76

**Approach**

Approach Direction WB

Median Present? Yes

Approach Delay(s) 1.9

Level of Service A

**Crosswalk**

Length (ft) 12 28

Lanes Crossed 2 2

Veh Vol Crossed 43 90

Ped Vol Crossed 0 0

Yield Rate(%) 0 0

Ped Platooning No No

Critical Headway (s) 6.43 11.00

Prob of Delayed X-ing 0.07 0.24

Prob of Blocked Lane 0.04 0.13

Delay for adq Gap 3.43 6.91

Avg Ped Delay (s) 0.25 1.66

**Approach**

Approach Direction	NB
Median Present?	No
Approach Delay(s)	0.6
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	29
Ped Vol Crossed	39
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.09
Prob of Blocked Lane	0.05
Delay for adq Gap	6.59
Avg Ped Delay (s)	0.61

**Approach**

Approach Direction	SB
Median Present?	No
Approach Delay(s)	0.6
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	29
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.09
Prob of Blocked Lane	0.05
Delay for adq Gap	6.59
Avg Ped Delay (s)	0.61

---

**Approach**

Approach Direction	WB
Median Present?	No
Approach Delay(s)	0.1
Level of Service	A

---

**Crosswalk**

Length (ft)	20
Lanes Crossed	1
Veh Vol Crossed	14
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
<hr/>	
Critical Headway (s)	8.71
Prob of Delayed X-ing	0.03
Prob of Blocked Lane	0.03
Delay for adq Gap	4.48
Avg Ped Delay (s)	0.15

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**Approach**

Approach Direction	WB
Median Present?	No
Approach Delay(s)	0.9
Level of Service	A

**Crosswalk**

Length (ft)	20
Lanes Crossed	1
Veh Vol Crossed	81
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	8.71
Prob of Delayed X-ing	0.18
Prob of Blocked Lane	0.18
Delay for adq Gap	5.13
Avg Ped Delay (s)	0.91

**Approach**

Approach Direction	NB
Median Present?	No
Approach Delay(s)	0.0
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	0
Ped Vol Crossed	20
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.00
Prob of Blocked Lane	0.00
Delay for adq Gap	0.00
Avg Ped Delay (s)	0.00

**Approach**

Approach Direction	SB
Median Present?	No
Approach Delay(s)	0.0
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	0
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.00
Prob of Blocked Lane	0.00
Delay for adq Gap	0.00
Avg Ped Delay (s)	0.00

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Approach

Approach Direction	EB
Median Present?	Yes
Approach Delay(s)	0.9
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	30	42
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.05	0.12
Prob of Blocked Lane	0.03	0.06
Delay for adq Gap	3.36	6.12
Avg Ped Delay (s)	0.18	0.74

---

Approach

Approach Direction	WB
Median Present?	Yes
Approach Delay(s)	0.8
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	42	30
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.07	0.09
Prob of Blocked Lane	0.04	0.04
Delay for adq Gap	3.42	5.94
Avg Ped Delay (s)	0.25	0.52

---

Approach

Approach Direction	EB
Median Present?	Yes
Approach Delay(s)	1.3
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	90	43
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.15	0.12
Prob of Blocked Lane	0.08	0.06
Delay for adq Gap	3.67	6.13
Avg Ped Delay (s)	0.55	0.76

---

Approach

Approach Direction	WB
Median Present?	Yes
Approach Delay(s)	1.9
Level of Service	A

Crosswalk

Length (ft)	12	28
Lanes Crossed	2	2
Veh Vol Crossed	43	90
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	6.43	11.00
Prob of Delayed X-ing	0.07	0.24
Prob of Blocked Lane	0.04	0.13
Delay for adq Gap	3.43	6.91
Avg Ped Delay (s)	0.25	1.66

**Approach**

Approach Direction	NB
Median Present?	No
Approach Delay(s)	1.3
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	58
Ped Vol Crossed	20
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.18
Prob of Blocked Lane	0.09
Delay for adq Gap	7.14
Avg Ped Delay (s)	1.27

**Approach**

Approach Direction	SB
Median Present?	No
Approach Delay(s)	1.3
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	58
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.18
Prob of Blocked Lane	0.09
Delay for adq Gap	7.14
Avg Ped Delay (s)	1.27

---

**Approach**

Approach Direction	WB
Median Present?	No
Approach Delay(s)	0.1
Level of Service	A

---

**Crosswalk**

Length (ft)	20
Lanes Crossed	1
Veh Vol Crossed	9
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	8.71
Prob of Delayed X-ing	0.02
Prob of Blocked Lane	0.02
Delay for adq Gap	4.44
Avg Ped Delay (s)	0.10

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**Approach**

Approach Direction	WB
Median Present?	No
Approach Delay(s)	0.2
Level of Service	A

---

**Crosswalk**

Length (ft)	20
Lanes Crossed	1
Veh Vol Crossed	19
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	8.71
Prob of Delayed X-ing	0.04
Prob of Blocked Lane	0.04
Delay for adq Gap	4.53
Avg Ped Delay (s)	0.20

---

**Approach**

Approach Direction	NB
Median Present?	No
Approach Delay(s)	0.0
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	0
Ped Vol Crossed	10
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.00
Prob of Blocked Lane	0.00
Delay for adq Gap	0.00
Avg Ped Delay (s)	0.00

**Approach**

Approach Direction	SB
Median Present?	No
Approach Delay(s)	0.0
Level of Service	A

**Crosswalk**

Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	0
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.00
Prob of Blocked Lane	0.00
Delay for adq Gap	0.00
Avg Ped Delay (s)	0.00

# **APPENDIX I**

**Synchro Reports:  
2021 Existing Conditions,  
AM and PM Peak Hours**

1. Existing 2021 AM Peak  
1: Driveway 1 & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

## 1. Existing 2021 AM Peak

2: Diebenkorn Dr &amp; Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			1131			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.03	0.00	0.07			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↗	↑	↓
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			703			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.09	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

1. Existing 2021 AM Peak  
 4: Sagan Loop & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

1. Existing 2021 AM Peak  
5: Driveway 2 & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			434			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

1. Existing 2021 AM Peak  
6: University Blvd & Fritts Crossing

06/18/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↑	↗	↘	↑
Traffic Volume (veh/h)	0	25	173	0	24	281
Future Volume (Veh/h)	0	25	173	0	24	281
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Hourly flow rate (vph)	0	60	222	0	32	335
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	621	222		222		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	621	222		222		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	100	93		98		
cM capacity (veh/h)	440	818		1347		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	60	222	32	335		
Volume Left	0	0	32	0		
Volume Right	60	0	0	0		
cSH	818	1700	1347	1700		
Volume to Capacity	0.07	0.13	0.02	0.20		
Queue Length 95th (ft)	6	0	2	0		
Control Delay (s)	9.8	0.0	7.7	0.0		
Lane LOS	A		A			
Approach Delay (s)	9.8	0.0	0.7			
Approach LOS	A					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization		25.8%		ICU Level of Service		A
Analysis Period (min)			15			

# 1. Existing 2021 AM Peak

7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/18/2021



Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	99	171	0	0	68	8	0	0	41
Future Volume (Veh/h)	0	0	99	171	0	0	68	8	0	0	41
Sign Control	Stop			Free			Free		Stop		
Grade	0%			0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Hourly flow rate (vph)	0	0	230	194	0	0	97	23	0	0	66
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type				None			None				
Median storage veh											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume	774	97	120			194			666	762	60
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	774	97	120			194			666	762	60
tC, single (s)	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)											
tF (s)	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	100	84			100			100	100	93
cM capacity (veh/h)	276	940	1466			1377			304	281	993
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1			
Volume Total	0	230	97	97	0	65	55	66			
Volume Left	0	230	0	0	0	0	0	0			
Volume Right	0	0	0	0	0	0	23	66			
cSH	1700	1466	1700	1700	1700	1700	1700	993			
Volume to Capacity	0.00	0.16	0.06	0.06	0.00	0.04	0.03	0.07			
Queue Length 95th (ft)	0	14	0	0	0	0	0	5			
Control Delay (s)	0.0	7.9	0.0	0.0	0.0	0.0	0.0	8.9			
Lane LOS	A	A						A			
Approach Delay (s)	0.0	4.3			0.0			8.9			
Approach LOS	A							A			
Intersection Summary											
Average Delay			3.9								
Intersection Capacity Utilization		15.5%			ICU Level of Service			A			
Analysis Period (min)			15								

1. Existing 2021 AM Peak  
8: Strand Loop & University Blvd

06/18/2021

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	84	34	21	0	16	1	21	0	0	0	0	24
Future Volume (Veh/h)	84	34	21	0	16	1	21	0	0	0	0	24
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Hourly flow rate (vph)	94	44	33	0	22	2	33	0	0	0	0	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	24			77			296	272	38	233	288	12
vC1, stage 1 conf vol							248	248		23	23	
vC2, stage 2 conf vol							47	24		210	265	
vCu, unblocked vol	24			77			296	272	38	233	288	12
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			95	100	100	100	100	97
cM capacity (veh/h)	1589			1520			601	586	1025	656	581	1065
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	94	29	48	0	15	9	33	36				
Volume Left	94	0	0	0	0	0	33	0				
Volume Right	0	0	33	0	0	2	0	36				
cSH	1589	1700	1700	1700	1700	1700	601	1065				
Volume to Capacity	0.06	0.02	0.03	0.00	0.01	0.01	0.05	0.03				
Queue Length 95th (ft)	5	0	0	0	0	0	4	3				
Control Delay (s)	7.4	0.0	0.0	0.0	0.0	0.0	11.3	8.5				
Lane LOS	A						B	A				
Approach Delay (s)	4.1			0.0			11.3	8.5				
Approach LOS							B	A				
Intersection Summary												
Average Delay			5.2									
Intersection Capacity Utilization		25.8%		ICU Level of Service				A				
Analysis Period (min)			15									

1. Existing 2021 AM Peak  
9: Sagan Loop & Stieglitz Ave

06/18/2021

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.00	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%		ICU Level of Service						A		
Analysis Period (min)			15									

2. Existing 2021 PM Peak  
1: Driveway 1 & Bobby Foster Rd

06/18/2021

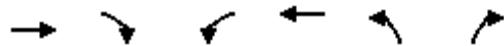


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

## 2. Existing 2021 PM Peak

### 2: Diebenkorn Dr & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			1131			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.03	0.00	0.07			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			703			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.09	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

2. Existing 2021 PM Peak  
4: Sagan Loop & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

2. Existing 2021 PM Peak  
5: Driveway 2 & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			434			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

2. Existing 2021 PM Peak  
6: University Blvd & Fritts Crossing

06/18/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	2	25	213	2	8	183
Future Volume (Veh/h)	2	25	213	2	8	183
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Hourly flow rate (vph)	4	45	260	4	16	220
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	514	262		264		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	514	262		264		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	99	94		99		
cM capacity (veh/h)	514	777		1300		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	49	264	16	220		
Volume Left	4	0	16	0		
Volume Right	45	4	0	0		
cSH	746	1700	1300	1700		
Volume to Capacity	0.07	0.16	0.01	0.13		
Queue Length 95th (ft)	5	0	1	0		
Control Delay (s)	10.2	0.0	7.8	0.0		
Lane LOS	B		A			
Approach Delay (s)	10.2	0.0	0.5			
Approach LOS	B					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization		21.3%		ICU Level of Service		A
Analysis Period (min)			15			

## 2. Existing 2021 PM Peak

### 7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/18/2021



Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	36	102	0	0	114	2	49	0	41
Future Volume (Veh/h)	0	0	36	102	0	0	114	2	49	0	41
Sign Control	Stop			Free			Free		Stop		
Grade	0%			0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Hourly flow rate (vph)	0	0	64	113	0	0	141	6	163	0	72
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type				None			None				
Median storage veh											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume	388	56	147			113			328	385	74
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	388	56	147			113			328	385	74
tC, single (s)	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)											
tF (s)	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	100	96			100			72	100	93
cM capacity (veh/h)	521	998	1432			1474			580	523	973
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1			
Volume Total	0	64	56	56	0	94	53	235			
Volume Left	0	64	0	0	0	0	0	163			
Volume Right	0	0	0	0	0	0	6	72			
cSH	1700	1432	1700	1700	1700	1700	1700	662			
Volume to Capacity	0.00	0.04	0.03	0.03	0.00	0.06	0.03	0.35			
Queue Length 95th (ft)	0	4	0	0	0	0	0	40			
Control Delay (s)	0.0	7.6	0.0	0.0	0.0	0.0	0.0	13.4			
Lane LOS	A	A						B			
Approach Delay (s)	0.0	2.8			0.0			13.4			
Approach LOS	A							B			
Intersection Summary											
Average Delay			6.5								
Intersection Capacity Utilization			Err%			ICU Level of Service		H			
Analysis Period (min)			15								

2. Existing 2021 PM Peak  
8: Strand Loop & University Blvd

06/18/2021

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	34	42	33	2	53	1	43	0	5	1	1	75
Future Volume (Veh/h)	34	42	33	2	53	1	43	0	5	1	1	75
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Hourly flow rate (vph)	52	79	39	4	65	3	62	0	7	3	4	101
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	68			118			346	278	59	225	296	34
vC1, stage 1 conf vol							202	202		74	74	
vC2, stage 2 conf vol							144	76		150	222	
vCu, unblocked vol	68			118			346	278	59	225	296	34
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			89	100	99	100	99	90
cM capacity (veh/h)	1531			1468			564	611	994	696	604	1032
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	52	53	65	4	43	25	69	108				
Volume Left	52	0	0	4	0	0	62	3				
Volume Right	0	0	39	0	0	3	7	101				
cSH	1531	1700	1700	1468	1700	1700	590	992				
Volume to Capacity	0.03	0.03	0.04	0.00	0.03	0.01	0.12	0.11				
Queue Length 95th (ft)	3	0	0	0	0	0	10	9				
Control Delay (s)	7.4	0.0	0.0	7.5	0.0	0.0	11.9	9.1				
Lane LOS	A			A			B	A				
Approach Delay (s)	2.3			0.4			11.9	9.1				
Approach LOS							B	A				
Intersection Summary												
Average Delay			5.3									
Intersection Capacity Utilization		24.6%			ICU Level of Service			A				
Analysis Period (min)			15									

2. Existing 2021 PM Peak  
9: Sagan Loop & Stieglitz Ave

06/18/2021

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.00	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%		ICU Level of Service						A		
Analysis Period (min)			15									

# **APPENDIX J**

**Synchro Reports:  
2023 and 2028 No Build  
AM and PM Peak Hours**



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↔	↔	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.03	0.00	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

## 3. 2023 No Build AM Peak

2: Diebenkorn Dr &amp; Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↗	↘
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			1131			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.02	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↔	↔	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			703			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.07	0.00	0.04			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				

3. 2023 No Build AM Peak  
4: Sagan Loop & Bobby Foster Rd

06/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.05	0.00	0.02			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↖	↗	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			434			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.05	0.00	0.03			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	0	27	187	0	26	303
Future Volume (Veh/h)	0	27	187	0	26	303
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Hourly flow rate (vph)	0	64	240	0	35	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	671	240		240		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	671	240		240		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	100	92		97		
cM capacity (veh/h)	411	799		1327		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	64	240	35	361		
Volume Left	0	0	35	0		
Volume Right	64	0	0	0		
cSH	799	1700	1327	1700		
Volume to Capacity	0.08	0.14	0.03	0.21		
Queue Length 95th (ft)	7	0	2	0		
Control Delay (s)	9.9	0.0	7.8	0.0		
Lane LOS	A		A			
Approach Delay (s)	9.9	0.0	0.7			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.3			
Intersection Capacity Utilization		26.5%		ICU Level of Service		A
Analysis Period (min)			15			

## 3. 2023 No Build AM Peak

7: University Blvd &amp; Bobby Foster Rd &amp; Eastman Crossing

06/18/2021

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	107	185	0	0	73	9	0	0	44
Future Volume (Veh/h)	0	0	107	185	0	0	73	9	0	0	44
Sign Control	Stop			Free			Free		Stop		
Grade	0%			0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Hourly flow rate (vph)	0	0	249	210	0	0	104	26	0	0	71
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type				None			None				
Median storage veh											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume	838	105	130			210			720	825	65
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	838	105	130			210			720	825	65
tC, single (s)	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)											
tF (s)	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	100	83			100			100	100	93
cM capacity (veh/h)	249	929	1453			1358			274	254	986
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1			
Volume Total	0	249	105	105	0	69	61	71			
Volume Left	0	249	0	0	0	0	0	0			
Volume Right	0	0	0	0	0	0	26	71			
cSH	1700	1453	1700	1700	1700	1700	1700	986			
Volume to Capacity	0.44	0.17	0.06	0.06	0.00	0.04	0.04	0.07			
Queue Length 95th (ft)	0	15	0	0	0	0	0	6			
Control Delay (s)	0.0	8.0	0.0	0.0	0.0	0.0	0.0	8.9			
Lane LOS	A	A						A			
Approach Delay (s)	0.0	4.3			0.0			8.9			
Approach LOS	A							A			
Intersection Summary											
Average Delay			4.0								
Intersection Capacity Utilization		15.9%			ICU Level of Service			A			
Analysis Period (min)			15								

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	91	37	23	0	17	1	23	0	0	0	0	26
Future Volume (Veh/h)	91	37	23	0	17	1	23	0	0	0	0	26
Sign Control	Free			Free			Stop			Stop		Stop
Grade	0%			0%			0%			0%		0%
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Hourly flow rate (vph)	102	47	37	0	24	2	37	0	0	0	0	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	26			84			320	296	42	252	313	13
vC1, stage 1 conf vol							270	270		25	25	
vC2, stage 2 conf vol							51	26		228	288	
vCu, unblocked vol	26			84			320	296	42	252	313	13
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			94	100	100	100	100	96
cM capacity (veh/h)	1587			1511			579	570	1019	636	563	1064
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	102	31	53	0	16	10	37	39				
Volume Left	102	0	0	0	0	0	37	0				
Volume Right	0	0	37	0	0	2	0	39				
cSH	1587	1700	1700	1700	1700	1700	579	1064				
Volume to Capacity	0.06	0.02	0.03	0.00	0.01	0.01	0.06	0.04				
Queue Length 95th (ft)	5	0	0	0	0	0	5	3				
Control Delay (s)	7.4	0.0	0.0	0.0	0.0	0.0	11.6	8.5				
Lane LOS	A						B	A				
Approach Delay (s)	4.1			0.0			11.6	8.5				
Approach LOS							B	A				
Intersection Summary												
Average Delay			5.3									
Intersection Capacity Utilization		26.3%			ICU Level of Service			A				
Analysis Period (min)			15									

3. 2023 No Build AM Peak  
9: Sagan Loop & Stieglitz Ave

06/18/2021

	↗	→	↘	↖	←	↙	↑	↗	↘	↓	↖	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					⬆️			⬇️				
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.02	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%			ICU Level of Service					A		
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↖	↗	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↖	↗
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			1131			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.03	0.00	0.07			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↗	↘
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			703			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.09	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↗	↘
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
<b>Intersection Summary</b>						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↖	↗	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)			434			
pX, platoon unblocked						
vC, conflicting volume		0		0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		0		0	0	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1623		1023	1085	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↑	↑	↗	↙	↑
Traffic Volume (veh/h)	2	27	230	2	9	198
Future Volume (Veh/h)	2	27	230	2	9	198
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Hourly flow rate (vph)	4	49	280	4	18	239
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	557	282		284		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	557	282		284		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	99	94		99		
cM capacity (veh/h)	485	757		1278		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	53	284	18	239		
Volume Left	4	0	18	0		
Volume Right	49	4	0	0		
cSH	726	1700	1278	1700		
Volume to Capacity	0.07	0.17	0.01	0.14		
Queue Length 95th (ft)	6	0	1	0		
Control Delay (s)	10.3	0.0	7.9	0.0		
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization		22.2%		ICU Level of Service		A
Analysis Period (min)			15			

## 4. 2023 No Build PM Peak

7: University Blvd &amp; Bobby Foster Rd &amp; Eastman Crossing

06/18/2021



Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	39	110	0	0	123	2	53	0	44
Future Volume (Veh/h)	0	0	39	110	0	0	123	2	53	0	44
Sign Control	Stop			Free			Free		Stop		
Grade	0%			0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Hourly flow rate (vph)	0	0	70	122	0	0	152	6	177	0	77
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type				None			None				
Median storage veh											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume	420	61	158			122			356	417	79
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	420	61	158			122			356	417	79
tC, single (s)	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)											
tF (s)	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	100	95			100			68	100	92
cM capacity (veh/h)	497	991	1419			1463			553	499	965
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1			
Volume Total	0	70	61	61	0	101	57	254			
Volume Left	0	70	0	0	0	0	0	177			
Volume Right	0	0	0	0	0	0	6	77			
cSH	1700	1419	1700	1700	1700	1700	1700	635			
Volume to Capacity	0.00	0.05	0.04	0.04	0.00	0.06	0.03	0.40			
Queue Length 95th (ft)	0	4	0	0	0	0	0	48			
Control Delay (s)	0.0	7.7	0.0	0.0	0.0	0.0	0.0	14.4			
Lane LOS	A	A						B			
Approach Delay (s)	0.0	2.8			0.0			14.4			
Approach LOS	A							B			
Intersection Summary											
Average Delay			6.9								
Intersection Capacity Utilization			Err%		ICU Level of Service			H			
Analysis Period (min)			15								

