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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, particullarly 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

Development	AM Peak Hour (Vehicle Trips)	PM Peak Hour (Vehicle Trips)
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 Diekenborn 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

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. 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 E 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 and an All Way Stop Controlled (AWSC) warrant study will need to be conducted, the Synchro results were modeled to show the best alternatives for all three intersections. It was seen that signalizing or placing a roundabout at Intersections 6-8 results in a LOS of C or better in both the 2023 and 2028 Build conditions. An AWSC was not recommended for Intersection 6, since the

LOS deteriorates in the AM Peak Hour when compared to the Build Conditions and in the PM peak, the LOS improves to a LOS C in 2023, but remains at a LOS E when compared to the 2028 PM peak hour Build condition. For Intersection 7, an AWSC improves the intersection LOS to a LOS C or better in both the 2023 and 2028 Build conditions. For Intersection 8, an AWSC improves the intersection delay in both the 2023 and 2028 AM and PM peak hours, but it is not recommended since during the PM Peak, a LOS F remains.

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 above, a LOS F will be experienced along University Blvd. Assuming Build-out conditions and a constant growth of 4% per year after that, it is expected that the roadway will achieve a LOS F in 2056.

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 6th 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, 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 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 Diekenborn 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

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

Intersection 2 will be an unsignalized three-leg intersection at Bobby Foster Rd and Diekenborn Dr. Northbound Diekenborn Dr will include one stop controlled shared left-right turn lane. Eastbound Bobby Foster Rd will include one shared through-right turn lane. Westbound Bobby Foster Rd will include one shared through-left turn lane.

Intersection 3 will be an unsignalized three-leg intersection at Bobby Foster Rd and Newhall Dr. Northbound Newhall Dr will include one stop controlled shared left-right turn lane. Eastbound Bobby Foster Rd will include one shared through-right turn lane. Westbound Bobby Foster Rd will include one one shared through-left turn lane.

Intersection 4 is an unsignalized three-leg intersection at Bobby Foster Rd and Sagan Loop. Eastbound Bobby Foster Rd will include one shared through-right turn lane. Westbound Bobby Foster Rd will include one shared through-left turn lane. Sagan Loop consists of one stop controlled northbound shared left-right lane.

Intersection 5 is an unsignalized three-leg intersection at Bobby Foster Rd and Driveway 2. Eastbound Bobby Foster Rd will include one shared through-right turn lane. Westbound Bobby Foster Rd will include 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. 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 is assumed to consist one shared thru-left turn lane. Westbound Eastman Crossing includes one shared left-through-right 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.

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, the Albuquerque Studio is located, and to the north a recreational park and an Amphitheatre are located. 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.

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 D**.

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
Diekenborn 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
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 Frits 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 E**. 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 2 (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

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		
1*	Bobby Foster Rd & Driveway 1	-	AM PH Start	-	-	-	-	-	-	-	-	-	-	-	-		
			AM PHV	-	-	-	-	-	-	-	-	-	-	-	-		
			AM PHF	-	-	-	-	-	-	-	-	-	-	-	-		
		-	PM PH Start	-	-	-	-	-	-	-	-	-	-	-	-		
			PM PHV	-	-	-	-	-	-	-	-	-	-	-	-		
			PM PHF	-	-	-	-	-	-	-	-	-	-	-	-		
2*	Bobby Foster Rd & Dikenborn 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

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	7:30 AM	AM PH Start	8:30 AM	7:30 AM		7:00 AM		7:45 AM		7:45 AM	7:30 AM			
			AM PHV	24	281		0		25		173	0			
			AM PHF	0.75	0.84		0.25		0.42		0.78	0.50			
		3:00 PM	PM PH Start	5:00 PM	3:00 PM		3:00 PM		3:00 PM		3:00 PM	3:00 PM			
			PM PHV	8	183		2		25		213	2			
			PM PHF	0.50	0.83		0.50		0.55		0.82	0.50			
7**	University Blvd & Eastman Crossing	7:15 AM	AM PH Start	7:30 AM	7:30 AM		7:30 AM		8:00 AM		7:45 AM	7:30 AM			
			AM PHV	99	171		0		41		68	8			
			AM PHF	0.43	0.88		0.63		0.62		0.70	0.35			
		3:00 PM	PM PH Start	3:00 PM	4:00 PM		3:30 PM		3:30 PM		4:15 PM	3:00 PM			
			PM PHV	36	102		5		49		114	2			
			PM PHF	0.56	0.90		0.30		0.57		0.81	0.35			
8**	University Blvd & Strand Loop	7:30 AM	AM PH Start	7:30 AM	7:30 AM	7:30 AM	8:15 AM		8:15 AM		8:00 AM	8:45 AM	7:45 AM		
			AM PHV	84	34	21	0		24		16	1	21		
			AM PHF	0.89	0.78	0.63	0.31		0.66		0.72	0.63	0.69		
		3:30 PM	PM PH Start	3:00 PM	4:00 PM	4:45 PM	3:15 PM	5:00 PM	4:15 PM	3:00 PM	3:00 PM	5:00 PM	3:00 PM		4:00 PM
			PM PHV	34	42	33	1	1	75	2	53	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		0.75

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

** PHVs adjusted due to COVID-19

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**
9*	Stieglitz Ave & 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

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 0.89. 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 0.85.

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 and are shown in **Figure 3** and **4,** respectively.

3.5 Vehicle Trip Generation

The number of trips generated for the proposed developments were calculated using the *ITE Trip Generation Manual*, 10th *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 F.**

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 5**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facilty 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

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 6**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facilty 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 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 7**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facilty 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

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 8**. Directional distribution for the generated trips were also determined using the *ITE Trip Generation Manual*. The number of vehicles entering and exiting the facilty 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

3.6 Trip Adjustments

According to the *ITE Trip Generation Manual, i*nternal capture occurs at a site when two or more land uses have a possibility of interacting with each other, particullarly 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 5** shows a the 0.25 mile radius in the project area from the charter school, the commercial development, and the Albuquerque studios.

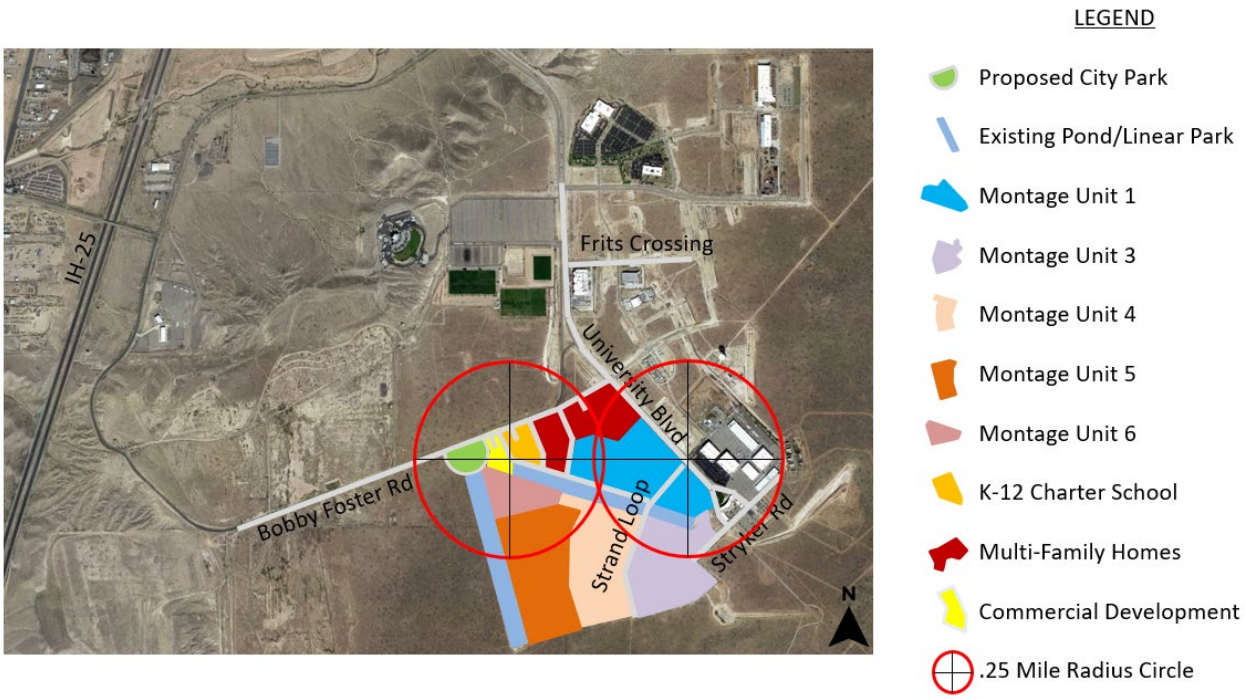


Figure 5 – 0.25 Mile Radius Site Map

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 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 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:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diekenborn 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 6** and **7**, 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, Diekenborn 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 8** and **9**, 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 10** and **11**, 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 12** and **13**, 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 14** and **15**, 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 16** and **17**, 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 13% of trips to exit through Intersection 8, 12% would exit on Arbus Dr, 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 Arbus Dr.
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 on Arbus Dr, 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 18** and **19**, 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 20** and **21 (Appendix A)** show the AM and PM peak hour 2023 and 2028 Build turning movements for the study intersections.

SECTION 4 - 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.

4.1 Existing 2021

Table 7 summarizes the Synchro traffic analysis results for the nine 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 G** includes the Synchro results for the intersection analyses of the 2021 Existing Conditions.

Table 7 – 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 & Dikenborn 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	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	-	-	-	-	-	-

*-Intersections are not yet constructed.

4.2 No-Build

The No-Build conditions were evaluated for the nine 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 8 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 and 2028, all intersections perform at a LOS C or better in the AM peak hour and PM Peak Hour. The Synchro results for the AM and PM peak hour analyses of the 2023 and 2028 No-Build Conditions are included in **Appendix H**.

Table 8 – 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 & Dikenborn Dr	Existing 2021	-	-	-	-	-	-
		2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
3*	Bobby Foster Rd & Newhall Dr	Existing 2021	-	-	-	-	-	-
		2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
4*	Bobby Foster Rd & Sagan Loop	Existing 2021	-	-	-	-	-	-
		2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
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	10.3 (WB)	B	0.25	11.0 (WB)	B	0.20
7	University Blvd & Eastman Crossing	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	9.1 (WB)	A	0.21	17.9 (WB)	C	0.52
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	12.4 (EB)	B	0.08	13.5 (EB)	B	0.17
9*	Stieglitz Ave & Sagan Loop	Existing 2021	-	-	-	-	-	-
		2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-

*- Intersections are not yet constructed.

4.3 Build

The Build conditions were also evaluated for the nine 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 9 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 1-6, and 9) experience a LOS B or better for both the AM and PM Peak hours. Of the three existing intersections, Intersection 7 experiences a LOS F while the other two intersections experience a LOS D or better. In the PM peak Intersections 6 and 7, worsen from the No-Build conditions and experience a LOS D in 2023 and a LOS E in 2028 Build scenarios. Intersection 8, experience a LOS F for both the 2023 and 2028 Build scenarios. The Synchro results for the AM and PM peak hour analyses of the 2023 and 2028 Build Conditions are included in **Appendix I**.

Table 9 – 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	8.9 (NB)	A	0.07	8.6 (NB)	A	0.03
2	Bobby Foster Rd & Dikenborn Dr	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	9.0 (NB)	A	0.08	8.7 (NB)	A	0.05
		2028 Build	9.0 (NB)	A	0.08	8.7 (NB)	A	0.05
3	Bobby Foster Rd & Newhall Dr	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	0.0	A	0.00	0.0	A	0.00
		2028 Build	0.0	A	0.00	0.0	A	0.00
4	Bobby Foster Rd & Sagan Loop	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	8.9 (NB)	A	0.06	8.7 (NB)	A	0.05
		2028 Build	8.9 (NB)	A	0.06	8.7 (NB)	A	0.05
5	Bobby Foster Rd & Driveway 2	2023 No-Build	-	-	-	-	-	-
		2028 No-Build	-	-	-	-	-	-
		2023 Build	9.4 (NB)	A	0.07	9.1 (NB)	A	0.05
		2028 Build	9.4 (NB)	A	0.07	9.1 (NB)	A	0.05
6	University Blvd & Fritts Crossing	2023 No-Build	9.9 (WB)	A	0.21	10.3 (WB)	B	0.17
		2028 No-Build	10.3 (WB)	B	0.25	11.0 (WB)	B	0.20
		2023 Build	12.2 (WB)	B	0.32	29.6 (WB)	D	0.50
		2028 Build	12.9 (WB)	B	0.35	37.4 (WB)	E	0.59
7	University Blvd & Eastman Crossing	2023 No-Build	8.9 (WB)	A	0.44	14.4 (WB)	B	0.40
		2028 No-Build	9.1 (WB)	A	0.21	17.9 (WB)	C	0.52
		2023 Build	93.9 (EBL)	F	0.83	25.6 (EBL)	D	0.58
		2028 Build	205.9 (EBL)	F	1.15	38.0 (EBL)	E	0.76
8	University Blvd & Strand Loop	2023 No-Build	11.6 (EB)	B	0.06	12.3 (EB)	B	0.13
		2028 No-Build	12.4 (EB)	B	0.08	13.5 (EB)	B	0.17
		2023 Build	21.0 (EB)	C	0.57	184.5 (EB)	F	1.21
		2028 Build	25.2 (EB)	D	0.64	310.3 (EB)	F	1.50
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	10.5 (WB)	B	0.07	9.3 (WB)	A	0.02

SECTION 5 – 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 J**. The PHF was also provided in the turning movement data collected. **Table 10** summarizes the PHF and heavy vehicle adjustment factor for University Blvd.

Table 10 – 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=Vp*PHF*N*Fhv 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, Vp is the demand flow rate, and Fhv is the heavy vehicle adjustment factor. **Table 11** summarizes the demand volume in vehicles per lane to achieve a LOS F for both the AM and PM peak.

Table 11 – 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. **Table 12** summarizes the volumes, demand flow rates, densities, and LOS.

Table 12 – 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	406	9	A
	PM Peak	455	10	A
Build 2023	AM Peak	652	14	B
	PM Peak	771	17	B
Build 2028	AM Peak	716	16	B
	PM Peak	842	19	C

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 C or better for 2028 AM and PM Peak hours.

To determine when the roadway would reach a LOS F, it was assumed that the Build-out traffic from 2023 would continue to grow at 4% per year. A LOS of F was reached in 2056 during the PM peak when the northbound demand flow rate is expected to exceed the northbound capacity.

SECTION 6 - CONCLUSIONS AND RECOMMENDATIONS

6.1 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 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. Intersections 6 and 7 experience a LOS of E in the 2028 PM peak hour. Intersections 1, 2, 3, 4, 5, and 9 are expected to perform at a LOS B or better in both the 2023 and 2028 AM and PM Peak.

6.2 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 13 summarizes the intersection results for the 2023 and 2028 AM and PM peak hour Mitigated scenarios. **Table 13** 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 K**.

Table 13 – 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	12.9 (WB)	B	0.35	37.4 (WB)	E	0.59
		2023 Signalized	2.8	A	0.36	6.7	A	0.43
		2028 Signalized	2.8	A	0.39	6.8	A	0.46
		2023 Roundabout	6.2	A	0.42	6.7	A	0.43
		2028 Roundabout	6.7	A	0.46	7.2	A	0.47
		2023 AWSC	18.9	C	0.73	24.6	C	0.83
		2028 AWSC	25.5	D	0.833	35.1	E	0.93
7	University Blvd & Eastman Crossing	2023 Build	93.9 (EBL)	F	0.83	25.6 (EBL)	D	0.58
		2028 Build	205.9 (EBL)	F	1.15	38.0 (EBL)	E	0.76
		2023 Signalized	6.0	A	0.37	8.3	A	0.57
		2028 Signalized	6.2	A	0.42	7.8	A	0.52
		2023 Roundabout	5.8	A	0.16	7.0	A	0.29
		2028 Roundabout	6.3	A	0.17	8.0	A	0.36
		2023 AWSC	11.3	B	0.42	13.1	B	0.48
		2028 AWSC	12.2	B	0.50	15.1	C	0.59
8	University Blvd & Strand Loop	2023 Build	21.0 (EB)	C	0.57	184.5 (EB)	F	1.21
		2028 Build	25.2 (EB)	D	0.64	310.3 (EB)	F	1.50
		2023 Signalized	10.8	B	0.67	20.6	C	0.89
		2028 Signalized	10.8	B	0.68	20.5	C	0.89
		2023 Roundabout	5.4	A	0.25	13.9	B	0.71
		2028 Roundabout	5.6	A	0.27	15.9	C	0.76
		2023 AWSC	11.2	B	0.47	70.7	F	1.17
		2028 AWSC	11.6	B	0.50	82.9	F	1.25

6.3 Recommendations Intersections

From the mitigation analyses conducted in Synchro, it can be seen that signalizing or placing a roundabout at Intersections 6-8 results in a LOS of C or better in both the 2023 and 2028 Build conditions.

An AWSC for Intersection 6 is not recommended, since the LOS deteriorates in the AM Peak Hour when compared to the Build Conditions. In the PM peak, the LOS improves to a LOS C in 2023, but remains at a LOS E when compared to the 2028 PM peak hour Build condition.

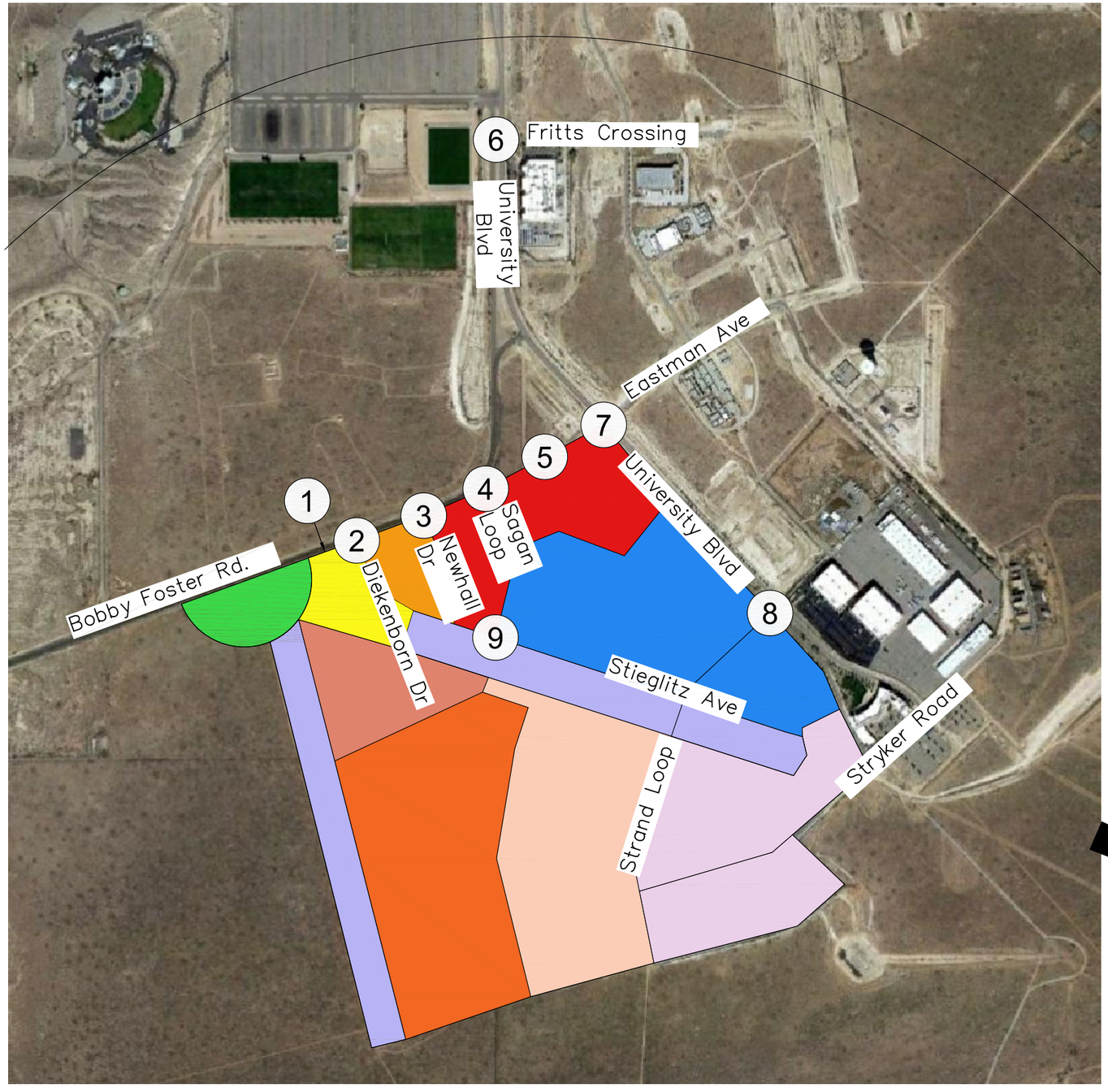
For Intersection 7 and 8, an AWSC at the intersections results in improvements to the delay for the two intersections, but it is better suited for Intersection 7, which experiences a LOS C or better in both the 2023 and 2028 Build conditions. For Intersection 8, although the LOS during the AM Peak improves with an AWSC to a LOS B, an AWSC is not recommended since the LOS F remains.

6.4 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. Assuming a constant growth of 4% per year, the northbound volume during the PM peak hour is expected to exceed the demand volume in 2056. At this point, an alternate access to IH-25 and IH-40 will be required.

APPENDIX A

Figures



Legend

- (#) Intersection number
- Proposed City Park
- Existing Pond / Linear Park
- Montage Unit 1
- Montage Unit 3
- Montage Unit 4
- Montage Unit 5
- Montage Unit 6
- K-12 Charter School
- Multi - Family Homes
- Commercial Development
- 1-Mile Radius

N

1" = 1800'

0 900 1800

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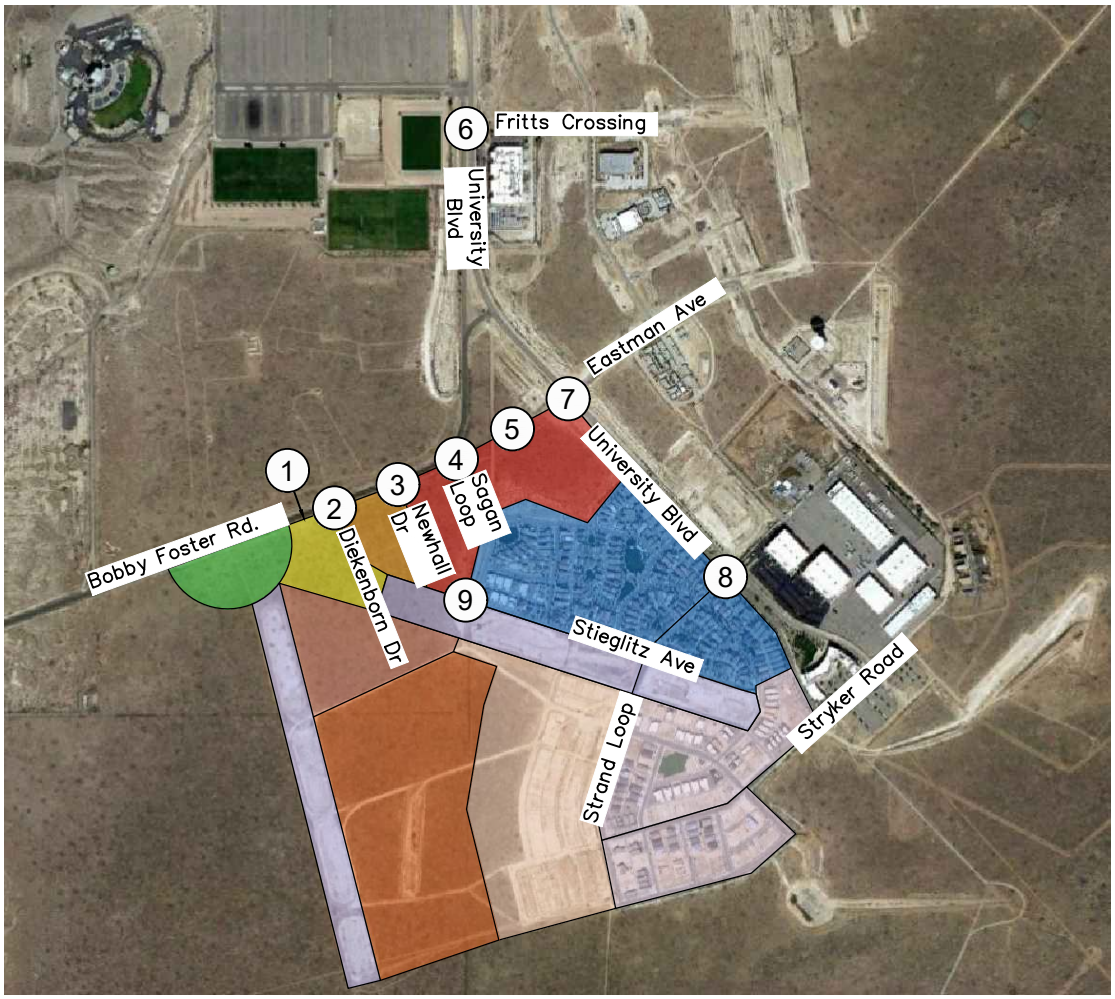
Montage Units Traffic Impact Analysis

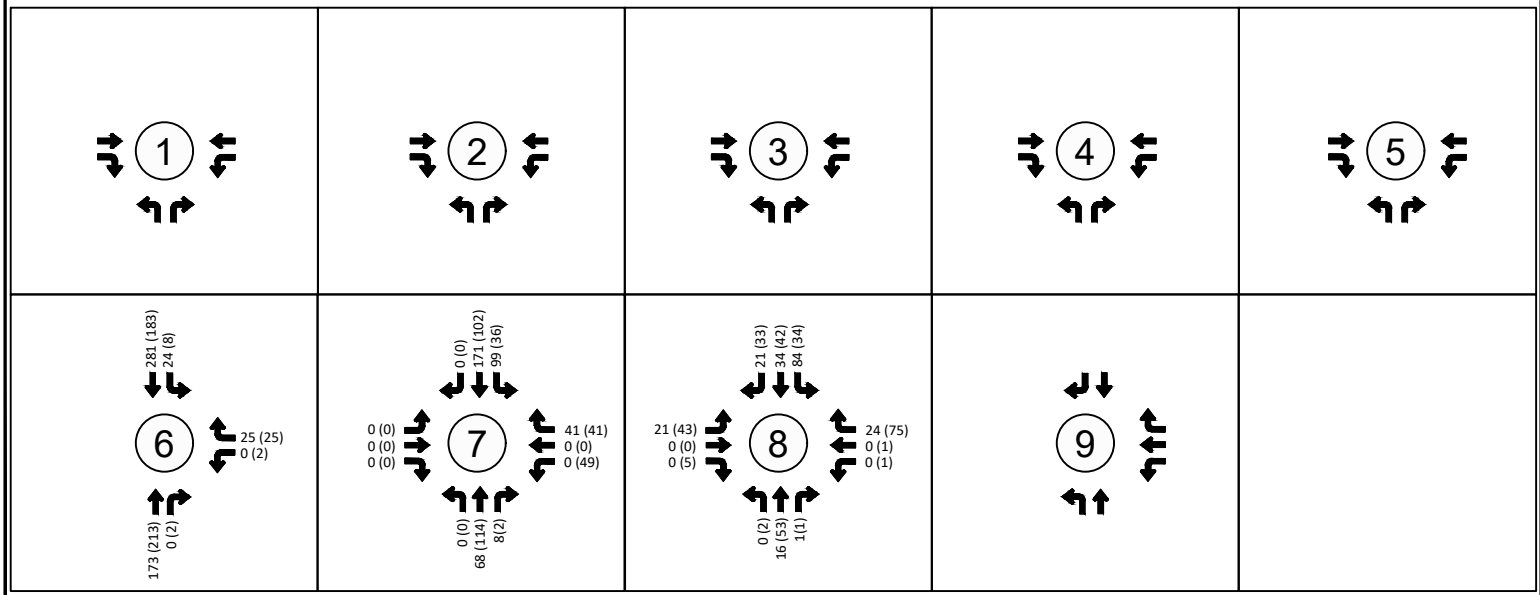
Project Location Exhibit

Figure Number

1

M:\PROJ\MARKETING\PROPOSAL\RD RANCHO OFFICE\MONTAGE UNITS TIA\00 DESIGN\3 TRANSPORTATION\TIA\CAD\FIG 1.DWG





Legend

(#) Intersection number

(#) AM (PM)

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Montage Units
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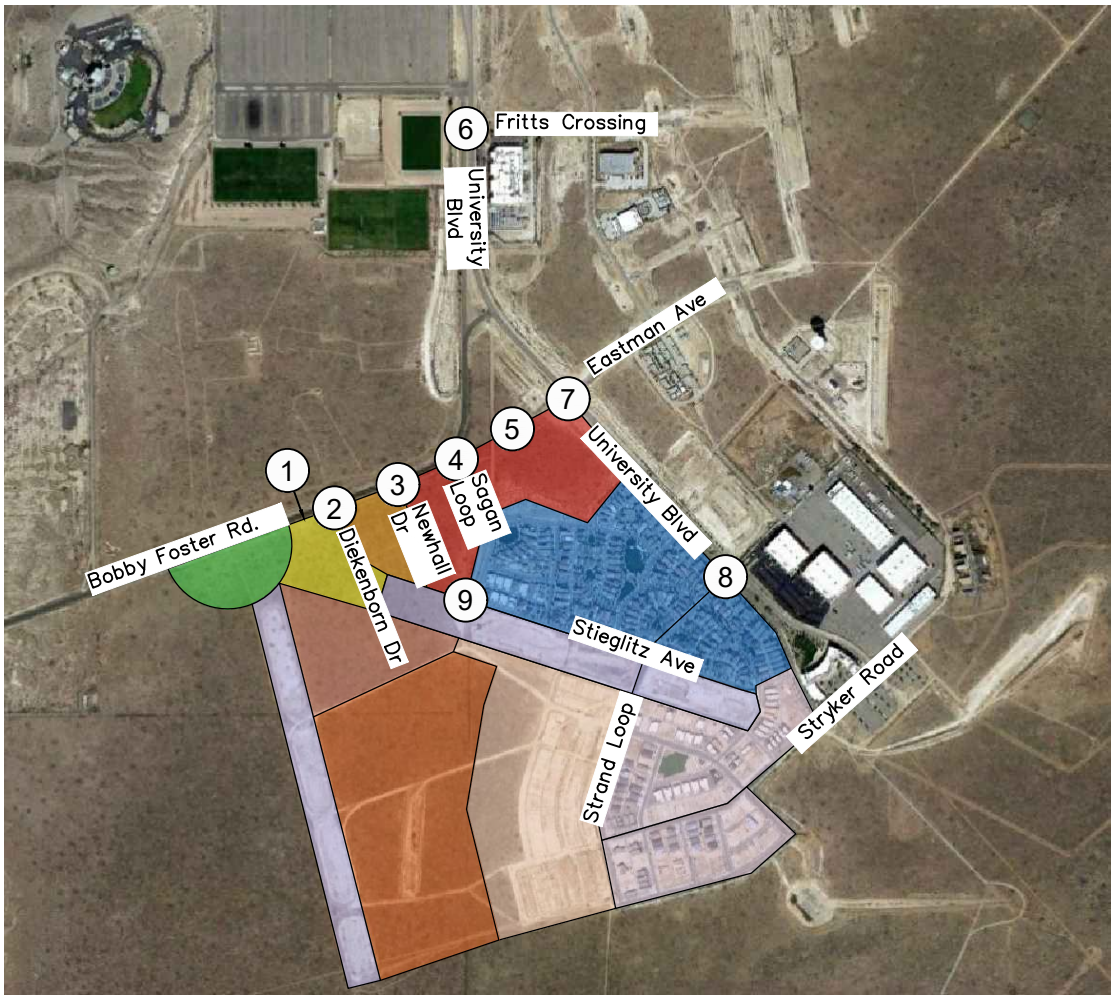
Existing 2021

Figure Number 2

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 2.DWG



1	2	3	4	5
6: 303 (198), 26 (9), 27 (27), 0 (2), 187 (230), 0 (2)	7: 0 (0), 185 (110), 107 (39), 0 (0), 0 (0), 0 (0), 44 (44), 0 (0), 0 (53), 0 (0), 73 (123), 9(2)	8: 23 (36), 37 (45), 91 (37), 23 (46), 0 (0), 0 (5), 26 (81), 0 (1), 0 (1), 0 (2), 17 (57), 1(1)	9	

Legend

#	Intersection number
# (#)	AM (PM)

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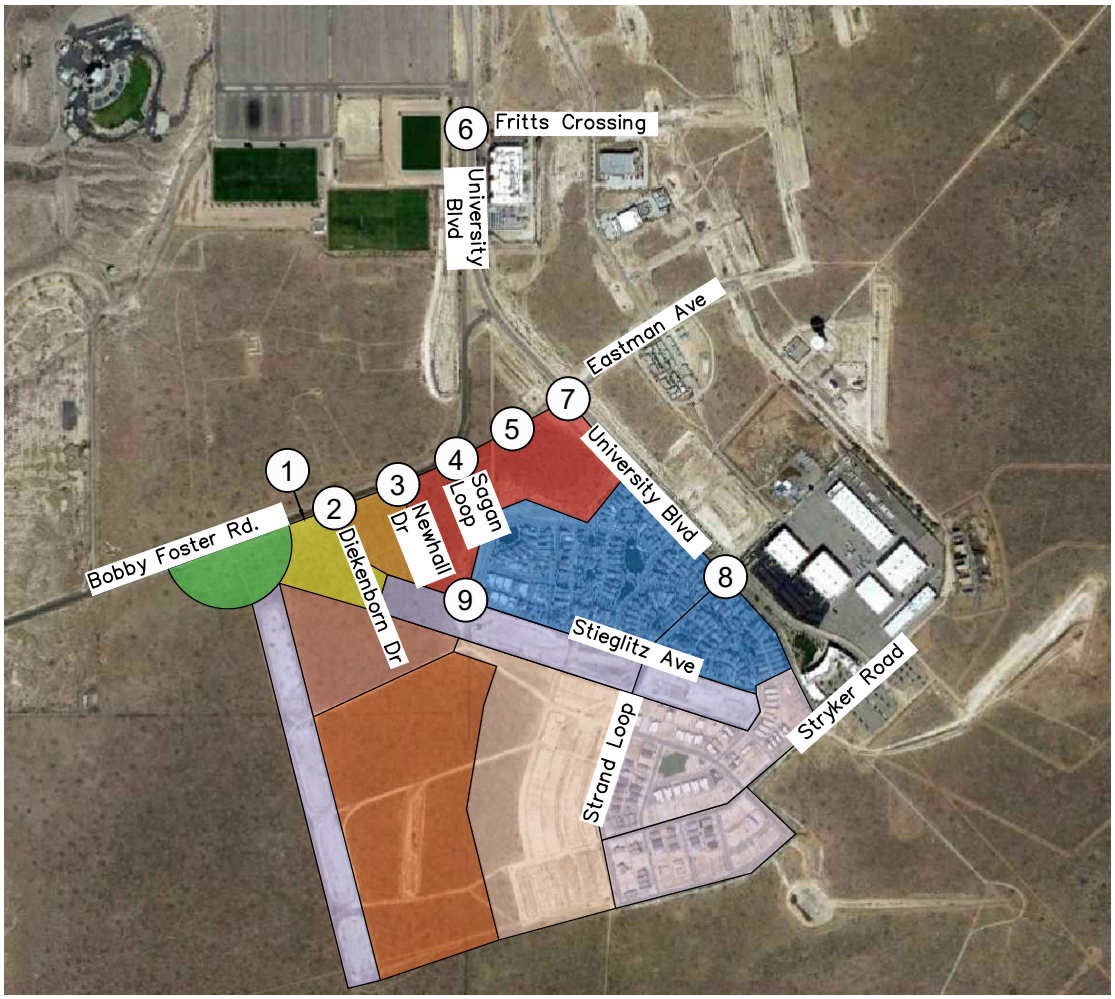
Montage Units
Traffic Impact Analysis
No Build 2023

Figure Number 3

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 3.DWG



1	2	3	4	5
6: 360(234), 31 (10), 32 (32), 0 (3), 221 (273), 0 (3)	7: 0 (0), 219 (131), 127 (46), 0 (0), 0 (0), 0 (0), 52 (52), 0 (0), 0 (63), 0 (0), 87 (146), 10(3)	8: 27 (42), 44 (54), 108 (44), 27 (55), 0 (0), 0 (6), 31 (96), 0 (1), 0 (1), 0 (3), 20 (68), 1(1)	9	

Legend

#	Intersection number
# (#)	AM (PM)

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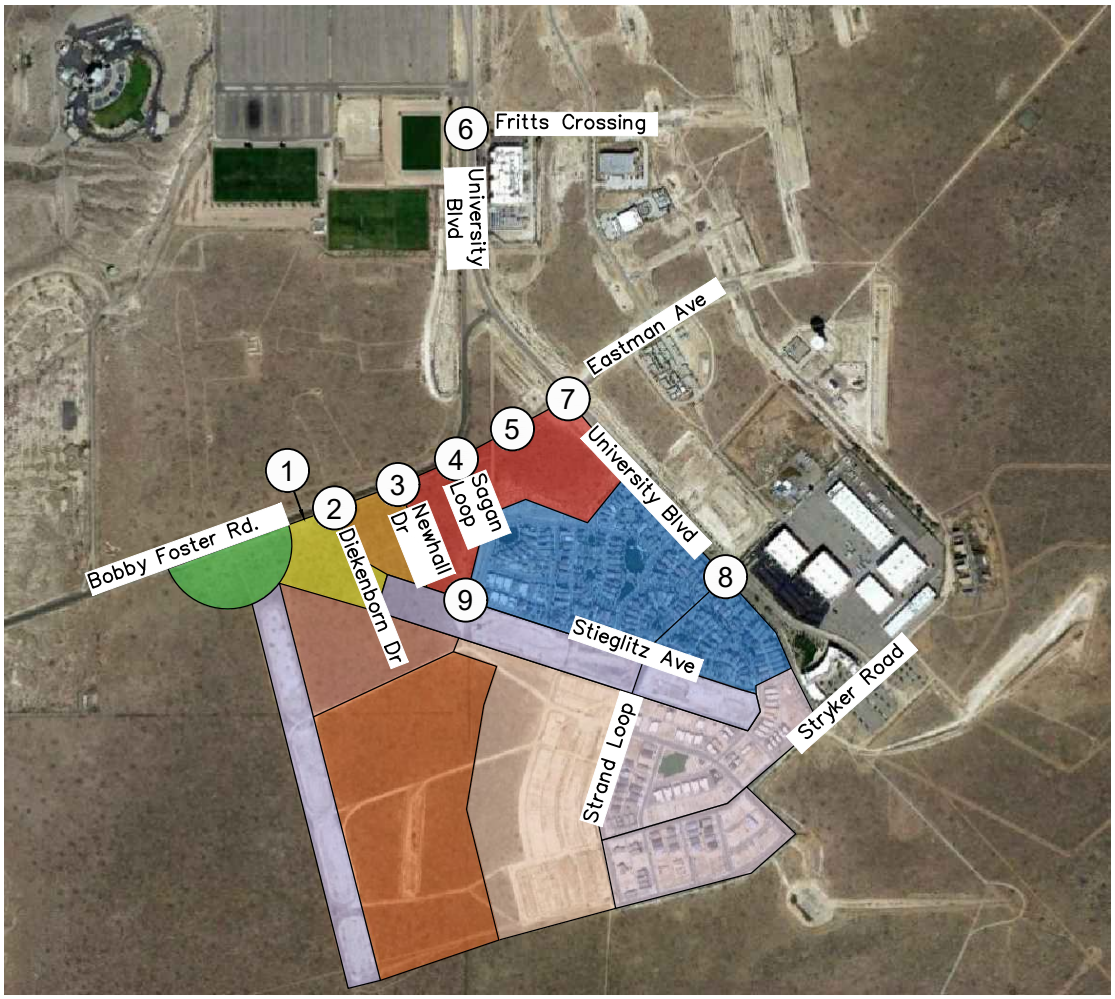
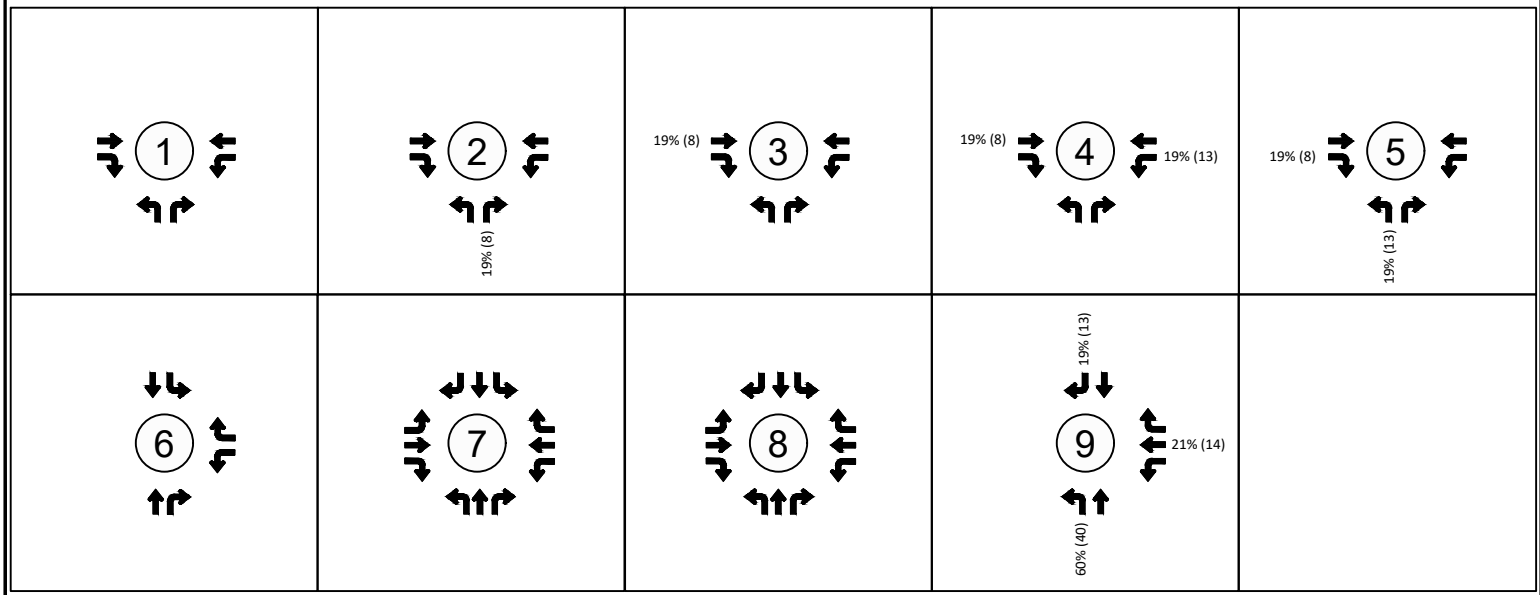
No Build 2028

Figure Number 4

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 4.DWG





Legend

(#) Intersection number

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AM Exiting = Distribution (Generated Trips)

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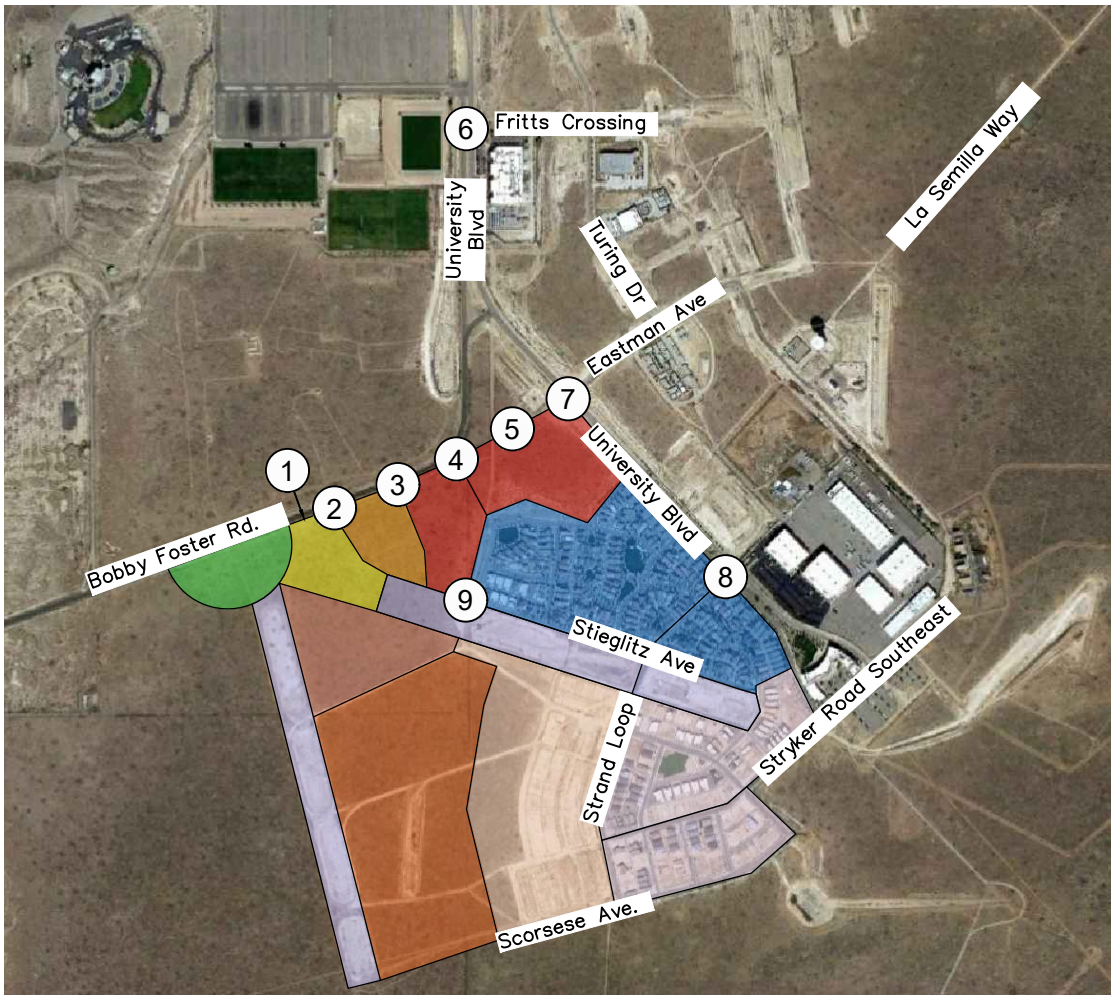
Montage Units
Traffic Impact Analysis
Charter School

Figure Number
6

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 6.DWG



1	2 19% (3)	19% (3) 3	19% (3) 4 19% (2)	19% (3) 5 19% (2)
6	7	8	19% (2) 9 21% (2) 60% (6)	

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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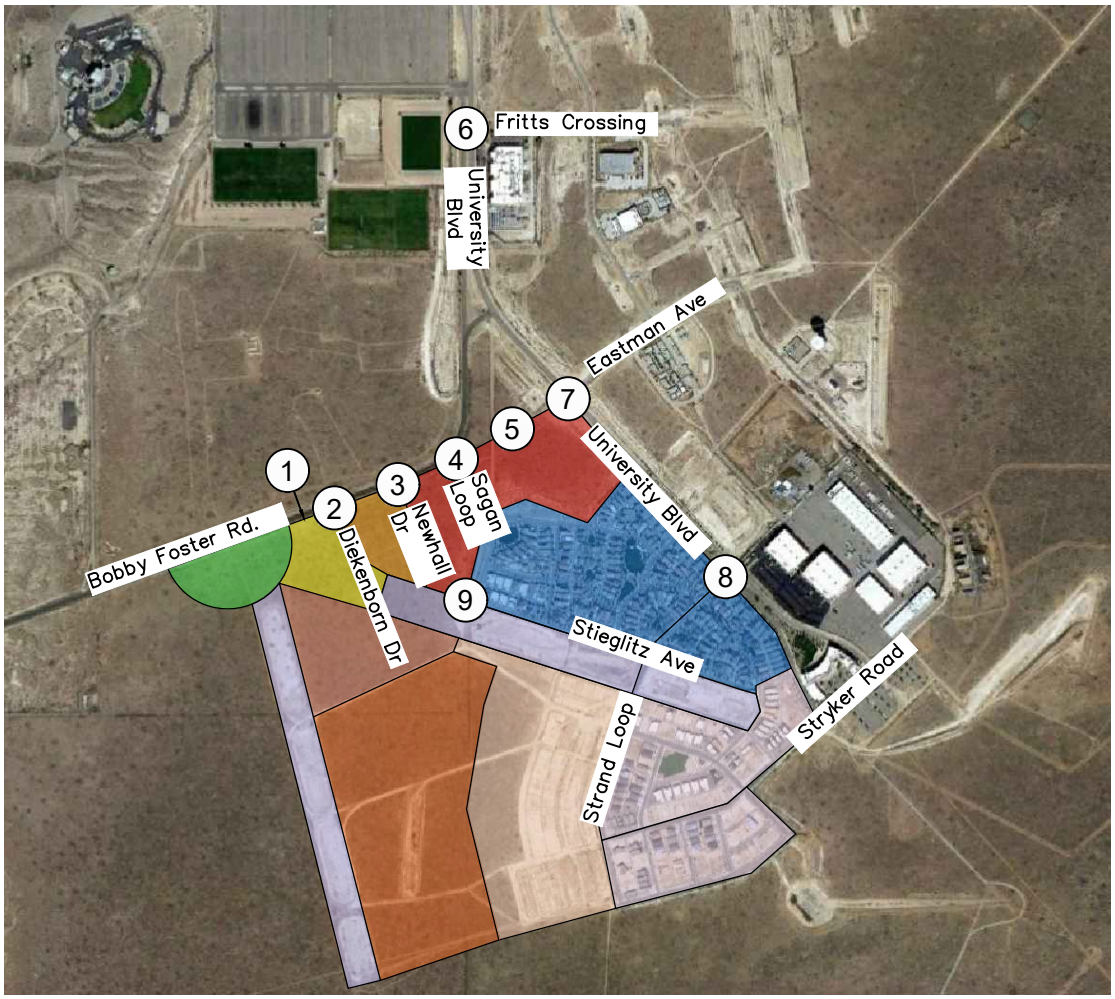
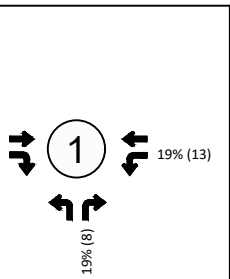
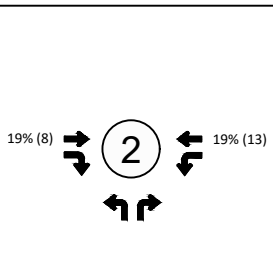
Montage Units
Traffic Impact Analysis
Charter School

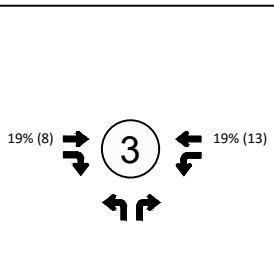
Figure Number 7

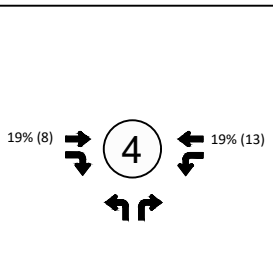
H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 7.DWG

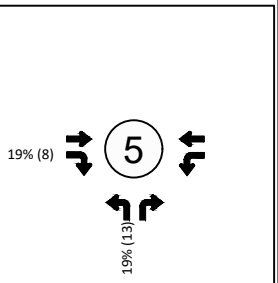


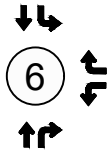


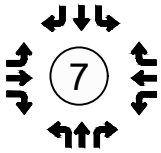


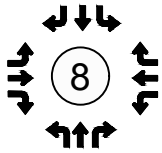


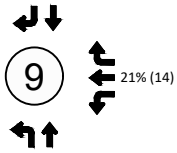












Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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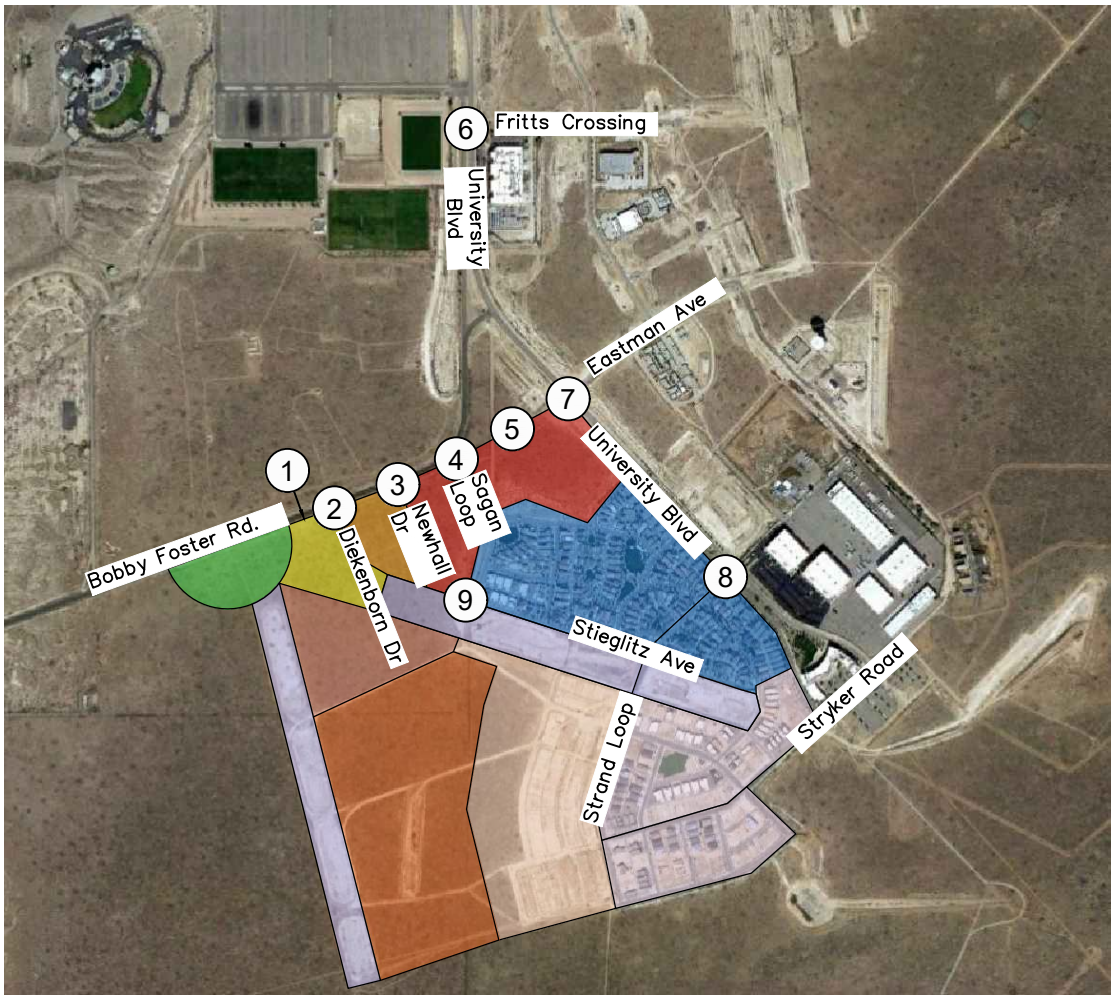
Commercial Development

Figure Number 8

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 8.DWG



19% (9) 1 19% (8) 19% (9)	19% (9) 2 19% (8)	19% (9) 3 19% (8)	19% (9) 4 19% (8)	19% (9) 5 19% (8)
6	7	8	9 21% (9)	

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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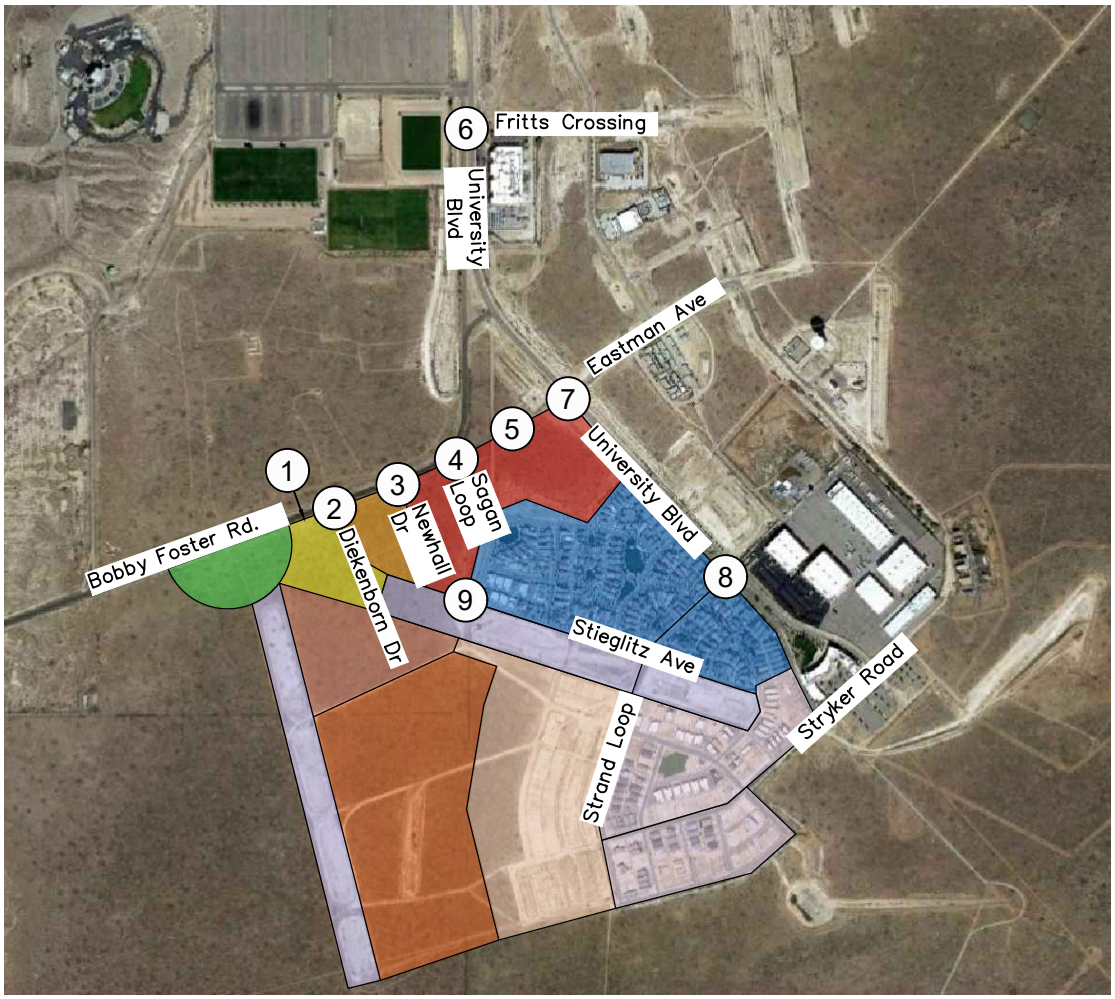
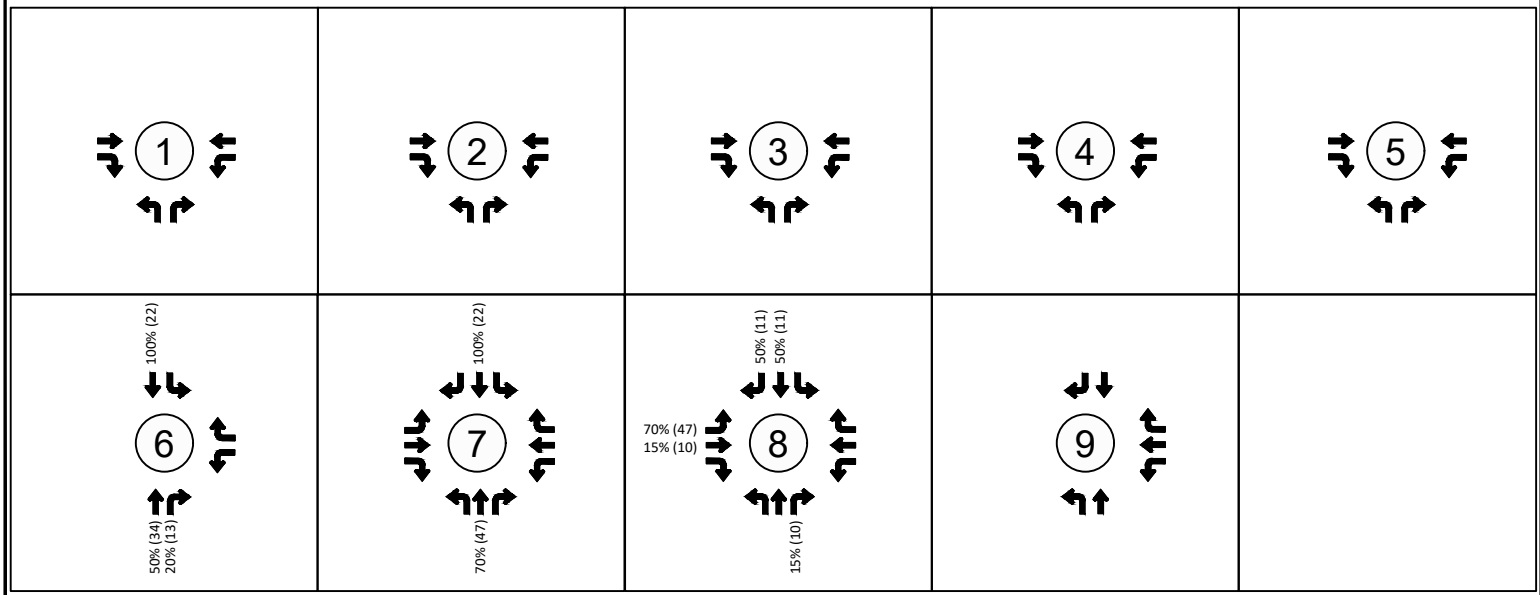
Figure Number 9

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 9.DWG





Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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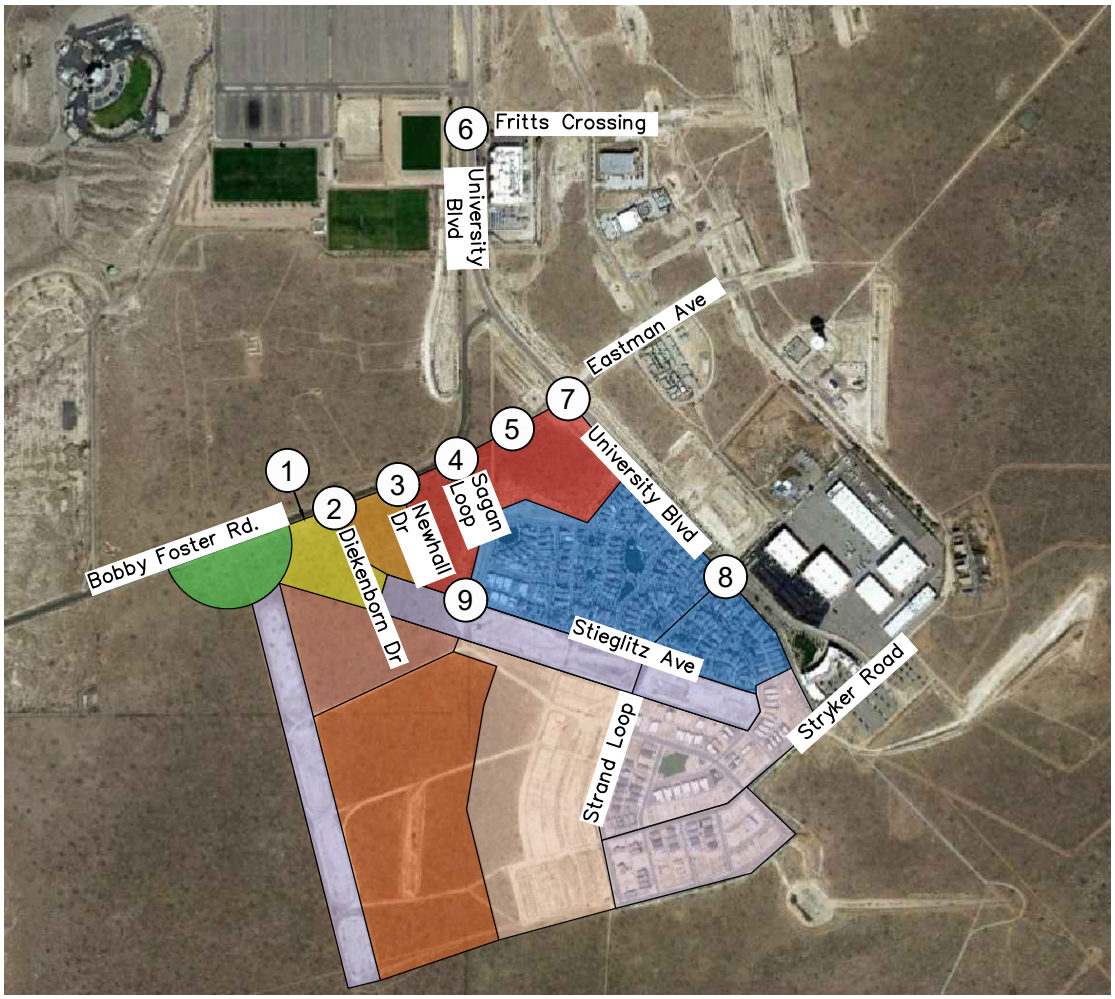
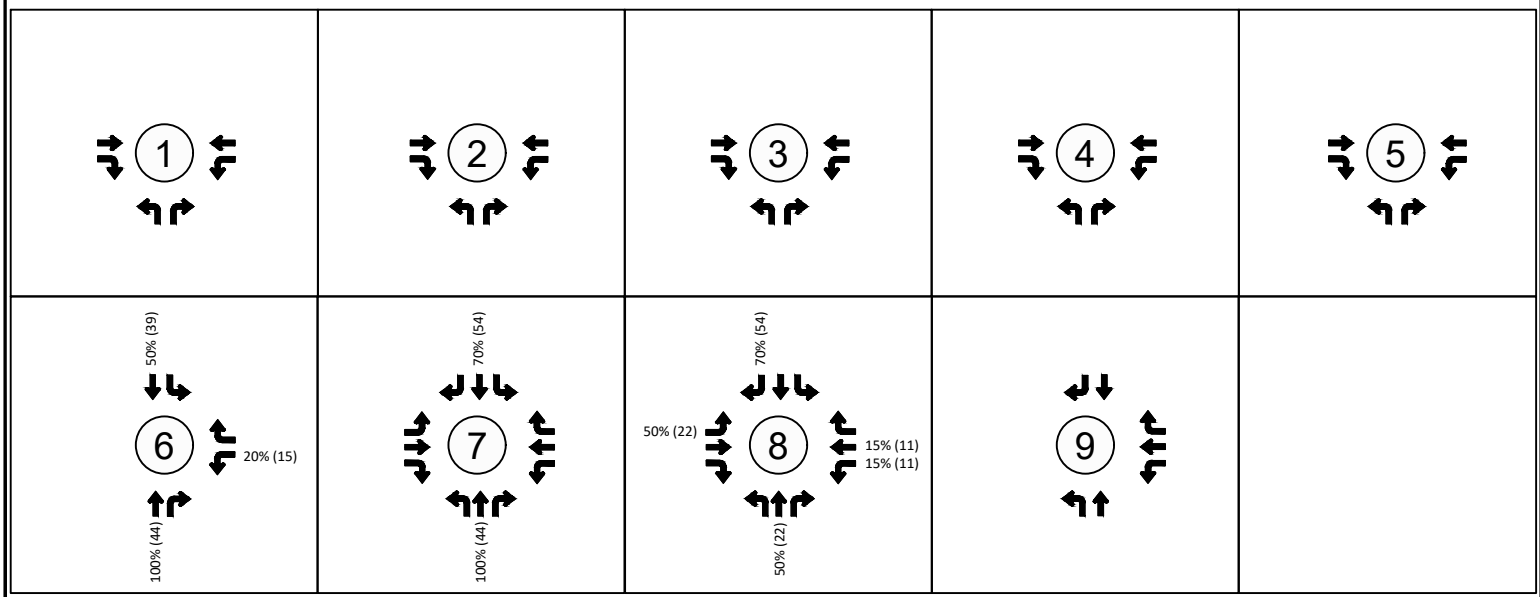
Montage Unit 3

Figure Number 10

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 10.DWG





Legend

(#) Intersection number

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PM Exiting = Distribution (Generated Trips)

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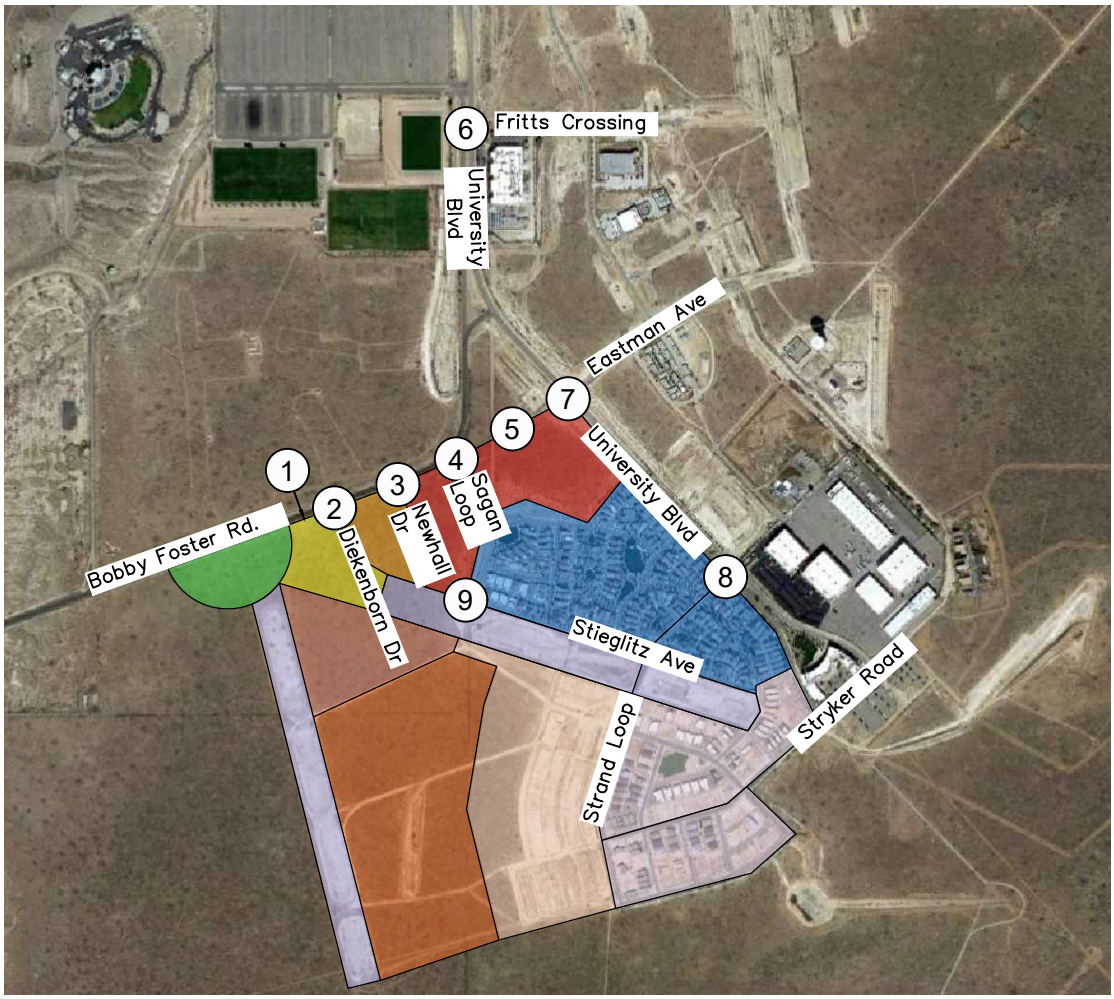
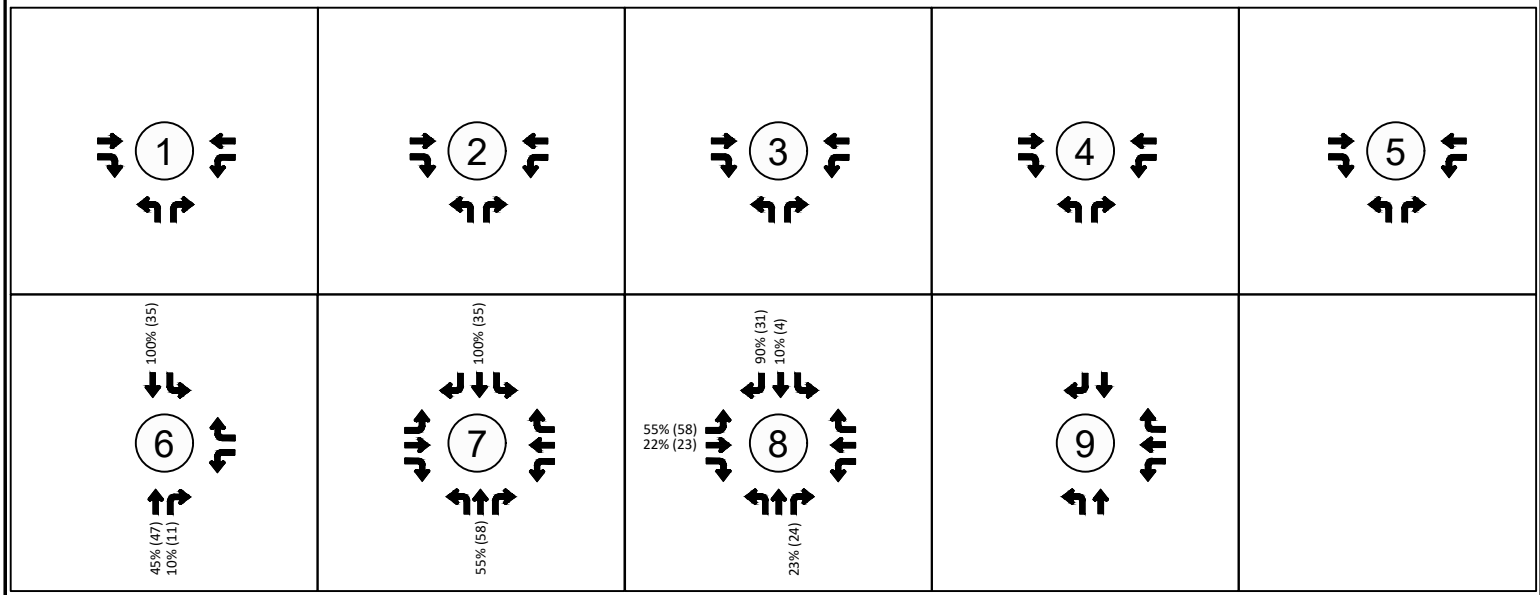
Montage Unit 3