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	37	45	36	2	57	1	46	0	5	1	1	81
Future Volume (Veh/h)	37	45	36	2	57	1	46	0	5	1	1	81
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Hourly flow rate (vph)	56	85	42	4	70	3	67	0	7	3	4	109
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	73			127			372	299	64	241	318	36
vC1, stage 1 conf vol							218	218		80	80	
vC2, stage 2 conf vol							154	81		162	239	
vCu, unblocked vol	73			127			372	299	64	241	318	36
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			100			88	100	99	100	99	89
cM capacity (veh/h)	1525			1457			543	598	988	682	590	1028
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	56	57	70	4	47	26	74	116				
Volume Left	56	0	0	4	0	0	67	3				
Volume Right	0	0	42	0	0	3	7	109				
cSH	1525	1700	1700	1457	1700	1700	567	989				
Volume to Capacity	0.04	0.03	0.04	0.00	0.03	0.02	0.13	0.12				
Queue Length 95th (ft)	3	0	0	0	0	0	11	10				
Control Delay (s)	7.5	0.0	0.0	7.5	0.0	0.0	12.3	9.1				
Lane LOS	A			A			B	A				
Approach Delay (s)	2.3			0.4			12.3	9.1				
Approach LOS							B	A				
Intersection Summary												
Average Delay			5.4									
Intersection Capacity Utilization		24.9%		ICU Level of Service				A				
Analysis Period (min)		15										

4. 2023 No Build PM Peak  
9: Sagan Loop & Stieglitz Ave

06/18/2021

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					⬆️			⬇️				
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.00	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%			ICU Level of Service					A		
Analysis Period (min)			15									

5. 2028 No Build AM Peak  
1: Driveway 1 & Bobby Foster Rd

08/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	321	0	0	102	0	0
Future Volume (Veh/h)	321	0	0	102	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	544	0	0	173	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		544		630	272	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		544		630	272	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1021		414	726	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	363	181	58	115	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1021	1700	1700	
Volume to Capacity	0.21	0.11	0.00	0.07	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS			A			
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS			A			
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		12.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	321	0	0	102	0	0
Future Volume (Veh/h)	321	0	0	102	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	544	0	0	173	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		544		630	272	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		544		630	272	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1021		414	726	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	363	181	58	115	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1021	1700	1700	
Volume to Capacity	0.21	0.11	0.00	0.07	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS				A		
<b>Intersection Summary</b>						
Average Delay		0.0				
Intersection Capacity Utilization		12.2%		ICU Level of Service		A
Analysis Period (min)		15				

5. 2028 No Build AM Peak  
3: Newhall Dr & Bobby Foster Rd

08/18/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	321	0	0	102	2	0	0	0	1	0	0
Future Volume (Veh/h)	0	321	0	0	102	2	0	0	0	1	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	544	0	0	173	3	0	0	0	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	176			544			630	720	272	446	718	88
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	176			544			630	720	272	446	718	88
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1398			1021			366	352	726	495	353	953
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	272	272	86	90	0	2						
Volume Left	0	0	0	0	0	2						
Volume Right	0	0	0	3	0	0						
cSH	1398	1700	1021	1700	1700	495						
Volume to Capacity	0.00	0.16	0.00	0.05	0.00	0.00						
Queue Length 95th (ft)	0	0	0	0	0	0						
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	12.3						
Lane LOS					A	B						
Approach Delay (s)	0.0		0.0		0.0	12.3						
Approach LOS					A	B						
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization		18.9%			ICU Level of Service				A			
Analysis Period (min)			15									

5. 2028 No Build AM Peak  
4: Sagan Loop & Bobby Foster Rd

08/18/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	321	0	0	104	2	0	0	0	1	0	0
Future Volume (Veh/h)	0	321	0	0	104	2	0	0	0	1	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.92	0.92	0.92	0.92	0.59	0.92	0.59	0.92	0.59	0.59	0.59
Hourly flow rate (vph)	0	349	0	0	113	3	0	0	0	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	116			349			406	465	174	289	464	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	116			349			406	465	174	289	464	58
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1470			1207			530	493	839	641	494	996
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	174	174	56	60	0	2						
Volume Left	0	0	0	0	0	2						
Volume Right	0	0	0	3	0	0						
cSH	1470	1700	1207	1700	1700	641						
Volume to Capacity	0.00	0.10	0.00	0.04	0.00	0.00						
Queue Length 95th (ft)	0	0	0	0	0	0						
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.6						
Lane LOS					A	B						
Approach Delay (s)	0.0		0.0		0.0	10.6						
Approach LOS					A	B						
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization		18.9%			ICU Level of Service					A		
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	323	0	0	106	0	0
Future Volume (Veh/h)	323	0	0	106	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	351	0	0	115	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		351		408	176	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		351		408	176	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1204		571	837	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	234	117	38	77	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1204	1700	1700	
Volume to Capacity	0.14	0.07	0.00	0.05	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS			A			
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS			A			
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		12.3%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	0	32	298	0	31	695
Future Volume (Veh/h)	0	32	298	0	31	695
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Hourly flow rate (vph)	0	76	382	0	41	827
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1291	382		382		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1291	382		382		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	100	89		97		
cM capacity (veh/h)	174	665		1176		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	76	382	41	827		
Volume Left	0	0	41	0		
Volume Right	76	0	0	0		
cSH	665	1700	1176	1700		
Volume to Capacity	0.11	0.22	0.03	0.49		
Queue Length 95th (ft)	10	0	3	0		
Control Delay (s)	11.1	0.0	8.2	0.0		
Lane LOS	B		A			
Approach Delay (s)	11.1	0.0	0.4			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			0.9			
Intersection Capacity Utilization		46.6%		ICU Level of Service		A
Analysis Period (min)			15			

## 5. 2028 No Build AM Peak

7: University Blvd &amp; Bobby Foster Rd &amp; Eastman Crossing

08/18/2021

Movement	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	22	200	101	127	550	5	1	162	34	17	0	96
Future Volume (Veh/h)	22	200	101	127	550	5	1	162	34	17	0	96
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Hourly flow rate (vph)	24	217	110	295	625	5	1	231	97	27	0	155
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1490	1548	315	328				630		1402	1502	164
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1490	1548	315	328				630		1402	1502	164
tC, single (s)	7.5	6.5	6.9	4.1				4.1		7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2				2.2		3.5	4.0	3.3
p0 queue free %	58	0	84	76				100		0	100	82
cM capacity (veh/h)	57	86	681	1228				948		0	92	852
Direction, Lane #	EB 1	EB 2	EB 3	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1	SW 2	SW 3
Volume Total	24	145	182	295	417	213	1	154	174	27	0	155
Volume Left	24	0	0	295	0	0	1	0	0	27	0	0
Volume Right	0	0	110	0	0	5	0	0	97	0	0	155
cSH	57	86	182	1228	1700	1700	948	1700	1700	0	1700	852
Volume to Capacity	0.42	1.68	1.00	0.24	0.25	0.13	0.00	0.09	0.10	Err	0.00	0.18
Queue Length 95th (ft)	39	298	208	24	0	0	0	0	0	Err	0	17
Control Delay (s)	107.8	436.5	120.3	8.9	0.0	0.0	8.8	0.0	0.0	Err	0.0	10.2
Lane LOS	F	F	F	A			A			F	A	B
Approach Delay (s)	249.8			2.8			0.0			Err		
Approach LOS	F									F		
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				44.2%			ICU Level of Service			A		
Analysis Period (min)				15								

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	108	426	28	0	129	13	27	0	0	3	0	31
Future Volume (Veh/h)	108	426	28	0	129	13	27	0	0	3	0	31
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Hourly flow rate (vph)	121	546	44	0	179	21	43	0	0	10	0	47
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	200			590			946	1010	295	704	1022	100
vC1, stage 1 conf vol							810	810		190	190	
vC2, stage 2 conf vol							136	200		515	832	
vCu, unblocked vol	200			590			946	1010	295	704	1022	100
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			100			84	100	100	97	100	95
cM capacity (veh/h)	1370			982			262	292	701	388	293	936
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	121	364	226	0	119	81	43	57				
Volume Left	121	0	0	0	0	0	43	10				
Volume Right	0	0	44	0	0	21	0	47				
cSH	1370	1700	1700	1700	1700	1700	262	750				
Volume to Capacity	0.09	0.21	0.13	0.00	0.07	0.05	0.16	0.08				
Queue Length 95th (ft)	7	0	0	0	0	0	14	6				
Control Delay (s)	7.9	0.0	0.0	0.0	0.0	0.0	21.4	10.2				
Lane LOS	A						C	B				
Approach Delay (s)	1.3			0.0			21.4	10.2				
Approach LOS							C	B				
Intersection Summary												
Average Delay			2.4									
Intersection Capacity Utilization		34.2%			ICU Level of Service			A				
Analysis Period (min)		15										

5. 2028 No Build AM Peak  
9: Sagan Loop & Stieglitz Ave

08/18/2021

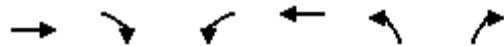
	↗	→	↘	↖	←	↙	↑	↗	↘	↓	↖	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					⬆️			⬇️				
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.00	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%				ICU Level of Service				A		
Analysis Period (min)			15									

6. 2028 No Build PM Peak  
1: Driveway 1 & Bobby Foster Rd

08/18/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	228	0	0
Future Volume (Veh/h)	230	0	0	228	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	390	0	0	386	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		390		583	195	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		390		583	195	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1165		443	814	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	260	130	129	257	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1165	1700	1700	
Volume to Capacity	0.15	0.08	0.00	0.15	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS				A		
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		9.7%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	228	0	0
Future Volume (Veh/h)	230	0	0	228	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	390	0	0	386	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		390		583	195	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		390		583	195	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1165		443	814	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	260	130	129	257	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1165	1700	1700	
Volume to Capacity	0.15	0.08	0.00	0.15	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS				A		
<b>Intersection Summary</b>						
Average Delay		0.0				
Intersection Capacity Utilization		9.7%		ICU Level of Service		A
Analysis Period (min)		15				

6. 2028 No Build PM Peak  
3: Newhall Dr & Bobby Foster Rd

08/18/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	230	0	0	228	25	0	0	0	13	0	0
Future Volume (Veh/h)	0	230	0	0	228	25	0	0	0	13	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	390	0	0	386	42	0	0	0	22	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	428			390			583	818	195	602	797	214
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	428			390			583	818	195	602	797	214
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	100
cM capacity (veh/h)	1128			1165			396	309	814	383	318	791
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	195	195	193	235	0	22						
Volume Left	0	0	0	0	0	22						
Volume Right	0	0	0	42	0	0						
cSH	1128	1700	1165	1700	1700	383						
Volume to Capacity	0.00	0.11	0.00	0.14	0.00	0.06						
Queue Length 95th (ft)	0	0	0	0	0	5						
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	15.0						
Lane LOS					A	B						
Approach Delay (s)	0.0		0.0		0.0	15.0						
Approach LOS					A	B						
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utilization		17.1%			ICU Level of Service					A		
Analysis Period (min)			15									

6. 2028 No Build PM Peak  
4: Sagan Loop & Bobby Foster Rd

08/18/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	243	0	0	253	26	0	0	0	14	0	0
Future Volume (Veh/h)	0	243	0	0	253	26	0	0	0	14	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.92	0.92	0.92	0.92	0.59	0.92	0.59	0.92	0.59	0.59	0.59
Hourly flow rate (vph)	0	264	0	0	275	44	0	0	0	24	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	319			264			402	583	132	429	561	160
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	319			264			402	583	132	429	561	160
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	95	100	100
cM capacity (veh/h)	1238			1297			533	423	893	510	435	857
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	132	132	138	182	0	24						
Volume Left	0	0	0	0	0	24						
Volume Right	0	0	0	44	0	0						
cSH	1238	1700	1297	1700	1700	510						
Volume to Capacity	0.00	0.08	0.00	0.11	0.00	0.05						
Queue Length 95th (ft)	0	0	0	0	0	4						
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	12.4						
Lane LOS					A	B						
Approach Delay (s)	0.0		0.0		0.0	12.4						
Approach LOS					A	B						
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization		17.8%			ICU Level of Service					A		
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	257	0	0	279	0	0
Future Volume (Veh/h)	257	0	0	279	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	279	0	0	303	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		279		430	140	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		279		430	140	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1281		553	883	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	186	93	101	202	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1281	1700	1700	
Volume to Capacity	0.11	0.05	0.00	0.12	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS			A			
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS			A			
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		11.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	3	32	679	3	10	573
Future Volume (Veh/h)	3	32	679	3	10	573
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Hourly flow rate (vph)	6	58	828	6	20	690
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1561	831		834		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1561	831		834		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	95	84		97		
cM capacity (veh/h)	120	370		799		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	64	834	20	690		
Volume Left	6	0	20	0		
Volume Right	58	6	0	0		
cSH	309	1700	799	1700		
Volume to Capacity	0.21	0.49	0.03	0.41		
Queue Length 95th (ft)	19	0	2	0		
Control Delay (s)	19.6	0.0	9.6	0.0		
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	0.3			
Approach LOS	C					
Intersection Summary						
Average Delay		0.9				
Intersection Capacity Utilization		45.9%		ICU Level of Service		A
Analysis Period (min)		15				

## 6. 2028 No Build PM Peak

7: University Blvd &amp; Bobby Foster Rd &amp; Eastman Crossing

08/18/2021

	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	118	75	64	83	383	104	144	524	3	83	105	102
Future Volume (Veh/h)	118	75	64	83	383	104	144	524	3	83	105	102
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Hourly flow rate (vph)	128	82	70	148	426	113	157	647	9	277	114	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None				None			
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1652	1748	270	656			539			1586	1800	328
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1652	1748	270	656			539			1586	1800	328
tC, single (s)	7.5	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	0	0	90	84			85			0	0	73
cM capacity (veh/h)	0	61	728	927			1025			0	56	668
Direction, Lane #	EB 1	EB 2	EB 3	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1	SW 2	SW 3
Volume Total	128	55	97	148	284	255	157	431	225	277	76	217
Volume Left	128	0	0	148	0	0	157	0	0	277	0	0
Volume Right	0	0	70	0	0	113	0	0	9	0	0	179
cSH	0	61	178	927	1700	1700	1025	1700	1700	0	56	230
Volume to Capacity	Err	0.90	0.55	0.16	0.17	0.15	0.15	0.25	0.13	Err	1.35	0.94
Queue Length 95th (ft)	Err	104	71	14	0	0	13	0	0	Err	168	206
Control Delay (s)	Err	199.7	47.4	9.6	0.0	0.0	9.1	0.0	0.0	Err	361.3	90.7
Lane LOS	F	F	E	A			A			F	F	F
Approach Delay (s)	Err			2.1			1.8			Err		
Approach LOS	F									F		
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				46.4%			ICU Level of Service			A		
Analysis Period (min)				15								

6. 2028 No Build PM Peak  
8: Strand Loop & University Blvd

08/18/2021

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	44	421	46	3	595	1	62	0	21	2	1	96
Future Volume (Veh/h)	44	421	46	3	595	1	62	0	21	2	1	96
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Hourly flow rate (vph)	67	794	54	6	735	3	90	0	28	6	4	130
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	738			848			1466	1705	424	1308	1730	369
vC1, stage 1 conf vol							955	955		748	748	
vC2, stage 2 conf vol							512	750		559	982	
vCu, unblocked vol	738			848			1466	1705	424	1308	1730	369
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			99			44	100	95	97	98	79
cM capacity (veh/h)	864			785			161	187	579	225	192	628
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	67	529	319	6	490	248	118	140				
Volume Left	67	0	0	6	0	0	90	6				
Volume Right	0	0	54	0	0	3	28	130				
cSH	864	1700	1700	785	1700	1700	195	550				
Volume to Capacity	0.08	0.31	0.19	0.01	0.29	0.15	0.61	0.25				
Queue Length 95th (ft)	6	0	0	1	0	0	85	25				
Control Delay (s)	9.5	0.0	0.0	9.6	0.0	0.0	48.5	13.8				
Lane LOS	A			A			E	B				
Approach Delay (s)	0.7			0.1			48.5	13.8				
Approach LOS							E	B				
Intersection Summary												
Average Delay			4.4									
Intersection Capacity Utilization		41.2%			ICU Level of Service			A				
Analysis Period (min)			15									

6. 2028 No Build PM Peak  
9: Sagan Loop & Stieglitz Ave

08/18/2021

	↗	→	↘	↖	←	↙	↑	↗	↘	↓	↖	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					⬆️			⬇️				
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1023	896	1085	1023	896	1085	1623			1623		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	0	0	0									
Volume Left	0	0	0									
Volume Right	0	0	0									
cSH	1700	1700	1700									
Volume to Capacity	0.00	0.00	0.00									
Queue Length 95th (ft)	0	0	0									
Control Delay (s)	0.0	0.0	0.0									
Lane LOS	A											
Approach Delay (s)	0.0	0.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		0.0										
Intersection Capacity Utilization		0.0%			ICU Level of Service					A		
Analysis Period (min)			15									

# **APPENDIX K**

**Synchro Reports:  
2023 and 2028 Build  
AM and PM Peak Hours**



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↗	↘
Traffic Volume (veh/h)	74	0	13	22	0	8
Future Volume (Veh/h)	74	0	13	22	0	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	125	0	22	37	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		125		206	125	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		125		206	125	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		98		100	98	
cM capacity (veh/h)		1462		771	926	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	125	59	14			
Volume Left	0	22	0			
Volume Right	0	0	14			
cSH	1700	1462	926			
Volume to Capacity	0.07	0.02	0.02			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	2.9	8.9			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.9	8.9			
Approach LOS		A				
Intersection Summary						
Average Delay		1.5				
Intersection Capacity Utilization		18.5%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	82	0	8	35	0	8
Future Volume (Veh/h)	82	0	8	35	0	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	139	0	14	59	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		139		226	139	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		139		226	139	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		99		100	98	
cM capacity (veh/h)		1445		755	909	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	139	73	14			
Volume Left	0	14	0			
Volume Right	0	0	14			
cSH	1700	1445	909			
Volume to Capacity	0.08	0.01	0.02			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	1.5	9.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.5	9.0			
Approach LOS		A				
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		18.7%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↓	↖	↙	↗	↘
Traffic Volume (veh/h)	90	0	0	43	0	0
Future Volume (Veh/h)	90	0	0	43	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	153	0	0	73	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		153		226	153	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		153		226	153	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1428		762	893	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	153	73	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1428	1700			
Volume to Capacity	0.09	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		8.1%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	90	0	22	43	0	21
Future Volume (Veh/h)	90	0	22	43	0	21
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	0	24	47	0	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		98		193	98	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		98		193	98	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		98		100	98	
cM capacity (veh/h)		1495		783	958	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	98	71	23			
Volume Left	0	24	0			
Volume Right	0	0	23			
cSH	1700	1495	958			
Volume to Capacity	0.06	0.02	0.02			
Queue Length 95th (ft)	0	1	2			
Control Delay (s)	0.0	2.6	8.9			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.6	8.9			
Approach LOS		A				
Intersection Summary						
Average Delay		2.0				
Intersection Capacity Utilization		20.1%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	95	16	4	40	26	20
Future Volume (Veh/h)	95	16	4	40	26	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	103	17	4	43	28	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		120		162	112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		120		162	112	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		97	98	
cM capacity (veh/h)		1468		826	942	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	120	47	50			
Volume Left	0	4	28			
Volume Right	17	0	22			
cSH	1700	1468	873			
Volume to Capacity	0.07	0.00	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.7	9.4			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.7	9.4			
Approach LOS		A				
Intersection Summary						
Average Delay		2.3				
Intersection Capacity Utilization		16.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	0	27	366	41	26	425
Future Volume (Veh/h)	0	27	366	41	26	425
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Hourly flow rate (vph)	0	64	469	82	35	506
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1086	510		551		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1086	510		551		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	100	89		97		
cM capacity (veh/h)	231	563		1019		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	64	551	35	506		
Volume Left	0	0	35	0		
Volume Right	64	82	0	0		
cSH	563	1700	1019	1700		
Volume to Capacity	0.11	0.32	0.03	0.30		
Queue Length 95th (ft)	10	0	3	0		
Control Delay (s)	12.2	0.0	8.7	0.0		
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization		32.4%		ICU Level of Service		A
Analysis Period (min)		15				

Movement	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	115	0	0	107	262	44	0	178	9	0	0	44
Future Volume (Veh/h)	115	0	0	107	262	44	0	178	9	0	0	44
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Hourly flow rate (vph)	125	0	0	249	298	48	0	254	26	0	0	71
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1018	1100	173	280			346			914	1111	140
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1018	1100	173	280			346			914	1111	140
tC, single (s)	7.5	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	17	100	100	81			100			100	100	92
cM capacity (veh/h)	150	170	840	1280			1210			194	167	882
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1				
Volume Total	125	249	199	147	0	169	111	71				
Volume Left	125	249	0	0	0	0	0	0				
Volume Right	0	0	0	48	0	0	26	71				
cSH	150	1280	1700	1700	1700	1700	1700	882				
Volume to Capacity	0.83	0.19	0.12	0.09	0.00	0.10	0.07	0.08				
Queue Length 95th (ft)	137	18	0	0	0	0	0	7				
Control Delay (s)	93.9	8.5	0.0	0.0	0.0	0.0	0.0	9.4				
Lane LOS	F	A						A				
Approach Delay (s)	93.9	3.6			0.0			9.4				
Approach LOS	F							A				
Intersection Summary												
Average Delay			13.6									
Intersection Capacity Utilization		28.3%			ICU Level of Service			A				
Analysis Period (min)			15									