Figure Number 11

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 11.DWG





Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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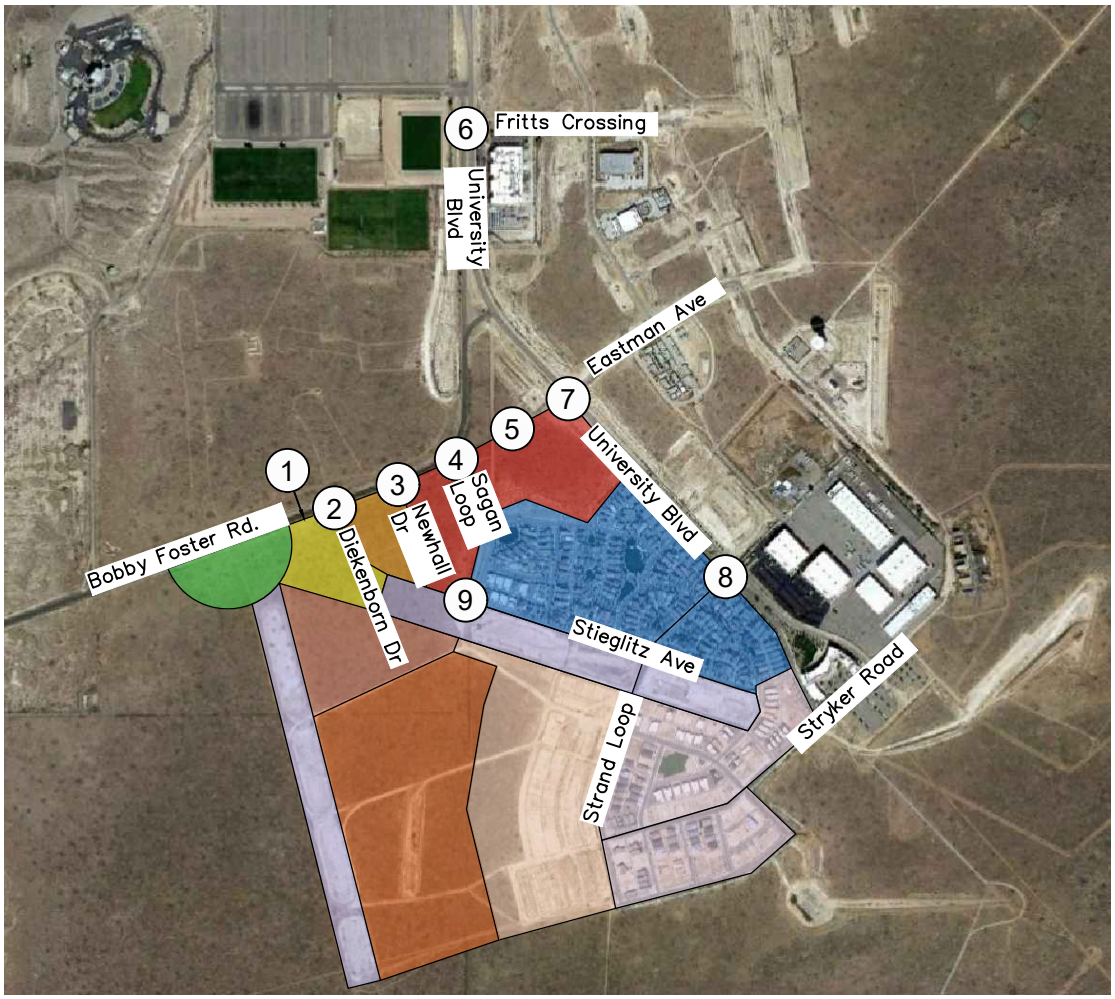
Montage Units
Traffic Impact Analysis
Montage Unit 4

Figure Number 12

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 12.DWG



1	2	3	4	5
6 45% (54) 10% (12) 100% (69)	7 55% (66) 100% (69)	8 55% (66) 90% (62) 22% (26) 23% (27) 23% (7)	9	

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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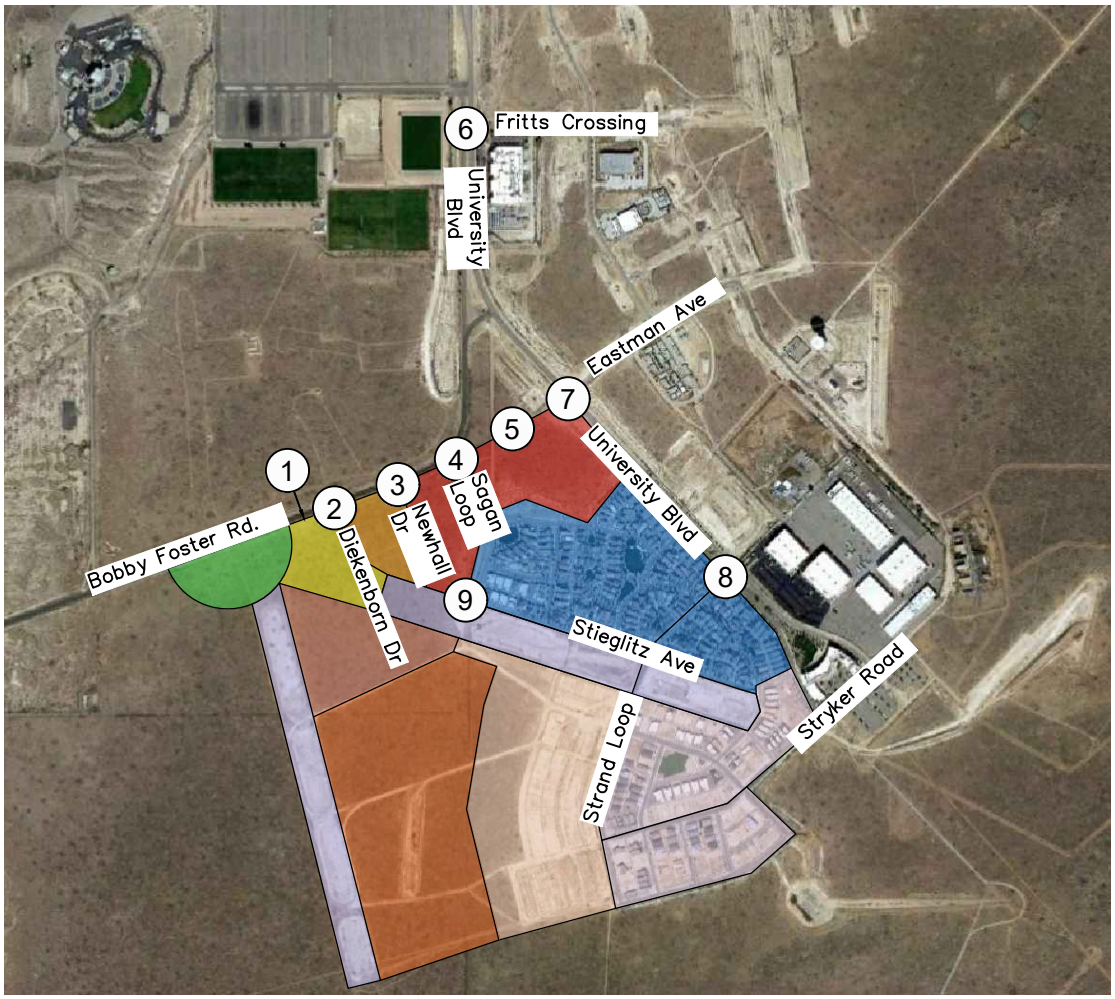
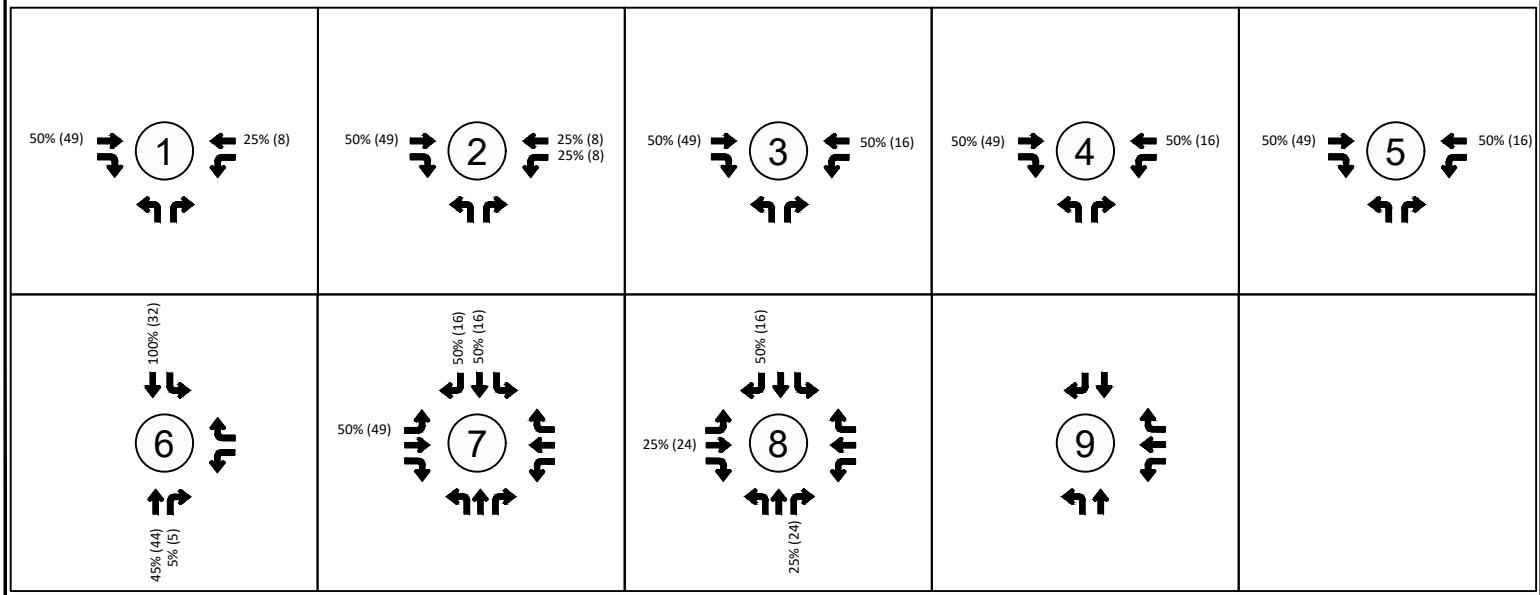
Montage Units
Traffic Impact Analysis
Montage Unit 4

Figure Number 13

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 13.DWG





Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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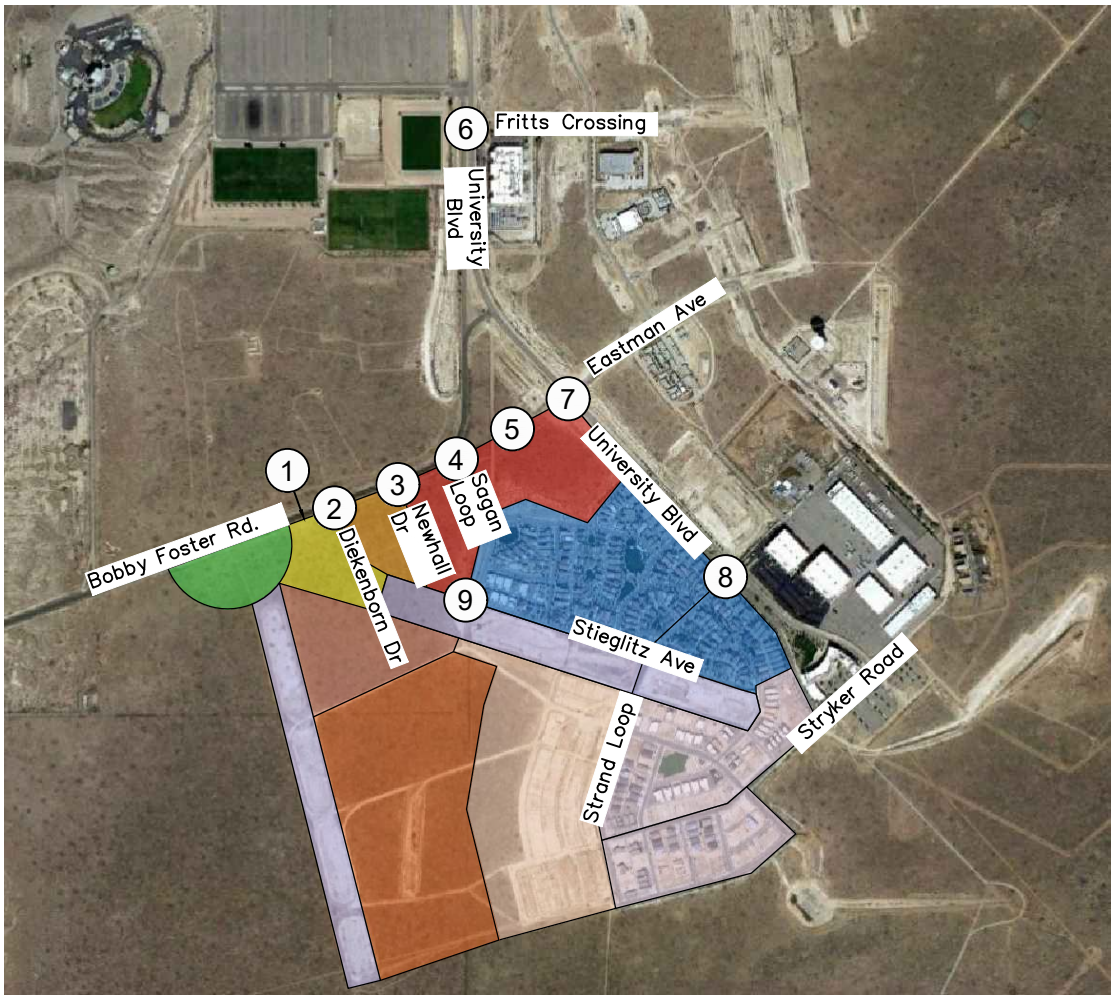
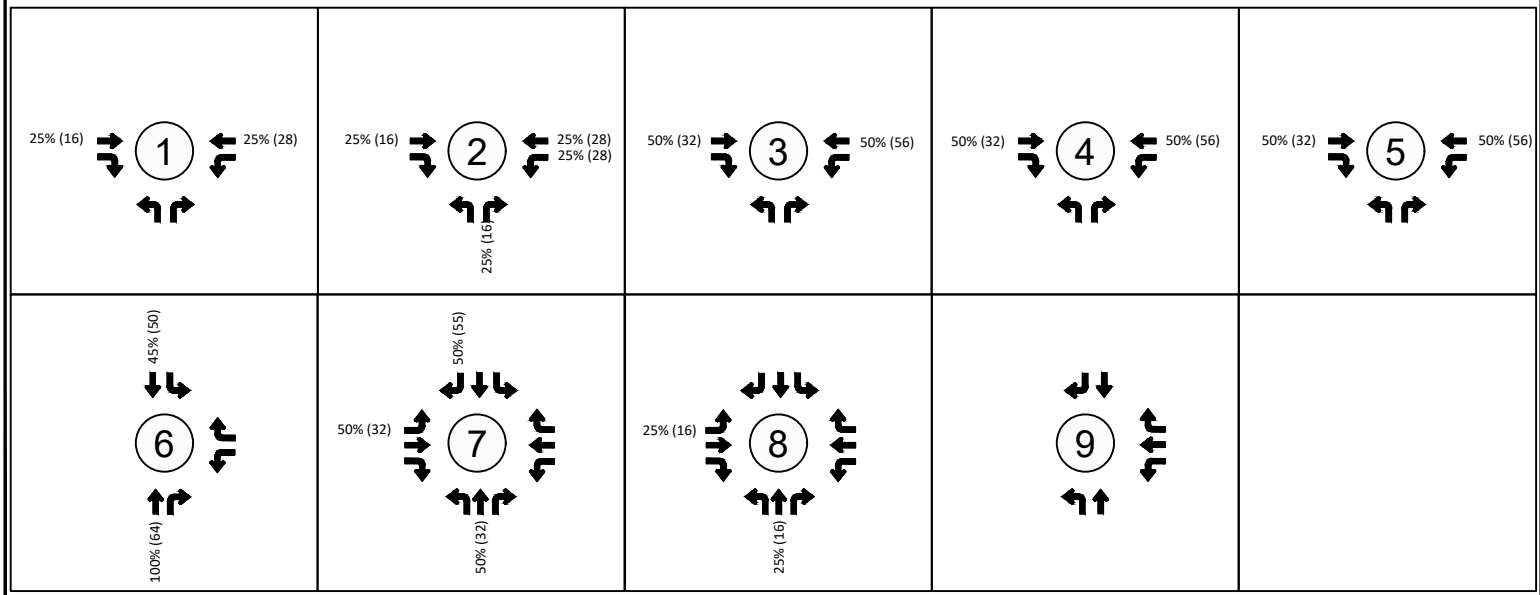
Montage Units
Traffic Impact Analysis
Montage Unit 5

Figure Number 14

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 14.DWG





Legend

(#) Intersection number

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PM Exiting = Distribution (Generated Trips)

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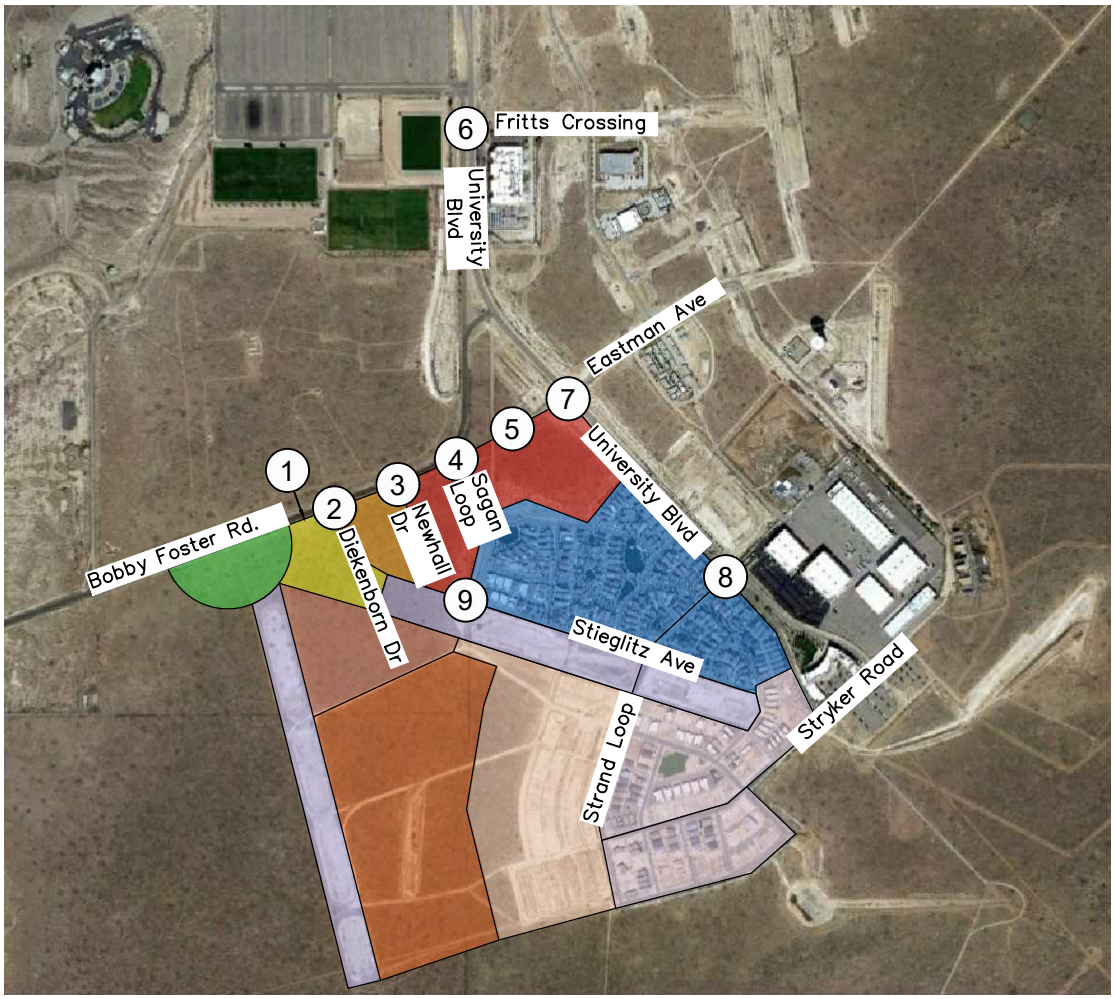
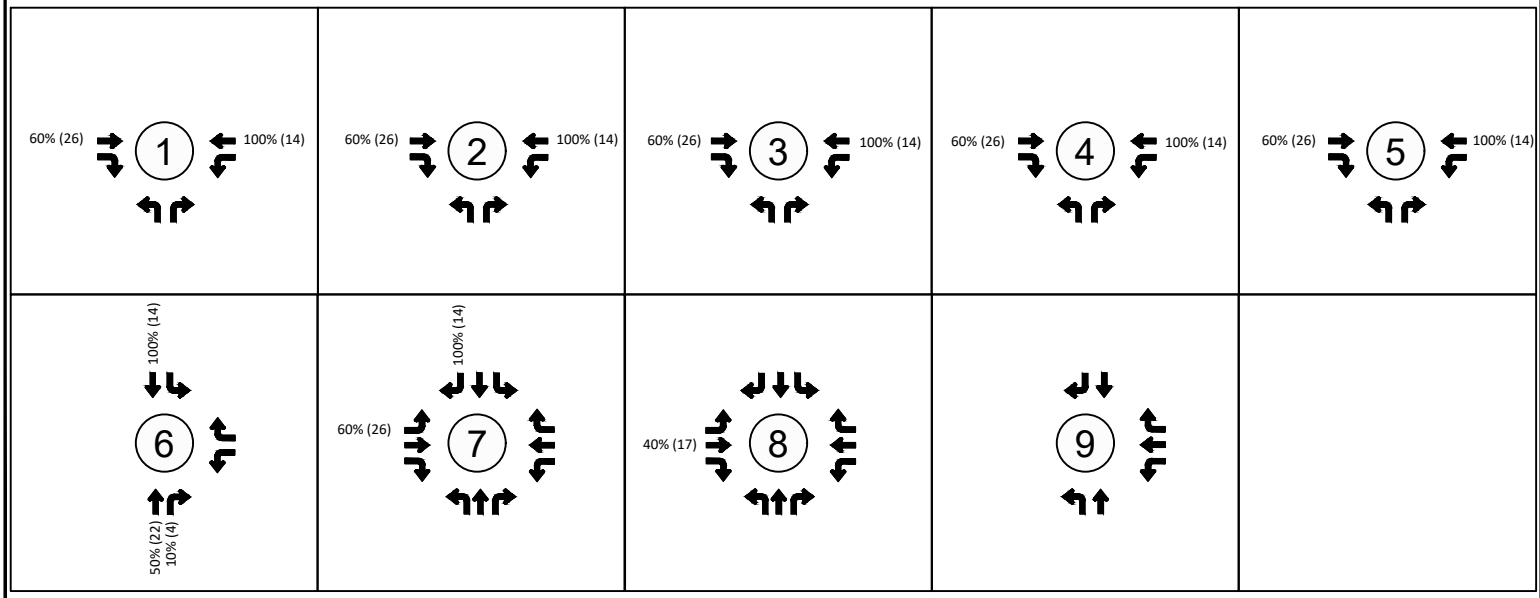
Montage Units
Traffic Impact Analysis
Montage Unit 5

Figure Number 15

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 15.DWG





Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

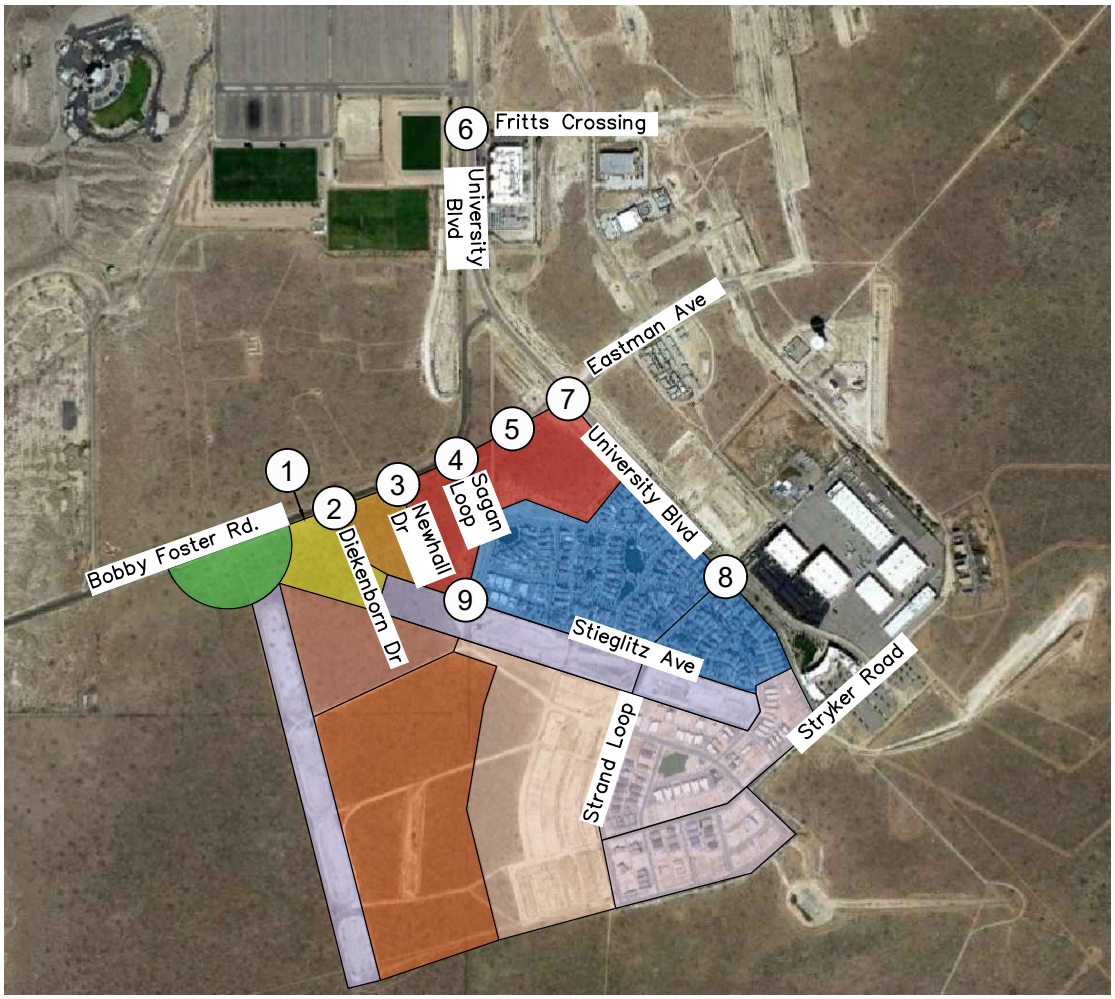
AM Exiting = Distribution (Generated Trips)

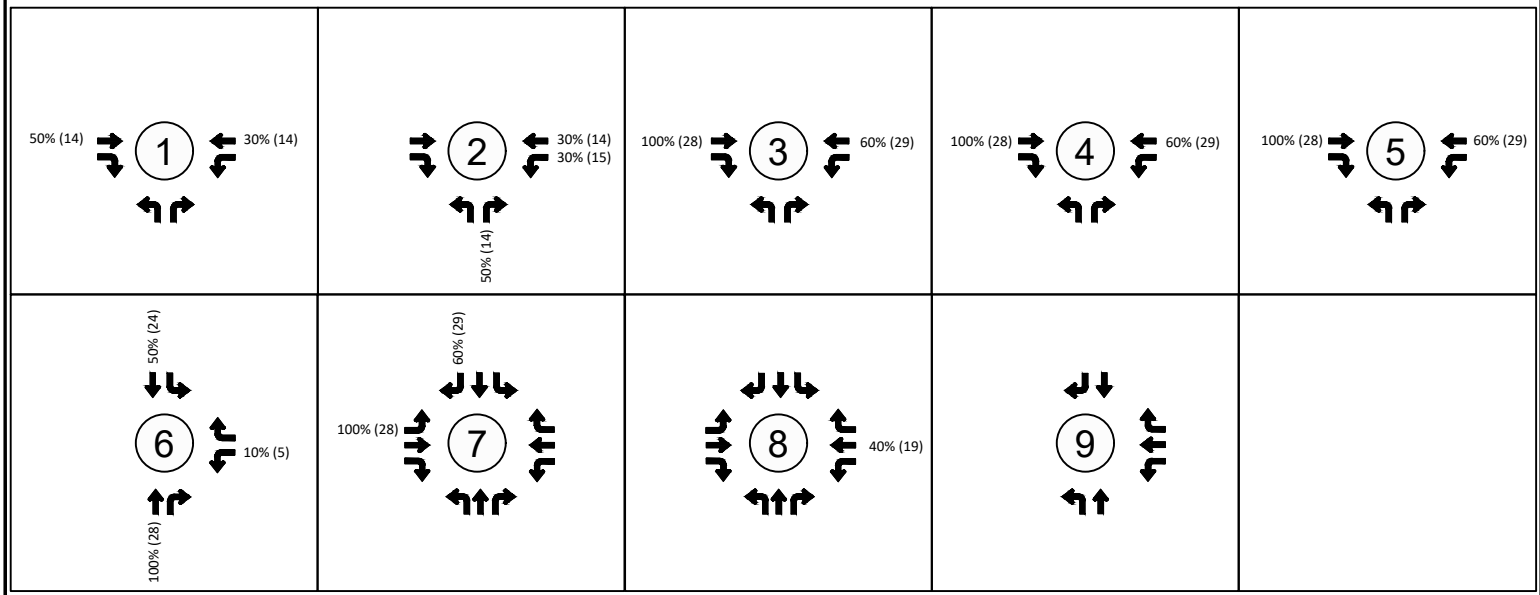
HUITT-ZOLLARS
5822 Cromo Drive
Suite 210
El Paso, Texas 79912
915.587.4339
Firm No. F-761
www.huitt-zollars.com

Montage Units
Traffic Impact Analysis
Montage Unit 6

Figure Number 16

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 16.DWG





Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

HUITT-ZOLLARS
5822 Cromo Drive
Suite 210
El Paso, Texas 79912
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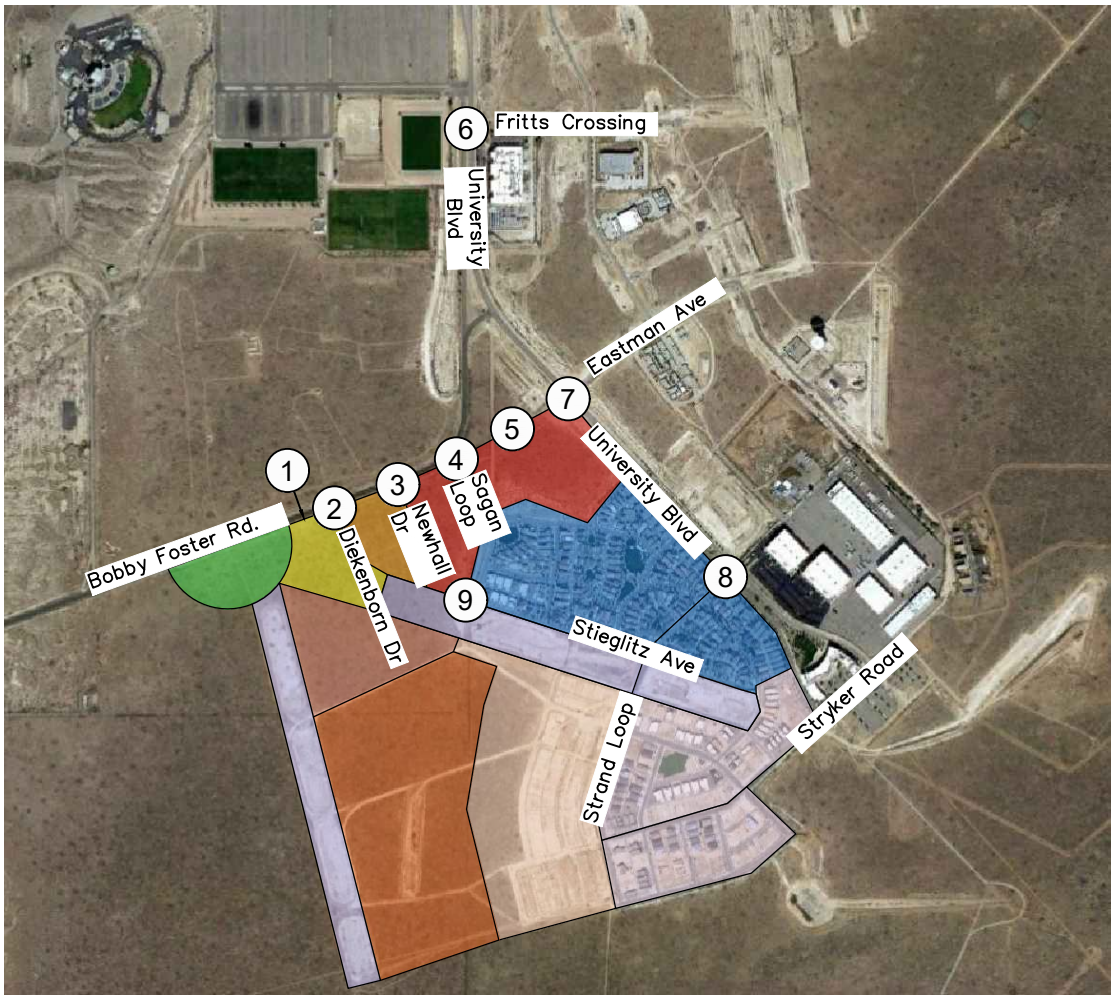
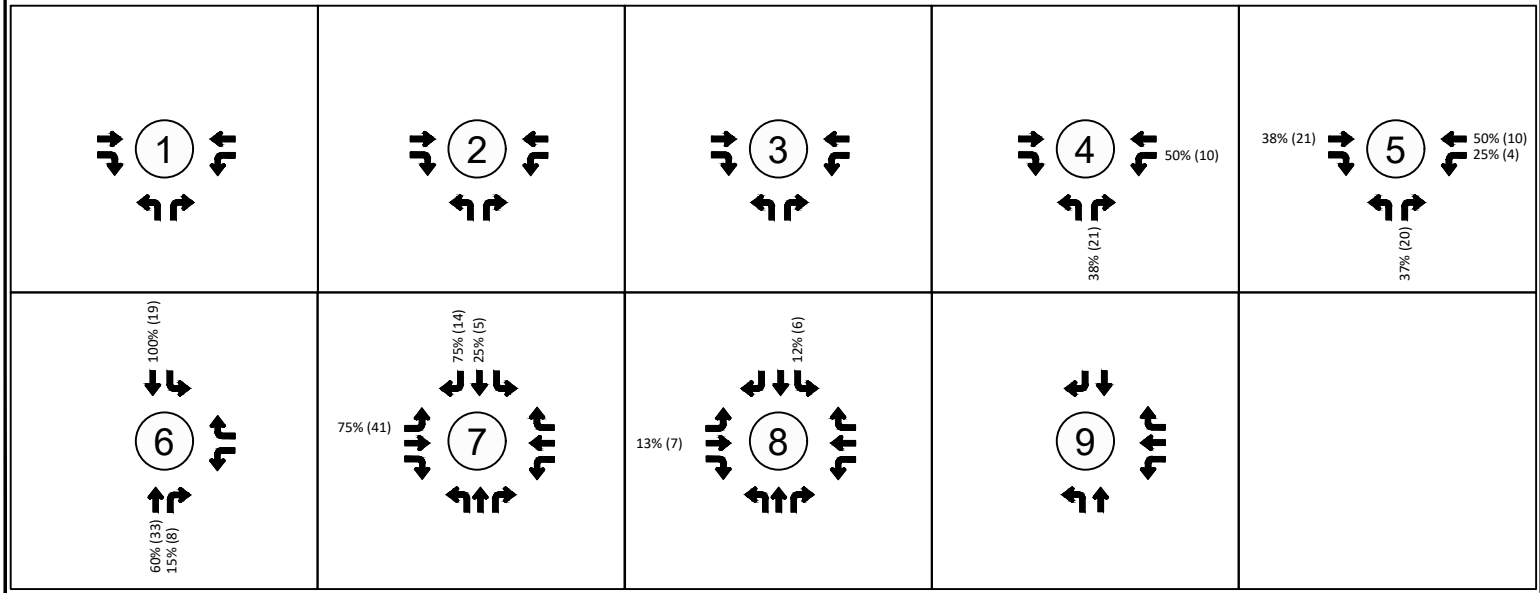
Firm No. F-761
www.huitt-zollars.com

Montage Units
Traffic Impact Analysis
Montage Unit 6

Figure Number 17

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 17.DWG





Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

HUITT-ZOLLARS
5822 Cromo Drive
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El Paso, Texas 79912
915.587.4339
Firm No. F-761
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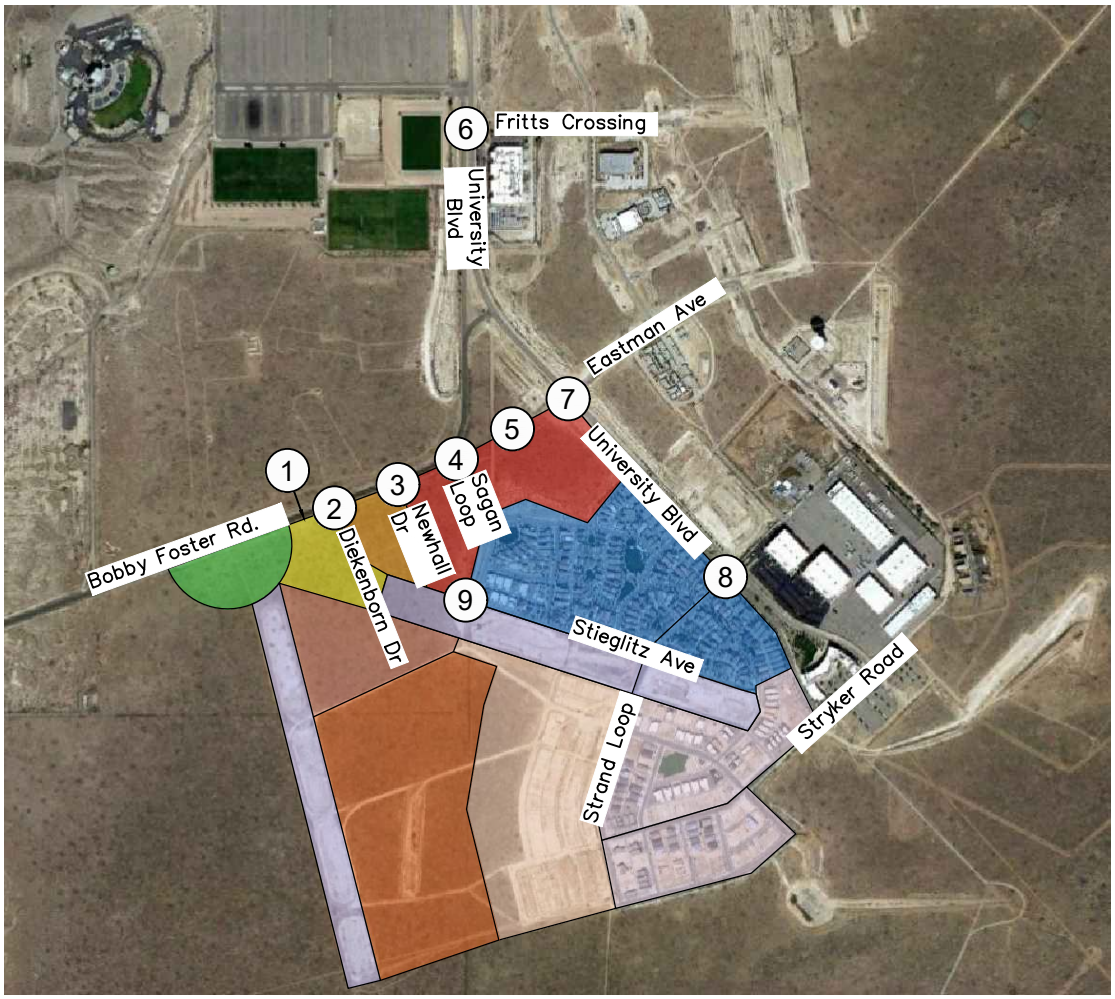
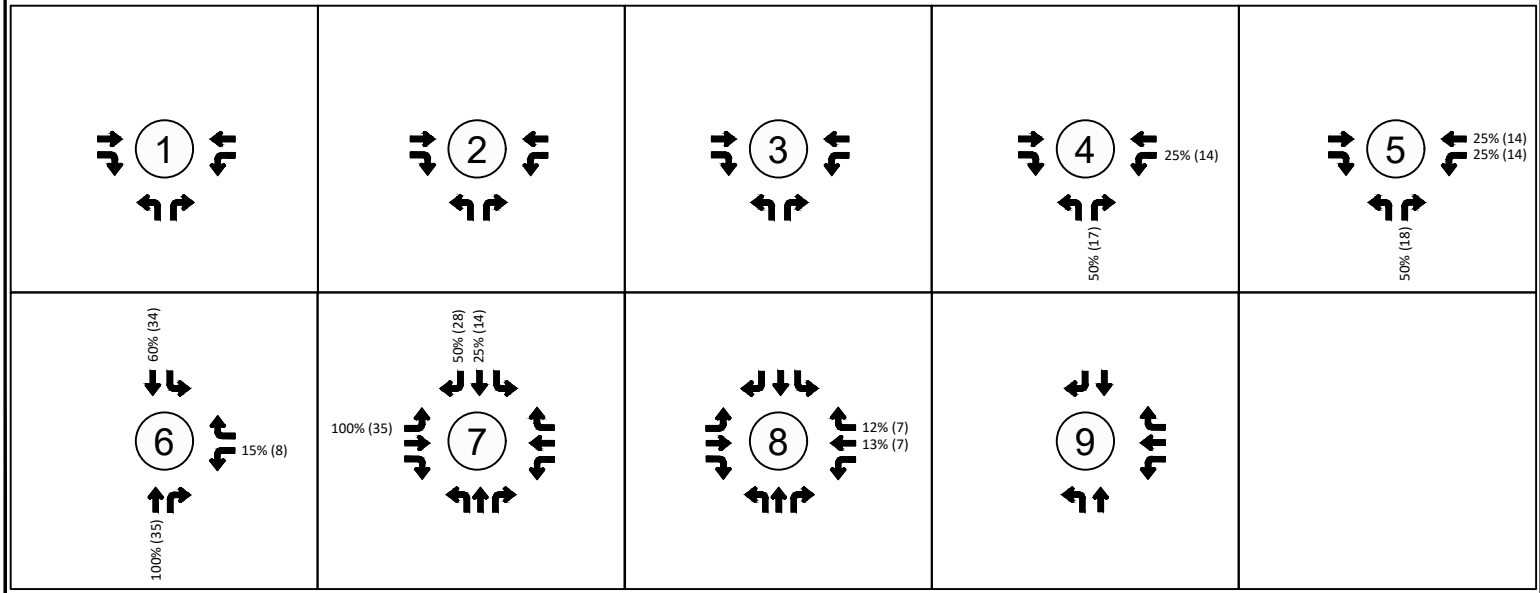
Montage Units
Traffic Impact Analysis
Multi-Family

Figure Number 18

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 18.DWG





Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

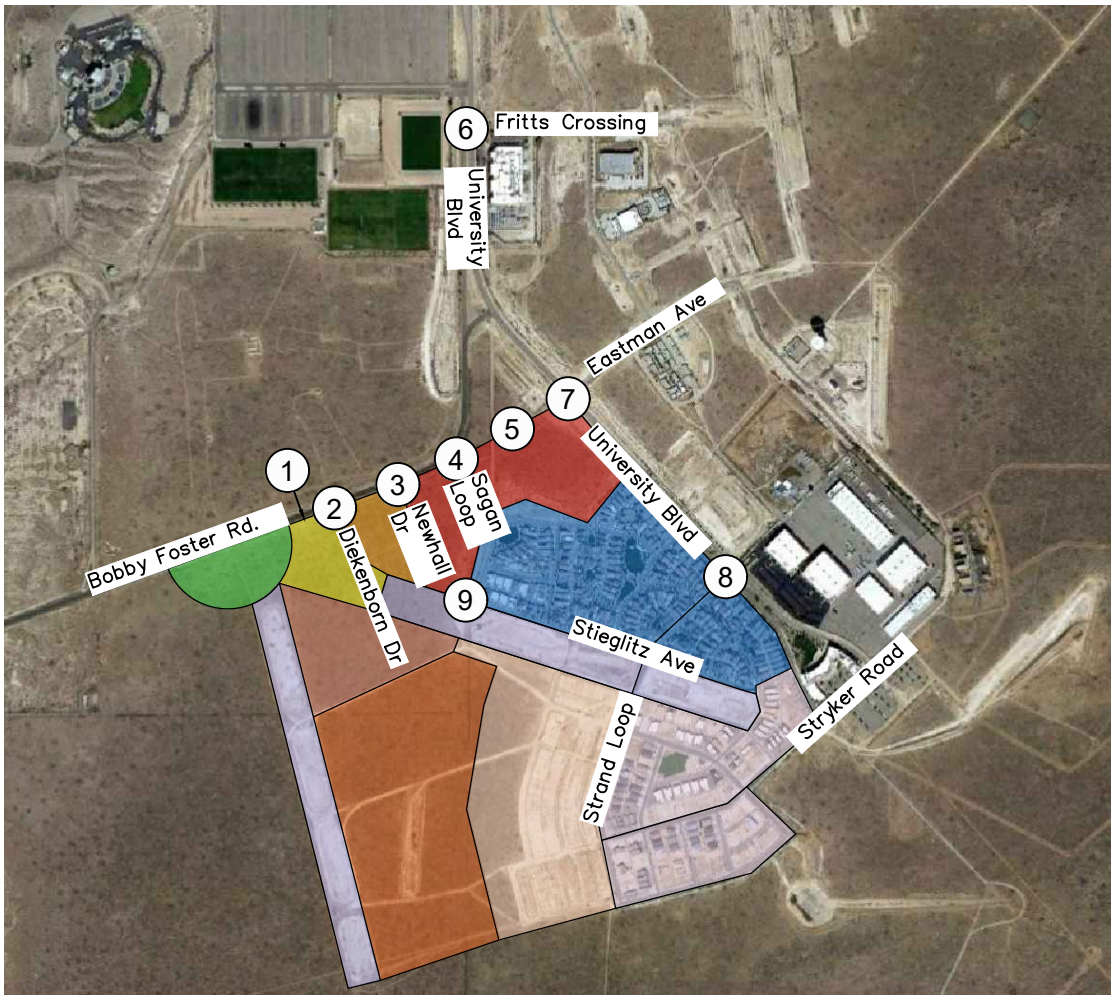
PM Exiting = Distribution (Generated Trips)

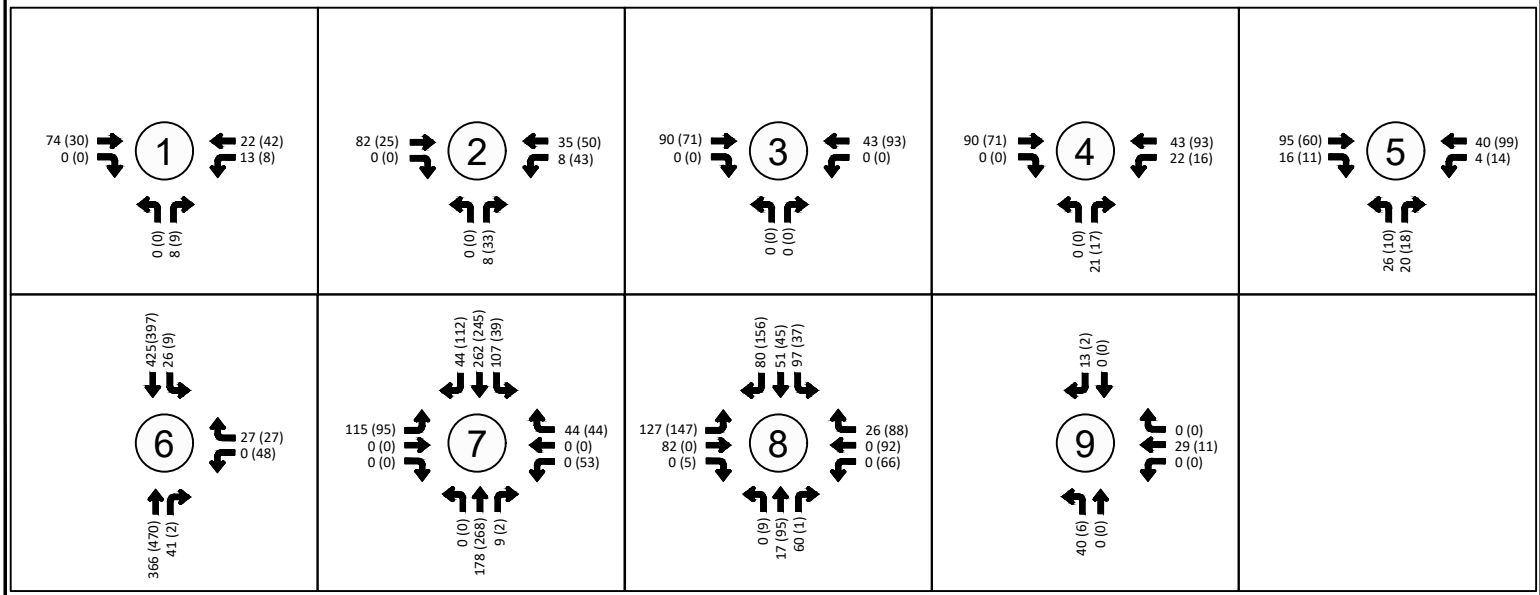
HUITT-ZOLLARS
5822 Cromo Drive
Suite 210
El Paso, Texas 79912
915.587.4339
Firm No. F-761
www.huitt-zollars.com

Montage Units
Traffic Impact Analysis
Multi-Family

Figure Number 19

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 19.DWG





Legend

(#) Intersection number

(#) AM (PM)

HUITT-ZOLLARS
5822 Cromo Drive
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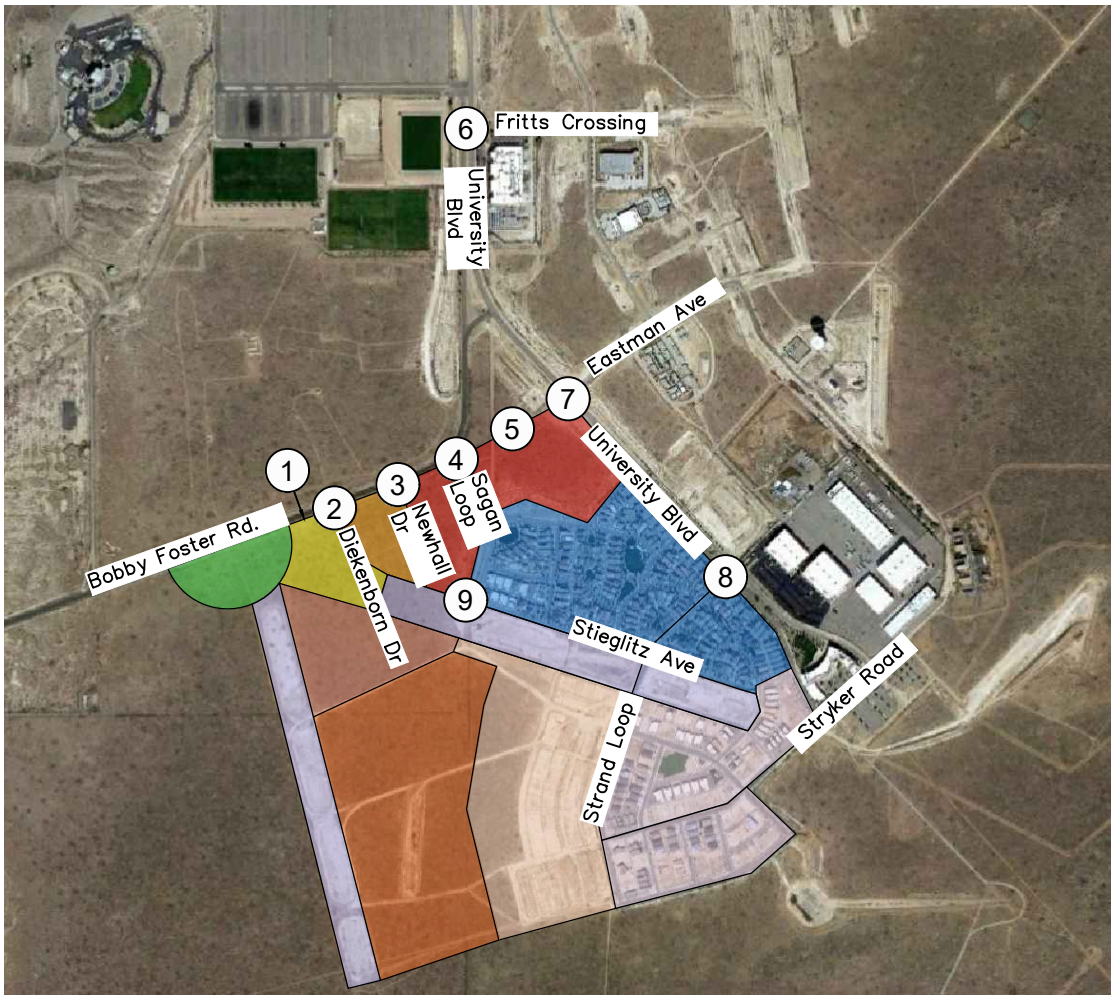
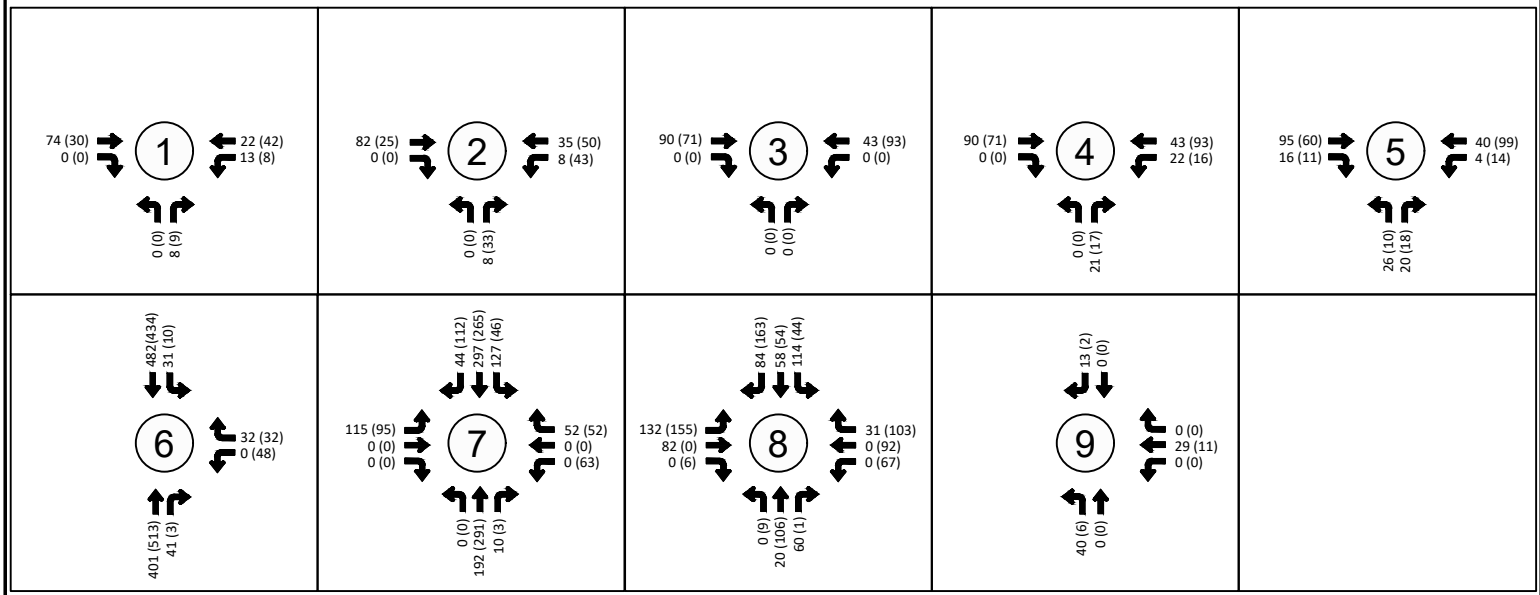
El Paso, Texas 79912
915.587.4339
Firm No. F-761
www.huitt-zollars.com

Montage Units
Traffic Impact Analysis
Build 2023

Figure Number
20

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 20.DWG





Legend

(#) Intersection number

(#) AM (PM)

HUITT-ZOLLARS
5822 Cromo Drive
Suite 210
El Paso, Texas 79912
915.587.4339
Firm No. F-761
www.huitt-zollars.com

Montage Units
Traffic Impact Analysis
Build 2028

Figure Number
21

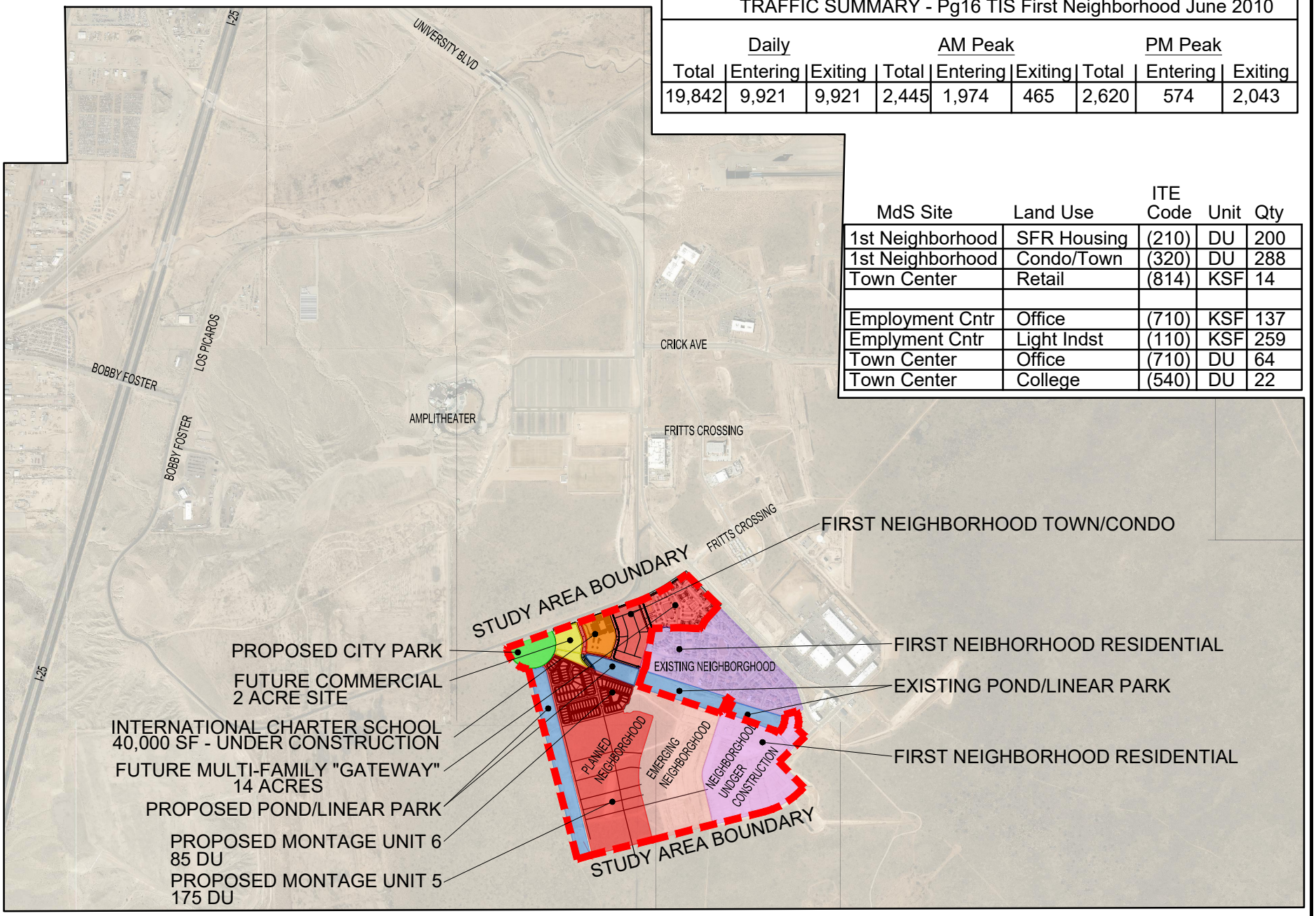
H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\TIA\CAD\FIGURE 21.DWG

APPENDIX B

Montage Units
Site Development Plan

TRAFFIC SUMMARY - Pg16 TIS First Neighborhood June 2010								
	Daily			AM Peak			PM Peak	
Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
19,842	9,921	9,921	2,445	1,974	465	2,620	574	2,043

MdS Site	Land Use	ITE Code	Unit	Qty
1st Neighborhood	SFR Housing	(210)	DU	200
1st Neighborhood	Condo/Town	(320)	DU	288
Town Center	Retail	(814)	KSF	14
Employment Cntr	Office	(710)	KSF	137
Emplyment Cntr	Light Indst	(110)	KSF	259
Town Center	Office	(710)	DU	64
Town Center	College	(540)	DU	22



Designed For:

SC[3] DEVELOPMENT

MONTAGE UNIT 5 & 6 SUBDIVISION, INTERNATIONAL SCHOOL & GATEWAY MULTI-FAMILY
MESA DEL SOL

TRAFFIC STUDY BOUNDARY
SCOPING MEETING

Designed By:

HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

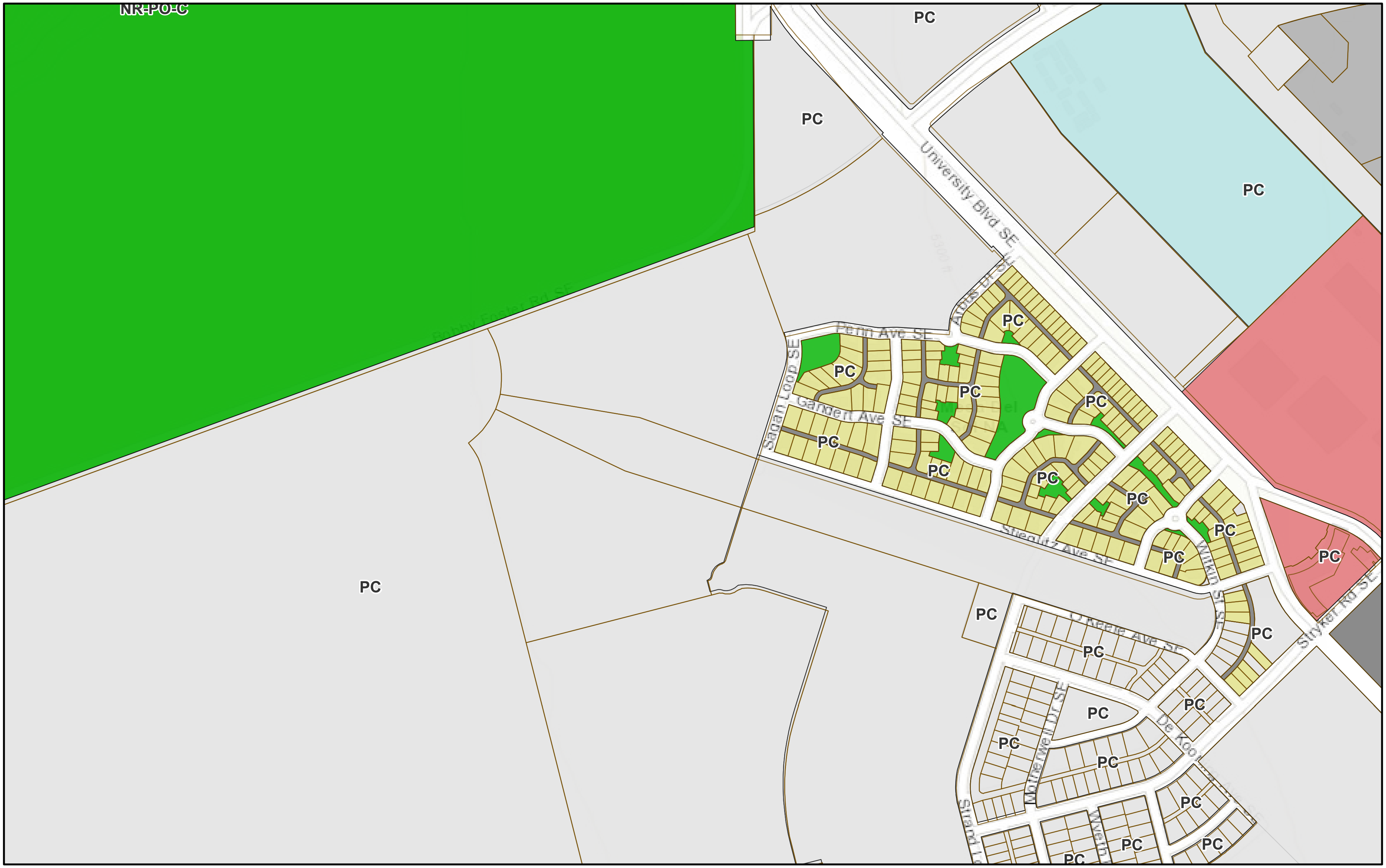
DATE:
MARCH 2021

FIGURE
A

APPENDIX C

Albuquerque, NM
Zoning Map

Montage Units Albuquerque, New Mexico



June 7, 2021

1:9,028

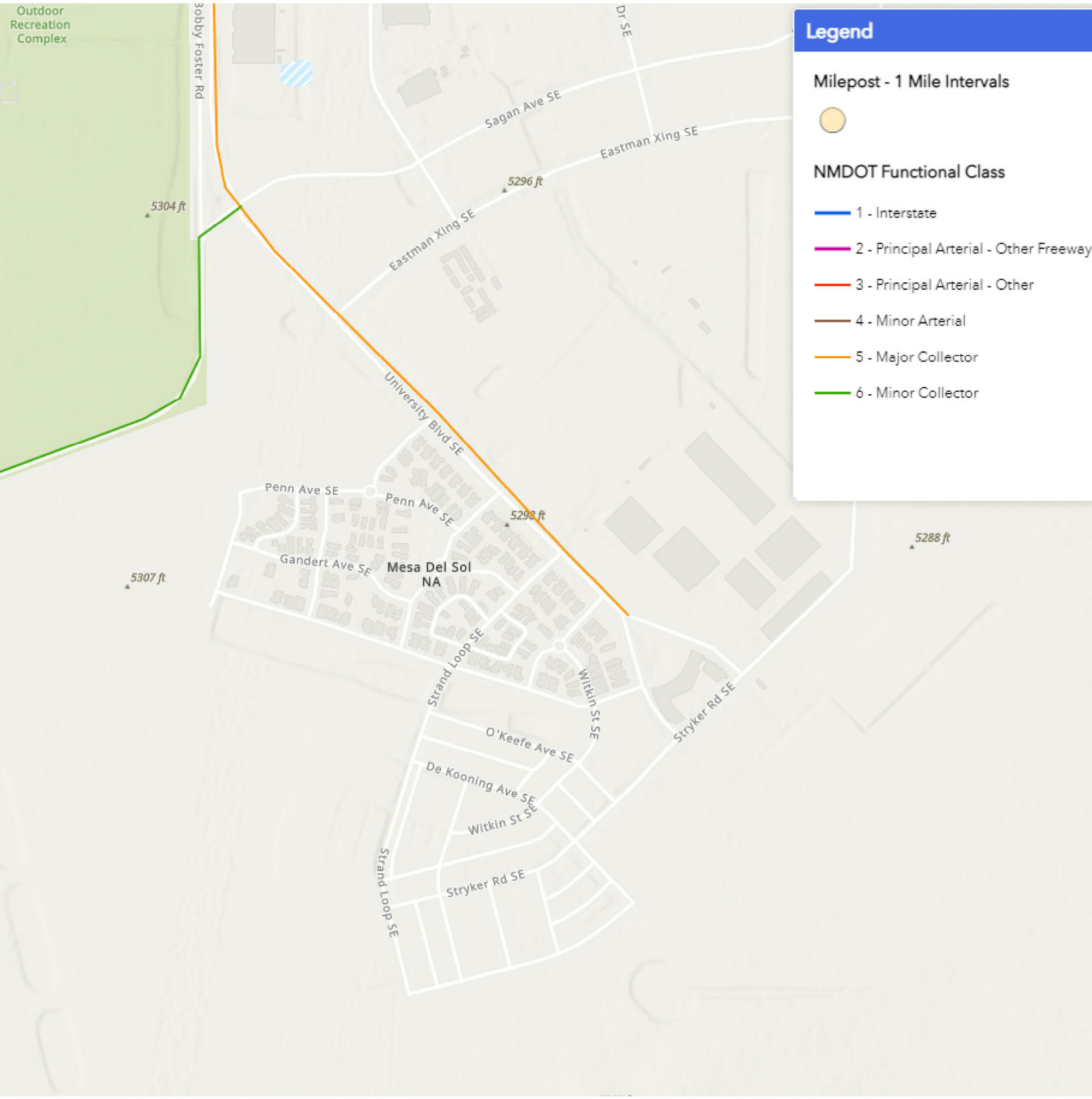
0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

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

APPENDIX D

NMDOT Roadway Functional Class Map


Outdoor Recreation Complex
Bobby Foster Rd
Dr SE
Sagan Ave SE
Eastman Xing SE
Eastman Xing SE
5296 ft
5304 ft
University Blvd SE
Penn Ave SE
Penn Ave SE
5298 ft
5288 ft
5307 ft
Gandert Ave SE
Mesa Del Sol NA
Strand Loop SE
Witkin St SE
Stryker Rd SE
O'Keefe Ave SE
De Kooning Ave SE
Witkin St SE
Strand Loop SE
Stryker Rd SE
Legend
Milepost - 1 Mile Intervals
NMDOT Functional Class
1 - Interstate
2 - Principal Arterial - Other Freeway
3 - Principal Arterial - Other
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector

APPENDIX E

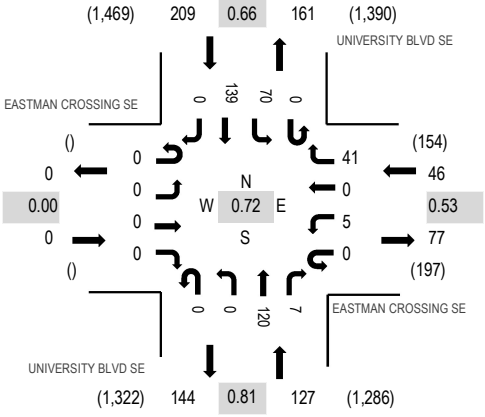
2021 AM and PM
Turning Movement Counts

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

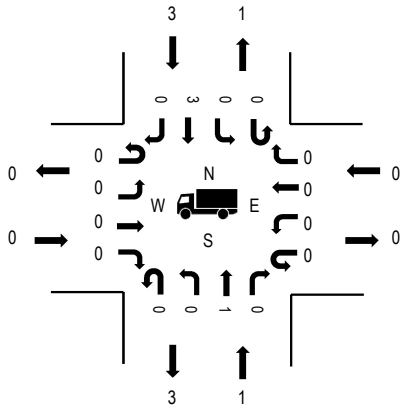
Location: 4 UNIVERSITY BLVD SE & EASTMAN CROSSING SE AM
Date: Wednesday, April 21, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

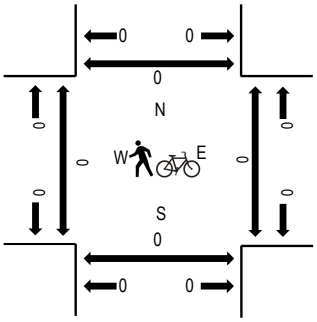
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



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 Eastbound				EASTMAN CROSSING 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	Total	
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	24	28	0	89	317
7:30 AM	0	0	0	0	0	1	0	1	0	0	29	0	0	7	39	0	77	360
7:45 AM	0	0	0	0	0	0	0	0	0	0	25	0	0	6	41	0	72	382
8:00 AM	0	0	0	0	0	2	0	9	0	0	25	2	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	7	33	0	99	273
8:45 AM	0	0	0	0	0	0	0	1	0	0	22	0	0	1	36	0	60	217
9:00 AM	0	0	0	0	0	0	0	0	0	0	24	0	0	1	32	0	57	199
9:15 AM	0	0	0	0	0	0	0	1	0	0	28	0	0	0	28	0	57	199
9:30 AM	0	0	0	0	0	0	0	0	0	0	21	0	0	1	21	0	43	187
9:45 AM	0	0	0	0	0	1	0	0	0	0	25	0	0	0	16	0	42	182
10:00 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	2	29	0	57	191
10:15 AM	0	0	0	0	0	0	0	2	0	0	25	1	0	0	17	0	45	182
10:30 AM	0	0	0	0	0	0	0	2	0	0	18	2	0	0	16	0	38	189
10:45 AM	0	0	0	0	0	0	0	2	0	0	26	0	0	1	22	0	51	221
11:00 AM	0	0	0	0	0	0	0	0	0	0	24	1	0	0	23	0	48	254
11:15 AM	0	0	0	0	0	0	0	1	0	0	18	1	0	1	31	0	52	282
11:30 AM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	44	0	70	297
11:45 AM	0	0	0	0	0	2	0	0	0	0	32	2	0	1	47	0	84	289
12:00 PM	0	0	0	0	0	1	0	1	0	0	27	0	0	1	46	0	76	264
12:15 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	3	34	0	67	243
12:30 PM	0	0	0	0	0	1	0	4	0	0	27	0	0	1	29	0	62	239
12:45 PM	0	0	0	0	0	0	0	1	0	0	25	0	0	0	33	0	59	218
1:00 PM	0	0	0	0	0	0	0	0	0	0	20	1	0	1	33	0	55	209
1:15 PM	0	0	0	0	0	0	0	0	0	0	32	0	0	1	30	0	63	200
1:30 PM	0	0	0	0	0	0	0	0	0	0	30	0	0	1	10	0	41	185

1:45 PM	0	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	0	1	0	0	21	0	0	2	22	0	46	196
2:15 PM	0	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	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	0	1	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	Total		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

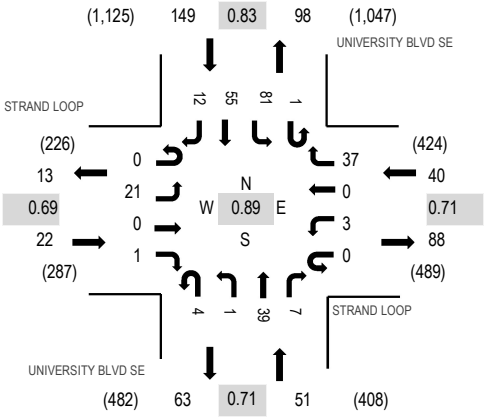
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	2	0	2
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	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

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

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

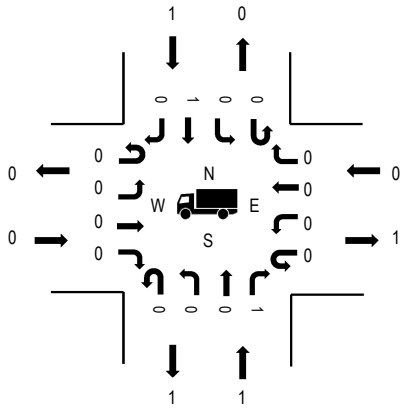
Motorized Vehicles



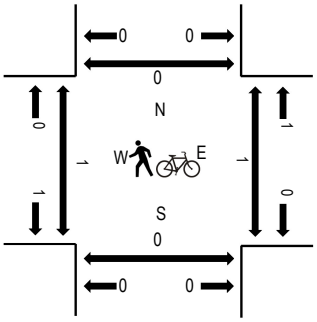
Note: Total study counts contained in parentheses.