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Volume (veh/h)	97	51	80	0	17	60	127	82	0	0	0	26
Future Volume (Veh/h)	97	51	80	0	17	60	127	82	0	0	0	26
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Hourly flow rate (vph)	109	65	127	0	24	95	202	89	0	0	0	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	119			192			398	466	96	366	482	60
vC1, stage 1 conf vol							346	346		72	72	
vC2, stage 2 conf vol							51	119		295	410	
vCu, unblocked vol	119			192			398	466	96	366	482	60
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			100			61	82	100	100	100	96
cM capacity (veh/h)	1467			1379			518	493	942	483	482	994
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	109	43	149	0	16	103	291	39				
Volume Left	109	0	0	0	0	0	202	0				
Volume Right	0	0	127	0	0	95	0	39				
cSH	1467	1700	1700	1700	1700	1700	510	994				
Volume to Capacity	0.07	0.03	0.09	0.00	0.01	0.06	0.57	0.04				
Queue Length 95th (ft)	6	0	0	0	0	0	88	3				
Control Delay (s)	7.7	0.0	0.0	0.0	0.0	0.0	21.0	8.8				
Lane LOS	A						C	A				
Approach Delay (s)	2.8			0.0			21.0	8.8				
Approach LOS							C	A				
Intersection Summary												
Average Delay			9.7									
Intersection Capacity Utilization		36.7%		ICU Level of Service				A				
Analysis Period (min)		15										

7. 2023 Build AM Peak  
9: Sagan Loop & Stieglitz Ave

09/23/2021

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	29	0	40	0	0	0	0	13
Future Volume (Veh/h)	0	0	0	0	29	0	40	0	0	0	0	13
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	49	0	68	0	0	0	0	22
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	172	147	11	147	158	0	22				0	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	172	147	11	147	158	0	22				0	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	100	100	93	100	96				100	
cM capacity (veh/h)	725	713	1070	795	703	1085	1593				1623	
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	49	68	22									
Volume Left	0	68	0									
Volume Right	0	0	22									
cSH	703	1593	1700									
Volume to Capacity	0.07	0.04	0.01									
Queue Length 95th (ft)	6	3	0									
Control Delay (s)	10.5	7.4	0.0									
Lane LOS	B	A										
Approach Delay (s)	10.5	7.4	0.0									
Approach LOS	B											
Intersection Summary												
Average Delay			7.3									
Intersection Capacity Utilization		18.9%			ICU Level of Service						A	
Analysis Period (min)			15									



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑			↑↑		↑
Traffic Volume (veh/h)	376	5	0	291	0	3
Future Volume (Veh/h)	376	5	0	291	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	409	5	0	316	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	2			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		414		570	207	
vC1, stage 1 conf vol				412		
vC2, stage 2 conf vol				158		
vCu, unblocked vol		414		570	207	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1141		599	799	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	
Volume Total	273	141	158	158	3	
Volume Left	0	0	0	0	0	
Volume Right	0	5	0	0	3	
cSH	1700	1700	1700	1700	799	
Volume to Capacity	0.16	0.08	0.09	0.09	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	9.5	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		9.5	
Approach LOS				A		
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		20.6%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑	↑	↑	↑↑	↑	
Traffic Volume (veh/h)	288	92	0	237	54	3
Future Volume (Veh/h)	288	92	0	237	54	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	313	100	0	258	59	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		413		442	313	
vC1, stage 1 conf vol				313		
vC2, stage 2 conf vol				129		
vCu, unblocked vol		413		442	313	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		90	100	
cM capacity (veh/h)		1142		600	683	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NW 3	NE 1
Volume Total	313	100	0	129	129	62
Volume Left	0	0	0	0	0	59
Volume Right	0	100	0	0	0	3
cSH	1700	1700	1700	1700	1700	604
Volume to Capacity	0.18	0.06	0.00	0.08	0.08	0.10
Queue Length 95th (ft)	0	0	0	0	0	9
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	11.6
Lane LOS					B	
Approach Delay (s)	0.0		0.0		11.6	
Approach LOS					B	
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		25.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	30	0	8	42	0	9
Future Volume (Veh/h)	30	0	8	42	0	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	51	0	14	71	0	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		51		150	51	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		51		150	51	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		99		100	99	
cM capacity (veh/h)		1555		834	1017	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	51	85	15			
Volume Left	0	14	0			
Volume Right	0	0	15			
cSH	1700	1555	1017			
Volume to Capacity	0.03	0.01	0.01			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	1.3	8.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.3	8.6			
Approach LOS		A				
Intersection Summary						
Average Delay		1.6				
Intersection Capacity Utilization		19.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	25	0	43	50	0	33
Future Volume (Veh/h)	25	0	43	50	0	33
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	42	0	73	85	0	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		42		273	42	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		42		273	42	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		95		100	95	
cM capacity (veh/h)		1567		683	1029	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	42	158	56			
Volume Left	0	73	0			
Volume Right	0	0	56			
cSH	1700	1567	1029			
Volume to Capacity	0.02	0.05	0.05			
Queue Length 95th (ft)	0	4	4			
Control Delay (s)	0.0	3.6	8.7			
Lane LOS		A	A			
Approach Delay (s)	0.0	3.6	8.7			
Approach LOS		A				
<b>Intersection Summary</b>						
Average Delay		4.1				
Intersection Capacity Utilization		21.7%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	71	0	0	93	0	0
Future Volume (Veh/h)	71	0	0	93	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	120	0	0	158	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		120		278	120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		120		278	120	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1468		712	931	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	120	158	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1468	1700			
Volume to Capacity	0.07	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		8.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	71	0	19	93	0	17
Future Volume (Veh/h)	71	0	19	93	0	17
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	77	0	21	101	0	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		77		220	77	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		77		220	77	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		99		100	98	
cM capacity (veh/h)		1522		758	984	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	77	122	18			
Volume Left	0	21	0			
Volume Right	0	0	18			
cSH	1700	1522	984			
Volume to Capacity	0.05	0.01	0.02			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	1.4	8.7			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.4	8.7			
Approach LOS		A				
Intersection Summary						
Average Delay		1.5				
Intersection Capacity Utilization		22.6%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (veh/h)	60	11	18	102	10	18
Future Volume (Veh/h)	60	11	18	102	10	18
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	12	20	111	11	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		77		222		71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		77		222		71
tC, single (s)		4.1		6.4		6.2
tC, 2 stage (s)						
tF (s)		2.2		3.5		3.3
p0 queue free %		99		99		98
cM capacity (veh/h)		1522		756		991
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	77	131	31			
Volume Left	0	20	11			
Volume Right	12	0	20			
cSH	1700	1522	893			
Volume to Capacity	0.05	0.01	0.03			
Queue Length 95th (ft)	0	1	3			
Control Delay (s)	0.0	1.2	9.2			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.2	9.2			
Approach LOS		A				
Intersection Summary						
Average Delay		1.9				
Intersection Capacity Utilization		23.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	48	27	470	2	9	397
Future Volume (Veh/h)	48	27	470	2	9	397
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Hourly flow rate (vph)	96	49	573	4	18	478
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1089	575		577		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1089	575		577		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	59	91		98		
cM capacity (veh/h)	234	518		996		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	145	577	18	478		
Volume Left	96	0	18	0		
Volume Right	49	4	0	0		
cSH	287	1700	996	1700		
Volume to Capacity	0.50	0.34	0.02	0.28		
Queue Length 95th (ft)	66	0	1	0		
Control Delay (s)	29.6	0.0	8.7	0.0		
Lane LOS	D		A			
Approach Delay (s)	29.6	0.0	0.3			
Approach LOS	D					
Intersection Summary						
Average Delay		3.7				
Intersection Capacity Utilization		35.8%		ICU Level of Service		A
Analysis Period (min)		15				

Movement	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	95	0	0	39	245	112	7	268	2	53	0	44
Future Volume (Veh/h)	95	0	0	39	245	112	7	268	2	53	0	44
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Hourly flow rate (vph)	103	0	0	70	272	122	8	331	6	177	0	77
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	732	826	197	337				394		626	884	168
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	732	826	197	337				394		626	884	168
tC, single (s)	7.5	6.5	6.9	4.1				4.1		7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2				2.2		3.5	4.0	3.3
p0 queue free %	61	100	100	94				99		50	100	91
cM capacity (veh/h)	267	286	811	1219				1161		351	265	846
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1				
Volume Total	103	70	181	213	8	221	116	254				
Volume Left	103	70	0	0	8	0	0	177				
Volume Right	0	0	0	122	0	0	6	77				
cSH	267	1219	1700	1700	1161	1700	1700	426				
Volume to Capacity	0.39	0.06	0.11	0.13	0.01	0.13	0.07	0.60				
Queue Length 95th (ft)	43	5	0	0	1	0	0	94				
Control Delay (s)	26.6	8.1	0.0	0.0	8.1	0.0	0.0	25.2				
Lane LOS	D	A			A			D				
Approach Delay (s)	26.6	1.2			0.2			25.2				
Approach LOS	D							D				
Intersection Summary												
Average Delay			8.4									
Intersection Capacity Utilization		Err%			ICU Level of Service			H				
Analysis Period (min)			15									

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Volume (veh/h)	37	45	156	9	95	1	147	0	5	66	92	88
Future Volume (Veh/h)	37	45	156	9	95	1	147	0	5	66	92	88
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Hourly flow rate (vph)	56	85	184	18	117	3	213	0	7	189	368	119
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	120			269			686	445	134	316	536	60
vC1, stage 1 conf vol							289	289		154	154	
vC2, stage 2 conf vol							398	156		162	381	
vCu, unblocked vol	120			269			686	445	134	316	536	60
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			99			0	100	99	70	23	88
cM capacity (veh/h)	1466			1292			178	525	890	628	481	993
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	56	57	212	18	78	42	220	676				
Volume Left	56	0	0	18	0	0	213	189				
Volume Right	0	0	184	0	0	3	7	119				
cSH	1466	1700	1700	1292	1700	1700	182	570				
Volume to Capacity	0.04	0.03	0.12	0.01	0.05	0.02	1.21	1.19				
Queue Length 95th (ft)	3	0	0	1	0	0	293	597				
Control Delay (s)	7.6	0.0	0.0	7.8	0.0	0.0	184.5	124.8				
Lane LOS	A			A			F	F				
Approach Delay (s)	1.3			1.0			184.5	124.8				
Approach LOS							F	F				
Intersection Summary												
Average Delay				92.3								
Intersection Capacity Utilization				40.0%			ICU Level of Service					
Analysis Period (min)				15								

8. 2023 Build PM Peak  
9: Sagan Loop & Stieglitz Ave

09/23/2021

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	11	0	6	0	0	0	0	2
Future Volume (Veh/h)	0	0	0	0	11	0	6	0	0	0	0	2
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	19	0	10	0	0	0	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	31	22	2	22	23	0	3				0	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	31	22	2	22	23	0	3				0	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	100	100	98	100	99				100	
cM capacity (veh/h)	956	867	1083	986	865	1085	1619				1623	
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	19	10	3									
Volume Left	0	10	0									
Volume Right	0	0	3									
cSH	865	1619	1700									
Volume to Capacity	0.02	0.01	0.00									
Queue Length 95th (ft)	2	0	0									
Control Delay (s)	9.3	7.2	0.0									
Lane LOS	A	A										
Approach Delay (s)	9.3	7.2	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay			7.8									
Intersection Capacity Utilization		15.0%			ICU Level of Service				A			
Analysis Period (min)			15									



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑			↑↑		↑
Traffic Volume (veh/h)	320	14	0	384	0	0
Future Volume (Veh/h)	320	14	0	384	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	348	15	0	417	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	2			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		363		564	182	
vC1, stage 1 conf vol				356		
vC2, stage 2 conf vol				208		
vCu, unblocked vol		363		564	182	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		1192		620	830	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	
Volume Total	232	131	208	208	0	
Volume Left	0	0	0	0	0	
Volume Right	0	15	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.14	0.08	0.12	0.12	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS				A		
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		13.9%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑	↑	↑	↑↑	↑	
Traffic Volume (veh/h)	245	76	0	346	38	0
Future Volume (Veh/h)	245	76	0	346	38	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	266	83	0	376	41	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		349		454	266	
vC1, stage 1 conf vol				266		
vC2, stage 2 conf vol				188		
vCu, unblocked vol		349		454	266	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		93	100	
cM capacity (veh/h)		1207		602	732	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NW 3	NE 1
Volume Total	266	83	0	188	188	41
Volume Left	0	0	0	0	0	41
Volume Right	0	83	0	0	0	0
cSH	1700	1700	1700	1700	1700	602
Volume to Capacity	0.16	0.05	0.00	0.11	0.11	0.07
Queue Length 95th (ft)	0	0	0	0	0	5
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	11.4
Lane LOS					B	
Approach Delay (s)	0.0		0.0		11.4	
Approach LOS					B	
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization		22.9%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	434	0	13	178	0	8
Future Volume (Veh/h)	434	0	13	178	0	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	736	0	22	302	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		736		931	368	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		736		931	368	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		97		100	98	
cM capacity (veh/h)		865		259	629	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	491	245	123	201	14	
Volume Left	0	0	22	0	0	
Volume Right	0	0	0	0	14	
cSH	1700	1700	865	1700	629	
Volume to Capacity	0.29	0.14	0.03	0.12	0.02	
Queue Length 95th (ft)	0	0	2	0	2	
Control Delay (s)	0.0	0.0	1.9	0.0	10.9	
Lane LOS			A		B	
Approach Delay (s)	0.0		0.7		10.9	
Approach LOS				B		
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		24.8%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	434	9	8	179	13	8
Future Volume (Veh/h)	434	9	8	179	13	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	736	15	14	303	22	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		751		923	376	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		751		923	376	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		98		92	98	
cM capacity (veh/h)		854		264	622	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	491	260	115	202	36	
Volume Left	0	0	14	0	22	
Volume Right	0	15	0	0	14	
cSH	1700	1700	854	1700	341	
Volume to Capacity	0.29	0.15	0.02	0.12	0.11	
Queue Length 95th (ft)	0	0	1	0	9	
Control Delay (s)	0.0	0.0	1.3	0.0	16.8	
Lane LOS			A		C	
Approach Delay (s)	0.0		0.5		16.8	
Approach LOS					C	
<b>Intersection Summary</b>						
Average Delay		0.7				
Intersection Capacity Utilization		22.3%		ICU Level of Service		A
Analysis Period (min)		15				

9. 2028 Build AM Peak  
3: Newhall Dr & Bobby Foster Rd

02/14/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	434	9	0	174	2	13	0	0	1	0	0
Future Volume (Veh/h)	0	434	9	0	174	2	13	0	0	1	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	736	15	0	295	3	22	0	0	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	298			751			891	1042	376	664	1048	149
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	298			751			891	1042	376	664	1048	149
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			91	100	100	99	100	100
cM capacity (veh/h)	1260			854			237	228	622	346	227	871
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	368	383	148	150	22	2						
Volume Left	0	0	0	0	22	2						
Volume Right	0	15	0	3	0	0						
cSH	1260	1700	854	1700	237	346						
Volume to Capacity	0.00	0.23	0.00	0.09	0.09	0.01						
Queue Length 95th (ft)	0	0	0	0	8	0						
Control Delay (s)	0.0	0.0	0.0	0.0	21.7	15.5						
Lane LOS					C	C						
Approach Delay (s)	0.0		0.0		21.7	15.5						
Approach LOS					C	C						
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization		22.3%			ICU Level of Service					A		
Analysis Period (min)			15									

9. 2028 Build AM Peak  
4: Sagan Loop & Bobby Foster Rd

02/14/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	426	9	22	163	2	13	0	48	1	0	0
Future Volume (Veh/h)	0	426	9	22	163	2	13	0	48	1	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.92	0.92	0.92	0.92	0.59	0.92	0.59	0.92	0.59	0.59	0.59
Hourly flow rate (vph)	0	463	10	24	177	3	14	0	52	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	180			473			604	696	236	510	700	90
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	180			473			604	696	236	510	700	90
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			96	100	93	100	100	100
cM capacity (veh/h)	1393			1085			375	356	765	409	354	950
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	232	242	112	92	66	2						
Volume Left	0	0	24	0	14	2						
Volume Right	0	10	0	3	52	0						
cSH	1393	1700	1085	1700	627	409						
Volume to Capacity	0.00	0.14	0.02	0.05	0.11	0.00						
Queue Length 95th (ft)	0	0	2	0	9	0						
Control Delay (s)	0.0	0.0	1.9	0.0	11.4	13.8						
Lane LOS			A		B	B						
Approach Delay (s)	0.0		1.1		11.4	13.8						
Approach LOS					B	B						
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization		30.7%			ICU Level of Service					A		
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	459	16	4	161	26	20
Future Volume (Veh/h)	459	16	4	161	26	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	499	17	4	175	28	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		516		603	258	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		516		603	258	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		93	97	
cM capacity (veh/h)		1046		429	741	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	333	183	62	117	50	
Volume Left	0	0	4	0	28	
Volume Right	0	17	0	0	22	
cSH	1700	1700	1046	1700	526	
Volume to Capacity	0.20	0.11	0.00	0.07	0.09	
Queue Length 95th (ft)	0	0	0	0	8	
Control Delay (s)	0.0	0.0	0.6	0.0	12.6	
Lane LOS			A		B	
Approach Delay (s)	0.0		0.2		12.6	
Approach LOS					B	
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization		23.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	0	32	396	41	31	760
Future Volume (Veh/h)	0	32	396	41	31	760
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Hourly flow rate (vph)	0	76	508	82	41	905
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1536	549		590		
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1536	549		590		
tC, single (s)	6.4	6.2		4.1		
tC, 2 stage (s)						
tF (s)	3.5	3.3		2.2		
p0 queue free %	100	86		96		
cM capacity (veh/h)	122	535		985		
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	76	590	41	905		
Volume Left	0	0	41	0		
Volume Right	76	82	0	0		
cSH	535	1700	985	1700		
Volume to Capacity	0.14	0.35	0.04	0.53		
Queue Length 95th (ft)	12	0	3	0		
Control Delay (s)	12.8	0.0	8.8	0.0		
Lane LOS	B		A			
Approach Delay (s)	12.8	0.0	0.4			
Approach LOS	B					
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization		50.0%		ICU Level of Service		A
Analysis Period (min)			15			

Movement	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	137	241	101	184	571	49	1	185	70	17	16	96
Future Volume (Veh/h)	137	241	101	184	571	49	1	185	70	17	16	96
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Hourly flow rate (vph)	149	262	110	428	649	53	1	264	200	27	17	155
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1829	1998	351	464			702			1788	1924	232
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1829	1998	351	464			702			1788	1924	232
tC, single (s)	7.5	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	0	0	83	61			100			0	58	80
cM capacity (veh/h)	18	36	645	1094			891			0	40	770
Direction, Lane #	EB 1	EB 2	EB 3	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1	SW 2	SW 3
Volume Total	149	175	197	428	433	269	1	176	288	27	11	161
Volume Left	149	0	0	428	0	0	1	0	0	27	0	0
Volume Right	0	0	110	0	0	53	0	0	200	0	0	155
cSH	18	36	76	1094	1700	1700	891	1700	1700	0	40	469
Volume to Capacity	8.18	4.84	2.59	0.39	0.25	0.16	0.00	0.10	0.17	Err	0.28	0.34
Queue Length 95th (ft)	Err	Err	476	47	0	0	0	0	0	Err	23	38
Control Delay (s)	Err	Err	837.0	10.4	0.0	0.0	9.0	0.0	0.0	Err	126.6	16.6
Lane LOS	F	F	F	B			A			F	F	C
Approach Delay (s)	6528.8			3.9			0.0			Err		
Approach LOS	F									F		
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				47.4%			ICU Level of Service			A		
Analysis Period (min)				15								

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	19	476	9	0	214	12	13	14	27	3	0	5
Future Volume (Veh/h)	19	476	9	0	214	12	13	14	27	3	0	5
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Hourly flow rate (vph)	21	610	14	0	297	19	21	15	29	10	0	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	316			624			816	975	312	690	972	158
vC1, stage 1 conf vol							659	659		306	306	
vC2, stage 2 conf vol							156	316		384	666	
vCu, unblocked vol	316			624			816	975	312	690	972	158
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			94	96	96	98	100	99
cM capacity (veh/h)	1241			953			347	347	684	415	349	859
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	21	407	217	0	198	118	65	18				
Volume Left	21	0	0	0	0	0	21	10				
Volume Right	0	0	14	0	0	19	29	8				
cSH	1241	1700	1700	1700	1700	1700	444	538				
Volume to Capacity	0.02	0.24	0.13	0.00	0.12	0.07	0.15	0.03				
Queue Length 95th (ft)	1	0	0	0	0	0	13	3				
Control Delay (s)	8.0	0.0	0.0	0.0	0.0	0.0	14.5	11.9				
Lane LOS	A						B	B				
Approach Delay (s)	0.3			0.0			14.5	11.9				
Approach LOS							B	B				
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization		26.0%		ICU Level of Service				A				
Analysis Period (min)		15										