	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

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	STRAND LOOP Eastbound				STRAND LOOP 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	Total	
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	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	1	1
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	1	0	2	3	8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1	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	0	1	0	1	8:45 AM	0	0	0	0	0
9:00 AM	0	0	1	0	1	9:00 AM	1	2	0	0	3
9:15 AM	0	0	0	0	0	9:15 AM	1	0	0	0	1
9:30 AM	0	0	0	0	0	9:30 AM	0	0	0	0	0
9:45 AM	0	1	0	1	2	9:45 AM	1	0	0	0	1
10:00 AM	0	1	2	0	3	10:00 AM	2	1	0	0	3
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	1	0	0	0	1
10:45 AM	0	0	0	1	1	10:45 AM	2	0	0	0	2
11:00 AM	0	0	0	0	0	11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	1	1	11:15 AM	0	0	0	0	0
11:30 AM	0	0	1	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	1	0	1	0	2
12:30 PM	0	1	0	1	2	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	0	0	1:15 PM	1	0	0	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	1	0	1
1:45 PM	0	0	0	1	1	1:45 PM	2	0	1	0	3
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	1	0	0	0	1
2:30 PM	0	0	0	0	0	2:30 PM	2	0	0	0	2
2:45 PM	0	0	0	0	0	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

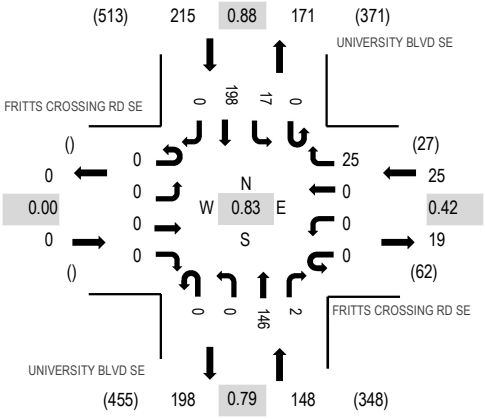
3:30 PM	0	0	0	0	0	3:30 PM	1	0	0	0	1
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	1	1
4:00 PM	0	0	0	0	0	4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	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

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

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

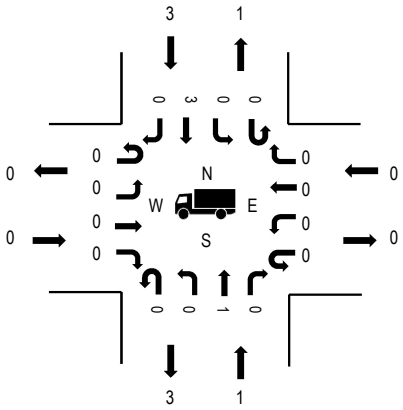
Motorized Vehicles



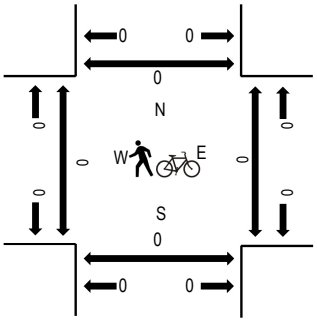
Note: Total study counts contained in parentheses.

	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

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

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

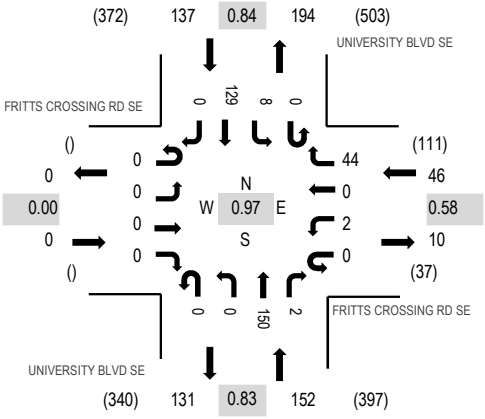
9:15 AM	0	0	0	0	0	9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	1	1	9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0	9:45 AM	0	0	0	0	0
Count Total	0	3	0	4	7	Count Total	0	0	0	0	0
Peak Hour	0	1	0	3	4	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

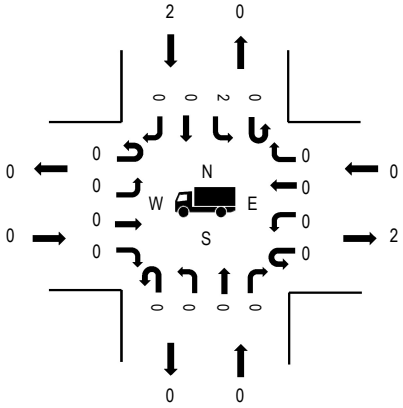
Location: 8 UNIVERSITY BLVD SE & FRITTS CROSSING RD SE PM
Date: Wednesday, April 21, 2021
Peak Hour: 03:00 PM - 04:00 PM
Peak 15-Minutes: 03:15 PM - 03:30 PM

Peak Hour

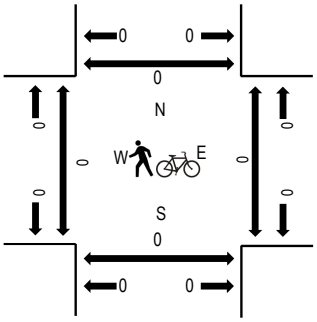
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



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 Eastbound				FRITTS CROSSING RD 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	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	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	1	1	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	1	1	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	1	1	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	1	2	4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1	4:45 PM	0	1	0	0	1
5:00 PM	0	0	1	0	1	5:00 PM	0	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 F

NIA for the Proposed Charter School

HUITT-ZOLLARS

HUITT-ZOLLARS, INC. • 5822 Cromo Dr • Suite 210 • El Paso, TX 79912-5502 • 915.587.4339 phone • 915.587.5247 fax • huitt-zollars.com

Memorandum

DRAFT

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: June 15, 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 will be located on the south side of Bobby Foster Rd. and west of University Blvd. 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 Diekemborn 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 Diekemborn Dr with two connections (one entrance and one exit) to Diekemborn 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.

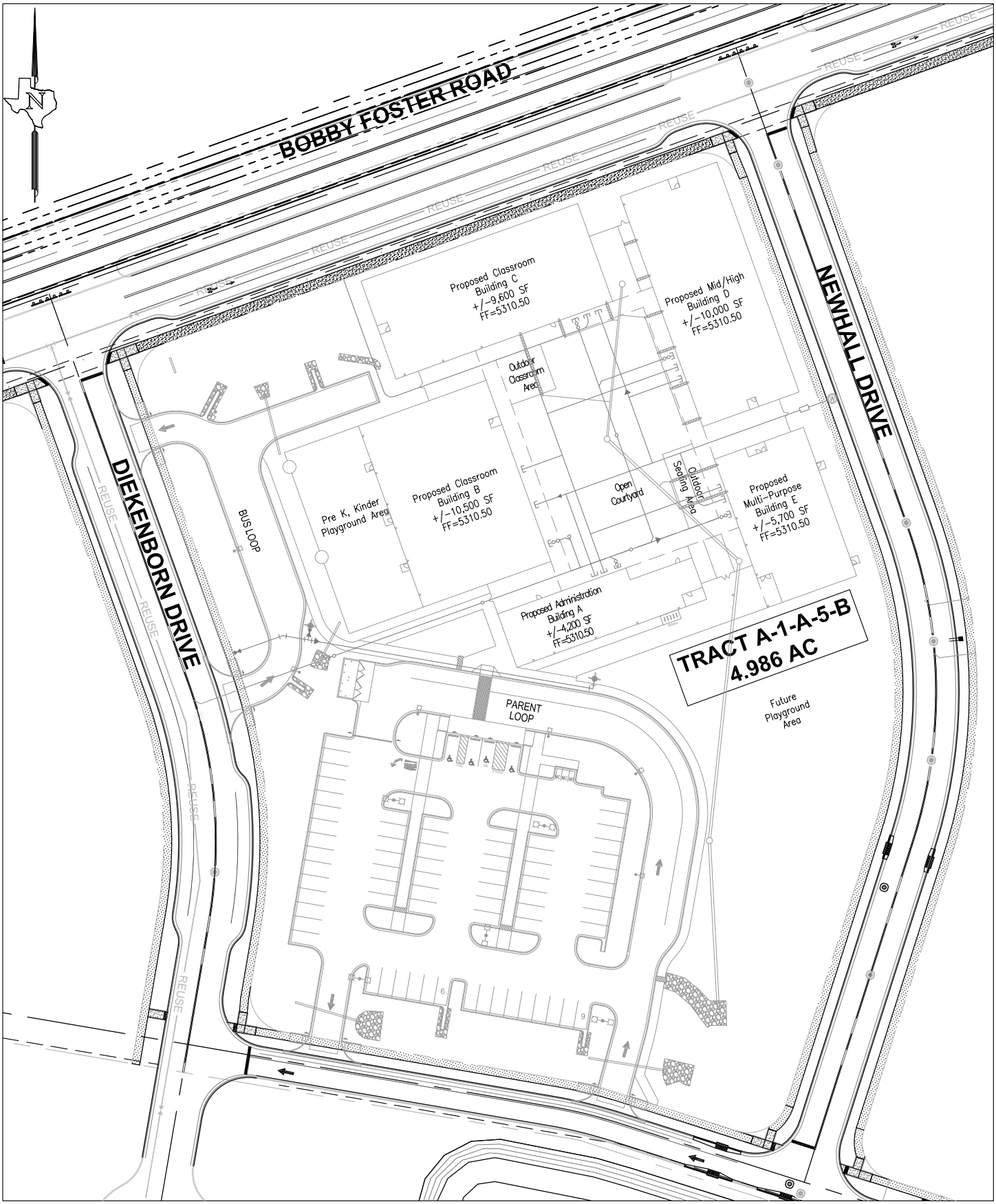


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Figure Number
2

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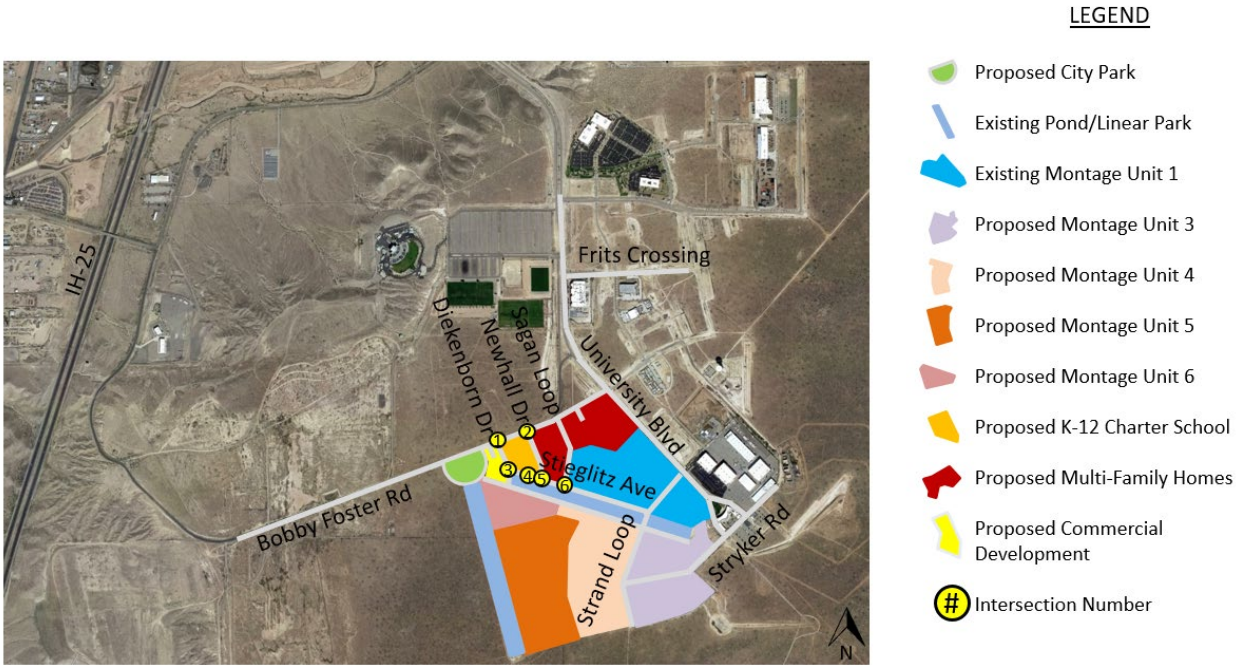


Figure 1 - Study Area

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 Diekenborn Dr	Unsignalized
2	Bobby Foster Rd and Newhall Dr	Unsignalized
3	Stieglitz Ave and Diekenborn 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 Diekenborn Dr. Northbound Diekenborn 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 Steiglitz Ave and Diekenborn Dr. It includes one stop controlled westbound shared left-right-turn lane on Steiglitz Ave. Northbound Diekenborn Dr includes a through lane. Southbound Diekenborn Dr includes one through lane.

Intersection 4 is an unsignalized three-leg intersection at Steiglitz 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 Steiglitz 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 Steiglitz Ave and Newhall Dr. It includes one stop controlled southbound shared left-right turn lane on Newhall Dr. Westbound Steiglitz Ave includes a shared through-right-turn lane. Since Steiglitz Ave is a one-way roadway, eastbound Steiglitz Ave only has one receiving lane each.

Intersection 6 is an unsignalized four-leg intersection at Steiglitz Ave and Sagan Loop. It includes one stop controlled westbound shared left-through-right-turn lane on Steiglitz Ave. Eastbound Steiglitz 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 development is 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

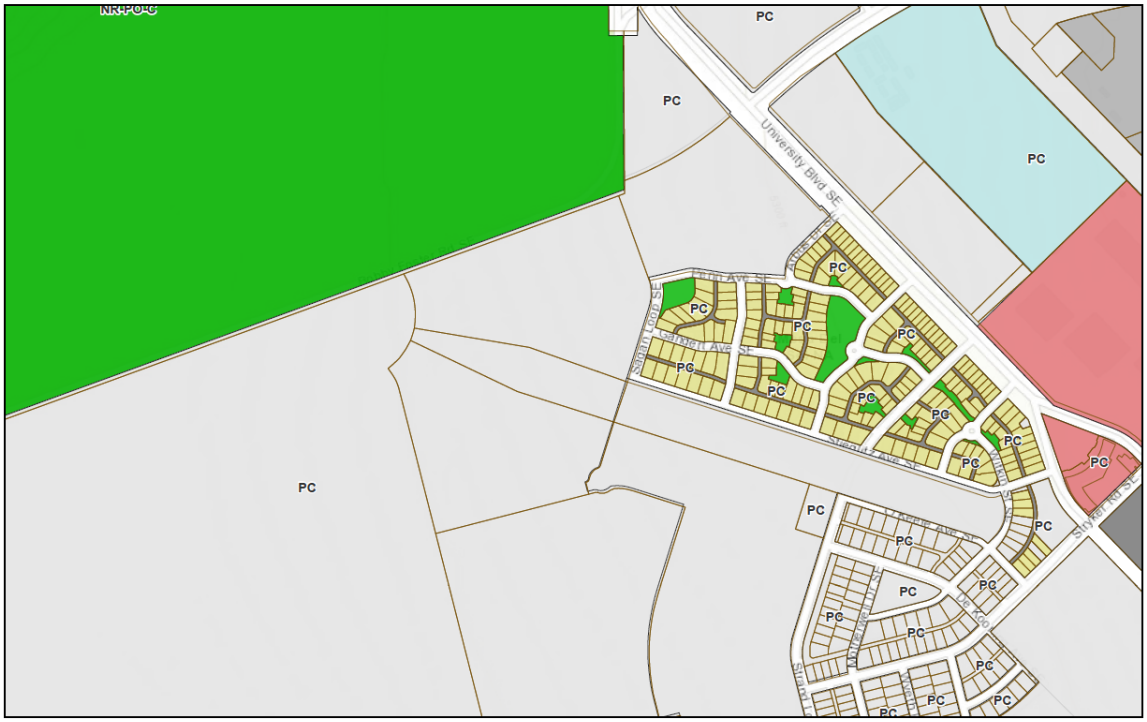


Figure 3 - Study Area Zoning Map

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.

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 (**Figure 2**) was not exceeded by the queue expected during the highest peak hour. The expected queue length 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 of 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

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 as 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 6th 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 as 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 as 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 Stieglitz 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**.

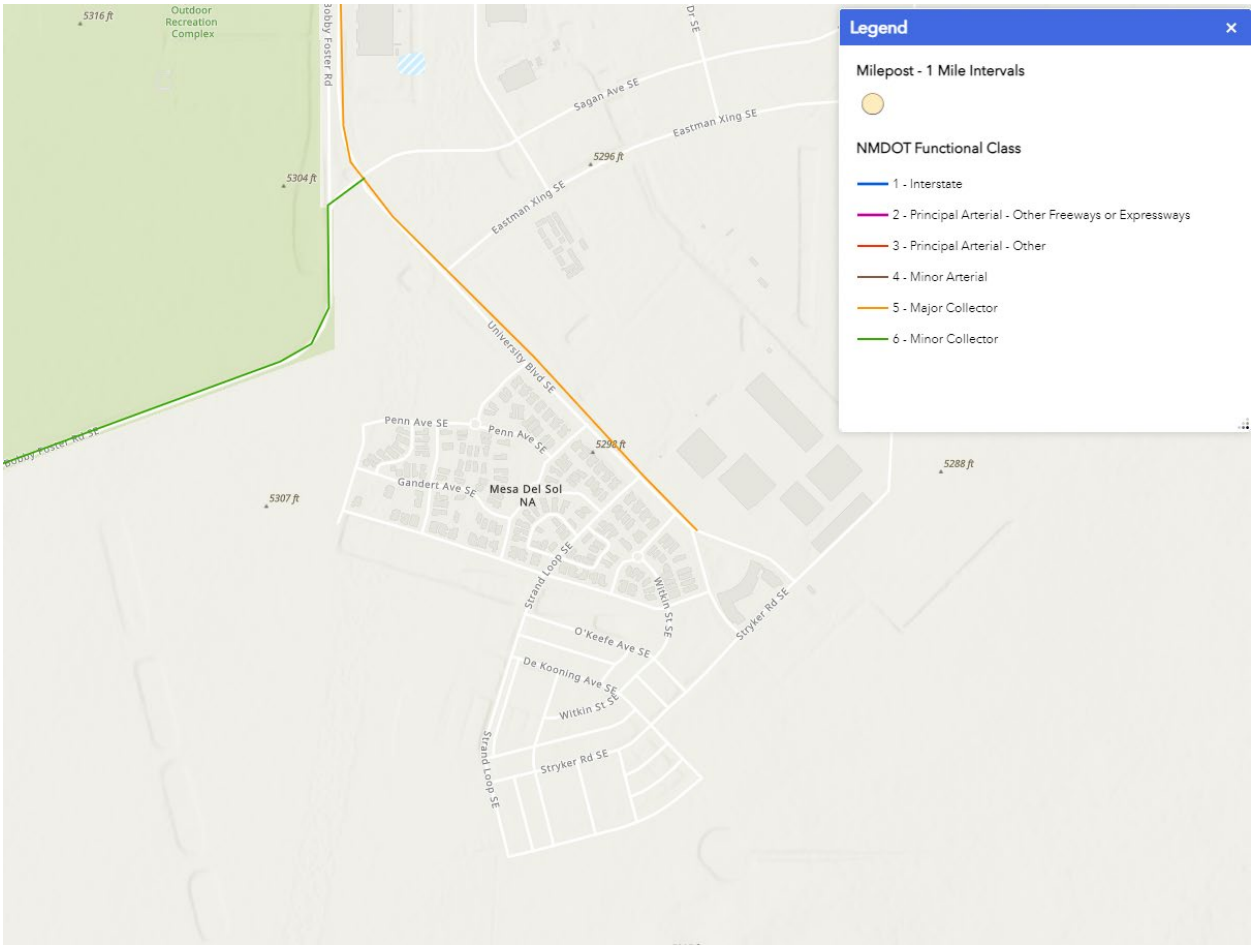


Figure 4 – NMDOT Roadway Functional Class Map of the Project Area

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
Diekenborn 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.

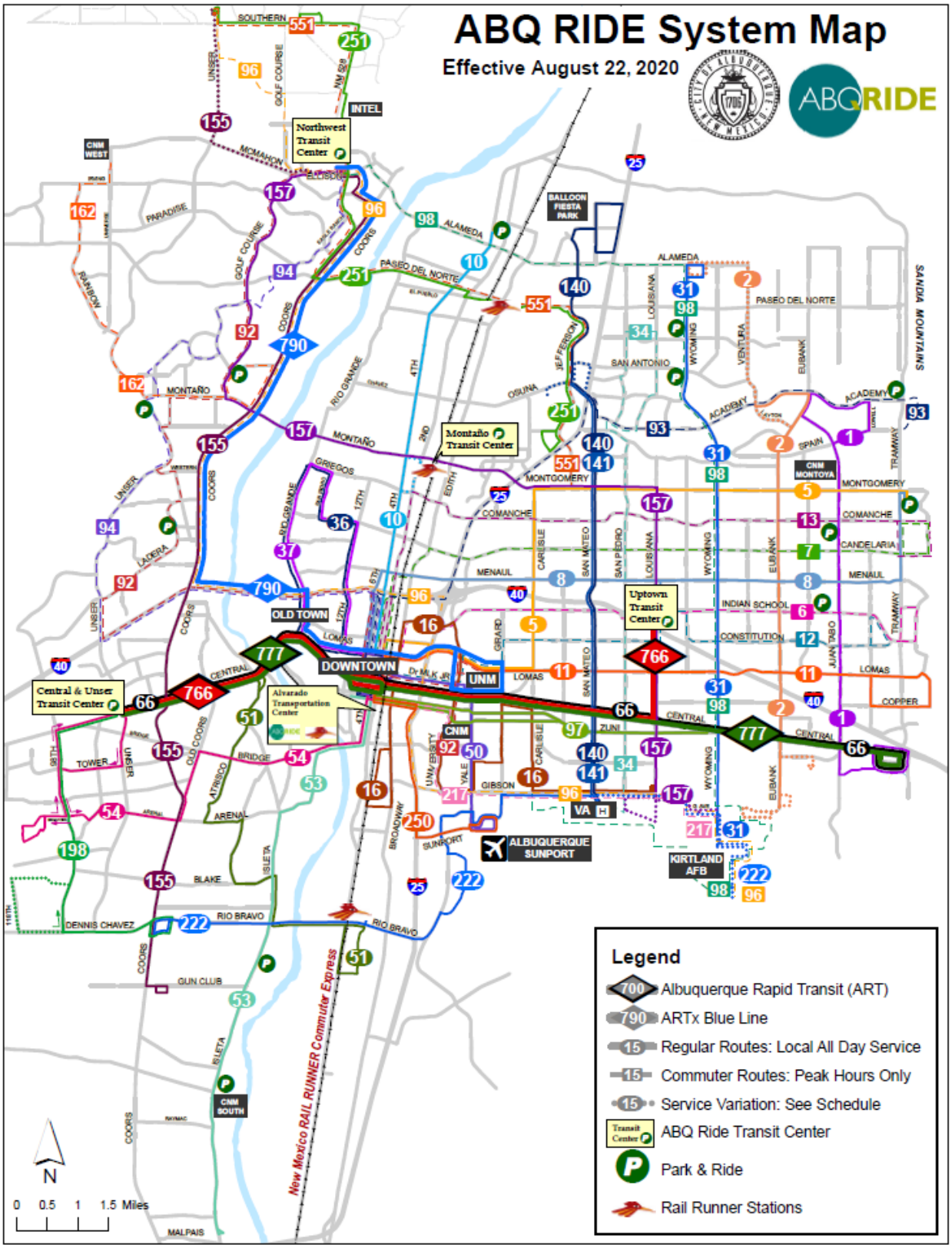


Figure 5 – ABQ Ride System Map

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*, 10th *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 facilty 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 facilty 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 facilty 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 facilty 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, i*nternal capture occurs at a site when two or more land uses have a possibility of interacting with each other, particullarly 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 a the 0.25 mile radius in the project area from the charter school, the commercial development, and the Albuquerque studios.

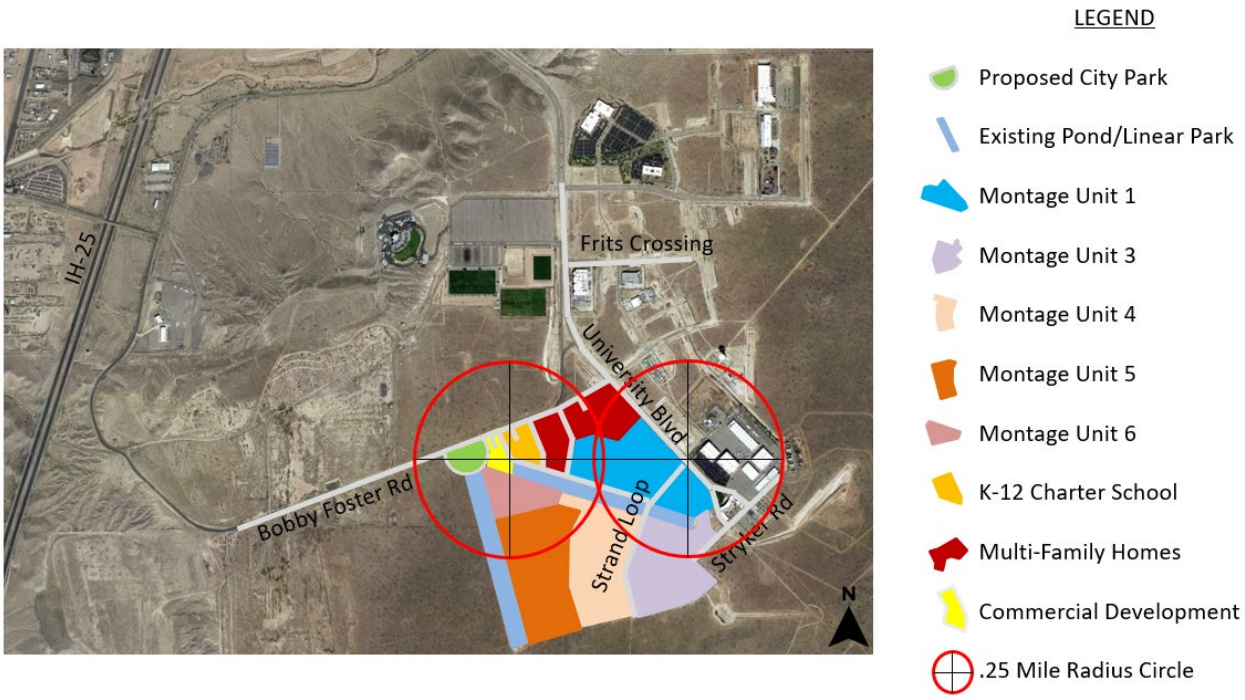


Figure 6 – 0.25 Mile Radius Site Map

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

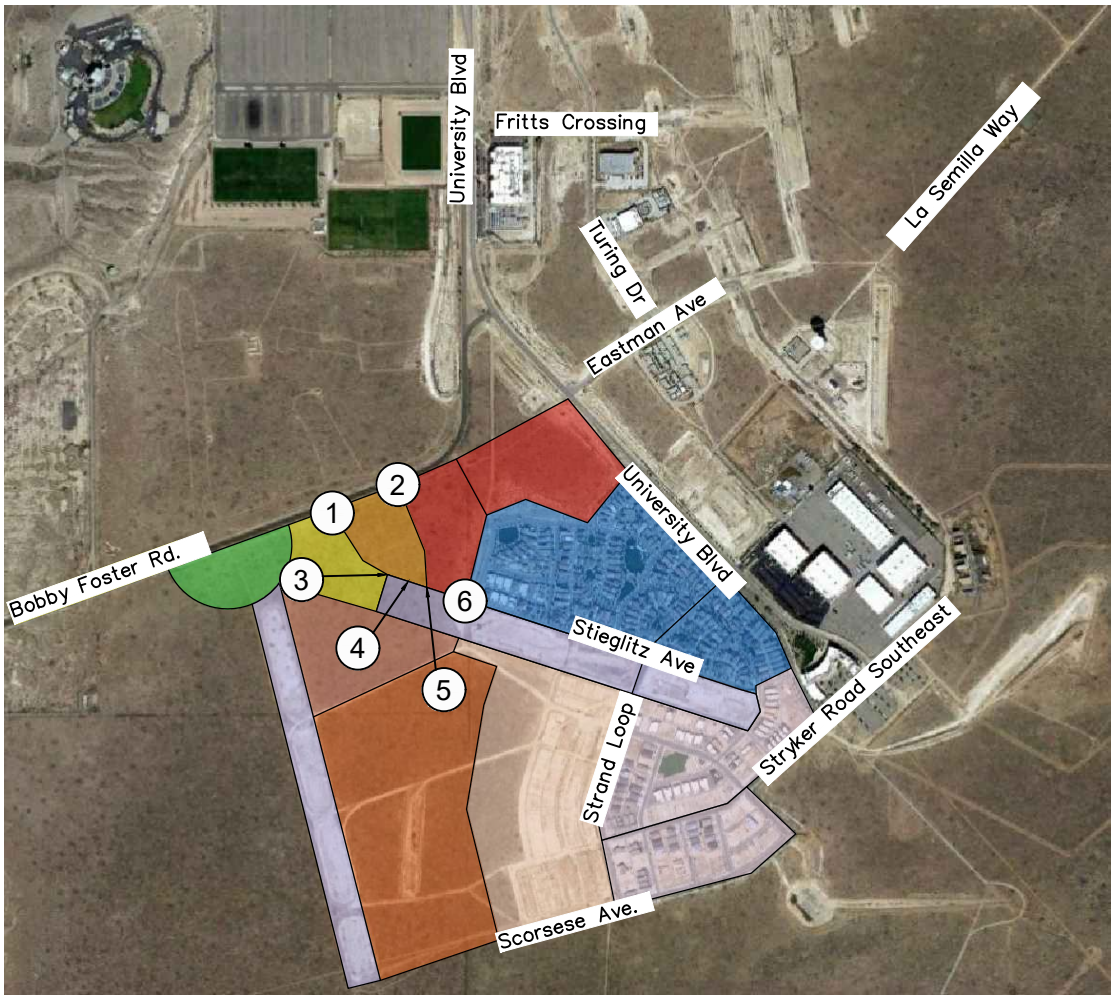
Traffic generated by the developments under had to be distributed and assigned to the study area intersections so that the analyses could be conducted. The distribution of the generated traffic through the study area intersections was determined by considering factors such as the existing and proposed 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, Diekenborn 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 pathmoved .
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.



1 19% (8)	19% (8) 2	3 19% (8) 81% (35)	4 100% (67)	5 100% (67)
19% (13) 6 21% (14) 60% (40)				

Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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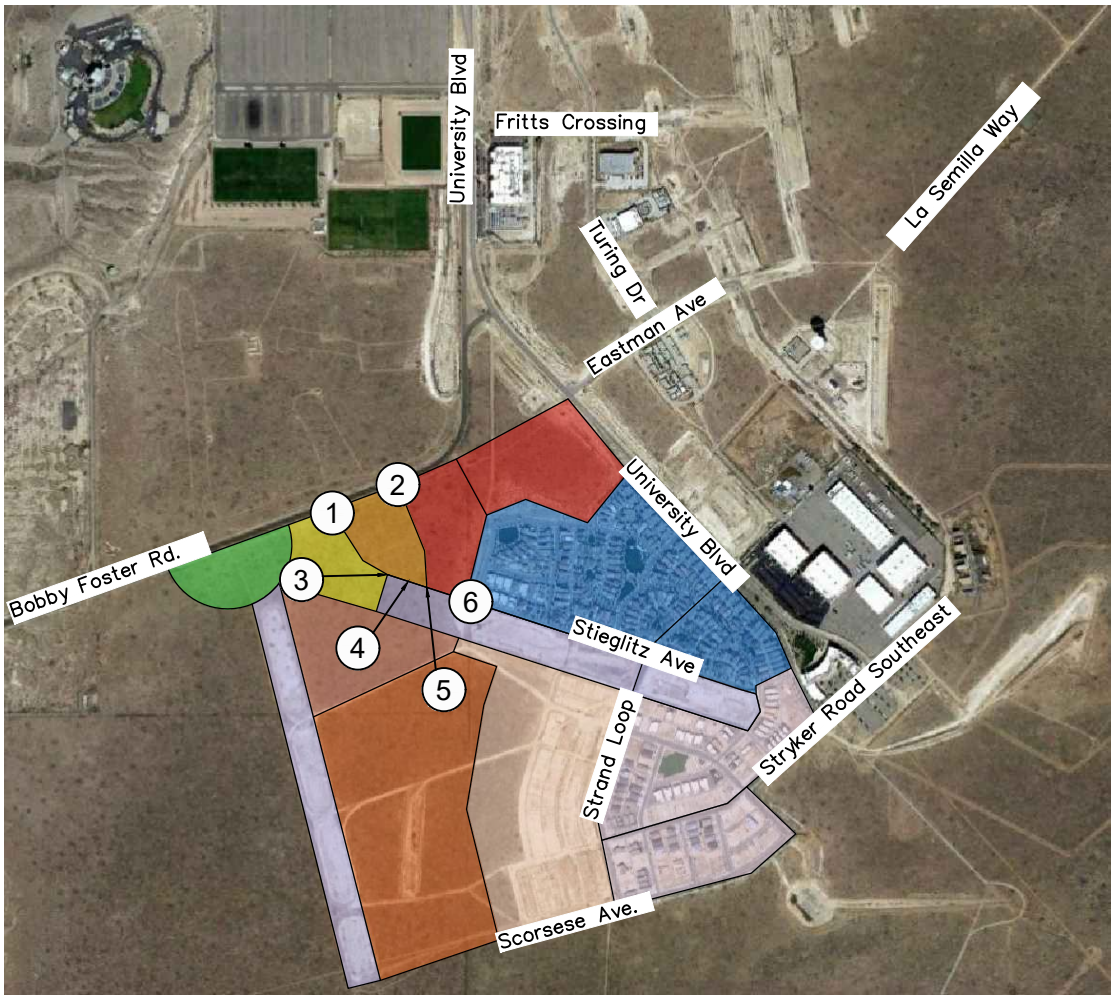

1 — 19% (3)	19% (3) — 2	3 — 19% (3), 81% (11)	4 — 100% (10)	5 — 100% (10)
19% (2), 6, 21% (2), 60% (6)				

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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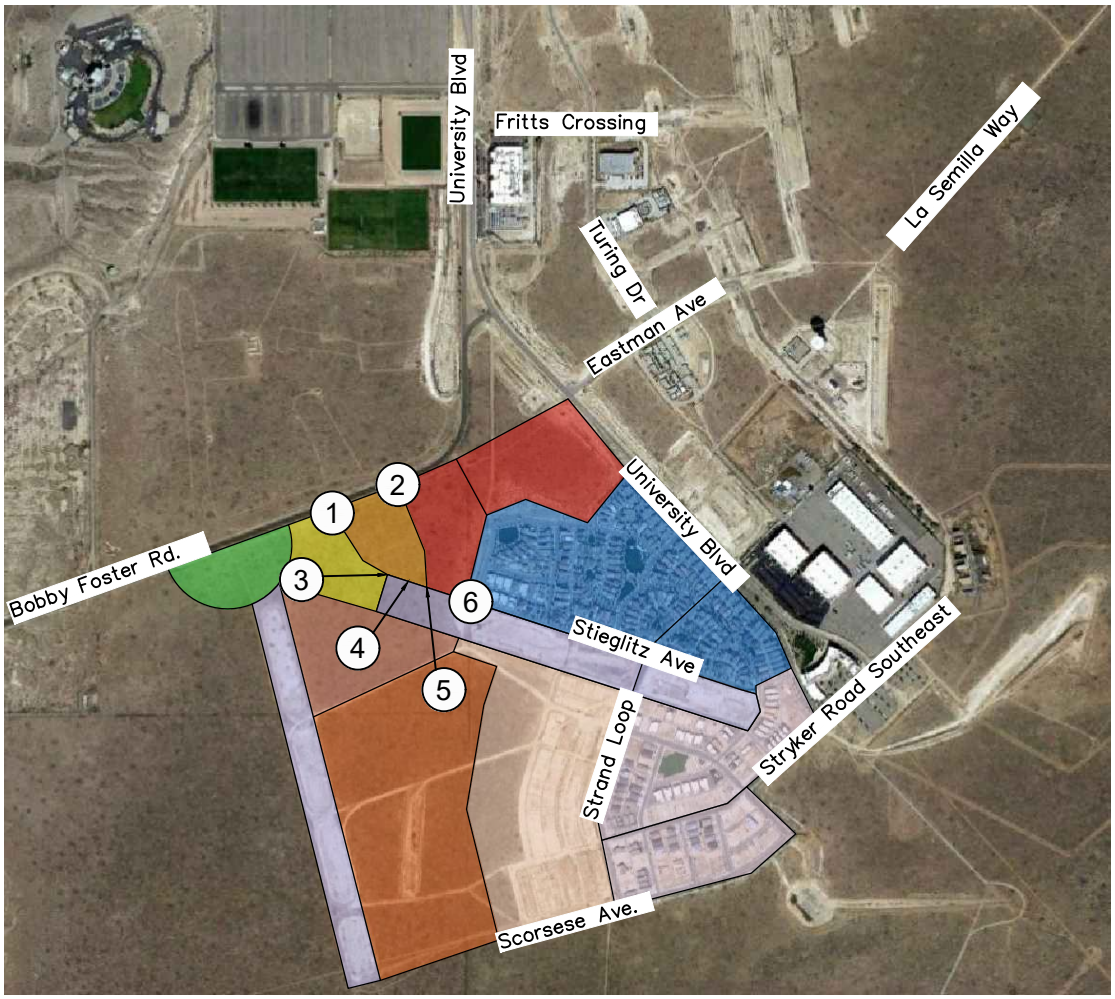
4.4.2 Commercial Development

The following factors affected the trip distribution:

1. Assumed all roadway connections have been completed. This includes Sagan Loop, Diekenborn 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 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

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.



1 — 19% (13); 19% (8)	19% (8) 2 19% (13)	19% (13) 3 21% (14); 19% (8)	4 21% (14)	5 21% (14)
6 21% (14)				

Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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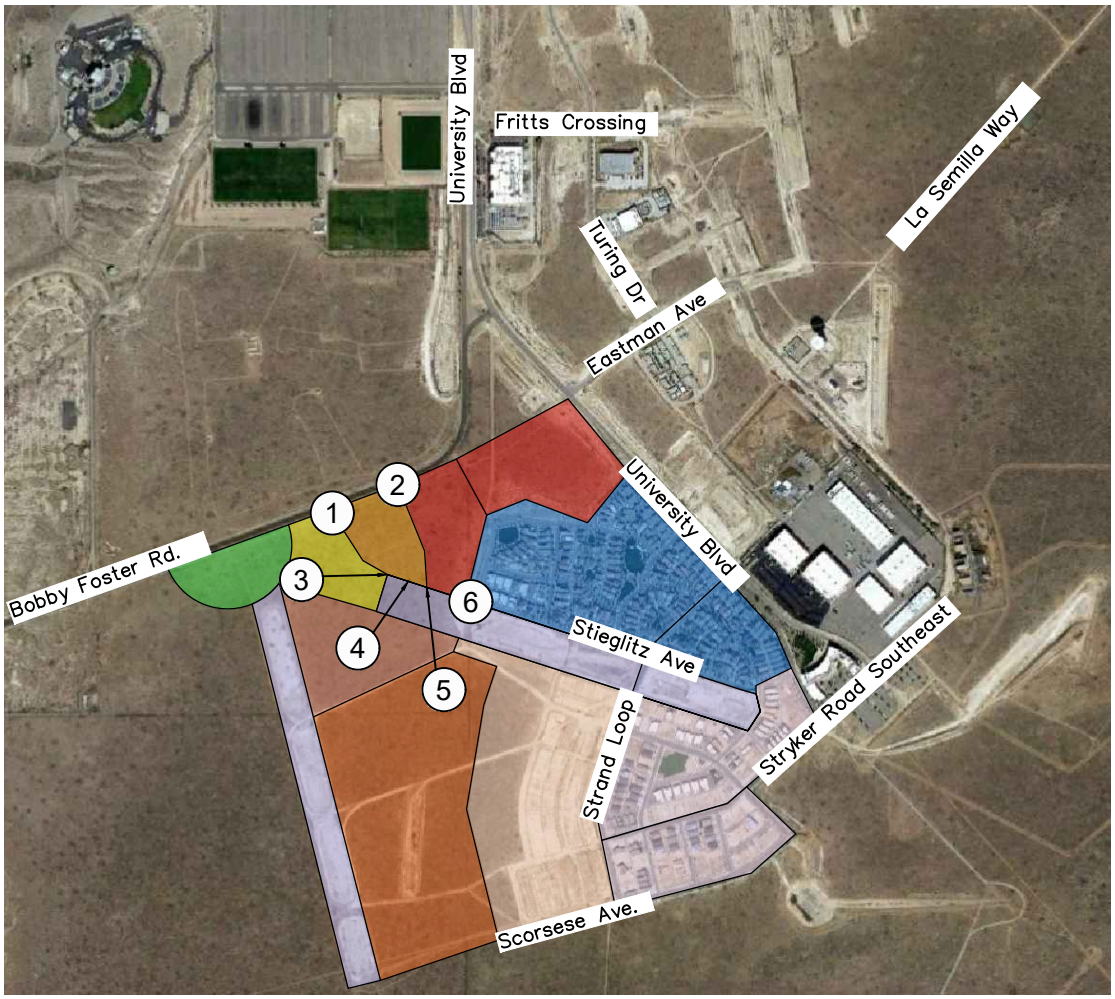
H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 9.DWG



1: 19% (8) / 19% (9)	19% (9) 2: 19% (8)	19% (8) 3: 21% (9) / 19% (9)	4: 21% (9)	5: 21% (9)
6: 21% (9)				

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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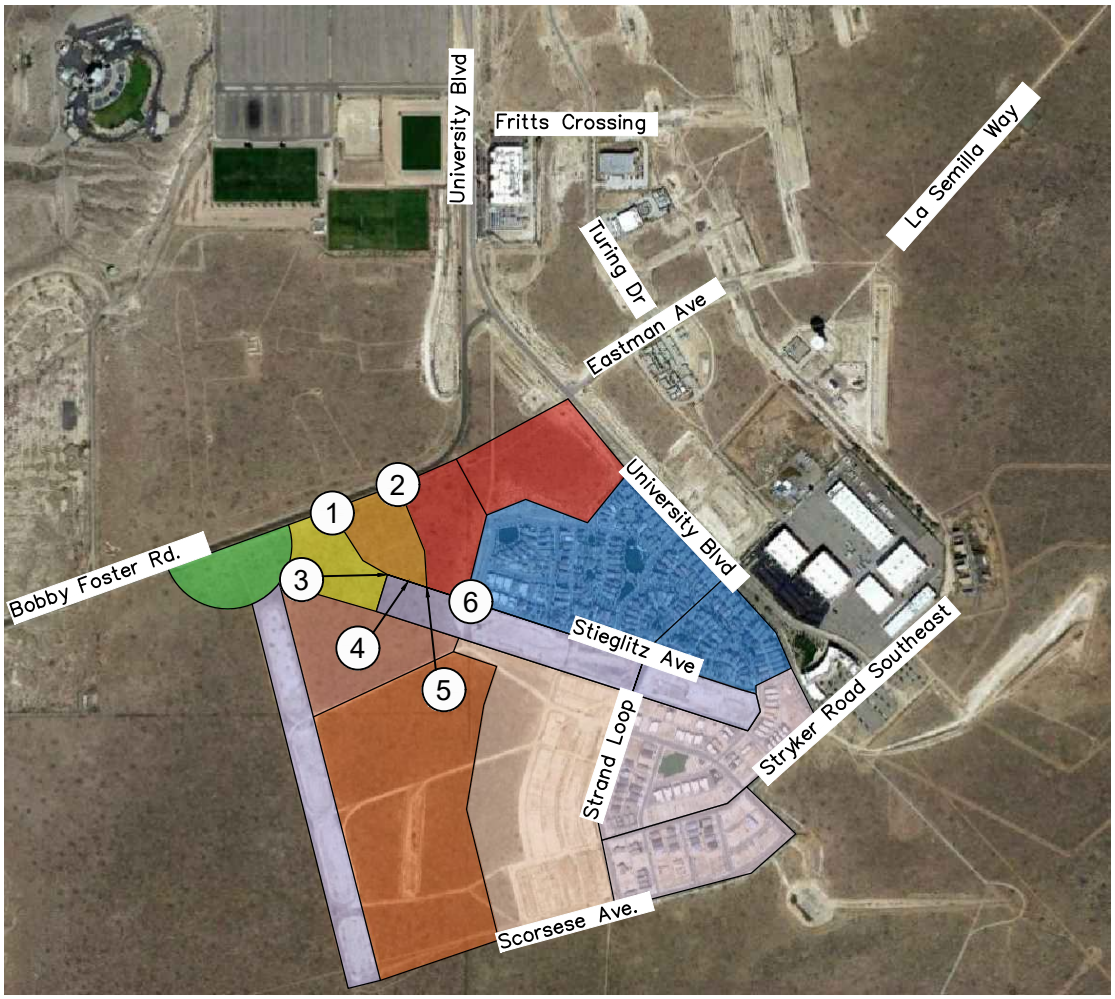
H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 10.DWG

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, Diekenborn 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.



1	2	3	4	5
6 (25% (5), 25% (15))				

Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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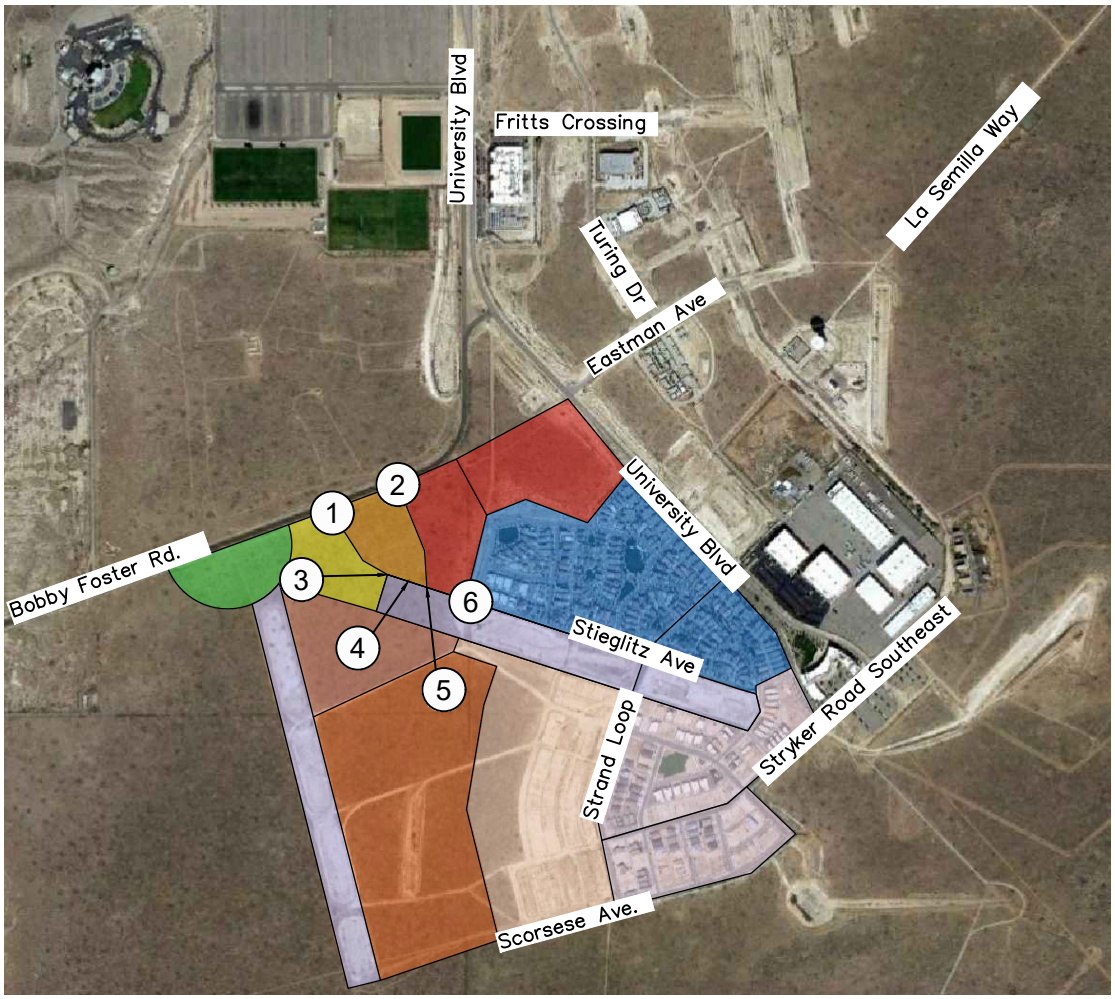
Neighborhood Impact Analysis
Montage Unit 1

Figure Number 11

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 11.DWG



1	2	3	4	5
6 (25% (17) / 25% (10))				

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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Figure Number 12

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 12.DWG

4.4.4 Montage Unit 3 & 4

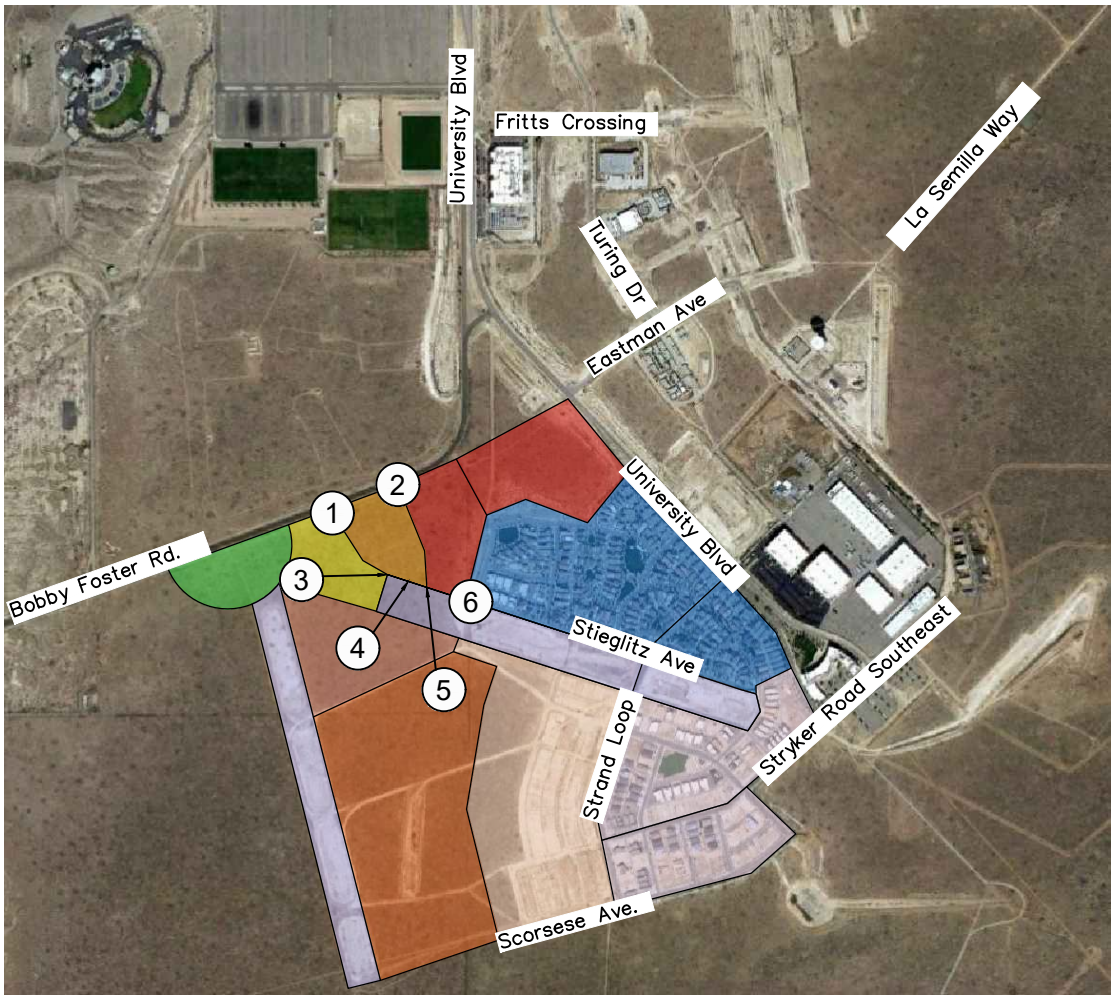
Since the remaining trips from Montage Unit 3 and 4 are expected to exit through University Blvd through the shortest path, Montage Unit 3 and 4 will not affect the NIA study intersections apart from the trips already mentioned in Sections 4.4.1 and 4.4.2.

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, Diekenborn 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.



50% (49) → 1 ← 25% (8), 25% (8)	50% (49) → 2 ← 50% (16)	25% (8) → 3	4	5
6				

Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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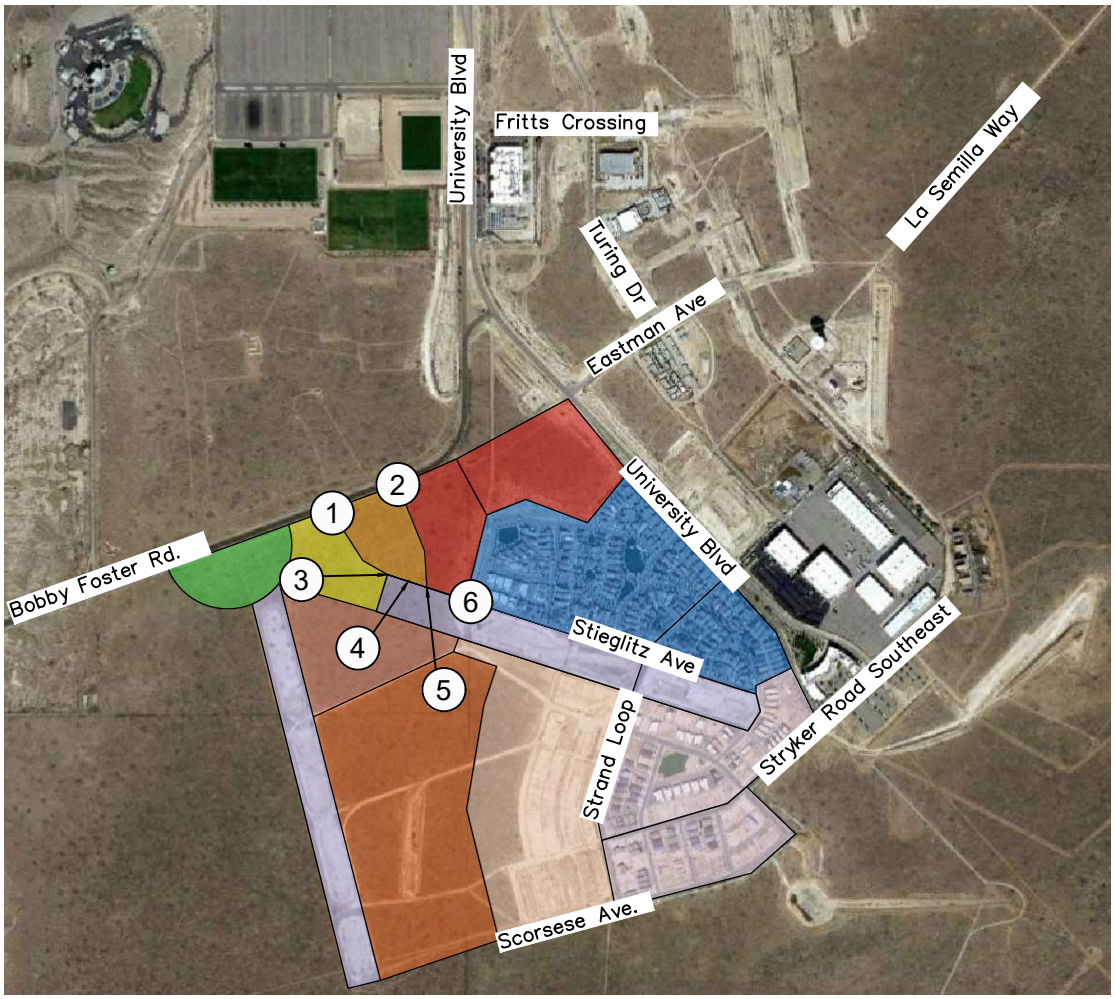
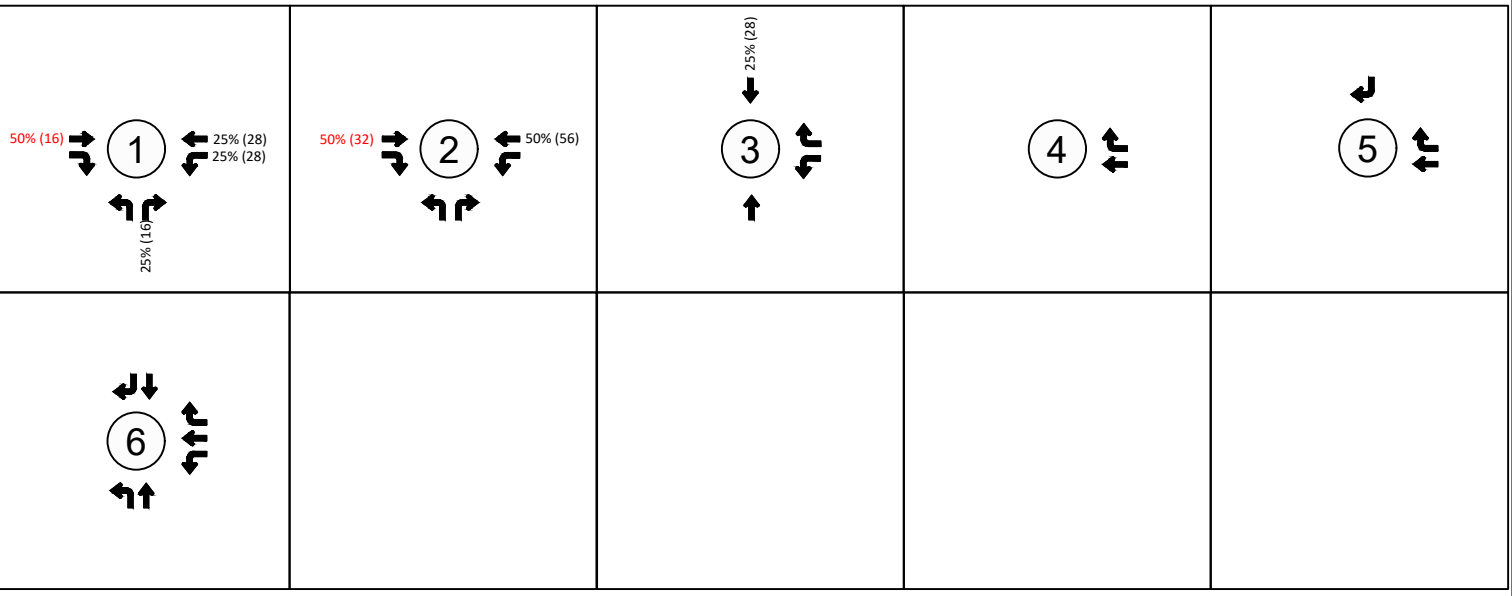
Figure Number 13

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 13.DWG





Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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Figure Number 14

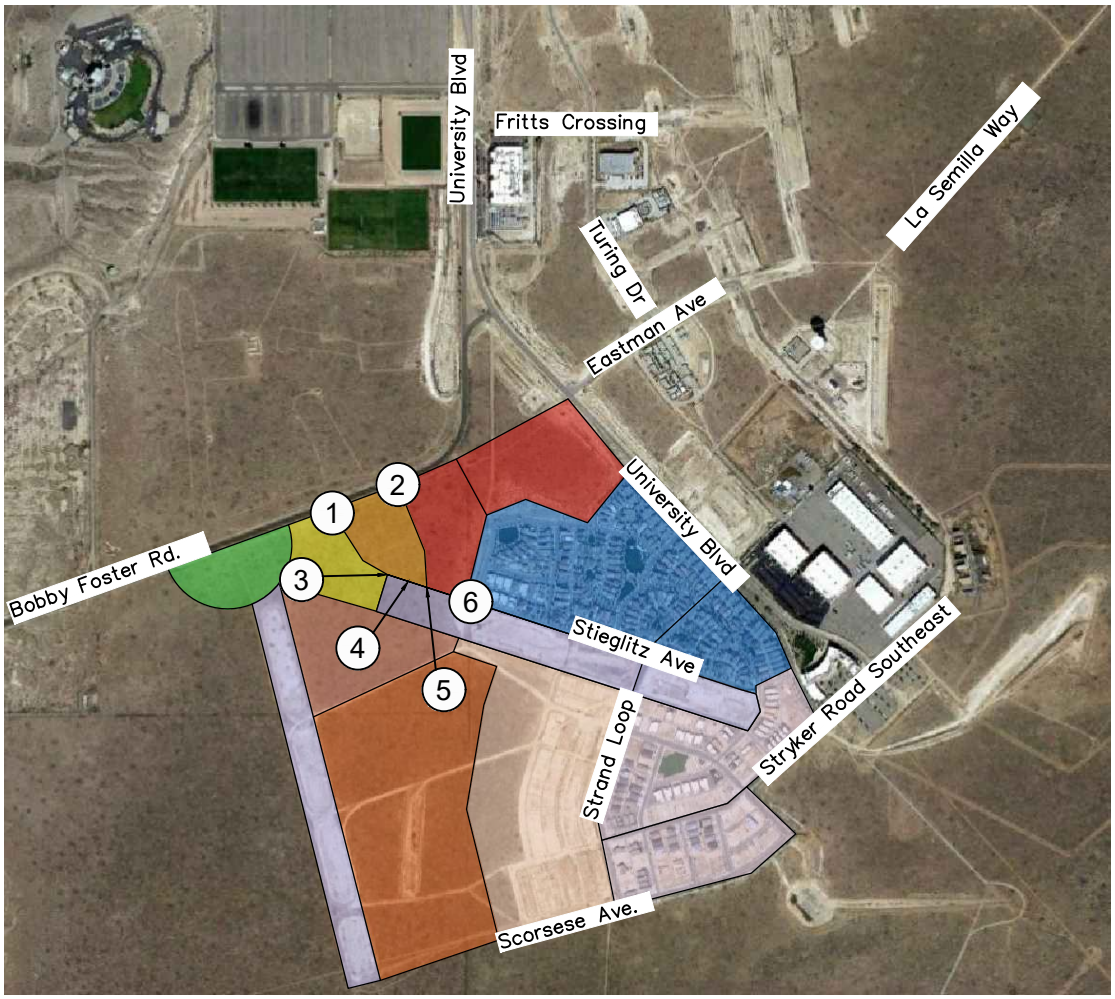
H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 14.DWG

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, Diekenborn 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.



60% (26) 1 100% (14)	60% (26) 2 100% (14)	3	4	5
6				

Legend

(#) Intersection number

AM Entering = Distribution (Generated Trips)

AM Exiting = Distribution (Generated Trips)

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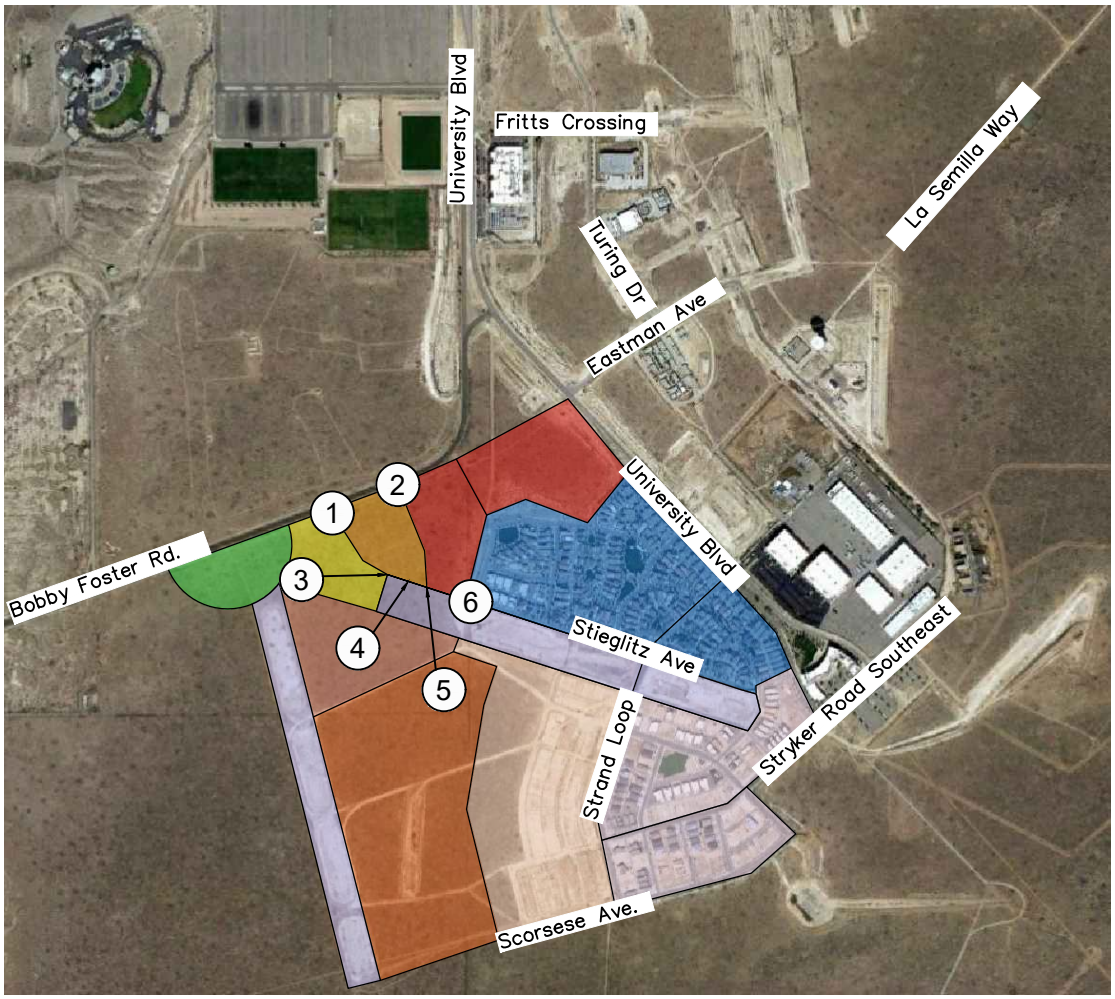
Figure Number 15

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 15.DWG



50% (14) → 1 ← 30% (14), 30% (14); ↓ 50% (14)	100% (28) → 2 ← 60% (28)	3	4	5
6				

Legend

(#) Intersection number

PM Entering = Distribution (Generated Trips)

PM Exiting = Distribution (Generated Trips)

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Figure Number 16

H:\PROJ\MARKETING\PROPOSAL\RIO RANCHO OFFICE\MONTAGE UNITS TIA\05 DESIGN\3 TRANSPORTATION\NIA TECH MEMO\CAD\FIGURE 16.DWG

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 & Diekenborn Dr	AM PHV	-	-	-	21	22	-	0	-	16	-	74	0
		AM PHF	-	-	-	0.59	0.59	-	0.00	-	0.59	-	0.59	0.00
		PM PHV	-	-	-	50	42	-	0	-	41	-	30	0
		PM PHF	-	-	-	0.59	0.59	-	0.00	-	0.59	-	0.59	0.00
2	Bobby Foster Rd & Newhall Dr	AM PHV	-	-	-	0	43	-	0	-	0	-	90	0
		AM PHF	-	-	-	0.00	0.59	-	0.00	-	0.00	-	0.59	0.00
		PM PHV	-	-	-	0	92	-	0	-	0	-	74	0
		PM PHF	-	-	-	0.00	0.59	-	0.00	-	0.00	-	0.59	0.00
3	Stieglitz Ave & Diekenborn 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 Driveway	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 & Segan 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	-	-	-	-

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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 & Diekenborn 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 & Diekenborn 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

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 for 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

Since the length from the drop off point in the front of the school to Stieglitz Ave is 430 ft and assuming 25 ft per vehicle, once the queue exceeds 17 vehicles, the network streets will start to become affected by the queue.

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 Diekenborn 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 sided 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 pedestrian 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 & Diekenborn Dr	1.34	A	0.74	A
2	Bobby Foster Rd & Newhall Dr	1.66	A	1.66	A
3	Stieglitz Ave & Diekenborn 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

Since no transit routes are existing or planned within the project area, according to ABQ ride no other evaluations were conducted and the project area is found to be consistent.

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 minimum of two vehicles be allowed to drop off at the parent loop. 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.