9. 2028 Build AM Peak  
9: Sagan Loop & Stieglitz Ave

02/14/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	29	0	40	13	0	0	0	13
Future Volume (Veh/h)	0	0	0	0	29	0	40	13	0	0	0	13
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	49	0	68	22	0	0	0	22
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	194	169	11	169	180	22	22			22		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	194	169	11	169	180	22	22			22		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	93	100	96			100		
cM capacity (veh/h)	701	693	1070	769	683	1055	1593			1593		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	49	90	22									
Volume Left	0	68	0									
Volume Right	0	0	22									
cSH	683	1593	1700									
Volume to Capacity	0.07	0.04	0.01									
Queue Length 95th (ft)	6	3	0									
Control Delay (s)	10.7	5.6	0.0									
Lane LOS	B	A										
Approach Delay (s)	10.7	5.6	0.0									
Approach LOS	B											
Intersection Summary												
Average Delay		6.4										
Intersection Capacity Utilization		19.6%										
Analysis Period (min)		15										
ICU Level of Service												
A												



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	825	5	0	381	0	3
Future Volume (Veh/h)	825	5	0	381	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	897	5	0	414	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		902		1106	451	
vC1, stage 1 conf vol				900		
vC2, stage 2 conf vol				207		
vCu, unblocked vol		902		1106	451	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	99	
cM capacity (veh/h)		749		342	556	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	
Volume Total	598	304	207	207	3	
Volume Left	0	0	0	0	0	
Volume Right	0	5	0	0	3	
cSH	1700	1700	1700	1700	556	
Volume to Capacity	0.35	0.18	0.12	0.12	0.01	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	11.5	
Lane LOS				B		
Approach Delay (s)	0.0		0.0		11.5	
Approach LOS				B		
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		33.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	668	117	0	336	64	77
Future Volume (Veh/h)	668	117	0	336	64	77
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	726	127	0	365	70	84
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		853		972	426	
vC1, stage 1 conf vol				790		
vC2, stage 2 conf vol				182		
vCu, unblocked vol		853		972	426	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		79	85	
cM capacity (veh/h)		782		341	576	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NW 3	NE 1
Volume Total	484	369	0	182	182	154
Volume Left	0	0	0	0	0	70
Volume Right	0	127	0	0	0	84
cSH	1700	1700	1700	1700	1700	439
Volume to Capacity	0.28	0.22	0.00	0.11	0.11	0.35
Queue Length 95th (ft)	0	0	0	0	0	39
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.6
Lane LOS				C		
Approach Delay (s)	0.0		0.0		17.6	
Approach LOS				C		
Intersection Summary						
Average Delay		2.0				
Intersection Capacity Utilization		37.1%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	310	0	8	370	0	9
Future Volume (Veh/h)	310	0	8	370	0	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	525	0	14	627	0	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		525		866	262	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		525		866	262	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		99		100	98	
cM capacity (veh/h)		1038		288	736	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	350	175	223	418	15	
Volume Left	0	0	14	0	0	
Volume Right	0	0	0	0	15	
cSH	1700	1700	1038	1700	736	
Volume to Capacity	0.21	0.10	0.01	0.25	0.02	
Queue Length 95th (ft)	0	0	1	0	2	
Control Delay (s)	0.0	0.0	0.7	0.0	10.0	
Lane LOS			A		A	
Approach Delay (s)	0.0		0.2		10.0	
Approach LOS				A		
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		25.9%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	288	17	58	362	16	33
Future Volume (Veh/h)	288	17	58	362	16	33
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	488	29	98	614	27	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		517		1006	258	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		517		1006	258	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		91		87	92	
cM capacity (veh/h)		1045		215	740	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	325	192	303	409	83	
Volume Left	0	0	98	0	27	
Volume Right	0	29	0	0	56	
cSH	1700	1700	1045	1700	413	
Volume to Capacity	0.19	0.11	0.09	0.24	0.20	
Queue Length 95th (ft)	0	0	8	0	19	
Control Delay (s)	0.0	0.0	3.5	0.0	15.9	
Lane LOS			A		C	
Approach Delay (s)	0.0		1.5		15.9	
Approach LOS					C	
Intersection Summary						
Average Delay		1.8				
Intersection Capacity Utilization		33.5%		ICU Level of Service		A
Analysis Period (min)		15				

10. 2028 Build PM Peak  
3: Newhall Dr & Bobby Foster Rd

02/14/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	318	17	15	404	25	16	0	0	13	0	0
Future Volume (Veh/h)	0	318	17	15	404	25	16	0	0	13	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	539	29	25	685	42	27	0	0	22	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	727			568			946	1330	284	1026	1324	364
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	727			568			946	1330	284	1026	1324	364
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			87	100	100	88	100	100
cM capacity (veh/h)	872			1000			212	150	713	185	151	633
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	270	298	368	384	27	22						
Volume Left	0	0	25	0	27	22						
Volume Right	0	29	0	42	0	0						
cSH	872	1700	1000	1700	212	185						
Volume to Capacity	0.00	0.18	0.02	0.23	0.13	0.12						
Queue Length 95th (ft)	0	0	2	0	11	10						
Control Delay (s)	0.0	0.0	0.8	0.0	24.4	27.0						
Lane LOS			A		C	D						
Approach Delay (s)	0.0		0.4		24.4	27.0						
Approach LOS					C	D						
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization		33.0%			ICU Level of Service				A			
Analysis Period (min)			15									

10. 2028 Build PM Peak  
4: Sagan Loop & Bobby Foster Rd

02/14/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	314	17	35	428	26	16	0	17	14	0	0
Future Volume (Veh/h)	0	314	17	35	428	26	16	0	17	14	0	0
Sign Control	Free				Free			Stop			Stop	
Grade		0%				0%			0%			0%
Peak Hour Factor	0.59	0.92	0.92	0.92	0.92	0.59	0.92	0.59	0.92	0.59	0.59	0.59
Hourly flow rate (vph)	0	341	18	38	465	44	17	0	18	24	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	509			359			658	935	180	752	922	254
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	509			359			658	935	180	752	922	254
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			95	100	98	92	100	100
cM capacity (veh/h)	1052			1196			341	256	832	286	260	745
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	170	188	270	276	35	24						
Volume Left	0	0	38	0	17	24						
Volume Right	0	18	0	44	18	0						
cSH	1052	1700	1196	1700	489	286						
Volume to Capacity	0.00	0.11	0.03	0.16	0.07	0.08						
Queue Length 95th (ft)	0	0	2	0	6	7						
Control Delay (s)	0.0	0.0	1.4	0.0	12.9	18.8						
Lane LOS			A		B	C						
Approach Delay (s)	0.0		0.7		12.9	18.8						
Approach LOS				B	C							
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization		36.2%			ICU Level of Service					A		
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	317	11	18	530	10	18
Future Volume (Veh/h)	317	11	18	530	10	18
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	345	12	20	576	11	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		357		679	178	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol		357		679	178	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)						
tF (s)		2.2		3.5	3.3	
p0 queue free %		98		97	98	
cM capacity (veh/h)		1198		379	834	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	230	127	212	384	31	
Volume Left	0	0	20	0	11	
Volume Right	0	12	0	0	20	
cSH	1700	1700	1198	1700	585	
Volume to Capacity	0.14	0.07	0.02	0.23	0.05	
Queue Length 95th (ft)	0	0	1	0	4	
Control Delay (s)	0.0	0.0	0.9	0.0	11.5	
Lane LOS			A		B	
Approach Delay (s)	0.0		0.3		11.5	
Approach LOS				B		
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		37.6%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h)	48	32	786	3	10	751
Future Volume (Veh/h)	48	32	786	3	10	751
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Hourly flow rate (vph)	96	58	959	6	20	905
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1907	962			965	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1907	962			965	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	81			97	
cM capacity (veh/h)	73	310			714	
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	154	965	20	905		
Volume Left	96	0	20	0		
Volume Right	58	6	0	0		
cSH	103	1700	714	1700		
Volume to Capacity	1.50	0.57	0.03	0.53		
Queue Length 95th (ft)	286	0	2	0		
Control Delay (s)	342.7	0.0	10.2	0.0		
Lane LOS	F		B			
Approach Delay (s)	342.7	0.0	0.2			
Approach LOS	F					
Intersection Summary						
Average Delay		25.9				
Intersection Capacity Utilization		52.8%		ICU Level of Service		A
Analysis Period (min)		15				

Movement	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	213	75	64	105	495	216	151	536	3	83	203	102
Future Volume (Veh/h)	213	75	64	105	495	216	151	536	3	83	203	102
Sign Control	Stop				Free			Free		Stop		
Grade	0%				0%			0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Hourly flow rate (vph)	232	82	70	188	550	235	164	662	9	277	221	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1992	2042	392	671			785			1756	2156	336
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1992	2042	392	671			785			1756	2156	336
tC, single (s)	7.5	6.5	6.9	4.1			4.1			7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	0	0	88	79			80			0	0	73
cM capacity (veh/h)	0	35	606	915			829			0	30	660
Direction, Lane #	EB 1	EB 2	EB 3	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1	SW 2	SW 3
Volume Total	232	55	97	188	367	418	164	441	230	277	147	253
Volume Left	232	0	0	188	0	0	164	0	0	277	0	0
Volume Right	0	0	70	0	0	235	0	0	9	0	0	179
cSH	0	35	110	915	1700	1700	829	1700	1700	0	30	93
Volume to Capacity	Err	1.54	0.89	0.21	0.22	0.25	0.20	0.26	0.14	Err	4.90	2.72
Queue Length 95th (ft)	Err	147	133	19	0	0	18	0	0	Err	Err	598
Control Delay (s)	Err	519.9	129.2	9.9	0.0	0.0	10.4	0.0	0.0	Err	Err	874.6
Lane LOS	F	F	F	A			B			F	F	F
Approach Delay (s)	Err			1.9			2.0			Err		
Approach LOS	F									F		
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				58.7%			ICU Level of Service			B		
Analysis Period (min)				15								

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	461	17	3	707	0	16	0	21	34	15	17
Future Volume (Veh/h)	7	461	17	3	707	0	16	0	21	34	15	17
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Hourly flow rate (vph)	11	870	20	6	873	0	23	0	28	97	60	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1				1						
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	873			890			1404	1787	445	1370	1797	436
vC1, stage 1 conf vol							902	902		885	885	
vC2, stage 2 conf vol							502	885		485	912	
vCu, unblocked vol	873			890			1404	1787	445	1370	1797	436
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			88	100	95	54	69	96
cM capacity (veh/h)	768			757			187	195	561	213	195	568
Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1				
Volume Total	11	580	310	6	436	436	51	180				
Volume Left	11	0	0	6	0	0	23	97				
Volume Right	0	0	20	0	0	0	28	23				
cSH	768	1700	1700	757	1700	1700	295	224				
Volume to Capacity	0.01	0.34	0.18	0.01	0.26	0.26	0.17	0.80				
Queue Length 95th (ft)	1	0	0	1	0	0	15	148				
Control Delay (s)	9.8	0.0	0.0	9.8	0.0	0.0	19.8	65.1				
Lane LOS	A			A			C	F				
Approach Delay (s)	0.1			0.1			19.8	65.1				
Approach LOS							C	F				
Intersection Summary												
Average Delay			6.4									
Intersection Capacity Utilization		31.3%			ICU Level of Service			A				
Analysis Period (min)		15										

10. 2028 Build PM Peak  
9: Sagan Loop & Stieglitz Ave

02/14/2022

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	11	0	6	16	0	0	0	2
Future Volume (Veh/h)	0	0	0	0	11	0	6	16	0	0	0	2
Sign Control	Stop				Stop			Free			Free	
Grade		0%				0%			0%		0%	
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Hourly flow rate (vph)	0	0	0	0	19	0	10	27	0	0	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	58	48	2	48	50	27	3			27		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	58	48	2	48	50	27	3			27		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	98	100	99			100		
cM capacity (veh/h)	918	838	1083	947	836	1048	1619			1587		
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total	19	37	3									
Volume Left	0	10	0									
Volume Right	0	0	3									
cSH	836	1619	1700									
Volume to Capacity	0.02	0.01	0.00									
Queue Length 95th (ft)	2	0	0									
Control Delay (s)	9.4	2.0	0.0									
Lane LOS	A	A										
Approach Delay (s)	9.4	2.0	0.0									
Approach LOS	A											
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		16.1%				ICU Level of Service				A		
Analysis Period (min)			15									



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑			↑↑		↑
Traffic Volume (veh/h)	671	14	0	817	0	0
Future Volume (Veh/h)	671	14	0	817	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	729	15	0	888	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		744		1180	372	
vC1, stage 1 conf vol				736		
vC2, stage 2 conf vol				444		
vCu, unblocked vol		744		1180	372	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	100	
cM capacity (veh/h)		859		381	625	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	
Volume Total	486	258	444	444	0	
Volume Left	0	0	0	0	0	
Volume Right	0	15	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.29	0.15	0.26	0.26	0.01	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS				A		
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS				A		
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		25.9%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	516	106	0	768	61	0
Future Volume (Veh/h)	516	106	0	768	61	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	561	115	0	835	66	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume		676		1036	338	
vC1, stage 1 conf vol				618		
vC2, stage 2 conf vol				418		
vCu, unblocked vol		676		1036	338	
tC, single (s)		4.1		6.8	6.9	
tC, 2 stage (s)				5.8		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		81	100	
cM capacity (veh/h)		911		356	658	
Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NW 3	NE 1
Volume Total	374	302	0	418	418	66
Volume Left	0	0	0	0	0	66
Volume Right	0	115	0	0	0	0
cSH	1700	1700	1700	1700	1700	356
Volume to Capacity	0.22	0.18	0.00	0.25	0.25	0.19
Queue Length 95th (ft)	0	0	0	0	0	17
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.4
Lane LOS					C	
Approach Delay (s)	0.0		0.0		17.4	
Approach LOS					C	
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		31.3%		ICU Level of Service		A
Analysis Period (min)		15				

# **APPENDIX L**

**Turning Movement Counts  
for University Blvd and Rio Bravo Blvd  
April 28, 2021**

# Huitt-Zollars, Inc.

333 Rio Rancho Drive NW, Suite 101  
 Rio Rancho, NM 87124  
*ADVANCED DESIGN*

Weather: Overcast  
 Serial Number: 3083  
 Collected By: BTrejo  
 Other:

File Name : UNIVERSITY-RIO BRAVO\_05042021 BT  
 Site Code : 00000000  
 Start Date : 4/28/2021  
 Page No : 1

### Groups Printed- Passenger Vehicles - Trucks

	UNIVERSITY From North			UNIVERSITY From South			RIO BRAVO From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:30 AM	16	4	0	3	9	0	35	64	1	132
06:45 AM	24	8	0	3	35	0	45	61	0	176
Total	40	12	0	6	44	0	80	125	1	308
07:00 AM	16	5	0	5	25	0	35	50	0	136
07:15 AM	17	6	0	4	26	0	53	57	0	163
07:30 AM	15	4	0	7	28	0	46	73	0	173
07:45 AM	19	10	0	8	28	0	46	79	0	190
Total	67	25	0	24	107	0	180	259	0	662
08:00 AM	18	9	0	8	22	0	59	58	0	174
08:15 AM	28	10	0	5	40	0	65	52	0	200
08:30 AM	19	9	0	14	58	0	36	49	0	185
08:45 AM	15	8	0	9	19	0	41	59	0	151
Total	80	36	0	36	139	0	201	218	0	710
09:00 AM	19	10	0	9	30	0	26	43	0	137
09:15 AM	13	8	0	5	18	0	28	31	0	103
*** BREAK ***										
Total	32	18	0	14	48	0	54	74	0	240
*** BREAK ***										
11:00 AM	35	7	0	7	19	0	24	38	0	130
11:15 AM	26	1	0	5	33	0	19	39	0	123
11:30 AM	24	10	0	4	25	0	23	40	0	126
11:45 AM	21	4	0	6	28	0	25	35	0	119
Total	106	22	0	22	105	0	91	152	0	498
12:00 PM	30	4	0	7	34	0	26	33	0	134
12:15 PM	24	12	0	7	18	0	20	45	0	126
12:30 PM	24	5	0	10	25	0	22	41	0	127
12:45 PM	32	7	0	7	29	0	31	36	0	142
Total	110	28	0	31	106	0	99	155	0	529
01:00 PM	26	8	0	6	15	0	27	41	0	123
01:15 PM	23	4	0	5	20	0	33	50	0	135
01:30 PM	32	5	0	6	39	0	25	40	0	147
01:45 PM	25	5	0	9	26	0	26	44	0	135
Total	106	22	0	26	100	0	111	175	0	540
*** BREAK ***										
03:00 PM	50	7	0	4	44	0	29	50	0	184
03:15 PM	43	7	0	6	18	0	25	47	0	146
03:30 PM	52	16	0	14	57	0	19	50	0	208
03:45 PM	43	5	0	11	67	0	19	33	0	178
Total	188	35	0	35	186	0	92	180	0	716

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Rio Rancho, NM 87124

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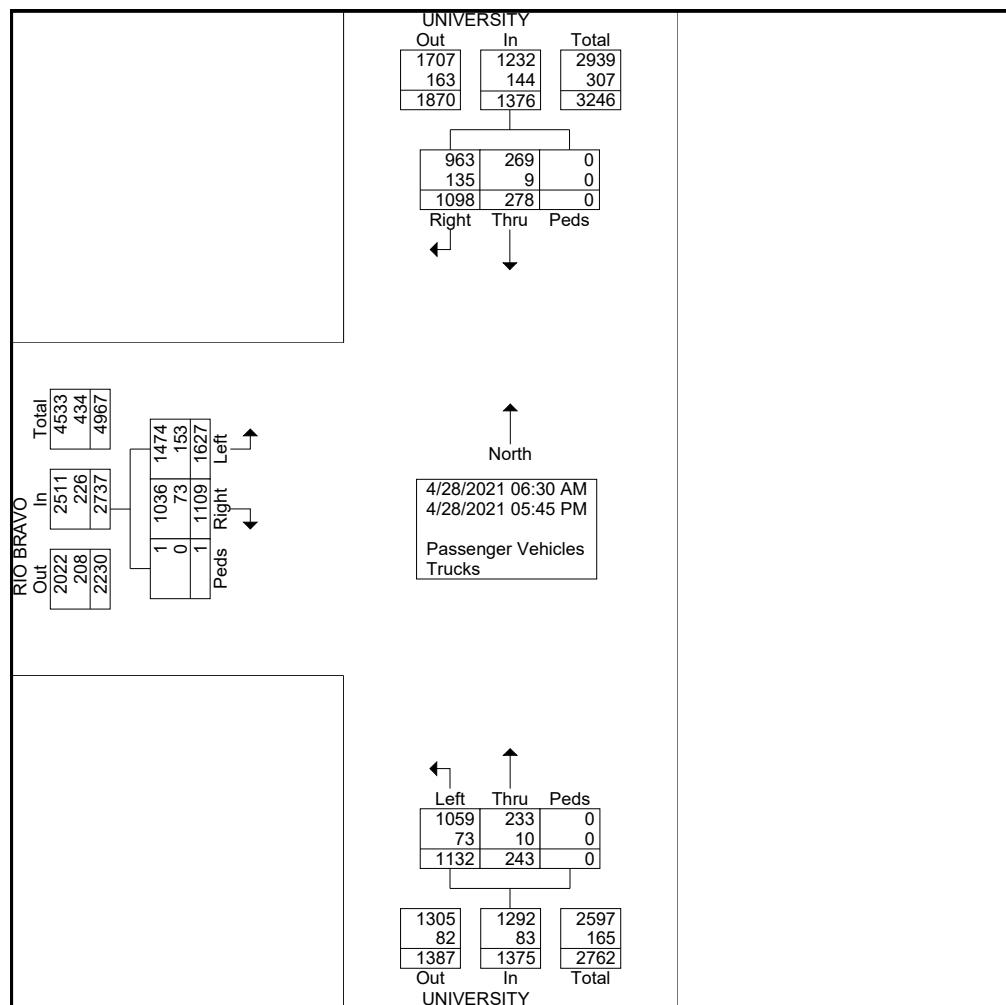
Site Code : 00000000

Start Date : 4/28/2021

Page No : 2

## Groups Printed- Passenger Vehicles - Trucks

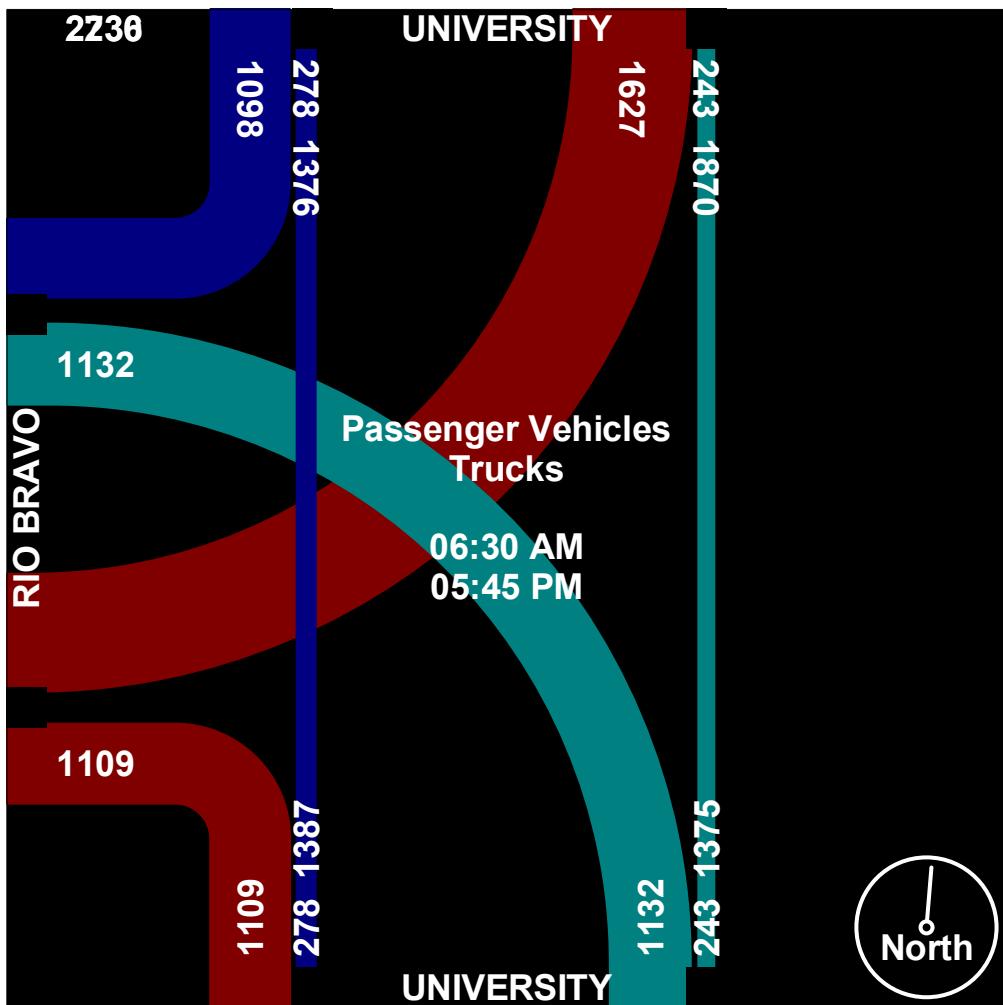
	UNIVERSITY From North			UNIVERSITY From South			RIO BRAVO From West			
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
04:00 PM	33	7	0	3	38	0	17	42	0	140
04:15 PM	40	14	0	9	39	0	22	31	0	155
04:30 PM	63	9	0	6	49	0	25	24	0	176
04:45 PM	55	4	0	3	32	0	27	45	0	166
Total	191	34	0	21	158	0	91	142	0	637
05:00 PM	50	16	0	10	54	0	20	41	0	191
05:15 PM	44	10	0	5	32	0	25	33	0	149
05:30 PM	41	12	0	6	26	0	31	29	0	145
05:45 PM	43	8	0	7	27	0	34	44	0	163
Total	178	46	0	28	139	0	110	147	0	648
Grand Total	1098	278	0	243	1132	0	1109	1627	1	5488
Apprch %	79.8	20.2	0	17.7	82.3	0	40.5	59.4	0	
Total %	20	5.1	0	4.4	20.6	0	20.2	29.6	0	
Passenger Vehicles	963	269	0	233	1059	0	1036	1474	1	5035
% Passenger Vehicles	87.7	96.8	0	95.9	93.6	0	93.4	90.6	100	91.7
Trucks	135	9	0	10	73	0	73	153	0	453
% Trucks	12.3	3.2	0	4.1	6.4	0	6.6	9.4	0	8.3



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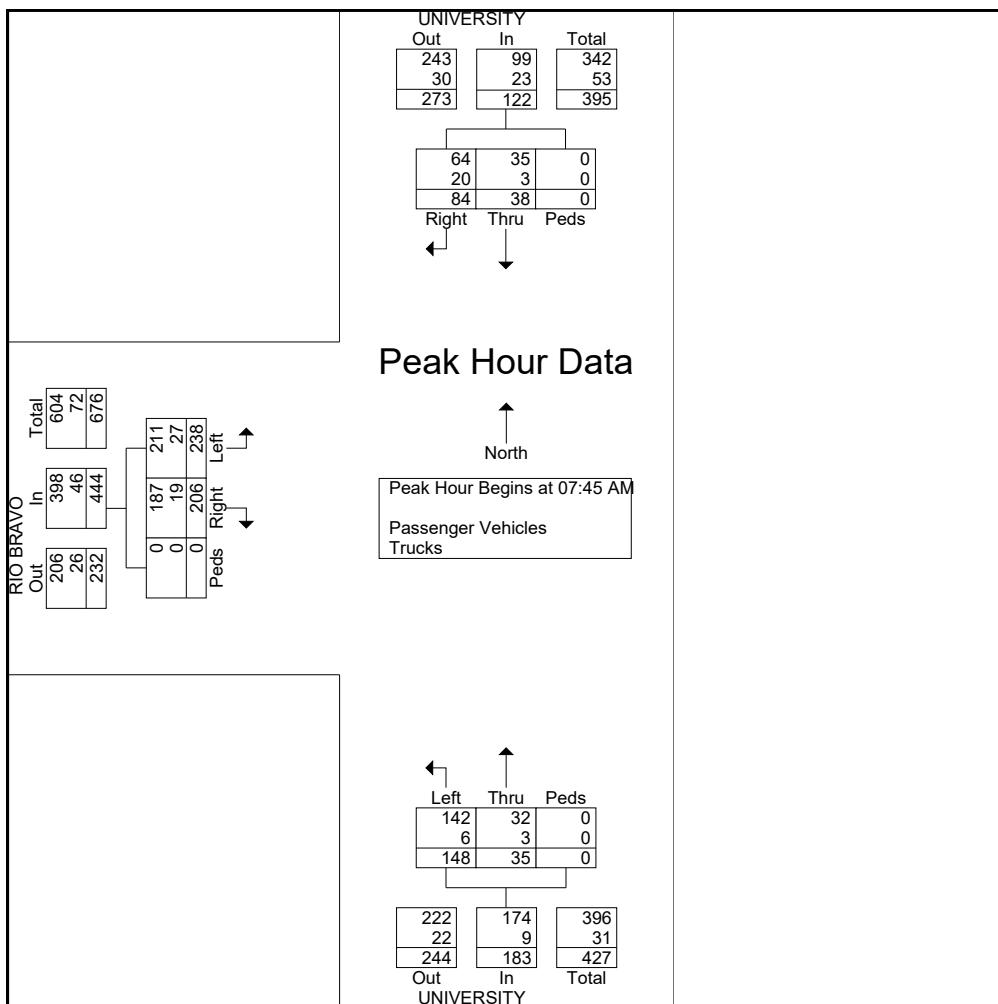
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

Site Code : 00000000

Start Date : 4/28/2021

Page No : 4

	UNIVERSITY From North					UNIVERSITY From South					RIO BRAVO From West				
	Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 07:45 AM															
07:45 AM	19	10	0	29	8	28	0	36	46	79	0	125	190		
08:00 AM	18	9	0	27	8	22	0	30	59	58	0	117	174		
08:15 AM	28	10	0	38	5	40	0	45	65	52	0	117	200		
08:30 AM	19	9	0	28	14	58	0	72	36	49	0	85	185		
Total Volume	84	38	0	122	35	148	0	183	206	238	0	444	749		
% App. Total	68.9	31.1	0		19.1	80.9	0		46.4	53.6	0				
PHF	.750	.950	.000	.803	.625	.638	.000	.635	.792	.753	.000	.888	.936		
Passenger Vehicles	64	35	0	99	32	142	0	174	187	211	0	398	671		
% Passenger Vehicles	76.2	92.1	0	81.1	91.4	95.9	0	95.1	90.8	88.7	0	89.6	89.6		
Trucks	20	3	0	23	3	6	0	9	19	27	0	46	78		
% Trucks	23.8	7.9	0	18.9	8.6	4.1	0	4.9	9.2	11.3	0	10.4	10.4		



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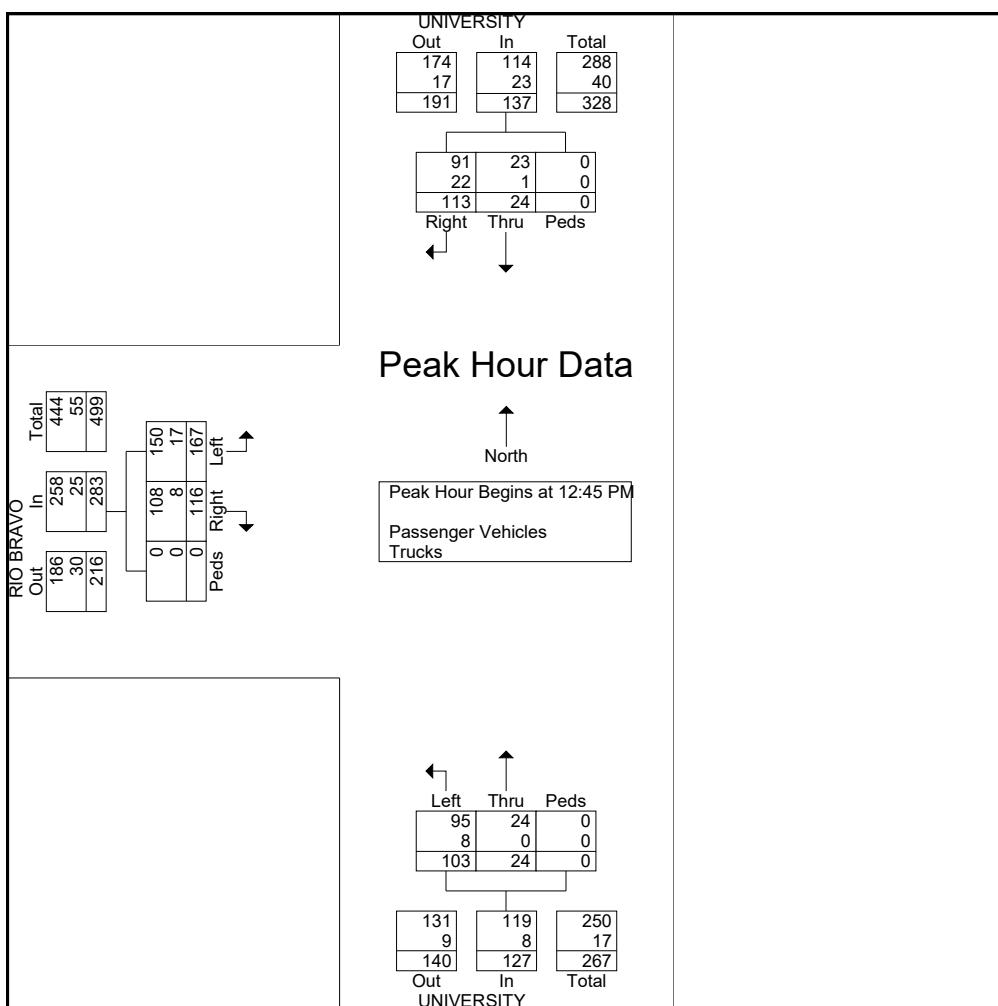
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

Site Code : 00000000

Start Date : 4/28/2021

Page No : 5

Start Time	UNIVERSITY From North				UNIVERSITY From South				RIO BRAVO From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
<b>Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1</b>														
<b>Peak Hour for Entire Intersection Begins at 12:45 PM</b>														
12:45 PM	32	7	0	39	7	29	0	36	31	36	0	67	142	
01:00 PM	26	8	0	34	6	15	0	21	27	41	0	68	123	
01:15 PM	23	4	0	27	5	20	0	25	33	50	0	83	135	
01:30 PM	32	5	0	37	6	39	0	45	25	40	0	65	147	
Total Volume	113	24	0	137	24	103	0	127	116	167	0	283	547	
% App. Total	82.5	17.5	0		18.9	81.1	0		41	59	0			
PHF	.883	.750	.000	.878	.857	.660	.000	.706	.879	.835	.000	.852	.930	
Passenger Vehicles	91	23	0	114	24	95	0	119	108	150	0	258	491	
% Passenger Vehicles	80.5	95.8	0	83.2	100	92.2	0	93.7	93.1	89.8	0	91.2	89.8	
Trucks	22	1	0	23	0	8	0	8	8	17	0	25	56	
% Trucks	19.5	4.2	0	16.8	0	7.8	0	6.3	6.9	10.2	0	8.8	10.2	



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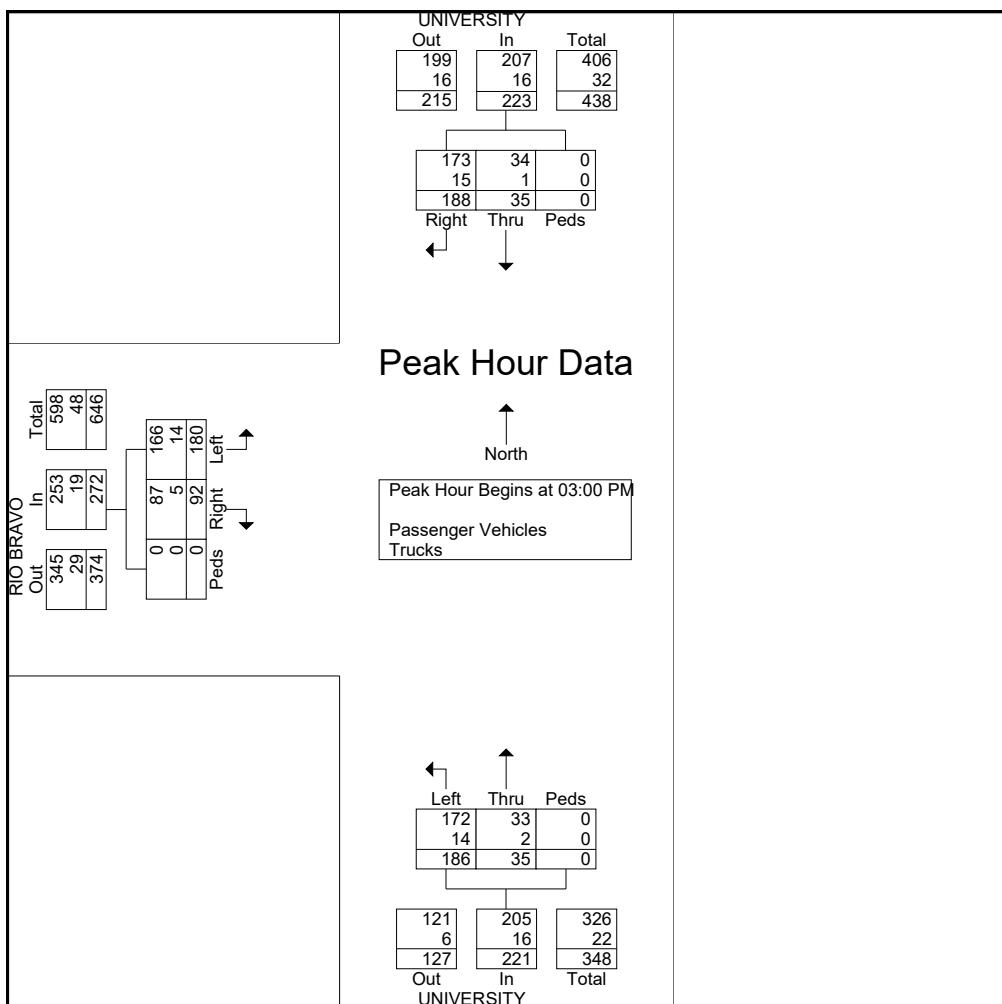
File Name : UNIVERSITY-RIO BRAVO\_05042021 BT

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Start Date : 4/28/2021

Page No : 6

Start Time	UNIVERSITY From North				UNIVERSITY From South				RIO BRAVO From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
<b>Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1</b>														
<b>Peak Hour for Entire Intersection Begins at 03:00 PM</b>														
03:00 PM	50	7	0	57	4	44	0	48	29	50	0	79	184	
03:15 PM	43	7	0	50	6	18	0	24	25	47	0	72	146	
03:30 PM	52	16	0	68	14	57	0	71	19	50	0	69	208	
03:45 PM	43	5	0	48	11	67	0	78	19	33	0	52	178	
Total Volume	188	35	0	223	35	186	0	221	92	180	0	272	716	
% App. Total	84.3	15.7	0		15.8	84.2	0		33.8	66.2	0			
PHF	.904	.547	.000	.820	.625	.694	.000	.708	.793	.900	.000	.861	.861	
Passenger Vehicles	173	34	0	207	33	172	0	205	87	166	0	253	665	
% Passenger Vehicles	92.0	97.1	0	92.8	94.3	92.5	0	92.8	94.6	92.2	0	93.0	92.9	
Trucks	15	1	0	16	2	14	0	16	5	14	0	19	51	
% Trucks	8.0	2.9	0	7.2	5.7	7.5	0	7.2	5.4	7.8	0	7.0	7.1	



**Huitt-Zollars, Inc.**

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Site Code : 00000000  
Start Date : 4/28/2021  
Page No : 7



# **APPENDIX M**

**Synchro Reports:  
2023 and 2028 Mitigations  
AM and PM Peak Hours**

Intersection

Intersection Delay, s/veh 18.9

Intersection LOS C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	27	366	41	26	425
Future Vol, veh/h	0	27	366	41	26	425
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	64	469	82	35	506
Number of Lanes	1	0	1	0	1	1
Approach	WB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		2		1	
Conflicting Approach Left	NB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right	SB		WB			
Conflicting Lanes Right	2		1		0	
HCM Control Delay	9.5		19.6		19.4	
HCM LOS	A		C		C	

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%
Vol Thru, %	90%	0%	0%	100%
Vol Right, %	10%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	407	27	26	425
LT Vol	0	0	26	0
Through Vol	366	0	0	425
RT Vol	41	27	0	0
Lane Flow Rate	551	64	35	506
Geometry Grp	5	2	7	7
Degree of Util (X)	0.729	0.104	0.054	0.721
Departure Headway (Hd)	4.762	5.808	5.631	5.127
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	755	621	633	703
Service Time	2.818	3.808	3.392	2.888
HCM Lane V/C Ratio	0.73	0.103	0.055	0.72
HCM Control Delay	19.6	9.5	8.7	20.1
HCM Lane LOS	C	A	A	C
HCM 95th-tile Q	6.4	0.3	0.2	6.2

Intersection										
Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations	↑↑		↑↑	↑↑		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	0	107	262	44	0	178	9	0	0
Future Vol, veh/h	0	0	107	262	44	0	178	9	0	0
Peak Hour Factor	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	249	298	48	0	254	26	0	0
Number of Lanes	1	0	1	2	0	1	2	0	0	1
Approach										
Opposing Approach			SE			NW			SW	
Opposing Lanes			NW			SE				
Conflicting Approach Left			3			3			0	
Conflicting Lanes Left			SW			EB			NW	
Conflicting Approach Right			1			1			3	
Conflicting Lanes Right			EB			SW			SE	
HCM Control Delay			11.5			10.6			9.8	
HCM LOS			B			B			A	
Lane	NWLn1	NWLn2	NWLn3	EBLn1	SELn1	SELn2	SELn3	SWLn1		
Vol Left, %	0%	0%	0%	100%	100%	0%	0%	0%		
Vol Thru, %	100%	100%	87%	0%	0%	100%	66%	0%		
Vol Right, %	0%	0%	13%	0%	0%	0%	34%	100%		
Sign Control	Stop									
Traffic Vol by Lane	0	119	68	115	107	175	131	44		
LT Vol	0	0	0	115	107	0	0	0		
Through Vol	0	119	59	0	0	175	87	0		
RT Vol	0	0	9	0	0	0	44	44		
Lane Flow Rate	0	170	110	125	249	198	147	71		
Geometry Grp	7	7	7	7	7	7	7	7		
Degree of Util (X)	0	0.282	0.181	0.251	0.422	0.309	0.219	0.122		
Departure Headway (Hd)	5.982	5.982	5.888	7.227	6.105	5.6	5.362	6.181		
Convergence, Y/N	Yes									
Cap	0	600	609	498	590	643	669	579		
Service Time	3.72	3.72	3.627	4.97	3.836	3.331	3.094	3.928		
HCM Lane V/C Ratio	0	0.283	0.181	0.251	0.422	0.308	0.22	0.123		
HCM Control Delay	8.7	11.1	9.9	12.4	13.2	10.8	9.6	9.8		
HCM Lane LOS	N	B	A	B	B	B	A	A		
HCM 95th-tile Q	0	1.2	0.7	1	2.1	1.3	0.8	0.4		

Intersection

Intersection Delay, s/veh 11.2

Intersection LOS B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Vol, veh/h	97	51	80	0	17	60	127	82	0	0	0	26
Future Vol, veh/h	97	51	80	0	17	60	127	82	0	0	0	26
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	109	65	127	0	24	95	202	89	0	0	0	39
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Approach	SE			NW			NE			SW		
Opposing Approach	NW			SE			SW			NE		
Opposing Lanes	3			3			1			1		
Conflicting Approach Left	SW			NE			SE			NW		
Conflicting Lanes Left	1			1			3			3		
Conflicting Approach Right	NE			SW			NW			SE		
Conflicting Lanes Right	1			1			3			3		
HCM Control Delay	9.6			9			14.1			8.4		
HCM LOS	A			A			B			A		

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	61%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	39%	100%	100%	9%	0%	100%	18%	0%
Vol Right, %	0%	0%	0%	91%	0%	0%	82%	100%
Sign Control	Stop							
Traffic Vol by Lane	209	0	11	66	97	34	97	26
LT Vol	127	0	0	0	97	0	0	0
Through Vol	82	0	11	6	0	34	17	0
RT Vol	0	0	0	60	0	0	80	26
Lane Flow Rate	291	0	16	103	109	44	149	39
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.482	0	0.026	0.153	0.186	0.068	0.209	0.059
Departure Headway (Hd)	5.971	5.998	5.998	5.347	6.262	5.756	5.171	5.359
Convergence, Y/N	Yes							
Cap	608	0	598	672	577	626	698	671
Service Time	3.671	3.72	3.72	3.069	3.962	3.456	2.871	3.072
HCM Lane V/C Ratio	0.479	0	0.027	0.153	0.189	0.07	0.213	0.058
HCM Control Delay	14.1	8.7	8.9	9	10.4	8.9	9.2	8.4
HCM Lane LOS	B	N	A	A	B	A	A	A
HCM 95th-tile Q	2.6	0	0.1	0.5	0.7	0.2	0.8	0.2