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 Diekenborn 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 (NIA)

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									
7:30-7:35	No. of cars	1	4	2	1	1	1	1	1		
	Service Times (s)	16	18	15	18	15	30	30	17		
7:35-7:40	No. of cars	1	1	2	1	2					
	Service Times (s)	20	35	17	12	23					
7:40-7:45	No. of cars	1	1	2	1	1					
	Service Times (s)	28	11	31	9	11					
7:45-7:50	No. of cars	2	1	1	1	1	1	1			
	Service Times (s)	18	15	11	8	25	9	12			
7:50-7:55	No. of cars	1	1	2	2	3	1	2	2	1	1
	Service Times (s)	14	16	35	18	24	26	20	35	21	10
7:55-8:00	No. of cars	4	1	2	3	2	3	2			
	Service Times (s)	35	10	29	24	15	40	20			
8:00-8:05	No. of cars	3	2	3	3	2	1	2	3	3	
	Service Times (s)	17	15	15	27	10	11	16	31	28	
8:05-8:10	No. of cars	4	2	1	1	4	2	4			
	Service Times (s)	38	25	10	15	23	23	32			
8:10-8:15	No. of cars	2	2	1	1	1	1	3			
	Service Times (s)	18	14	8	12	15	13	22			

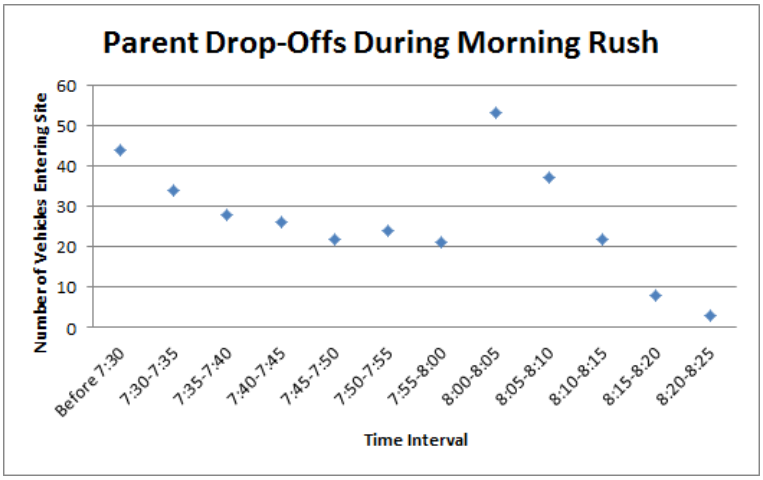


Figure A.1: Data Collected by Nitsch Engineering

Table A.6: Day 2 Drop-Off Times

Time		Service Times									
7:30-7:35	No. of cars	1	1	1	1						
	Service Times (s)	16	8	15	10						
7:35-7:40	No. of cars	1	3	1	1	1					
	Service Times (s)	14	39	5	8	25					
7:40-7:45	No. of cars	1	1	1	2	1	1				
	Service Times (s)	14	25	13	23	22	10				
7:45-7:50	No. of cars	3	2	1	1	2					
	Service Times (s)	46	17	19	8	39					
7:50-7:55	No. of cars	2	3	1	2	3	1				
	Service Times (s)	30	23	28	20	17	12				
7:55-8:00	No. of cars	1	3	2	2	1	2	4	4	3	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	2	2	1	2		
	Service Times (s)	27	15	23	35	17	31	17	8		
8:05-8:10	No. of cars	1	3	3	3	2	4	3	1		
	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									
7:30-7:35	No. of cars	1	3	2	1	1	1			
	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	3			
	Service Times (s)	18	23	52	38	22	20			
7:55-8:00	No. of cars	3	4	4	3	3	4			
	Service Times (s)	20	30	17	23	30	40			
8:00-8:05	No. of cars	3	3	2	2	4	4	3	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		Service Times													
7:30-7:35	No. of cars	1	1	1	2	1	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	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							
	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	4	
	Svc Time(s)	42	13	20	18	20	14	23	10	8	14	5	34	20	
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	3	1	2	1
	Svc Time(s)	15	24	11	9	28	17	13	11	8	22	19	43	19	15
8:10-8:15	No. of cars														
	Svc Time(s)														

APPENDIX B (NIA)

Synchro Reports:
2022 Build Out
AM and PM Peak Hours

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
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

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

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

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 G

Synchro Reports:
2021 Existing Conditions,
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	0.00	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

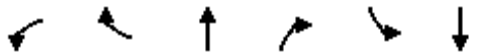
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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	0.00	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)	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	

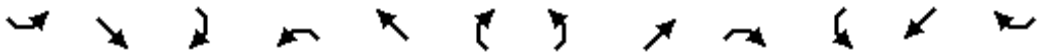
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	60	222	32	335
Volume Left	0	0	32	0
Volume Right	60	0	0	0
cSH	818	1700	1347	1700
Volume to Capacity	0.07	0.13	0.02	0.20
Queue Length 95th (ft)	6	0	2	0
Control Delay (s)	9.8	0.0	7.7	0.0
Lane LOS	A		A	
Approach Delay (s)	9.8	0.0	0.7	
Approach LOS	A			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		

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

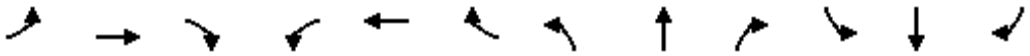
Intersection Summary				
Average Delay	3.9			
Intersection Capacity Utilization	15.5%	ICU Level of Service		A
Analysis Period (min)	15			



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			



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			

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

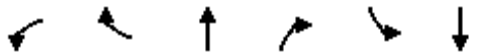
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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	0.00	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	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	

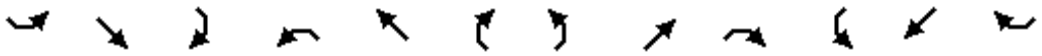
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	49	264	16	220
Volume Left	4	0	16	0
Volume Right	45	4	0	0
cSH	746	1700	1300	1700
Volume to Capacity	0.07	0.16	0.01	0.13
Queue Length 95th (ft)	5	0	1	0
Control Delay (s)	10.2	0.0	7.8	0.0
Lane LOS	B		A	
Approach Delay (s)	10.2	0.0	0.5	
Approach LOS	B			

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

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

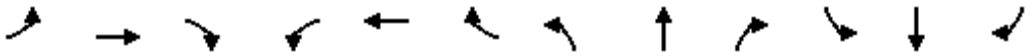
Intersection Summary				
Average Delay	6.5			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



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			



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 H

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		

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		

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

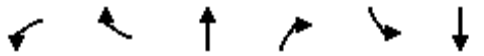
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.05	0.00	0.02
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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						
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	

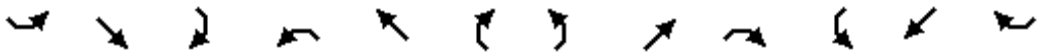
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	64	240	35	361
Volume Left	0	0	35	0
Volume Right	64	0	0	0
cSH	799	1700	1327	1700
Volume to Capacity	0.08	0.14	0.03	0.21
Queue Length 95th (ft)	7	0	2	0
Control Delay (s)	9.9	0.0	7.8	0.0
Lane LOS	A		A	
Approach Delay (s)	9.9	0.0	0.7	
Approach LOS	A			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

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

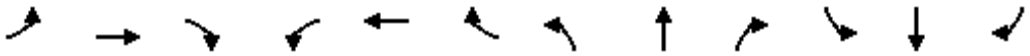
Intersection Summary				
Average Delay	4.0			
Intersection Capacity Utilization	15.9%	ICU Level of Service		A
Analysis Period (min)	15			



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	
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)	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			



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

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	0.00	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	

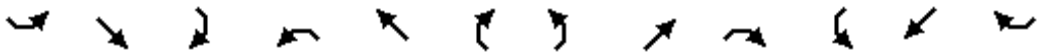
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	53	284	18	239
Volume Left	4	0	18	0
Volume Right	49	4	0	0
cSH	726	1700	1278	1700
Volume to Capacity	0.07	0.17	0.01	0.14
Queue Length 95th (ft)	6	0	1	0
Control Delay (s)	10.3	0.0	7.9	0.0
Lane LOS	B		A	
Approach Delay (s)	10.3	0.0	0.6	
Approach LOS	B			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	22.2%	ICU Level of Service	A
Analysis Period (min)	15		

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

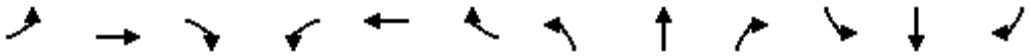
Intersection Summary				
Average Delay	6.9			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



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			



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			

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

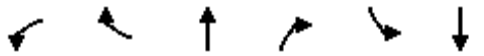
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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	0.00	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)	0	32	221	0	31	360
Future Volume (Veh/h)	0	32	221	0	31	360
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	283	0	41	429
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	794	283			283	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	794	283			283	
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	90			97	
cM capacity (veh/h)	346	756			1279	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	76	283	41	429
Volume Left	0	0	41	0
Volume Right	76	0	0	0
cSH	756	1700	1279	1700
Volume to Capacity	0.10	0.17	0.03	0.25
Queue Length 95th (ft)	8	0	2	0
Control Delay (s)	10.3	0.0	7.9	0.0
Lane LOS	B		A	
Approach Delay (s)	10.3	0.0	0.7	
Approach LOS	B			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	127	219	0	0	87	10	0	0	52
Future Volume (Veh/h)	0	0	127	219	0	0	87	10	0	0	52
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	295	249	0	0	124	29	0	0	84
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	992	124	153			249			853	978	76
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	992	124	153			249			853	978	76
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	79			100			100	100	91
cM capacity (veh/h)	194	903	1425			1314			212	198	969

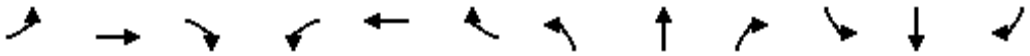
Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1
Volume Total	0	295	124	124	0	83	70	84
Volume Left	0	295	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	29	84
cSH	1700	1425	1700	1700	1700	1700	1700	969
Volume to Capacity	0.00	0.21	0.07	0.07	0.00	0.05	0.04	0.09
Queue Length 95th (ft)	0	19	0	0	0	0	0	7
Control Delay (s)	0.0	8.2	0.0	0.0	0.0	0.0	0.0	9.1
Lane LOS	A	A						A
Approach Delay (s)	0.0	4.4			0.0			9.1
Approach LOS	A							A

Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	17.0%	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	44	27	0	20	1	27	0	0	0	0	31
Future Volume (Veh/h)	108	44	27	0	20	1	27	0	0	0	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	56	43	0	28	2	43	0	0	0	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	30			99			380	350	50	299	370	15
vC1, stage 1 conf vol							320	320		29	29	
vC2, stage 2 conf vol							61	30		270	341	
vCu, unblocked vol	30			99			380	350	50	299	370	15
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			100			92	100	100	100	100	96
cM capacity (veh/h)	1581			1492			530	533	1008	592	526	1061

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1
Volume Total	121	37	62	0	19	11	43	47
Volume Left	121	0	0	0	0	0	43	0
Volume Right	0	0	43	0	0	2	0	47
cSH	1581	1700	1700	1700	1700	1700	530	1061
Volume to Capacity	0.08	0.02	0.04	0.00	0.01	0.01	0.08	0.04
Queue Length 95th (ft)	6	0	0	0	0	0	7	3
Control Delay (s)	7.5	0.0	0.0	0.0	0.0	0.0	12.4	8.6
Lane LOS	A						B	A
Approach Delay (s)	4.1			0.0			12.4	8.6
Approach LOS							B	A

Intersection Summary				
Average Delay	5.4			
Intersection Capacity Utilization	27.5%	ICU Level of Service		A
Analysis Period (min)	15			



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			

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

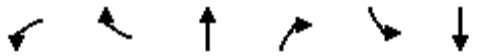
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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	0.00	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)	3	32	273	3	10	234
Future Volume (Veh/h)	3	32	273	3	10	234
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	333	6	20	282
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	658	336			339	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	658	336			339	
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	92			98	
cM capacity (veh/h)	422	706			1220	

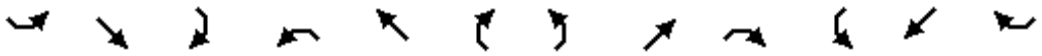
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	64	339	20	282
Volume Left	6	0	20	0
Volume Right	58	6	0	0
cSH	664	1700	1220	1700
Volume to Capacity	0.10	0.20	0.02	0.17
Queue Length 95th (ft)	8	0	1	0
Control Delay (s)	11.0	0.0	8.0	0.0
Lane LOS	B		A	
Approach Delay (s)	11.0	0.0	0.5	
Approach LOS	B			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	24.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations											
Traffic Volume (veh/h)	0	0	46	131	0	0	146	3	63	0	52
Future Volume (Veh/h)	0	0	46	131	0	0	146	3	63	0	52
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	82	146	0	0	180	9	210	0	91
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	499	73	189			146			422	494	94
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	499	73	189			146			422	494	94
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	94			100			57	100	90
cM capacity (veh/h)	444	974	1382			1434			493	446	944

Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1
Volume Total	0	82	73	73	0	120	69	301
Volume Left	0	82	0	0	0	0	0	210
Volume Right	0	0	0	0	0	0	9	91
cSH	1700	1382	1700	1700	1700	1700	1700	576
Volume to Capacity	0.00	0.06	0.04	0.04	0.00	0.07	0.04	0.52
Queue Length 95th (ft)	0	5	0	0	0	0	0	75
Control Delay (s)	0.0	7.8	0.0	0.0	0.0	0.0	0.0	17.9
Lane LOS	A	A						C
Approach Delay (s)	0.0	2.8			0.0			17.9
Approach LOS	A							C

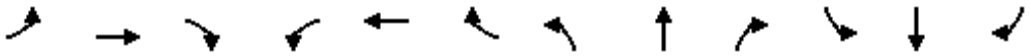
Intersection Summary				
Average Delay	8.4			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	44	54	42	3	68	1	55	0	6	1	1	96
Future Volume (Veh/h)	44	54	42	3	68	1	55	0	6	1	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	102	49	6	84	3	80	0	8	3	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	87			151			446	360	76	290	382	44
vC1, stage 1 conf vol							260	260		98	98	
vC2, stage 2 conf vol							186	99		193	285	
vCu, unblocked vol	87			151			446	360	76	290	382	44
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			84	100	99	100	99	87
cM capacity (veh/h)	1507			1428			486	561	970	640	552	1017

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1
Volume Total	67	68	83	6	56	31	88	137
Volume Left	67	0	0	6	0	0	80	3
Volume Right	0	0	49	0	0	3	8	130
cSH	1507	1700	1700	1428	1700	1700	509	980
Volume to Capacity	0.04	0.04	0.05	0.00	0.03	0.02	0.17	0.14
Queue Length 95th (ft)	3	0	0	0	0	0	15	12
Control Delay (s)	7.5	0.0	0.0	7.5	0.0	0.0	13.5	9.3
Lane LOS	A			A			B	A
Approach Delay (s)	2.3			0.5			13.5	9.3
Approach LOS							B	A

Intersection Summary				
Average Delay	5.6			
Intersection Capacity Utilization	25.9%	ICU Level of Service		A
Analysis Period (min)	15			



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 I

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)				1131		
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)				703		
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

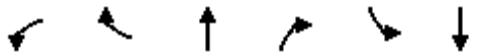
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	98	71	23
Volume Left	0	24	0
Volume Right	0	0	23
cSH	1700	1495	958
Volume to Capacity	0.06	0.02	0.02
Queue Length 95th (ft)	0	1	2
Control Delay (s)	0.0	2.6	8.9
Lane LOS		A	A
Approach Delay (s)	0.0	2.6	8.9
Approach LOS			A

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)				434		
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						
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	

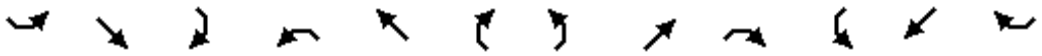
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	64	551	35	506
Volume Left	0	0	35	0
Volume Right	64	82	0	0
cSH	563	1700	1019	1700
Volume to Capacity	0.11	0.32	0.03	0.30
Queue Length 95th (ft)	10	0	3	0
Control Delay (s)	12.2	0.0	8.7	0.0
Lane LOS	B		A	
Approach Delay (s)	12.2	0.0	0.6	
Approach LOS	B			

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

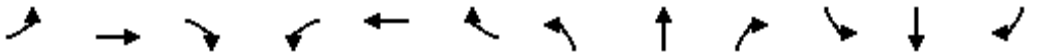
Intersection Summary				
Average Delay	13.6			
Intersection Capacity Utilization	28.3%	ICU Level of Service		A
Analysis Period (min)	15			



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			



Movement	EBL	EBT	EBR	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	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	30	0	8	0	0	9
Future Volume (Veh/h)	30	0	8	0	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	0	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		79	51
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			51		79	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		915	1017

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	51	14	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	7.3	8.6
Lane LOS		A	A
Approach Delay (s)	0.0	7.3	8.6
Approach LOS			A

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	16.6%	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)				1131		
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

Intersection Summary			
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)				703		
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	16	93	0	17
Future Volume (Veh/h)	71	0	16	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	17	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		212	77
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			77		212	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		768	984

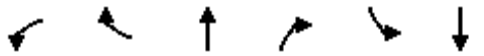
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	77	118	18
Volume Left	0	17	0
Volume Right	0	0	18
cSH	1700	1522	984
Volume to Capacity	0.05	0.01	0.02
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.1	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	1.1	8.7
Approach LOS			A

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	22.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	60	11	14	99	10	18
Future Volume (Veh/h)	60	11	14	99	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	15	108	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)				434		
pX, platoon unblocked						
vC, conflicting volume			77		209	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			77		209	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		772	991

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	77	123	31
Volume Left	0	15	11
Volume Right	12	0	20
cSH	1700	1522	900
Volume to Capacity	0.05	0.01	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	1.0	9.1
Lane LOS		A	A
Approach Delay (s)	0.0	1.0	9.1
Approach LOS			A

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	22.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
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	

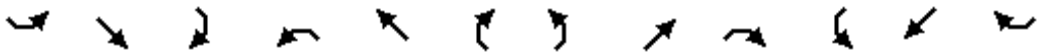
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	145	577	18	478
Volume Left	96	0	18	0
Volume Right	49	4	0	0
cSH	287	1700	996	1700
Volume to Capacity	0.50	0.34	0.02	0.28
Queue Length 95th (ft)	66	0	1	0
Control Delay (s)	29.6	0.0	8.7	0.0
Lane LOS	D		A	
Approach Delay (s)	29.6	0.0	0.3	
Approach LOS	D			

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	0	268	2	53	0	44
Future Volume (Veh/h)	95	0	0	39	245	112	0	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	0	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	716	810	197	337			394			610	868	168
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	716	810	197	337			394			610	868	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 %	63	100	100	94			100			51	100	91
cM capacity (veh/h)	276	294	811	1219			1161			362	272	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	0	221	116	254
Volume Left	103	70	0	0	0	0	0	177
Volume Right	0	0	0	122	0	0	6	77
cSH	276	1219	1700	1700	1700	1700	1700	438
Volume to Capacity	0.37	0.06	0.11	0.13	0.00	0.13	0.07	0.58
Queue Length 95th (ft)	41	5	0	0	0	0	0	90
Control Delay (s)	25.6	8.1	0.0	0.0	0.0	0.0	0.0	24.0
Lane LOS	D	A						C
Approach Delay (s)	25.6	1.2			0.0			24.0
Approach LOS	D							C

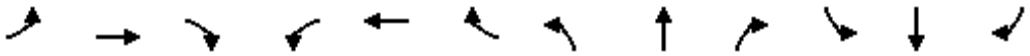
Intersection Summary				
Average Delay	8.0			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



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		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	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	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)				1131		
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

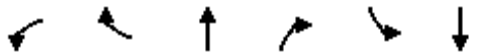
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	98	71	23
Volume Left	0	24	0
Volume Right	0	0	23
cSH	1700	1495	958
Volume to Capacity	0.06	0.02	0.02
Queue Length 95th (ft)	0	1	2
Control Delay (s)	0.0	2.6	8.9
Lane LOS		A	A
Approach Delay (s)	0.0	2.6	8.9
Approach LOS			A

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)				434		
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						
Traffic Volume (veh/h)	0	32	401	41	31	482
Future Volume (Veh/h)	0	32	401	41	31	482
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	514	82	41	574
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	1211	555			596	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1211	555			596	
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)	193	531			980	

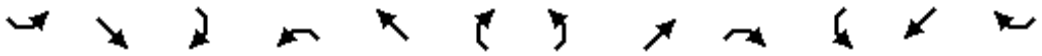
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	76	596	41	574
Volume Left	0	0	41	0
Volume Right	76	82	0	0
cSH	531	1700	980	1700
Volume to Capacity	0.14	0.35	0.04	0.34
Queue Length 95th (ft)	12	0	3	0
Control Delay (s)	12.9	0.0	8.8	0.0
Lane LOS	B		A	
Approach Delay (s)	12.9	0.0	0.6	
Approach LOS	B			

Intersection Summary			
Average Delay	1.0		
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)	115	0	0	127	297	44	0	192	10	0	0	52
Future Volume (Veh/h)	115	0	0	127	297	44	0	192	10	0	0	52
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	295	338	48	0	274	29	0	0	84
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	1173	1255	193	303			386			1048	1264	152
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1173	1255	193	303			386			1048	1264	152
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	100	100	76			100			100	100	90
cM capacity (veh/h)	109	130	816	1255			1169			149	129	868

Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1
Volume Total	125	295	225	161	0	183	120	84
Volume Left	125	295	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	29	84
cSH	109	1255	1700	1700	1700	1700	1700	868
Volume to Capacity	1.15	0.24	0.13	0.09	0.00	0.11	0.07	0.10
Queue Length 95th (ft)	198	23	0	0	0	0	0	8
Control Delay (s)	205.9	8.7	0.0	0.0	0.0	0.0	0.0	9.6
Lane LOS	F	A						A
Approach Delay (s)	205.9	3.8			0.0			9.6
Approach LOS	F							A

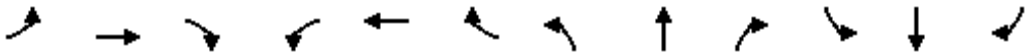
Intersection Summary				
Average Delay	24.4			
Intersection Capacity Utilization	29.3%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	114	58	84	0	20	60	132	82	0	0	0	31
Future Volume (Veh/h)	114	58	84	0	20	60	132	82	0	0	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)	128	74	133	0	28	95	210	89	0	0	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	123			207			458	520	104	413	538	62
vC1, stage 1 conf vol							396	396		76	76	
vC2, stage 2 conf vol							61	123		338	463	
vCu, unblocked vol	123			207			458	520	104	413	538	62
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			56	81	100	100	100	95
cM capacity (veh/h)	1462			1361			473	460	931	444	450	991

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1
Volume Total	128	49	158	0	19	104	299	47
Volume Left	128	0	0	0	0	0	210	0
Volume Right	0	0	133	0	0	95	0	47
cSH	1462	1700	1700	1700	1700	1700	469	991
Volume to Capacity	0.09	0.03	0.09	0.00	0.01	0.06	0.64	0.05
Queue Length 95th (ft)	7	0	0	0	0	0	109	4
Control Delay (s)	7.7	0.0	0.0	0.0	0.0	0.0	25.2	8.8
Lane LOS	A						D	A
Approach Delay (s)	2.9			0.0			25.2	8.8
Approach LOS							D	A

Intersection Summary				
Average Delay	11.1			
Intersection Capacity Utilization	37.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	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	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)				1131		
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

Intersection Summary			
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)				703		
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	0.04
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	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	16	93	0	17
Future Volume (Veh/h)	71	0	16	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	17	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		212	77
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			77		212	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		768	984

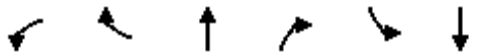
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	77	118	18
Volume Left	0	17	0
Volume Right	0	0	18
cSH	1700	1522	984
Volume to Capacity	0.05	0.01	0.02
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.1	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	1.1	8.7
Approach LOS			A

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	22.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	60	11	14	99	10	18
Future Volume (Veh/h)	60	11	14	99	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	15	108	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)				434		
pX, platoon unblocked						
vC, conflicting volume			77		209	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			77		209	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		772	991

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	77	123	31
Volume Left	0	15	11
Volume Right	12	0	20
cSH	1700	1522	900
Volume to Capacity	0.05	0.01	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	1.0	9.1
Lane LOS		A	A
Approach Delay (s)	0.0	1.0	9.1
Approach LOS			A

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	22.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	48	32	513	3	10	434
Future Volume (Veh/h)	48	32	513	3	10	434
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	626	6	20	523
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	1192	629			632	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1192	629			632	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	53	88			98	
cM capacity (veh/h)	202	482			951	

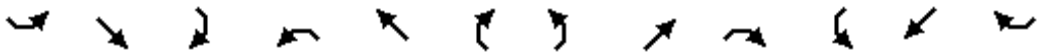
Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	154	632	20	523
Volume Left	96	0	20	0
Volume Right	58	6	0	0
cSH	259	1700	951	1700
Volume to Capacity	0.59	0.37	0.02	0.31
Queue Length 95th (ft)	87	0	2	0
Control Delay (s)	37.4	0.0	8.9	0.0
Lane LOS	E		A	
Approach Delay (s)	37.4	0.0	0.3	
Approach LOS	E			

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	38.5%	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	46	265	112	0	291	3	63	0	52
Future Volume (Veh/h)	95	0	0	46	265	112	0	291	3	63	0	52
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	82	294	122	0	359	9	210	0	91
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	790	887	208	368			416			674	944	184
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	790	887	208	368			416			674	944	184
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 %	56	100	100	93			100			35	100	89
cM capacity (veh/h)	237	262	798	1187			1139			322	243	827

Direction, Lane #	EB 1	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	SW 1
Volume Total	103	82	196	220	0	239	129	301
Volume Left	103	82	0	0	0	0	0	210
Volume Right	0	0	0	122	0	0	9	91
cSH	237	1187	1700	1700	1700	1700	1700	395
Volume to Capacity	0.44	0.07	0.12	0.13	0.00	0.14	0.08	0.76
Queue Length 95th (ft)	51	6	0	0	0	0	0	157
Control Delay (s)	31.4	8.3	0.0	0.0	0.0	0.0	0.0	38.0
Lane LOS	D	A						E
Approach Delay (s)	31.4	1.4			0.0			38.0
Approach LOS	D							E

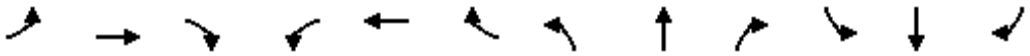
Intersection Summary				
Average Delay	12.1			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	44	54	163	9	106	1	155	0	6	67	92	103
Future Volume (Veh/h)	44	54	163	9	106	1	155	0	6	67	92	103
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	102	192	18	131	3	225	0	8	191	368	139
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	134			294			756	502	147	362	596	67
vC1, stage 1 conf vol							332	332		168	168	
vC2, stage 2 conf vol							424	170		193	428	
vCu, unblocked vol	134			294			756	502	147	362	596	67
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 %	95			99			0	100	99	68	19	86
cM capacity (veh/h)	1448			1264			151	494	873	593	452	983

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NE 1	SW 1
Volume Total	67	68	226	18	87	47	233	698
Volume Left	67	0	0	18	0	0	225	191
Volume Right	0	0	192	0	0	3	8	139
cSH	1448	1700	1700	1264	1700	1700	155	546
Volume to Capacity	0.05	0.04	0.13	0.01	0.05	0.03	1.50	1.28
Queue Length 95th (ft)	4	0	0	1	0	0	385	707
Control Delay (s)	7.6	0.0	0.0	7.9	0.0	0.0	310.3	162.1
Lane LOS	A			A			F	F
Approach Delay (s)	1.4			0.9			310.3	162.1
Approach LOS							F	F

Intersection Summary				
Average Delay	128.9			
Intersection Capacity Utilization	42.7%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	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			

APPENDIX J

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
ADVANCEDESIGN

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

File Name : UNIVERSITY-RIO BRAVO_05042021 BT
Site Code : 00000000
Start Date : 4/28/2021

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
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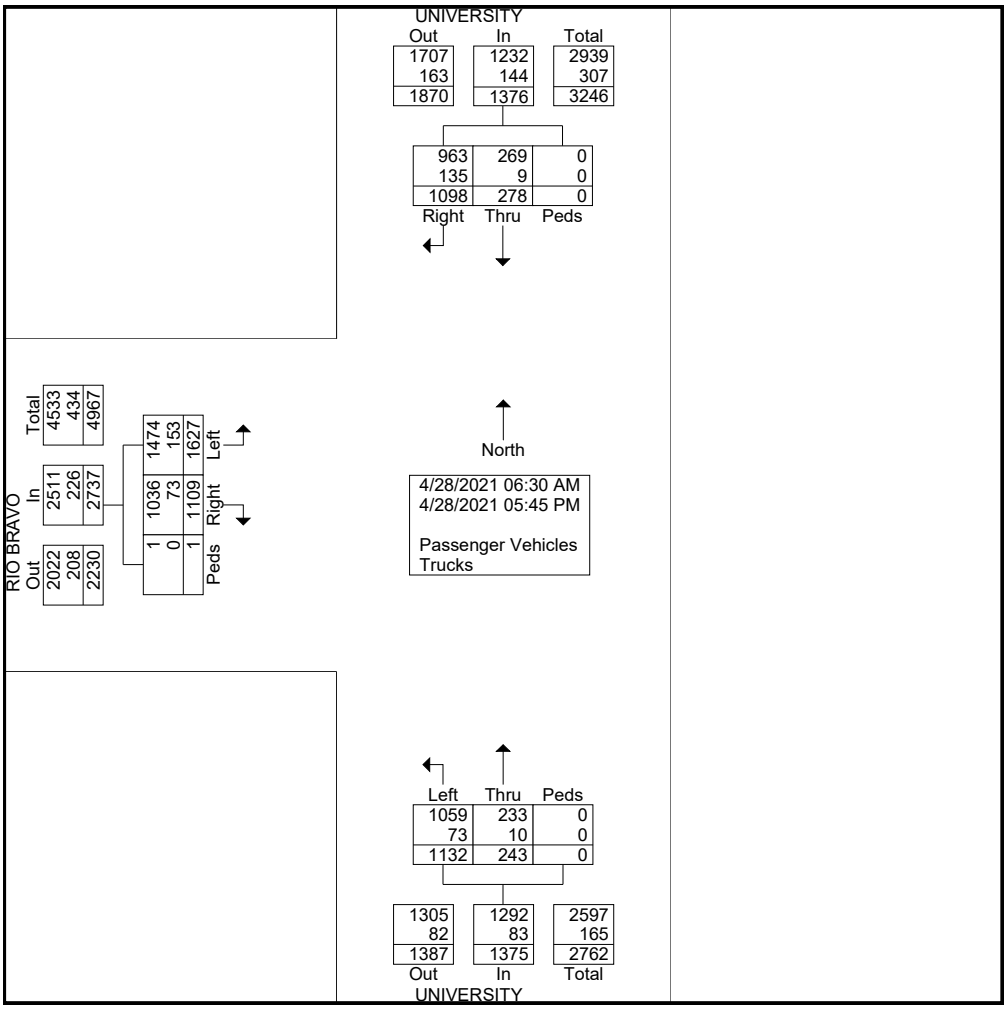
File Name : UNIVERSITY-RIO BRAVO_05042021 BT
Site Code : 00000000
Start Date : 4/28/2021

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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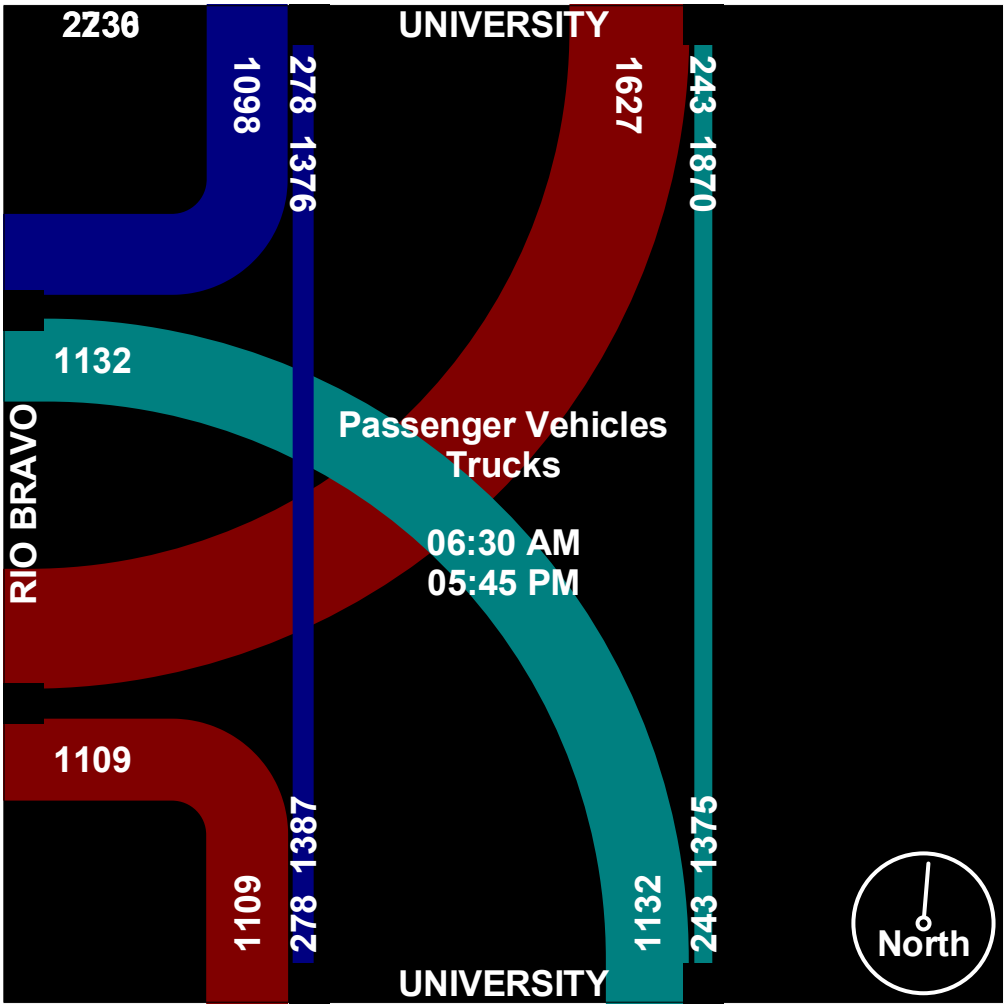

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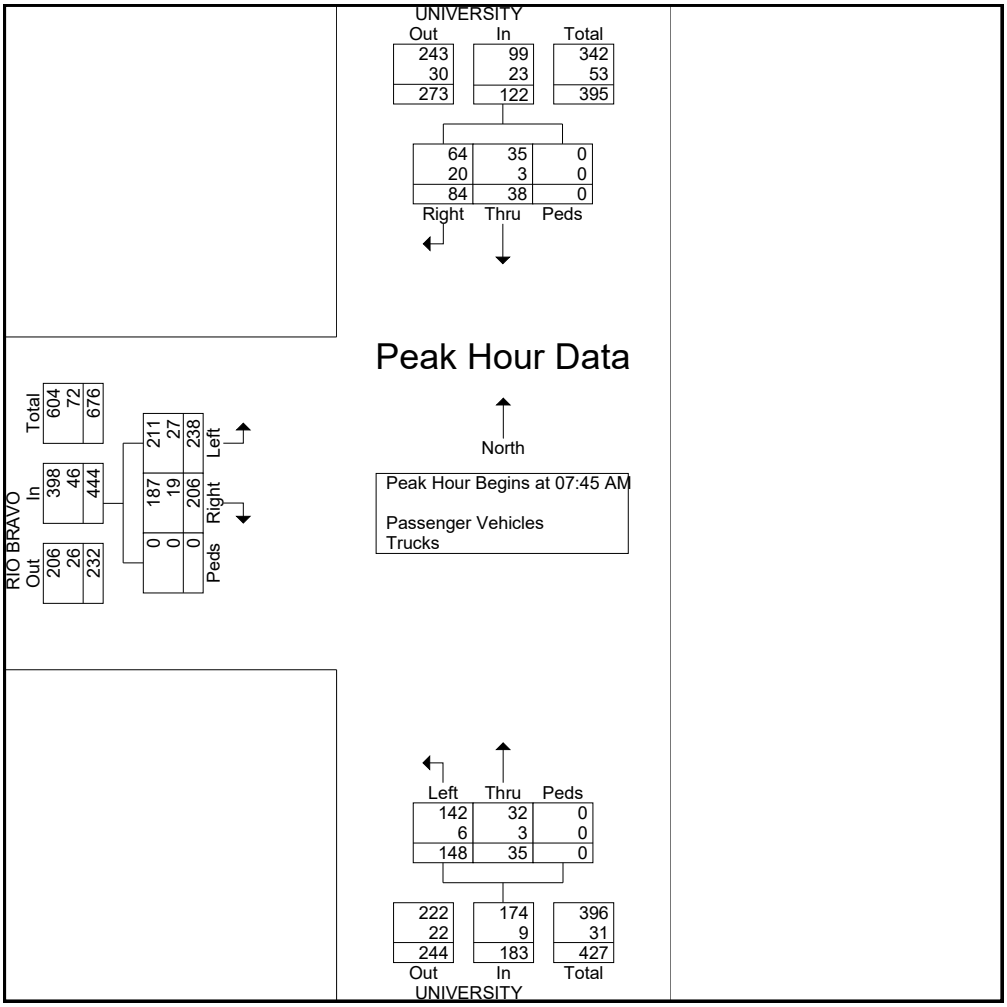
333 Rio Rancho Drive NW, Suite 101
Rio Rancho, NM 87124
ADVANCEDESIGN