Intersection

Intersection Delay, s/veh 24.6

Intersection LOS C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	27	470	2	9	397
Future Vol, veh/h	48	27	470	2	9	397
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	49	573	4	18	478
Number of Lanes	1	0	1	0	1	1
Approach	WB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		2		1	
Conflicting Approach Left	NB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right	SB		WB			
Conflicting Lanes Right	2		1		0	
HCM Control Delay	11.8		29.4		22.7	
HCM LOS	B		D		C	

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	64%	100%	0%
Vol Thru, %	100%	0%	0%	100%
Vol Right, %	0%	36%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	472	75	9	397
LT Vol	0	48	9	0
Through Vol	470	0	0	397
RT Vol	2	27	0	0
Lane Flow Rate	577	145	18	478
Geometry Grp	5	2	7	7
Degree of Util (X)	0.838	0.261	0.031	0.748
Departure Headway (Hd)	5.227	6.467	6.137	5.63
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	693	554	584	641
Service Time	3.259	4.518	3.869	3.362
HCM Lane V/C Ratio	0.833	0.262	0.031	0.746
HCM Control Delay	29.4	11.8	9.1	23.2
HCM Lane LOS	D	B	A	C
HCM 95th-tile Q	9.3	1	0.1	6.7

Intersection										
Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations	↑↑		↑↑	↑↑		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	0	39	245	112	0	268	2	53	0
Future Vol, veh/h	0	0	39	245	112	0	268	2	53	0
Peak Hour Factor	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	70	272	122	0	331	6	177	0
Number of Lanes	1	0	1	2	0	1	2	0	0	1
Approach										
Opposing Approach			SE			NW			SW	
Opposing Lanes			NW			SE				
Conflicting Approach Left			3			3			0	
Conflicting Lanes Left				SW		EB			NW	
Conflicting Approach Right				1		1			3	
Conflicting Lanes Right					EB	SW		SE		
HCM Control Delay					11.9		12.9		15.8	
HCM LOS					B		B		C	
Lane	NWLn1	NWLn2	NWLn3	EBLn1	SELn1	SELn2	SELn3	SWLn1		
Vol Left, %	0%	0%	0%	100%	100%	0%	0%	55%		
Vol Thru, %	100%	100%	98%	0%	0%	100%	42%	0%		
Vol Right, %	0%	0%	2%	0%	0%	0%	58%	45%		
Sign Control	Stop									
Traffic Vol by Lane	0	179	91	95	39	163	194	97		
LT Vol	0	0	0	95	39	0	0	53		
Through Vol	0	179	89	0	0	163	82	0		
RT Vol	0	0	2	0	0	0	112	44		
Lane Flow Rate	0	221	116	103	70	181	212	254		
Geometry Grp	7	7	7	7	7	7	7	7		
Degree of Util (X)	0	0.402	0.211	0.224	0.133	0.322	0.353	0.481		
Departure Headway (Hd)	6.558	6.558	6.542	7.819	6.896	6.387	5.974	6.816		
Convergence, Y/N	Yes									
Cap	0	545	544	462	516	559	597	525		
Service Time	4.353	4.353	4.338	5.519	4.686	4.176	3.763	4.604		
HCM Lane V/C Ratio	0	0.406	0.213	0.223	0.136	0.324	0.355	0.484		
HCM Control Delay	9.4	13.8	11.1	12.8	10.8	12.2	12	15.8		
HCM Lane LOS	N	B	B	B	B	B	B	C		
HCM 95th-tile Q	0	1.9	0.8	0.8	0.5	1.4	1.6	2.6		

Intersection

Intersection Delay, s/veh 70.7

Intersection LOS F

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Vol, veh/h	37	45	156	9	95	1	147	0	5	66	92	88
Future Vol, veh/h	37	45	156	9	95	1	147	0	5	66	92	88
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	85	184	18	117	3	213	0	7	189	368	119
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Approach	SE			NW			NE			SW		
Opposing Approach	NW			SE			SW			NE		
Opposing Lanes	3			3			1			1		
Conflicting Approach Left	SW			NE			SE			NW		
Conflicting Lanes Left	1			1			3			3		
Conflicting Approach Right	NE			SW			NW			SE		
Conflicting Lanes Right	1			1			3			3		
HCM Control Delay	13.9			12.5			17			127.4		
HCM LOS	B			B			C			F		

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	97%	100%	0%	0%	100%	0%	0%	27%
Vol Thru, %	0%	0%	100%	97%	0%	100%	9%	37%
Vol Right, %	3%	0%	0%	3%	0%	0%	91%	36%
Sign Control	Stop							
Traffic Vol by Lane	152	9	63	33	37	30	171	246
LT Vol	147	9	0	0	37	0	0	66
Through Vol	0	0	63	32	0	30	15	92
RT Vol	5	0	0	1	0	0	156	88
Lane Flow Rate	220	18	78	42	56	57	212	675
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.458	0.042	0.169	0.091	0.123	0.116	0.397	1.198
Departure Headway (Hd)	7.836	9.022	8.496	8.473	8.528	8.005	7.337	6.383
Convergence, Y/N	Yes							
Cap	464	399	425	425	423	451	494	574
Service Time	5.536	6.722	6.196	6.173	6.228	5.705	5.037	4.099
HCM Lane V/C Ratio	0.474	0.045	0.184	0.099	0.132	0.126	0.429	1.176
HCM Control Delay	17	12.1	12.9	12	12.4	11.8	14.8	127.4
HCM Lane LOS	C	B	B	B	B	B	B	F
HCM 95th-tile Q	2.4	0.1	0.6	0.3	0.4	0.4	1.9	24.3

Intersection

Intersection Delay, s/veh 15.3

Intersection LOS C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑↑		↑↑		↑	↑↑
Traffic Vol, veh/h	0	32	396	41	31	760
Future Vol, veh/h	0	32	396	41	31	760
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	76	508	82	41	905
Number of Lanes	1	0	2	0	1	2
Approach	WB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		3		2	
Conflicting Approach Left	NB				WB	
Conflicting Lanes Left	2		0		1	
Conflicting Approach Right	SB		WB			
Conflicting Lanes Right	3		1		0	
HCM Control Delay	10.7		16.4		15	
HCM LOS	B		C		B	

Lane	NBLn1	NBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	76%	0%	0%	100%	100%
Vol Right, %	0%	24%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	264	173	32	31	380	380
LT Vol	0	0	0	31	0	0
Through Vol	264	132	0	0	380	380
RT Vol	0	41	32	0	0	0
Lane Flow Rate	338	251	76	41	452	452
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	0.602	0.435	0.143	0.07	0.702	0.482
Departure Headway (Hd)	6.399	6.232	6.773	6.09	5.585	3.836
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	565	578	528	592	651	945
Service Time	4.141	3.974	4.529	3.79	3.285	1.536
HCM Lane V/C Ratio	0.598	0.434	0.144	0.069	0.694	0.478
HCM Control Delay	18.4	13.7	10.7	9.2	20.4	10.1
HCM Lane LOS	C	B	B	A	C	B
HCM 95th-tile Q	4	2.2	0.5	0.2	5.7	2.7

Intersection											
Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	
Lane Configurations	↑↑		↑	↑↑		↑	↑↑		↑	↑↑	
Traffic Vol, veh/h	241	101	127	571	184	1	185	70	17	16	
Future Vol, veh/h	241	101	127	571	184	1	185	70	17	16	
Peak Hour Factor	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	262	110	295	649	200	1	264	200	27	17	
Number of Lanes	2	0	1	2	0	1	2	0	1	2	
Approach											
Opposing Approach			SE			NW			SW		
Opposing Lanes			NW			SE					
Conflicting Approach Left			3			3			0		
Conflicting Lanes Left			SW			EB			NW		
Conflicting Approach Right			3			3			3		
Conflicting Lanes Right			EB			SW			EB		
HCM Control Delay			79.5			39.9			18.1		
HCM LOS			F			E			C		
Lane	NWLn1	NWLn2	NWLn3	EBLn1	EBLn2	EBLn3	SELn1	SELn2	SELn3	SWLn1	SWLn2
Vol Left, %	100%	0%	0%	100%	100%	44%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	47%	0%	0%	0%	0%	100%	51%	0%	0%
Vol Right, %	0%	0%	53%	0%	0%	56%	0%	0%	49%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	123	132	137	161	181	127	381	374	17	11
LT Vol	1	0	0	137	161	80	127	0	0	17	0
Through Vol	0	123	62	0	0	0	0	381	190	0	0
RT Vol	0	0	70	0	0	101	0	0	184	0	11
Lane Flow Rate	1	176	288	149	175	197	295	433	416	27	12
Geometry Grp	8	8	8	7	7	7	8	8	8	7	7
Degree of Util (X)	0.003	0.53	0.836	0.409	0.48	0.506	0.793	1.101	1.02	0.08	0.031
Departure Headway (Hd)	11.314	10.819	10.451	9.893	9.893	9.235	9.662	9.162	8.818	10.734	9.559
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	318	335	349	366	367	392	378	398	416	336	379
Service Time	9.034	8.534	8.162	7.598	7.598	6.929	7.362	6.862	6.518	8.409	7.209
HCM Lane V/C Ratio	0.003	0.525	0.825	0.407	0.477	0.503	0.78	1.088	1	0.08	0.032
HCM Control Delay	14.1	25.1	49	19.3	21.4	21	40.7	105.7	79.8	14.3	12.5
HCM Lane LOS	B	D	E	C	C	C	E	F	F	B	B
HCM 95th-tile Q	0	2.9	7.4	1.9	2.5	2.8	6.8	15.5	13	0.3	0.1

Intersection

Intersection Delay, s/veh 11.7

Intersection LOS B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Vol, veh/h	19	476	9	0	214	12	13	14	27	3	0	5
Future Vol, veh/h	19	476	9	0	214	12	13	14	27	3	0	5
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	610	14	0	297	19	21	15	29	10	0	8
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Approach	SE			NW			NE			SW		
Opposing Approach	NW			SE			SW			NE		
Opposing Lanes	3			3			1			1		
Conflicting Approach Left	SW			NE			SE			NW		
Conflicting Lanes Left	1			1			3			3		
Conflicting Approach Right	NE			SW			NW			SE		
Conflicting Lanes Right	1			1			3			3		
HCM Control Delay	12.8			10			10			9.4		
HCM LOS	B			A			A			A		

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	24%	0%	0%	0%	100%	0%	0%	38%
Vol Thru, %	26%	100%	100%	86%	0%	100%	95%	0%
Vol Right, %	50%	0%	0%	14%	0%	0%	5%	62%
Sign Control	Stop							
Traffic Vol by Lane	54	0	143	83	19	317	168	8
LT Vol	13	0	0	0	19	0	0	3
Through Vol	14	0	143	71	0	317	159	0
RT Vol	27	0	0	12	0	0	9	5
Lane Flow Rate	65	0	198	118	21	407	218	17
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.115	0	0.297	0.174	0.033	0.575	0.305	0.031
Departure Headway (Hd)	6.336	5.398	5.398	5.297	5.59	5.088	5.05	6.525
Convergence, Y/N	Yes							
Cap	561	0	662	673	638	708	708	552
Service Time	4.13	3.164	3.164	3.063	3.345	2.842	2.804	4.225
HCM Lane V/C Ratio	0.116	0	0.299	0.175	0.033	0.575	0.308	0.031
HCM Control Delay	10	8.2	10.5	9.2	8.5	14.6	10	9.4
HCM Lane LOS	A	N	B	A	A	B	A	A
HCM 95th-tile Q	0.4	0	1.2	0.6	0.1	3.7	1.3	0.1

Intersection

Intersection Delay, s/veh 61.8

Intersection LOS F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑↑		↑↑		↑	↑↑
Traffic Vol, veh/h	48	32	786	3	10	751
Future Vol, veh/h	48	32	786	3	10	751
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	58	959	6	20	905
Number of Lanes	1	0	2	0	1	2
Approach	WB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		3		2	
Conflicting Approach Left	NB				WB	
Conflicting Lanes Left	2		0		1	
Conflicting Approach Right	SB		WB			
Conflicting Lanes Right	3		1		0	
HCM Control Delay	15.5		106.4		23	
HCM LOS	C		F		C	

Lane	NBLn1	NBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	60%	100%	0%	0%
Vol Thru, %	100%	99%	0%	0%	100%	100%
Vol Right, %	0%	1%	40%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	524	265	80	10	376	376
LT Vol	0	0	48	10	0	0
Through Vol	524	262	0	0	376	376
RT Vol	0	3	32	0	0	0
Lane Flow Rate	639	326	154	20	452	452
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	1.248	0.635	0.345	0.038	0.808	0.59
Departure Headway (Hd)	7.033	7.025	8.457	7.264	6.755	4.99
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	514	429	496	538	728
Service Time	4.789	4.781	6.157	4.964	4.455	2.69
HCM Lane V/C Ratio	1.234	0.634	0.359	0.04	0.84	0.621
HCM Control Delay	149.8	21.3	15.5	10.3	32	14.6
HCM Lane LOS	F	C	C	B	D	B
HCM 95th-tile Q	25.2	4.4	1.5	0.1	7.8	3.9

Intersection

Intersection Delay, s/veh 110.4

Intersection LOS F

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations	↑↑↑		↑	↑↑		↑	↑↑		↑	↑↑
Traffic Vol, veh/h	75	64	105	495	216	144	536	3	83	203
Future Vol, veh/h	75	64	105	495	216	144	536	3	83	203
Peak Hour Factor	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	70	188	550	235	157	662	9	277	221
Number of Lanes	2	0	1	2	0	1	2	0	1	2
Approach			SE			NW			SW	
Opposing Approach			NW			SE				
Opposing Lanes			3			3			0	
Conflicting Approach Left			SW			EB			NW	
Conflicting Lanes Left			3			3			3	
Conflicting Approach Right			EB			SW			EB	
Conflicting Lanes Right			3			3			3	
HCM Control Delay			145.4			162.9			39.9	
HCM LOS			F			F			E	

Lane	NWLn1	NWLn2	NWLn3	EBLn1	EBLn2	EBLn3	SELn1	SELn2	SELn3	SWLn1	SWLn2
Vol Left, %	100%	0%	0%	100%	100%	28%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	98%	0%	0%	0%	0%	100%	43%	0%	0%
Vol Right, %	0%	0%	2%	0%	0%	72%	0%	0%	57%	0%	100%
Sign Control	Stop										
Traffic Vol by Lane	144	357	182	213	50	89	105	330	381	83	135
LT Vol	144	0	0	213	50	25	105	0	0	83	0
Through Vol	0	357	179	0	0	0	0	330	165	0	0
RT Vol	0	0	3	0	0	64	0	0	216	0	135
Lane Flow Rate	157	441	229	232	54	97	187	367	418	277	147
Geometry Grp	8	8	8	7	7	7	8	8	8	7	7
Degree of Util (X)	0.551	1.494	0.775	0.746	0.175	0.289	0.633	1.188	1.31	0.857	0.408
Departure Headway (Hd)	12.881	12.381	12.369	11.699	11.699	10.747	12.635	12.135	11.738	11.512	10.312
Convergence, Y/N	Yes										
Cap	282	296	296	310	309	334	287	301	314	318	352
Service Time	10.581	10.081	10.069	9.399	9.399	8.536	10.335	9.835	9.438	9.212	8.012
HCM Lane V/C Ratio	0.557	1.49	0.774	0.748	0.175	0.29	0.652	1.219	1.331	0.871	0.418
HCM Control Delay	30.3	270	47.4	42.1	16.9	17.9	34.8	148.1	192.7	56	19.9
HCM Lane LOS	D	F	E	E	C	C	D	F	F	F	C
HCM 95th-tile Q	3.1	24.6	6	5.6	0.6	1.2	4	15.5	19.6	7.6	1.9

Intersection

Intersection Delay, s/veh 40.7

Intersection LOS E

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Vol, veh/h	7	461	17	3	707	0	16	0	21	34	15	17
Future Vol, veh/h	7	461	17	3	707	0	16	0	21	34	15	17
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	870	20	6	873	0	23	0	28	97	60	23
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Approach	SE			NW			NE			SW		
Opposing Approach	NW			SE			SW			NE		
Opposing Lanes	3			3			1			1		
Conflicting Approach Left	SW			NE			SE			NW		
Conflicting Lanes Left	1			1			3			3		
Conflicting Approach Right	NE			SW			NW			SE		
Conflicting Lanes Right	1			1			3			3		
HCM Control Delay	62.6			24.7			12.6			16.9		
HCM LOS	F			C			B			C		

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	43%	100%	0%	0%	100%	0%	0%	52%
Vol Thru, %	0%	0%	100%	100%	0%	100%	90%	23%
Vol Right, %	57%	0%	0%	0%	0%	0%	10%	26%
Sign Control	Stop							
Traffic Vol by Lane	37	3	354	354	7	307	171	66
LT Vol	16	3	0	0	7	0	0	34
Through Vol	0	0	354	354	0	307	154	15
RT Vol	21	0	0	0	0	0	17	17
Lane Flow Rate	51	6	436	436	11	580	310	180
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.12	0.012	0.818	0.608	0.021	1.079	0.571	0.411
Departure Headway (Hd)	8.728	7.485	6.973	5.198	7.211	6.7	6.629	8.458
Convergence, Y/N	Yes							
Cap	413	481	524	698	493	539	539	429
Service Time	6.428	5.185	4.673	2.898	4.998	4.487	4.416	6.158
HCM Lane V/C Ratio	0.123	0.012	0.832	0.625	0.022	1.076	0.575	0.42
HCM Control Delay	12.6	10.3	33.9	15.6	10.2	87.4	18	16.9
HCM Lane LOS	B	B	D	C	B	F	C	C
HCM 95th-tile Q	0.4	0	8	4.1	0.1	17.5	3.6	2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		Y		Y	Y
Traffic Volume (vph)	0	27	366	41	26	425
Future Volume (vph)	0	27	366	41	26	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	12	12	12	12
Storage Length (ft)	0	0		0	170	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>	0.865		0.980			
Flt Protected					0.950	
Satd. Flow (prot)	1826	0	1825	0	1770	1863
Flt Permitted					0.447	
Satd. Flow (perm)	1826	0	1825	0	833	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	290		23			
Link Speed (mph)	30		35		30	
Link Distance (ft)	449		452		307	
Travel Time (s)	10.2		8.8		7.0	
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Adj. Flow (vph)	0	64	469	82	35	506
Shared Lane Traffic (%)						
Lane Group Flow (vph)	64	0	551	0	35	506
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	0.85	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type		Cl+Ex			Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2		6	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	22.5		22.5		22.5	22.5
Total Split (s)	22.5		27.5		27.5	27.5
Total Split (%)	45.0%		55.0%		55.0%	55.0%
Maximum Green (s)	18.0		23.0		23.0	23.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5		4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Max		C-Max	C-Max
Walk Time (s)	7.0		7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effect Green (s)	5.5		41.3		41.3	41.3
Actuated g/C Ratio	0.11		0.83		0.83	0.83
v/c Ratio	0.14		0.36		0.05	0.33
Control Delay	0.6		3.0		2.3	2.9
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	0.6		3.0		2.3	2.9
LOS	A		A		A	A
Approach Delay	0.6		3.0		2.9	
Approach LOS	A		A			A

#### Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 2.8

Intersection LOS: A

Intersection Capacity Utilization 34.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: University Blvd & Fritts Crossing



7. 2023 Build AM Peak Signalized  
 7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/21/2021

	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Group												
Lane Configurations												
Traffic Volume (vph)	115	0	0	107	262	44	0	178	9	0	0	44
Future Volume (vph)	115	0	0	107	262	44	0	178	9	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)				100		0	150		0	0	0	
Storage Lanes		1	0	1		0	1		0	1	0	
Taper Length (ft)		25		50			50			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt					0.979			0.986		0.865		
Flt Protected		0.950		0.950								
Satd. Flow (prot)	0	1770	0	1770	3465	0	1863	3490	0	1611	0	0
Flt Permitted		0.950		0.580								
Satd. Flow (perm)	0	1770	0	1080	3465	0	1863	3490	0	1611	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					48			26		607		
Link Speed (mph)		30			30			35		30		
Link Distance (ft)		434			390			588		807		
Travel Time (s)		9.9			8.9			11.5		18.3		
Peak Hour Factor	0.92	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Adj. Flow (vph)	125	0	0	249	298	48	0	254	26	0	0	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	125	0	249	346	0	0	280	0	71	0	0
Enter Blocked Intersection	No	No	No									
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		12			24			24		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	2		1	2		1		
Detector Template	Left	Left		Left	Thru		Left	Thru		Left		
Leading Detector (ft)	20	20		20	100		20	100		20		
Trailing Detector (ft)	0	0		0	0		0	0		0		
Detector 1 Position(ft)	0	0		0	0		0	0		0		
Detector 1 Size(ft)	20	20		20	6		20	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type	Perm	Prot		Perm	NA		Perm	NA		custom		
Protected Phases		4			6			2				
Permitted Phases	4			6			2					

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	8
Permitted Phases	

7. 2023 Build AM Peak Signalized  
 7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/21/2021



Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Detector Phase	4	4		6	6		2	2				
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0				
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%				
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0				
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5				
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0				
Lost Time Adjust (s)				0.0	0.0		0.0	0.0				
Total Lost Time (s)				4.5	4.5		4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0				
Recall Mode	None	None		C-Min	C-Min		C-Min	C-Min				
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effect Green (s)		8.5		30.4	30.4			30.4			0.0	
Actuated g/C Ratio		0.19		0.68	0.68			0.68			0.00	
v/c Ratio		0.37		0.34	0.15			0.12			0.12	
Control Delay		18.4		6.8	3.8			3.9			0.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		18.4		6.8	3.8			3.9			0.4	
LOS		B		A	A			A			A	
Approach Delay		18.4			5.0			3.9			0.4	
Approach LOS		B			A			A			A	

#### Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 6.0

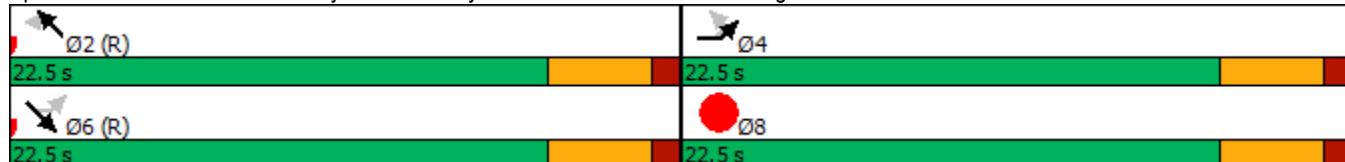
Intersection LOS: A

Intersection Capacity Utilization 37.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: University Blvd & Bobby Foster Rd & Eastman Crossing

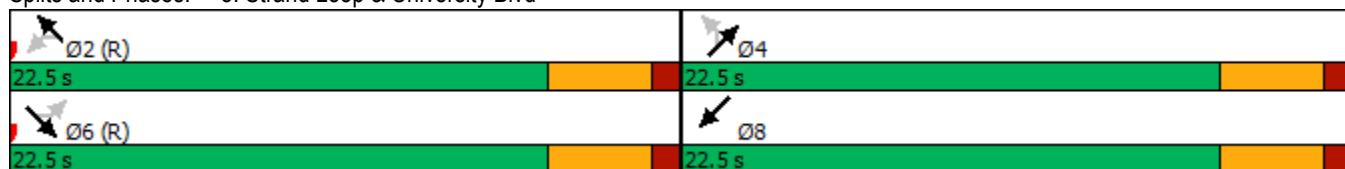


Lane Group	Ø8
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	22.5
Total Split (%)	50%
Maximum Green (s)	18.0
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Intersection Summary	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	97	51	80	0	17	60	127	82	0	0	0	26
Future Volume (vph)	97	51	80	0	17	60	127	82	0	0	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Storage Length (ft)	150		0	125		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	50			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.901			0.880						0.865	
Flt Protected	0.950							0.966				
Satd. Flow (prot)	1711	3083	0	1863	3115	0	0	1799	0	0	1611	0
Flt Permitted	0.677							0.769				
Satd. Flow (perm)	1219	3083	0	1863	3115	0	0	1432	0	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		127			95						1011	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		343			335			350			221	
Travel Time (s)		6.7			6.5			8.0			5.0	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Adj. Flow (vph)	109	65	127	0	24	95	202	89	0	0	0	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	192	0	0	119	0	0	291	0	0	39	0
Enter Blocked Intersection	No	No	No	No								
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			0			0	
Link Offset(ft)		0			-5			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2				2
Detector Template	Left	Thru		Left	Thru		Left	Thru				Thru
Leading Detector (ft)	20	100		20	100		20	100				100
Trailing Detector (ft)	0	0		0	0		0	0				0
Detector 1 Position(ft)	0	0		0	0		0	0				0
Detector 1 Size(ft)	20	6		20	6		20	6				6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA			NA	
Protected Phases		6			2			4			8	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4					
Detector Phase	6	6		2	2		4	4				8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0				5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				22.5
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				22.5
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%				50.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0				18.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5				3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0				1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0				0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0				3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None				None
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0				0
Act Effect Green (s)	22.2	22.2		22.2			13.8					13.8
Actuated g/C Ratio	0.49	0.49		0.49			0.31					0.31
v/c Ratio	0.18	0.12		0.07			0.67					0.03
Control Delay	8.9	3.6		3.4			20.8					0.0
Queue Delay	0.0	0.0		0.0			0.0					0.0
Total Delay	8.9	3.6		3.4			20.8					0.0
LOS	A	A		A			C					A
Approach Delay		5.6		3.4			20.8					
Approach LOS		A		A			C					
Intersection Summary												
Area Type:	Other											
Cycle Length:	45											
Actuated Cycle Length:	45											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	45											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.67												
Intersection Signal Delay: 10.8							Intersection LOS: B					
Intersection Capacity Utilization 37.6%							ICU Level of Service A					
Analysis Period (min) 15												

Splits and Phases: 8: Strand Loop & University Blvd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		Y		Y	Y
Traffic Volume (vph)	48	27	470	2	9	397
Future Volume (vph)	48	27	470	2	9	397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	12	12	12	12
Storage Length (ft)	0	0		0	170	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>	0.954		0.999			
Flt Protected	0.968				0.950	
Satd. Flow (prot)	1950	0	1861	0	1770	1863
Flt Permitted	0.968				0.407	
Satd. Flow (perm)	1950	0	1861	0	758	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	49		1			
Link Speed (mph)	30		35			30
Link Distance (ft)	449		452			307
Travel Time (s)	10.2		8.8			7.0
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Adj. Flow (vph)	96	49	573	4	18	478
Shared Lane Traffic (%)						
Lane Group Flow (vph)	145	0	577	0	18	478
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type		Cl+Ex			Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	22.5		22.5		22.5	22.5
Total Split (s)	22.5		27.5		27.5	27.5
Total Split (%)	45.0%		55.0%		55.0%	55.0%
Maximum Green (s)	18.0		23.0		23.0	23.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5		4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Max		C-Max	C-Max
Walk Time (s)	7.0		7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effect Green (s)	8.1		35.8		35.8	35.8
Actuated g/C Ratio	0.16		0.72		0.72	0.72
v/c Ratio	0.41		0.43		0.03	0.36
Control Delay	16.1		5.8		4.0	5.1
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	16.1		5.8		4.0	5.1
LOS	B		A		A	A
Approach Delay	16.1		5.8		5.1	
Approach LOS	B		A			A

#### Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 6.7

Intersection LOS: A

Intersection Capacity Utilization 36.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: University Blvd & Fritts Crossing



8. 2023 Build PM Peak Signalized  
7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/21/2021

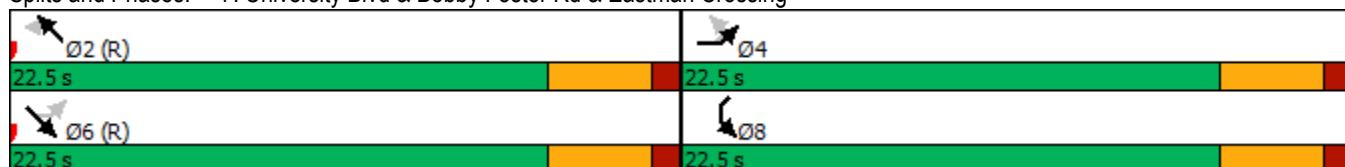
	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Group												
Lane Configurations												
Traffic Volume (vph)	95	0	0	39	245	112	0	268	2	53	0	44
Future Volume (vph)	95	0	0	39	245	112	0	268	2	53	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)				100			150			0	0	0
Storage Lanes		1	0	1			1			0	1	0
Taper Length (ft)		25		50			50			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt					0.954			0.997		0.959		
Flt Protected		0.950		0.950						0.966		
Satd. Flow (prot)	0	1770	0	1770	3376	0	1863	3529	0	1726	0	0
Flt Permitted		0.950		0.549						0.966		
Satd. Flow (perm)	0	1770	0	1023	3376	0	1863	3529	0	1726	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					122			5		58		
Link Speed (mph)		30			30			35		30		
Link Distance (ft)		434			390			588		807		
Travel Time (s)		9.9			8.9			11.5		18.3		
Peak Hour Factor	0.92	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Adj. Flow (vph)	103	0	0	70	272	122	0	331	6	177	0	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	0	70	394	0	0	337	0	254	0	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		12			24			24		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	2		1	2		1		
Detector Template	Left	Left		Left	Thru		Left	Thru		Left		
Leading Detector (ft)	20	20		20	100		20	100		20		
Trailing Detector (ft)	0	0		0	0		0	0		0		
Detector 1 Position(ft)	0	0		0	0		0	0		0		
Detector 1 Size(ft)	20	20		20	6		20	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type	Perm	Prot		Perm	NA		Perm	NA		Prot		
Protected Phases		4!			6			2		8!		
Permitted Phases	4			6			2					

8. 2023 Build PM Peak Signalized  
 7: University Blvd & Bobby Foster Rd & Eastman Crossing

06/21/2021

Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Detector Phase	4	4		6	6		2	2		8		
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5		
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5		
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%		
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0		
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5		4.5		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Recall Mode	None	None		C-Min	C-Min		C-Min	C-Min		None		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0		
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0		
Act Effect Green (s)	10.5		25.5	25.5			25.5			10.5		
Actuated g/C Ratio	0.23		0.57	0.57			0.57			0.23		
v/c Ratio	0.25		0.12	0.20			0.17			0.57		
Control Delay	14.0		6.7	4.3			5.8			15.9		
Queue Delay	0.0		0.0	0.0			0.0			0.0		
Total Delay	14.0		6.7	4.3			5.8			15.9		
LOS	B		A	A			A			B		
Approach Delay	14.0			4.7			5.8			15.9		
Approach LOS		B		A			A			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	45											
Actuated Cycle Length:	45											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	45											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.57											
Intersection Signal Delay:	8.3						Intersection LOS: A					
Intersection Capacity Utilization	40.4%						ICU Level of Service A					
Analysis Period (min)	15											
! Phase conflict between lane groups.												

Splits and Phases: 7: University Blvd & Bobby Foster Rd & Eastman Crossing



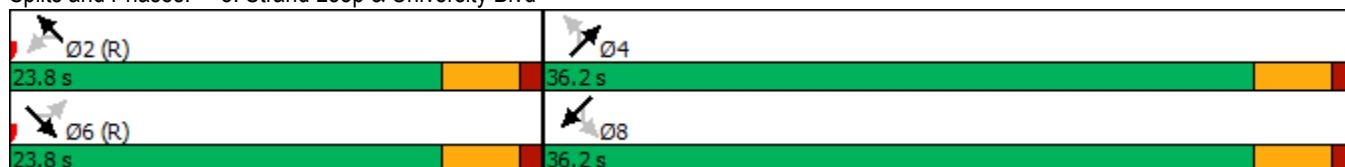
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	37	45	156	9	95	1	147	0	5	66	92	88
Future Volume (vph)	37	45	156	9	95	1	147	0	5	66	92	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Storage Length (ft)	150			0	125		0	0		0	0	0
Storage Lanes	1			0	1		0	0		0	0	0
Taper Length (ft)	50				50			25			25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.897			0.996			0.996			0.976
Flt Protected	0.950				0.950				0.954			0.986
Satd. Flow (prot)	1711	3069	0	1770	3525	0	0	1770	0	0	1793	0
Flt Permitted	0.676				0.586				0.363			0.842
Satd. Flow (perm)	1217	3069	0	1092	3525	0	0	673	0	0	1531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		184			3			27			27	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		343			335			350			221	
Travel Time (s)		6.7			6.5			8.0			5.0	
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Adj. Flow (vph)	56	85	184	18	117	3	213	0	7	189	368	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	269	0	18	120	0	0	220	0	0	676	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		36			36			0			0	
Link Offset(ft)		0			-5			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	

8. 2023 Build PM Peak Signalized  
8: Strand Loop & University Blvd

06/21/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	23.8	23.8		23.8	23.8		36.2	36.2		36.2	36.2	
Total Split (%)	39.7%	39.7%		39.7%	39.7%		60.3%	60.3%		60.3%	60.3%	
Maximum Green (s)	19.3	19.3		19.3	19.3		31.7	31.7		31.7	31.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	21.6	21.6		21.6	21.6			29.4			29.4	
Actuated g/C Ratio	0.36	0.36		0.36	0.36			0.49			0.49	
v/c Ratio	0.13	0.22		0.05	0.09			0.64			0.89	
Control Delay	15.4	5.9		14.6	14.0			19.2			28.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.4	5.9		14.6	14.0			19.2			28.7	
LOS	B	A		B	B			B			C	
Approach Delay		7.5			14.0			19.2			28.7	
Approach LOS		A			B			B			C	
Intersection Summary												
Area Type:	Other											
Cycle Length:	60											
Actuated Cycle Length:	60											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	60											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.89												
Intersection Signal Delay: 20.6							Intersection LOS: C					
Intersection Capacity Utilization 40.8%							ICU Level of Service A					
Analysis Period (min) 15												

Splits and Phases: 8: Strand Loop & University Blvd



9. 2028 Build AM Peak Signalized  
6: University Blvd & Fritts Crossing

02/14/2022

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	32	396	41	31	760
Future Volume (vph)	0	32	396	41	31	760
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	12	12	12	12
Storage Length (ft)	0	0		0	170	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Fr <sub>t</sub>	0.865		0.979			
Flt Protected					0.950	
Satd. Flow (prot)	1826	0	3465	0	1770	3539
Flt Permitted					0.429	
Satd. Flow (perm)	1826	0	3465	0	799	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	207		48			
Link Speed (mph)	30		35			30
Link Distance (ft)	449		452			307
Travel Time (s)	10.2		8.8			7.0
Peak Hour Factor	0.25	0.42	0.78	0.50	0.75	0.84
Adj. Flow (vph)	0	76	508	82	41	905
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	0	590	0	41	905
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	22.5		22.5		22.5	22.5
Total Split (s)	22.5		22.5		22.5	22.5
Total Split (%)	50.0%		50.0%		50.0%	50.0%
Maximum Green (s)	18.0		18.0		18.0	18.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5		4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Max		C-Max	C-Max
Walk Time (s)	7.0		7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effect Green (s)	5.5		36.3		36.3	36.3
Actuated g/C Ratio	0.12		0.81		0.81	0.81
v/c Ratio	0.19		0.21		0.06	0.32
Control Delay	1.0		2.2		2.7	2.7
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	1.0		2.2		2.7	2.7
LOS	A		A		A	A
Approach Delay	1.0		2.2		2.7	
Approach LOS	A		A			A

#### Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 2.4

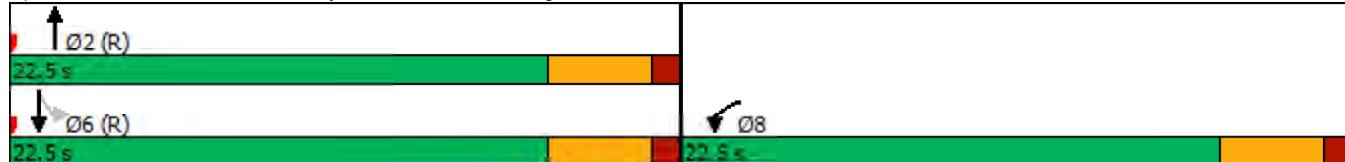
Intersection LOS: A

Intersection Capacity Utilization 32.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: University Blvd & Fritts Crossing



9. 2028 Build AM Peak Signalized  
 7: University Blvd & Bobby Foster Rd & Eastman Crossing

02/14/2022

	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Group												
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑↑		↑	↑↑	
Traffic Volume (vph)	137	241	101	184	571	49	1	185	70	17	16	96
Future Volume (vph)	137	241	101	184	571	49	1	185	70	17	16	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			0	150		0	100	0	
Storage Lanes	1	0	1			0	1		0	1	2	
Taper Length (ft)	50		50				50			50		
Lane Util. Factor	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.88	1.00
Frt		0.956			0.989			0.935			0.850	
Flt Protected	0.950	0.966		0.950			0.950			0.950		
Satd. Flow (prot)	1770	3337	0	1770	3500	0	1770	3309	0	1770	2787	0
Flt Permitted	0.635	0.966		0.485			0.374			0.950		
Satd. Flow (perm)	1183	3337	0	903	3500	0	697	3309	0	1770	2787	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		110			22			200			155	
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		434			390			588			807	
Travel Time (s)		9.9			8.9			11.5			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.43	0.88	0.92	0.92	0.70	0.35	0.63	0.92	0.62
Adj. Flow (vph)	149	262	110	428	649	53	1	264	200	27	17	155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	372	0	428	702	0	1	464	0	27	172	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		36			24			24			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	2		1	2		1	1	
Detector Template	Left	Left		Left	Thru		Left	Thru		Left	Right	
Leading Detector (ft)	20	20		20	100		20	100		20	20	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	20		20	6		20	6		20	20	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type	Perm	Prot		Perm	NA		Perm	NA		Prot	Prot	
Protected Phases		4!			6			2		8!	8	
Permitted Phases	4			6			2					

9. 2028 Build AM Peak Signalized  
 7: University Blvd & Bobby Foster Rd & Eastman Crossing

02/14/2022

Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Detector Phase	4	4		6	6		2	2		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	11.1	11.1		24.9	24.9		24.9	24.9		11.1	11.1	
Actuated g/C Ratio	0.25	0.25		0.55	0.55		0.55	0.55		0.25	0.25	
v/c Ratio	0.51	0.41		0.86	0.36		0.00	0.24		0.06	0.21	
Control Delay	19.9	10.3		34.0	7.0		7.0	4.0		11.1	3.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.9	10.3		34.0	7.0		7.0	4.0		11.1	3.8	
LOS	B	B		C	A		A	A		B	A	
Approach Delay		13.0			17.2			4.0		4.8		
Approach LOS		B			B			A		A		

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 12.6

Intersection LOS: B

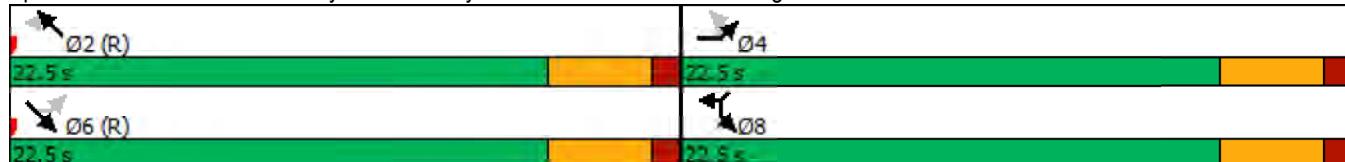
Intersection Capacity Utilization 50.7%

ICU Level of Service A

Analysis Period (min) 15

! Phase conflict between lane groups.

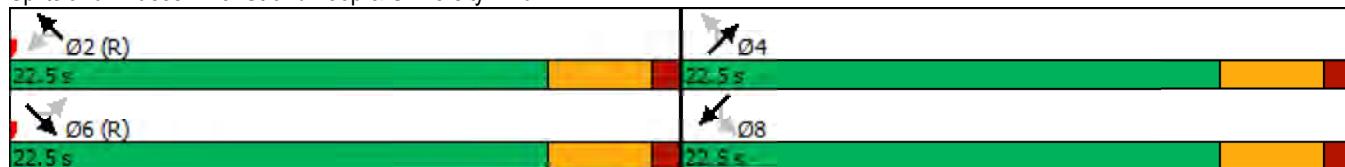
Splits and Phases: 7: University Blvd & Bobby Foster Rd & Eastman Crossing



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	19	476	9	0	214	12	13	14	27	3	0	5
Future Volume (vph)	19	476	9	0	214	12	13	14	27	3	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Storage Length (ft)	150		0	125		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	50			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.997			0.991			0.940			0.940	
Flt Protected	0.950							0.984			0.973	
Satd. Flow (prot)	1711	3411	0	1863	3507	0	0	1723	0	0	1704	0
Flt Permitted	0.560							0.885			0.792	
Satd. Flow (perm)	1008	3411	0	1863	3507	0	0	1550	0	0	1387	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			17			29			36	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		343			335			350			221	
Travel Time (s)		6.7			6.5			8.0			5.0	
Peak Hour Factor	0.89	0.78	0.63	0.92	0.72	0.63	0.63	0.92	0.92	0.31	0.92	0.66
Adj. Flow (vph)	21	610	14	0	297	19	21	15	29	10	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	624	0	0	316	0	0	65	0	0	18	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		36			36			0			0	
Link Offset(ft)		0			-5			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	35.1	35.1		35.1			6.7			6.7		
Actuated g/C Ratio	0.78	0.78		0.78			0.15			0.15		
v/c Ratio	0.03	0.23		0.12			0.25			0.08		
Control Delay	3.5	3.1		2.8			13.3			4.6		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	3.5	3.1		2.8			13.3			4.6		
LOS	A	A		A			B			A		
Approach Delay		3.2		2.8			13.3			4.6		
Approach LOS		A		A			B			A		
Intersection Summary												
Area Type:	Other											
Cycle Length:	45											
Actuated Cycle Length:	45											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	45											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.25												
Intersection Signal Delay: 3.7							Intersection LOS: A					
Intersection Capacity Utilization 27.5%							ICU Level of Service A					
Analysis Period (min) 15												

Splits and Phases: 8: Strand Loop & University Blvd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑		Y	↑↑
Traffic Volume (vph)	48	32	786	3	10	751
Future Volume (vph)	48	32	786	3	10	751
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	12	12	12	12
Storage Length (ft)	0	0		0	170	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Fr <sub>t</sub>	0.949		0.999			
Flt Protected	0.970				0.950	
Satd. Flow (prot)	1943	0	3536	0	1770	3539
Flt Permitted	0.970				0.281	
Satd. Flow (perm)	1943	0	3536	0	523	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	58		2			
Link Speed (mph)	30		35			30
Link Distance (ft)	449		452			307
Travel Time (s)	10.2		8.8			7.0
Peak Hour Factor	0.50	0.55	0.82	0.50	0.50	0.83
Adj. Flow (vph)	96	58	959	6	20	905
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	965	0	20	905
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type		Cl+Ex			Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	22.5		22.5		22.5	22.5
Total Split (s)	22.6		27.4		27.4	27.4
Total Split (%)	45.2%		54.8%		54.8%	54.8%
Maximum Green (s)	18.1		22.9		22.9	22.9
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5		4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Max		C-Max	C-Max
Walk Time (s)	7.0		7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effect Green (s)	8.1		35.8		35.8	35.8
Actuated g/C Ratio	0.16		0.72		0.72	0.72
v/c Ratio	0.42		0.38		0.05	0.36
Control Delay	15.6		4.6		4.4	4.5
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	15.6		4.6		4.4	4.5
LOS	B		A		A	A
Approach Delay	15.6		4.6		4.5	
Approach LOS	B		A			A

#### Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 5.4

Intersection LOS: A

Intersection Capacity Utilization 33.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: University Blvd & Fritts Crossing



10. 2028 Build PM Peak Signalized  
7: University Blvd & Bobby Foster Rd & Eastman Crossing

02/14/2022

	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Group												
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑↑		↑	↑↑	
Traffic Volume (vph)	213	75	64	105	495	216	144	536	3	83	203	102
Future Volume (vph)	213	75	64	105	495	216	144	536	3	83	203	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			0	150		0	100	0	
Storage Lanes	1	0	1			0	1		0	1	2	
Taper Length (ft)	50		50				50			50		
Lane Util. Factor	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.88	1.00
Frt		0.931			0.955			0.998			0.850	
Flt Protected	0.950	0.974		0.950			0.950			0.950		
Satd. Flow (prot)	1770	3277	0	1770	3380	0	1770	3532	0	1770	2787	0
Flt Permitted	0.470	0.974		0.372			0.316			0.950		
Satd. Flow (perm)	875	3277	0	693	3380	0	589	3532	0	1770	2787	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	70			173			3			179		
Link Speed (mph)	30			30			35			30		
Link Distance (ft)	434			390			588			807		
Travel Time (s)	9.9			8.9			11.5			18.3		
Peak Hour Factor	0.92	0.92	0.92	0.56	0.90	0.92	0.92	0.81	0.35	0.30	0.92	0.57
Adj. Flow (vph)	232	82	70	188	550	235	157	662	9	277	221	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	152	0	188	785	0	157	671	0	277	400	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)	36			24			24			12		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Number of Detectors	1	1		1	2		1	2		1	1	
Detector Template	Left	Left		Left	Thru		Left	Thru		Left	Right	
Leading Detector (ft)	20	20		20	100		20	100		20	20	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	20		20	6		20	6		20	20	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)				94			94					
Detector 2 Size(ft)				6			6					
Detector 2 Type				Cl+Ex			Cl+Ex					
Detector 2 Channel												
Detector 2 Extend (s)				0.0			0.0					
Turn Type	Perm	Prot		Perm	NA		Perm	NA		Prot	Prot	
Protected Phases		4!			6			2		8!	8	
Permitted Phases	4			6			2					

Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Detector Phase	4	4		6	6		2	2		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	23.0	23.0		32.0	32.0		32.0	32.0		23.0	23.0	
Total Split (%)	41.8%	41.8%		58.2%	58.2%		58.2%	58.2%		41.8%	41.8%	
Maximum Green (s)	18.5	18.5		27.5	27.5		27.5	27.5		18.5	18.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	16.8	16.8		29.2	29.2		29.2	29.2		16.8	16.8	
Actuated g/C Ratio	0.31	0.31		0.53	0.53		0.53	0.53		0.31	0.31	
v/c Ratio	0.87	0.14		0.51	0.42		0.50	0.36		0.51	0.41	
Control Delay	50.8	8.0		15.6	7.1		16.5	8.6		18.9	9.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	50.8	8.0		15.6	7.1		16.5	8.6		18.9	9.0	
LOS	D	A		B	A		B	A		B	A	
Approach Delay		33.8			8.8			10.1		13.1		
Approach LOS		C			A			B		B		

#### Intersection Summary

Area Type: Other

Cycle Length: 55

Actuated Cycle Length: 55

Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 13.5

Intersection LOS: B

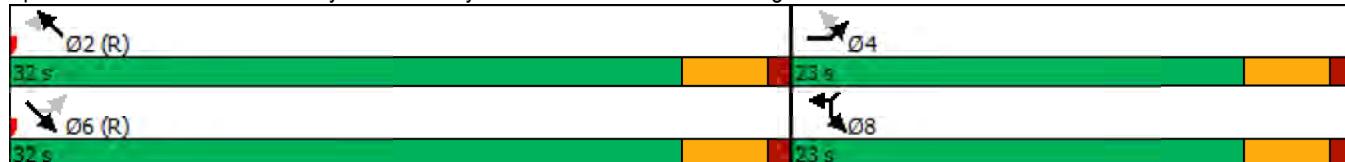
Intersection Capacity Utilization 60.0%

ICU Level of Service B

Analysis Period (min) 15

! Phase conflict between lane groups.

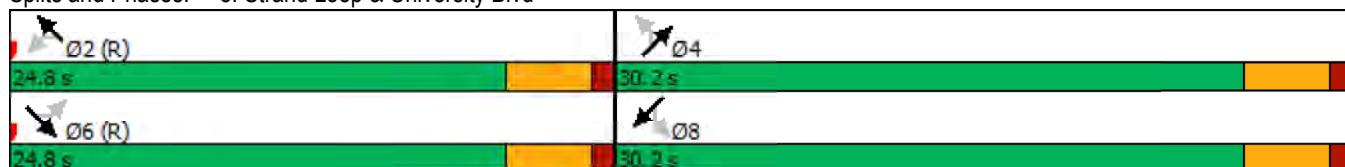
Splits and Phases: 7: University Blvd & Bobby Foster Rd & Eastman Crossing



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑			↑			↑	
Traffic Volume (vph)	7	461	17	3	707	0	16	0	21	34	15	17
Future Volume (vph)	7	461	17	3	707	0	16	0	21	34	15	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Storage Length (ft)	150		0	125		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	50			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.997						0.926			0.983	
Flt Protected	0.950			0.950				0.978			0.974	
Satd. Flow (prot)	1711	3411	0	1770	3539	0	0	1687	0	0	1783	0
Flt Permitted	0.307			0.300				0.858			0.804	
Satd. Flow (perm)	553	3411	0	559	3539	0	0	1480	0	0	1472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						30			18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		343			335			350			221	
Travel Time (s)		6.7			6.5			8.0			5.0	
Peak Hour Factor	0.66	0.53	0.85	0.50	0.81	0.31	0.69	0.92	0.75	0.35	0.25	0.74
Adj. Flow (vph)	11	870	20	6	873	0	23	0	28	97	60	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	890	0	6	873	0	0	51	0	0	180	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		36			36			0			0	
Link Offset(ft)		0			-5			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	24.8	24.8		24.8	24.8		30.2	30.2		30.2	30.2	
Total Split (%)	45.1%	45.1%		45.1%	45.1%		54.9%	54.9%		54.9%	54.9%	
Maximum Green (s)	20.3	20.3		20.3	20.3		25.7	25.7		25.7	25.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	37.8	37.8		37.8	37.8			11.1			11.3	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.20			0.21		
v/c Ratio	0.03	0.38		0.02	0.36		0.16			0.57		
Control Delay	5.7	6.0		5.7	5.9		10.3			24.0		
Queue Delay	0.0	0.0		0.0	0.0		0.0			0.0		
Total Delay	5.7	6.0		5.7	5.9		10.3			24.0		
LOS	A	A		A	A			B		C		
Approach Delay		6.0			5.9		10.3			24.0		
Approach LOS		A			A			B		C		
Intersection Summary												
Area Type:	Other											
Cycle Length:	55											
Actuated Cycle Length:	55											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	45											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.57											
Intersection Signal Delay:	7.7						Intersection LOS: A					
Intersection Capacity Utilization	32.1%						ICU Level of Service A					
Analysis Period (min)	15											

Splits and Phases: 8: Strand Loop & University Blvd



Intersection				
Intersection Delay, s/veh	6.2			
Approach	WB	NB	SB	
Entry Lanes	1	1		2
Conflicting Circle Lanes	1	1		1
Adj Approach Flow, veh/h	64	551	541	
Demand Flow Rate, veh/h	65	562	552	
Vehicles Circulating, veh/h	478	36	0	
Vehicles Exiting, veh/h	120	516	543	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	5.1	6.9	5.7	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Right
Designated Moves	LR	TR	L	TR
Assumed Moves	LR	TR	L	TR
RT Channelized				
Lane Util	1.000	1.000	0.065	0.935
Follow-Up Headway, s	2.609	2.609	2.535	2.535
Critical Headway, s	4.976	4.976	4.544	4.544
Entry Flow, veh/h	65	562	36	516
Cap Entry Lane, veh/h	847	1330	1420	1420
Entry HV Adj Factor	0.985	0.980	0.972	0.980
Flow Entry, veh/h	64	551	35	506
Cap Entry, veh/h	834	1303	1381	1392
V/C Ratio	0.077	0.423	0.025	0.363
Control Delay, s/veh	5.1	6.9	2.8	5.9
LOS	A	A	A	A
95th %tile Queue, veh	0	2	0	2

Intersection				
Approach	EB	SE	NW	SW
Entry Lanes	1	3	3	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	125	0	0	71
Demand Flow Rate, veh/h	128	0	0	72
Vehicles Circulating, veh/h	558	0	381	386
Vehicles Exiting, veh/h	49	458	304	281
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.4	0.0	0.0	4.6
Approach LOS	A	-	-	A
Lane	Left			Left
Designated Moves	LR			LR
Assumed Moves	LR			LR
RT Channelized				
Lane Util	1.000			1.000
Follow-Up Headway, s	2.609			2.609
Critical Headway, s	4.976			4.976
Entry Flow, veh/h	128			72
Cap Entry Lane, veh/h	781			931
Entry HV Adj Factor	0.980			0.986
Flow Entry, veh/h	125			71
Cap Entry, veh/h	766			918
V/C Ratio	0.164			0.077
Control Delay, s/veh	6.4			4.6
LOS	A			A
95th %tile Queue, veh	1			0

**Intersection**

Intersection Delay, s/veh 5.4

Intersection LOS A

Approach	SE	NW	NE	SW
Entry Lanes	3	3	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	0	0	291	39
Demand Flow Rate, veh/h	0	0	297	40
Vehicles Circulating, veh/h	0	408	177	230
Vehicles Exiting, veh/h	270	66	130	299
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	0.0	0.0	5.6	3.7
Approach LOS	-	-	A	A

Lane	Left	Left
Designated Moves	LT	TR
Assumed Moves	LT	TR
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
Entry Flow, veh/h	297	40
Cap Entry Lane, veh/h	1152	1091
Entry HV Adj Factor	0.981	0.975
Flow Entry, veh/h	291	39
Cap Entry, veh/h	1130	1064
V/C Ratio	0.258	0.037
Control Delay, s/veh	5.6	3.7
LOS	A	A
95th %tile Queue, veh	1	0

**Intersection**

Intersection Delay, s/veh 6.7

Intersection LOS A

Approach	WB	NB	SB
Entry Lanes	1	1	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	145	577	496
Demand Flow Rate, veh/h	148	588	506
Vehicles Circulating, veh/h	584	18	98
Vehicles Exiting, veh/h	22	586	634
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.0	6.9	6.3
Approach LOS	A	A	A

Lane	Left	Left	Left	Right
Designated Moves	LR	TR	L	TR
Assumed Moves	LR	TR	L	TR
RT Channelized				
Lane Util	1.000	1.000	0.036	0.964
Follow-Up Headway, s	2.609	2.609	2.535	2.535
Critical Headway, s	4.976	4.976	4.544	4.544
Entry Flow, veh/h	148	588	18	488
Cap Entry Lane, veh/h	761	1355	1299	1299
Entry HV Adj Factor	0.980	0.981	1.000	0.980
Flow Entry, veh/h	145	577	18	478
Cap Entry, veh/h	745	1328	1299	1273
V/C Ratio	0.195	0.434	0.014	0.376
Control Delay, s/veh	7.0	6.9	2.9	6.4
LOS	A	A	A	A
95th %tile Queue, veh	1	2	0	2

Intersection				
Intersection Delay, s/veh	7.0			
Intersection LOS	A			
Approach	EB	SE	NW	SW
Entry Lanes	1	3	3	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	103	0	0	254
Demand Flow Rate, veh/h	105	0	0	260
Vehicles Circulating, veh/h	529	181	176	443
Vehicles Exiting, veh/h	124	522	458	77
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.9	0.0	0.0	7.4
Approach LOS	A	-	-	A
Lane	Left			Left
Designated Moves	LR			LR
Assumed Moves	LR			LR
RT Channelized				
Lane Util	1.000			1.000
Follow-Up Headway, s	2.609			2.609
Critical Headway, s	4.976			4.976
Entry Flow, veh/h	105			260
Cap Entry Lane, veh/h	804			878
Entry HV Adj Factor	0.980			0.977
Flow Entry, veh/h	103			254
Cap Entry, veh/h	789			858
V/C Ratio	0.131			0.296
Control Delay, s/veh	5.9			7.4
LOS	A			A
95th %tile Queue, veh	0			1

**Intersection**

Intersection Delay, s/veh 13.9

Intersection LOS B

Approach	SE	NW	NE	SW
Entry Lanes	3	3	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	0	0	220	676
Demand Flow Rate, veh/h	0	0	224	689
Vehicles Circulating, veh/h	586	274	337	354
Vehicles Exiting, veh/h	457	287	581	60
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	0.0	0.0	6.0	16.4
Approach LOS	-	-	A	C

Lane	Left	Left
Designated Moves	LTR	LTR
Assumed Moves	LTR	LTR
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
Entry Flow, veh/h	224	689
Cap Entry Lane, veh/h	979	962
Entry HV Adj Factor	0.982	0.981
Flow Entry, veh/h	220	676
Cap Entry, veh/h	961	943
V/C Ratio	0.229	0.716
Control Delay, s/veh	6.0	16.4
LOS	A	C
95th %tile Queue, veh	1	6

Intersection					
Approach	WB	NB	SB		
Entry Lanes	1	2	2		
Conflicting Circle Lanes	2	2	2		
Adj Approach Flow, veh/h	76	590	946		
Demand Flow Rate, veh/h	78	602	965		
Vehicles Circulating, veh/h	518	42	0		
Vehicles Exiting, veh/h	126	923	596		
Ped Vol Crossing Leg, #/h	0	0	0		
Ped Cap Adj	1.000	1.000	1.000		
Approach Delay, s/veh	4.8	4.7	5.8		
Approach LOS	A	A	A		
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	78	283	319	454	511
Cap Entry Lane, veh/h	914	1299	1370	1350	1420
Entry HV Adj Factor	0.974	0.980	0.980	0.979	0.981
Flow Entry, veh/h	76	277	313	445	501
Cap Entry, veh/h	891	1272	1343	1322	1393
V/C Ratio	0.085	0.218	0.233	0.336	0.360
Control Delay, s/veh	4.8	4.7	4.7	5.8	5.8
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2

**Intersection**

Intersection Delay, s/veh 9.4

Intersection LOS A

Approach	EB	SE	NW	SW
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	476	1130	465	199
Demand Flow Rate, veh/h	485	1153	474	203
Vehicles Circulating, veh/h	1127	46	810	422
Vehicles Exiting, veh/h	72	579	802	862
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.4	7.0	10.1	4.8
Approach LOS	C	A	B	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	L	LTR	LT	TR	LT	TR	LTR	R
Assumed Moves	L	LTR	LT	TR	LT	TR	LTR	R
RT Channelized								
Lane Util	0.530	0.470	0.470	0.530	0.470	0.530	0.468	0.532
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	257	228	542	611	223	251	95	108
Cap Entry Lane, veh/h	479	545	1294	1366	641	713	916	992
Entry HV Adj Factor	0.982	0.981	0.980	0.980	0.979	0.981	0.985	0.977
Flow Entry, veh/h	252	224	531	599	218	246	94	105
Cap Entry, veh/h	470	535	1268	1339	628	700	901	969
V/C Ratio	0.537	0.419	0.419	0.447	0.348	0.352	0.104	0.109
Control Delay, s/veh	18.9	13.6	7.0	7.1	10.5	9.7	5.0	4.7
LOS	C	B	A	A	B	A	A	A
95th %tile Queue, veh	3	2	2	2	2	2	0	0

Intersection						
Approach	SE	NW	NE	SW		
Entry Lanes	2	2	1	1		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	645	198	65	18		
Demand Flow Rate, veh/h	657	202	66	18		
Vehicles Circulating, veh/h	10	57	653	204		
Vehicles Exiting, veh/h	212	662	14	55		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	4.7	3.4	5.3	3.1		
Approach LOS	A	A	A	A		
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	309	348	95	107	66	18
Cap Entry Lane, veh/h	1337	1408	1281	1353	815	1194
Entry HV Adj Factor	0.981	0.982	0.982	0.983	0.980	1.000
Flow Entry, veh/h	303	342	93	105	65	18
Cap Entry, veh/h	1312	1383	1257	1330	799	1194
V/C Ratio	0.231	0.247	0.074	0.079	0.081	0.015
Control Delay, s/veh	4.7	4.7	3.5	3.3	5.3	3.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	0	0	0	0

Intersection					
Approach	WB	NB	SB		
Entry Lanes	1	2	2		
Conflicting Circle Lanes	2	2	2		
Adj Approach Flow, veh/h	154	965	925		
Demand Flow Rate, veh/h	157	984	943		
Vehicles Circulating, veh/h	978	20	98		
Vehicles Exiting, veh/h	26	1021	1037		
Ped Vol Crossing Leg, #/h	0	0	0		
Ped Cap Adj	1.000	1.000	1.000		
Approach Delay, s/veh	9.2	6.0	6.4		
Approach LOS	A	A	A		
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	157	462	522	443	500
Cap Entry Lane, veh/h	618	1325	1396	1233	1307
Entry HV Adj Factor	0.981	0.982	0.980	0.981	0.980
Flow Entry, veh/h	154	453	511	435	490
Cap Entry, veh/h	607	1301	1368	1210	1281
V/C Ratio	0.254	0.349	0.374	0.359	0.383
Control Delay, s/veh	9.2	6.0	6.1	6.4	6.5
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	2	2	2

Intersection									
Approach	EB		SE		NW		SW		
Entry Lanes		2		2		2		2	
Conflicting Circle Lanes		2		2		2		2	
Adj Approach Flow, veh/h	384		973		835		677		
Demand Flow Rate, veh/h	392		993		851		691		
Vehicles Circulating, veh/h	1036		675		513		1079		
Vehicles Exiting, veh/h	632		1095		915		285		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	12.2		16.6		10.4		21.9		
Approach LOS	B		C		B		C		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	L	LTR	LT	TR	LT	TR	LTR	R	
Assumed Moves	L	LTR	LT	TR	LT	TR	LTR	R	
RT Channelized									
Lane Util	0.531	0.469	0.470	0.530	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	208	184	467	526	400	451	325	366	
Cap Entry Lane, veh/h	520	589	725	800	842	918	500	567	
Entry HV Adj Factor	0.979	0.982	0.979	0.980	0.981	0.981	0.979	0.980	
Flow Entry, veh/h	204	181	457	516	392	442	318	359	
Cap Entry, veh/h	510	578	710	784	826	901	490	556	
V/C Ratio	0.400	0.313	0.644	0.657	0.475	0.491	0.650	0.645	
Control Delay, s/veh	13.7	10.6	17.0	16.2	10.6	10.2	23.2	20.7	
LOS	B	B	C	C	B	B	C	C	
95th %tile Queue, veh	2	1	5	5	3	3	5	5	

Intersection						
Approach	SE	NW	NE	SW		
Entry Lanes	2	2	1	1		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	901	879	51	180		
Demand Flow Rate, veh/h	918	896	52	183		
Vehicles Circulating, veh/h	166	34	997	919		
Vehicles Exiting, veh/h	936	1015	87	11		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	6.9	5.8	7.0	9.2		
Approach LOS	A	A	A	A		
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.469	0.531	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	431	487	421	475	52	183
Cap Entry Lane, veh/h	1159	1233	1308	1380	608	650
Entry HV Adj Factor	0.982	0.980	0.981	0.980	0.981	0.983
Flow Entry, veh/h	423	477	413	466	51	180
Cap Entry, veh/h	1138	1209	1283	1352	597	639
V/C Ratio	0.372	0.395	0.322	0.344	0.085	0.281
Control Delay, s/veh	6.9	6.9	5.7	5.8	7.0	9.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	2	0	1