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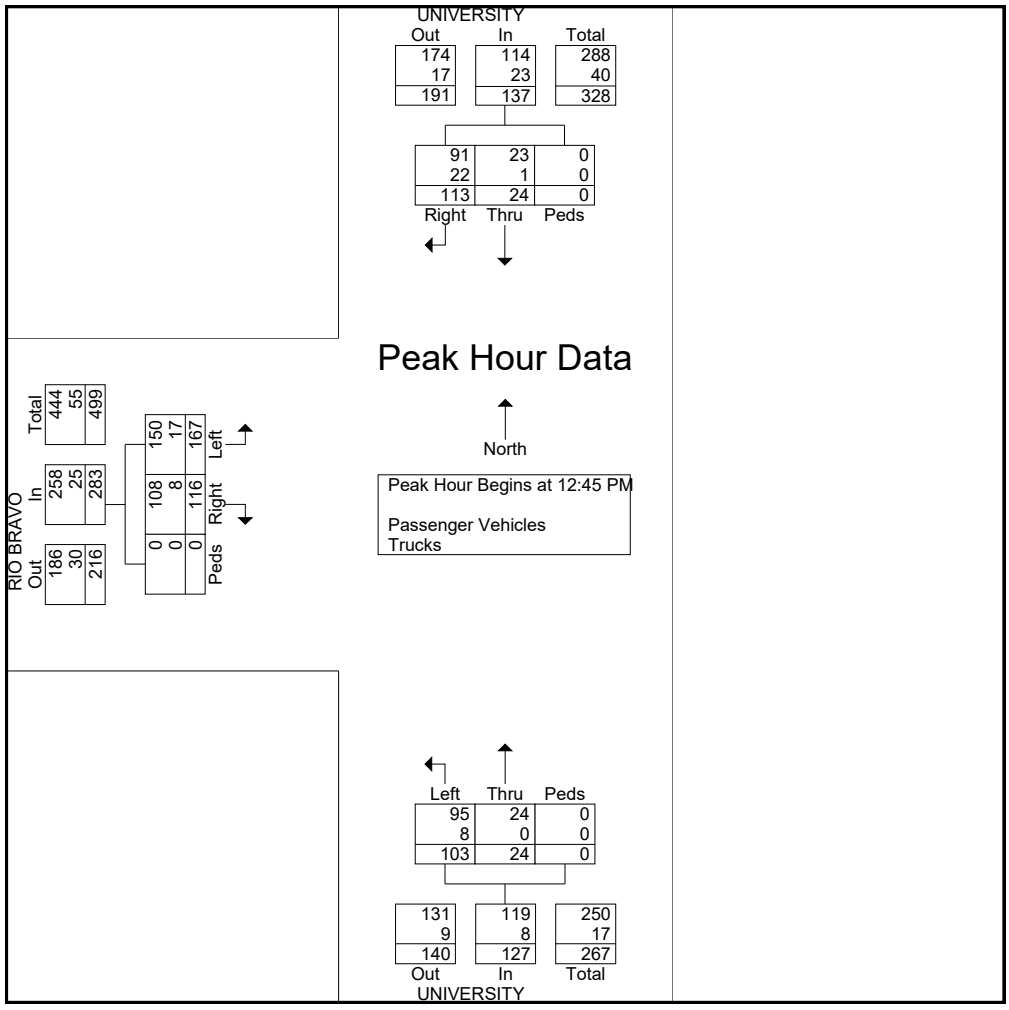
333 Rio Rancho Drive NW, Suite 101
Rio Rancho, NM 87124
ADVANCEDESIGN

File Name : UNIVERSITY-RIO BRAVO_05042021 BT
Site Code : 00000000
Start Date : 4/28/2021
Page No : 5

	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 10:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:45 PM													
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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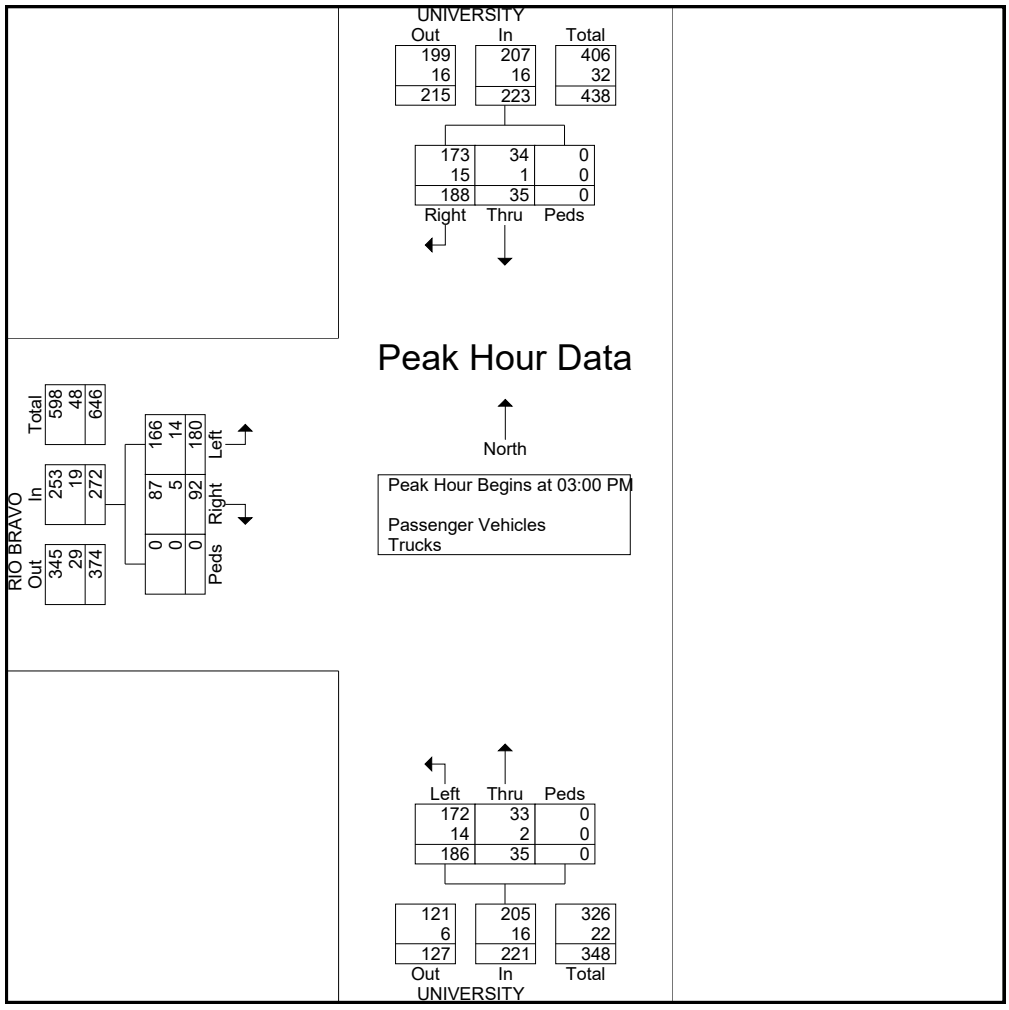
File Name : UNIVERSITY-RIO BRAVO_05042021 BT
Site Code : 00000000
Start Date : 4/28/2021
Page No : 6

	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 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:00 PM													
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
ADVANCEDESIGN

File Name : UNIVERSITY-RIO BRAVO_05042021 BT
Site Code : 00000000
Start Date : 4/28/2021

APPENDIX K

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	
Intersection Delay, s/veh	11.3
Intersection LOS	B

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	SE	NW	SW
Opposing Approach	NW	SE	
Opposing Lanes	3	3	0
Conflicting Approach Left	SW	EB	NW
Conflicting Lanes Left	1	1	3
Conflicting Approach Right	EB	SW	SE
Conflicting Lanes Right	1	1	3
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	Stop	Stop	Stop	Stop	Stop	Stop	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	Yes	Yes	Yes	Yes	Yes	Yes	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	Stop	Stop	Stop	Stop	Stop	Stop	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	Yes	Yes	Yes	Yes	Yes	Yes	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	
Intersection Delay, s/veh	13.1
Intersection LOS	B

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	SE	NW	SW
Opposing Approach	NW	SE	
Opposing Lanes	3	3	0
Conflicting Approach Left	SW	EB	NW
Conflicting Lanes Left	1	1	3
Conflicting Approach Right	EB	SW	SE
Conflicting Lanes Right	1	1	3
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	Stop	Stop	Stop	Stop	Stop	Stop	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	Yes	Yes	Yes	Yes	Yes	Yes	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	Stop	Stop	Stop	Stop	Stop	Stop	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	Yes	Yes	Yes	Yes	Yes	Yes	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	25.5
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	32	401	41	31	482
Future Vol, veh/h	0	32	401	41	31	482
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	514	82	41	574
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	10	25.6	27.3
HCM LOS	A	D	D

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%
Vol Thru, %	91%	0%	0%	100%
Vol Right, %	9%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	442	32	31	482
LT Vol	0	0	31	0
Through Vol	401	0	0	482
RT Vol	41	32	0	0
Lane Flow Rate	596	76	41	574
Geometry Grp	5	2	7	7
Degree of Util (X)	0.811	0.129	0.066	0.832
Departure Headway (Hd)	4.898	6.078	5.724	5.219
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	733	594	620	689
Service Time	2.974	4.078	3.508	3.003
HCM Lane V/C Ratio	0.813	0.128	0.066	0.833
HCM Control Delay	25.6	10	8.9	28.6
HCM Lane LOS	D	A	A	D
HCM 95th-tile Q	8.6	0.4	0.2	9.1

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	0	0	127	297	44	0	192	10	0	0
Future Vol, veh/h	0	0	127	297	44	0	192	10	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	295	338	48	0	274	29	0	0
Number of Lanes	1	0	1	2	0	1	2	0	0	1

Approach	SE	NW	SW
Opposing Approach	NW	SE	
Opposing Lanes	3	3	0
Conflicting Approach Left	SW	EB	NW
Conflicting Lanes Left	1	1	3
Conflicting Approach Right	EB	SW	SE
Conflicting Lanes Right	1	1	3
HCM Control Delay	12.8	11.2	10.3
HCM LOS	B	B	B

Lane	NWLn1	NWLn2	NWLn3	EBLn1	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	0%	0%	0%	100%	100%	0%	0%	0%
Vol Thru, %	100%	100%	86%	0%	0%	100%	69%	0%
Vol Right, %	0%	0%	14%	0%	0%	0%	31%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	128	74	115	127	198	143	52
LT Vol	0	0	0	115	127	0	0	0
Through Vol	0	128	64	0	0	198	99	0
RT Vol	0	0	10	0	0	0	44	52
Lane Flow Rate	0	183	120	125	295	225	160	84
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0	0.314	0.203	0.26	0.51	0.357	0.245	0.15
Departure Headway (Hd)	6.181	6.181	6.085	7.497	6.222	5.716	5.498	6.431
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	581	589	479	579	630	653	556
Service Time	3.93	3.93	3.834	5.252	3.96	3.454	3.236	4.19
HCM Lane V/C Ratio	0	0.315	0.204	0.261	0.509	0.357	0.245	0.151
HCM Control Delay	8.9	11.8	10.4	12.9	15.3	11.6	10	10.3
HCM Lane LOS	N	B	B	B	C	B	A	B
HCM 95th-tile Q	0	1.3	0.8	1	2.9	1.6	1	0.5

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	114	58	84	0	20	60	132	82	0	0	0	31
Future Vol, veh/h	114	58	84	0	20	60	132	82	0	0	0	31
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	128	74	133	0	28	95	210	89	0	0	0	47
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	10	9.3	14.9	8.7
HCM LOS	A	A	B	A

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	62%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	38%	100%	100%	10%	0%	100%	19%	0%
Vol Right, %	0%	0%	0%	90%	0%	0%	81%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	214	0	13	67	114	39	103	31
LT Vol	132	0	0	0	114	0	0	0
Through Vol	82	0	13	7	0	39	19	0
RT Vol	0	0	0	60	0	0	84	31
Lane Flow Rate	299	0	19	104	128	50	158	47
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.505	0	0.032	0.159	0.225	0.08	0.23	0.072
Departure Headway (Hd)	6.088	6.126	6.126	5.484	6.317	5.811	5.234	5.502
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	594	0	585	654	570	617	686	651
Service Time	3.813	3.859	3.859	3.217	4.044	3.538	2.961	3.237
HCM Lane V/C Ratio	0.503	0	0.032	0.159	0.225	0.081	0.23	0.072
HCM Control Delay	14.9	8.9	9.1	9.3	10.9	9	9.5	8.7
HCM Lane LOS	B	N	A	A	B	A	A	A
HCM 95th-tile Q	2.8	0	0.1	0.6	0.9	0.3	0.9	0.2

Intersection	
Intersection Delay, s/veh	35.1
Intersection LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	32	513	3	10	434
Future Vol, veh/h	48	32	513	3	10	434
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	626	6	20	523
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	12.4	44.6	30.4
HCM LOS	B	E	D

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	60%	100%	0%
Vol Thru, %	99%	0%	0%	100%
Vol Right, %	1%	40%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	516	80	10	434
LT Vol	0	48	10	0
Through Vol	513	0	0	434
RT Vol	3	32	0	0
Lane Flow Rate	632	154	20	523
Geometry Grp	5	2	7	7
Degree of Util (X)	0.94	0.286	0.035	0.837
Departure Headway (Hd)	5.356	6.684	6.268	5.761
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	676	535	571	627
Service Time	3.398	4.749	4.011	3.503
HCM Lane V/C Ratio	0.935	0.288	0.035	0.834
HCM Control Delay	44.6	12.4	9.2	31.2
HCM Lane LOS	E	B	A	D
HCM 95th-tile Q	13	1.2	0.1	9

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	0	0	46	265	112	0	291	3	63	0
Future Vol, veh/h	0	0	46	265	112	0	291	3	63	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	82	294	122	0	359	9	210	0
Number of Lanes	1	0	1	2	0	1	2	0	0	1

Approach	SE	NW	SW
Opposing Approach	NW	SE	
Opposing Lanes	3	3	0
Conflicting Approach Left	SW	EB	NW
Conflicting Lanes Left	1	1	3
Conflicting Approach Right	EB	SW	SE
Conflicting Lanes Right	1	1	3
HCM Control Delay	13.1	14.4	20
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%	97%	0%	0%	100%	44%	0%
Vol Right, %	0%	0%	3%	0%	0%	0%	56%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	194	100	95	46	177	200	115
LT Vol	0	0	0	95	46	0	0	63
Through Vol	0	194	97	0	0	177	88	0
RT Vol	0	0	3	0	0	0	112	52
Lane Flow Rate	0	240	128	103	82	196	220	301
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0	0.466	0.249	0.236	0.167	0.371	0.392	0.598
Departure Headway (Hd)	7.003	7.003	6.981	8.234	7.325	6.813	6.413	7.152
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	515	515	436	490	528	561	506
Service Time	4.744	4.744	4.723	5.983	5.065	4.553	4.152	4.89
HCM Lane V/C Ratio	0	0.466	0.249	0.236	0.167	0.371	0.392	0.595
HCM Control Delay	9.7	15.7	12	13.5	11.5	13.5	13.3	20
HCM Lane LOS	N	C	B	B	B	B	B	C
HCM 95th-tile Q	0	2.4	1	0.9	0.6	1.7	1.9	3.9

Intersection	
Intersection Delay, s/veh	82.9
Intersection LOS	F

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	44	54	163	9	106	1	155	0	6	67	92	103
Future Vol, veh/h	44	54	163	9	106	1	155	0	6	67	92	103
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	67	102	192	18	131	3	225	0	8	191	368	139
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	14.7	13.1	18.5	154.8
HCM LOS	B	B	C	F

Lane	NELn1	NWLn1	NWLn2	NWLn3	SELn1	SELn2	SELn3	SWLn1
Vol Left, %	96%	100%	0%	0%	100%	0%	0%	26%
Vol Thru, %	0%	0%	100%	97%	0%	100%	10%	35%
Vol Right, %	4%	0%	0%	3%	0%	0%	90%	39%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	9	71	36	44	36	181	262
LT Vol	155	9	0	0	44	0	0	67
Through Vol	0	0	71	35	0	36	18	92
RT Vol	6	0	0	1	0	0	163	103
Lane Flow Rate	233	18	87	47	67	68	226	699
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.495	0.042	0.192	0.103	0.148	0.141	0.43	1.266
Departure Headway (Hd)	8.129	9.328	8.799	8.779	8.769	8.244	7.583	6.525
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	386	410	411	411	437	479	559
Service Time	5.829	7.028	6.499	6.479	6.469	5.944	5.283	4.286
HCM Lane V/C Ratio	0.521	0.047	0.212	0.114	0.163	0.156	0.472	1.25
HCM Control Delay	18.5	12.4	13.6	12.5	13	12.3	15.9	154.8
HCM Lane LOS	C	B	B	B	B	B	C	F
HCM 95th-tile Q	2.7	0.1	0.7	0.3	0.5	0.5	2.1	27.6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
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
Frt	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 Effct 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

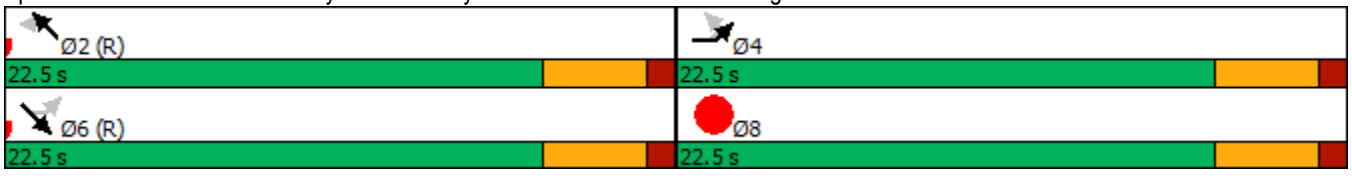
Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	115	0	0	107	262	44	0	178	9	0	0	44
Future Volume (vph)	115	0	0	107	262	44	0	178	9	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0	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	No	No	No	No	No	No	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	

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	0.0				
Total Lost Time (s)		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				
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 Effct 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 Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

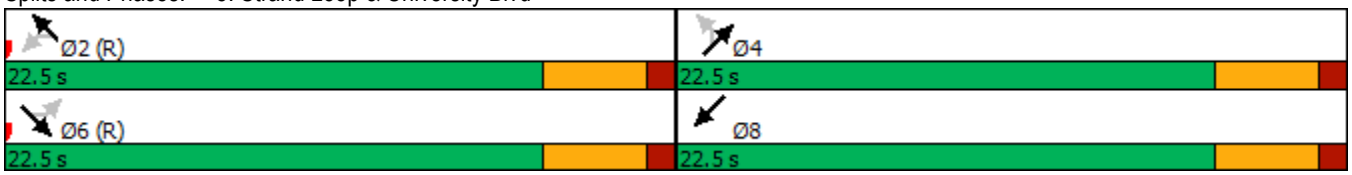
Intersection Summary

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
Frt		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	No	No	No	No	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	
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	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 Effct 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						
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
Frt	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 Effct 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			

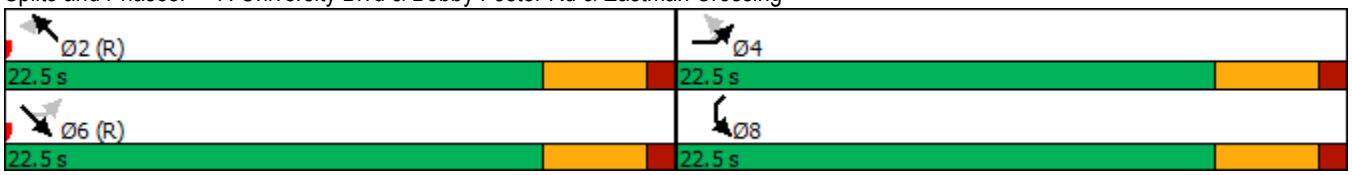
Splits and Phases: 6: University Blvd & Fritts Crossing

Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
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)		0	0	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					0.954			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	No	No	No	No	No	No	No	No	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		Prot		
Protected Phases		4!			6			2		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		
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 Effct 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

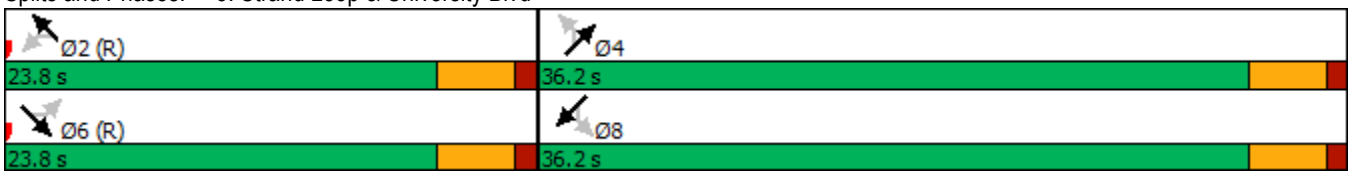


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	37	45	156	9	95	1	147	0	5	66	92	88
Future Volume (vph)	37	45	156	9	95	1	147	0	5	66	92	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	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
Frt		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	No	No	No	No	No	No	No	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		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		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		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	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		Perm	NA		Perm	NA		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)	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 Effct 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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	32	401	41	31	482
Future Volume (vph)	0	32	401	41	31	482
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
Frt	0.865		0.981			
Flt Protected					0.950	
Satd. Flow (prot)	1826	0	1827	0	1770	1863
Flt Permitted					0.423	
Satd. Flow (perm)	1826	0	1827	0	788	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	294		21			
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	514	82	41	574
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	0	596	0	41	574
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		32.5		32.5	32.5
Total Split (%)	40.9%		59.1%		59.1%	59.1%
Maximum Green (s)	18.0		28.0		28.0	28.0
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 Effct Green (s)	5.5		46.3		46.3	46.3
Actuated g/C Ratio	0.10		0.84		0.84	0.84
v/c Ratio	0.17		0.39		0.06	0.37
Control Delay	0.8		2.9		2.2	2.9
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	0.8		2.9		2.2	2.9
LOS	A		A		A	A
Approach Delay	0.8		2.9			2.8
Approach LOS	A		A			A

Intersection Summary	
Area Type:	Other
Cycle Length: 55	
Actuated Cycle Length: 55	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 2.8	Intersection LOS: A
Intersection Capacity Utilization 37.4%	ICU Level of Service A
Analysis Period (min) 15	

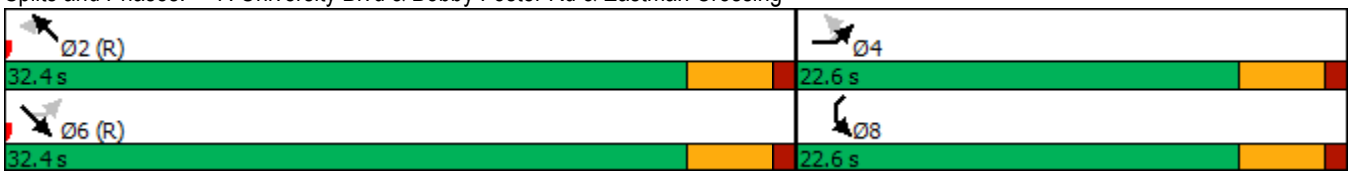
Splits and Phases: 6: University Blvd & Fritts Crossing

Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	115	0	0	127	297	44	0	192	10	0	0	52
Future Volume (vph)	115	0	0	127	297	44	0	192	10	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0	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					0.981			0.986		0.865		
Flt Protected		0.950		0.950								
Satd. Flow (prot)	0	1770	0	1770	3472	0	1863	3490	0	1611	0	0
Flt Permitted		0.950		0.567								
Satd. Flow (perm)	0	1770	0	1056	3472	0	1863	3490	0	1611	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					41			29		546		
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	295	338	48	0	274	29	0	0	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	125	0	295	386	0	0	303	0	84	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	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		Prot		
Protected Phases		4!			6			2		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		
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)	22.6	22.6		32.4	32.4		32.4	32.4		22.6		
Total Split (%)	41.1%	41.1%		58.9%	58.9%		58.9%	58.9%		41.1%		
Maximum Green (s)	18.1	18.1		27.9	27.9		27.9	27.9		18.1		
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 Effct Green (s)		9.2		39.7	39.7			39.7		9.2		
Actuated g/C Ratio		0.17		0.72	0.72			0.72		0.17		
v/c Ratio		0.42		0.39	0.15			0.12		0.12		
Control Delay		24.1		6.6	3.4			3.4		0.3		
Queue Delay		0.0		0.0	0.0			0.0		0.0		
Total Delay		24.1		6.6	3.4			3.4		0.3		
LOS		C		A	A			A		A		
Approach Delay		24.1			4.8			3.4		0.3		
Approach LOS		C			A			A		A		

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: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 39.3%		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

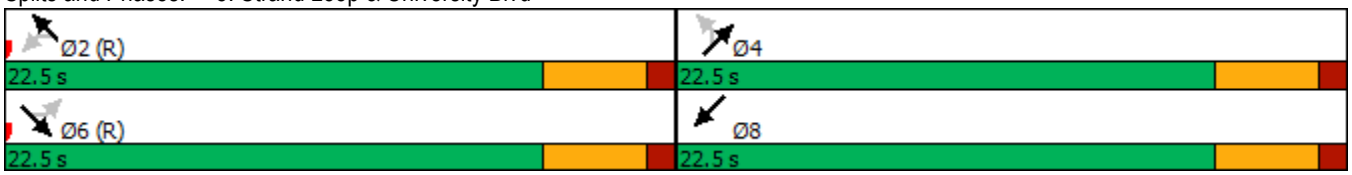


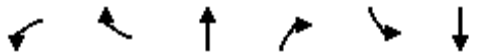
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	114	58	84	0	20	60	132	82	0	0	0	31
Future Volume (vph)	114	58	84	0	20	60	132	82	0	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	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
Frt		0.904			0.884						0.865	
Flt Protected	0.950							0.966				
Satd. Flow (prot)	1711	3093	0	1863	3129	0	0	1799	0	0	1611	0
Flt Permitted	0.674							0.761				
Satd. Flow (perm)	1214	3093	0	1863	3129	0	0	1418	0	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		133			95						998	
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)	128	74	133	0	28	95	210	89	0	0	0	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	207	0	0	123	0	0	299	0	0	47	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	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	
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	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 Effct Green (s)	22.0	22.0			22.0			14.0			14.0	
Actuated g/C Ratio	0.49	0.49			0.49			0.31			0.31	
v/c Ratio	0.22	0.13			0.08			0.68			0.04	
Control Delay	9.4	3.8			3.5			21.0			0.1	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	9.4	3.8			3.5			21.0			0.1	
LOS	A	A			A			C			A	
Approach Delay		5.9			3.5			21.0			0.1	
Approach LOS		A			A			C			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: 0.68			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 38.8%		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						
Traffic Volume (vph)	48	32	513	3	10	434
Future Volume (vph)	48	32	513	3	10	434
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
Frt	0.949		0.999			
Flt Protected	0.970				0.950	
Satd. Flow (prot)	1943	0	1861	0	1770	1863
Flt Permitted	0.970				0.378	
Satd. Flow (perm)	1943	0	1861	0	704	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	58		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	58	626	6	20	523
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	632	0	20	523
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		32.4		32.4	32.4
Total Split (%)	41.1%		58.9%		58.9%	58.9%
Maximum Green (s)	18.1		27.9		27.9	27.9
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 Effct Green (s)	8.3		40.6		40.6	40.6
Actuated g/C Ratio	0.15		0.74		0.74	0.74
v/c Ratio	0.45		0.46		0.04	0.38
Control Delay	17.6		5.8		3.9	5.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	17.6		5.8		3.9	5.0
LOS	B		A		A	A
Approach Delay	17.6		5.8			5.0
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 6.8		Intersection LOS: A	
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: University Blvd & Fritts Crossing

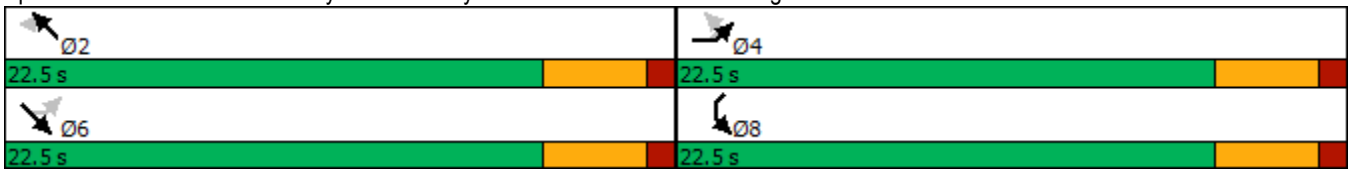
Lane Group	EBL2	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	95	0	0	46	265	112	0	291	3	63	0	52
Future Volume (vph)	95	0	0	46	265	112	0	291	3	63	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0	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					0.956			0.996		0.959		
Flt Protected		0.950		0.950						0.966		
Satd. Flow (prot)	0	1770	0	1770	3383	0	1863	3525	0	1726	0	0
Flt Permitted		0.950		0.533						0.966		
Satd. Flow (perm)	0	1770	0	993	3383	0	1863	3525	0	1726	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					122			6		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	82	294	122	0	359	9	210	0	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	0	82	416	0	0	368	0	301	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	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		Prot		
Protected Phases		4!			6			2		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		
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		Min	Min		Min	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 Effct Green (s)		9.8		12.0	12.0			12.0		9.8		
Actuated g/C Ratio		0.31		0.38	0.38			0.38		0.31		
v/c Ratio		0.18		0.21	0.30			0.27		0.52		
Control Delay		8.0		9.2	5.9			7.7		10.0		
Queue Delay		0.0		0.0	0.0			0.0		0.0		
Total Delay		8.0		9.2	5.9			7.7		10.0		
LOS		A		A	A			A		A		
Approach Delay		8.0			6.4			7.7		10.0		
Approach LOS		A			A			A		A		

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 31.2			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 42.0%		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

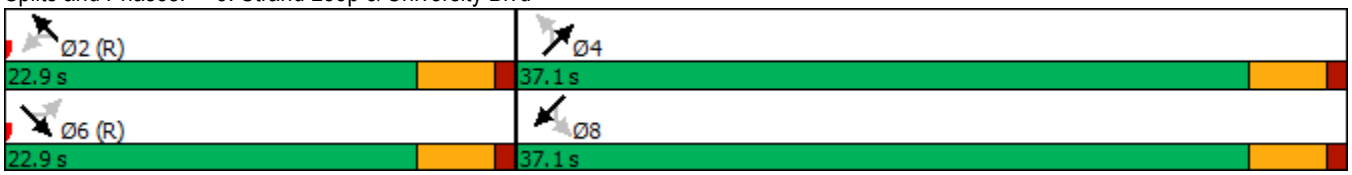


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	44	54	163	9	106	1	155	0	6	67	92	103
Future Volume (vph)	44	54	163	9	106	1	155	0	6	67	92	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	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
Frt		0.902			0.997			0.995			0.973	
Flt Protected	0.950			0.950				0.954			0.987	
Satd. Flow (prot)	1711	3086	0	1770	3529	0	0	1768	0	0	1789	0
Flt Permitted	0.667			0.572				0.358			0.841	
Satd. Flow (perm)	1201	3086	0	1065	3529	0	0	664	0	0	1524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		192			3			27			33	
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)	67	102	192	18	131	3	225	0	8	191	368	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	294	0	18	134	0	0	233	0	0	698	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	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		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		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		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	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		Perm	NA		Perm	NA		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)	22.9	22.9		22.9	22.9		37.1	37.1		37.1	37.1	
Total Split (%)	38.2%	38.2%		38.2%	38.2%		61.8%	61.8%		61.8%	61.8%	
Maximum Green (s)	18.4	18.4		18.4	18.4		32.6	32.6		32.6	32.6	
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 Effct Green (s)	20.7	20.7		20.7	20.7			30.3			30.3	
Actuated g/C Ratio	0.34	0.34		0.34	0.34			0.50			0.50	
v/c Ratio	0.16	0.25		0.05	0.11			0.67			0.89	
Control Delay	16.5	6.5		15.3	14.7			20.3			28.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	16.5	6.5		15.3	14.7			20.3			28.1	
LOS	B	A		B	B			C			C	
Approach Delay		8.4			14.8			20.3			28.1	
Approach LOS		A			B			C			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: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Strand Loop & University Blvd



Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

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	
Intersection Delay, s/veh	5.8
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	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	
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	76	596	615
Demand Flow Rate, veh/h	78	608	627
Vehicles Circulating, veh/h	524	42	0
Vehicles Exiting, veh/h	126	585	602
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	7.4	6.2
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	0.067	0.933
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	78	608	42	585
Cap Entry Lane, veh/h	809	1322	1420	1420
Entry HV Adj Factor	0.974	0.980	0.976	0.980
Flow Entry, veh/h	76	596	41	574
Cap Entry, veh/h	788	1295	1386	1392
V/C Ratio	0.096	0.460	0.030	0.412
Control Delay, s/veh	5.5	7.4	2.8	6.4
LOS	A	A	A	A
95th %tile Queue, veh	0	2	0	2

Intersection	
Intersection Delay, s/veh	6.3
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	125	0	0	84
Demand Flow Rate, veh/h	128	0	0	86
Vehicles Circulating, veh/h	646	0	428	406
Vehicles Exiting, veh/h	49	492	345	331
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	0.0	0.0	4.9
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	86
Cap Entry Lane, veh/h	714	912
Entry HV Adj Factor	0.980	0.977
Flow Entry, veh/h	125	84
Cap Entry, veh/h	700	891
V/C Ratio	0.179	0.094
Control Delay, s/veh	7.2	4.9
LOS	A	A
95th %tile Queue, veh	1	0

Intersection	
Intersection Delay, s/veh	5.6
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	299	47
Demand Flow Rate, veh/h	0	0	305	48
Vehicles Circulating, veh/h	0	436	206	243
Vehicles Exiting, veh/h	291	75	136	319
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	5.9	3.8
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	305	48
Cap Entry Lane, veh/h	1118	1077
Entry HV Adj Factor	0.981	0.979
Flow Entry, veh/h	299	47
Cap Entry, veh/h	1097	1055
V/C Ratio	0.273	0.045
Control Delay, s/veh	5.9	3.8
LOS	A	A
95th %tile Queue, veh	1	0

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	154	632	543
Demand Flow Rate, veh/h	157	645	553
Vehicles Circulating, veh/h	639	20	98
Vehicles Exiting, veh/h	26	631	698
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.6	7.6	6.7
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	0.036	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	157	645	20	533
Cap Entry Lane, veh/h	719	1352	1299	1299
Entry HV Adj Factor	0.981	0.981	1.000	0.980
Flow Entry, veh/h	154	632	20	523
Cap Entry, veh/h	705	1326	1299	1273
V/C Ratio	0.218	0.477	0.015	0.410
Control Delay, s/veh	7.6	7.6	2.9	6.8
LOS	A	A	A	A
95th %tile Queue, veh	1	3	0	2

Intersection	
Intersection Delay, s/veh	8.0
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	301
Demand Flow Rate, veh/h	105	0	0	307
Vehicles Circulating, veh/h	598	214	189	471
Vehicles Exiting, veh/h	124	564	514	93
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	8.5
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	307
Cap Entry Lane, veh/h	750	854
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	103	301
Cap Entry, veh/h	735	837
V/C Ratio	0.140	0.360
Control Delay, s/veh	6.4	8.5
LOS	A	A
95th %tile Queue, veh	0	2

Intersection	
Intersection Delay, s/veh	15.9
Intersection LOS	C

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	233	698
Demand Flow Rate, veh/h	0	0	238	712
Vehicles Circulating, veh/h	588	297	367	381
Vehicles Exiting, veh/h	505	307	589	71
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	6.4	19.0
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	238	712
Cap Entry Lane, veh/h	949	936
Entry HV Adj Factor	0.979	0.980
Flow Entry, veh/h	233	698
Cap Entry, veh/h	929	917
V/C Ratio	0.251	0.761
Control Delay, s/veh	6.4	19.0
LOS	A	C
95th %tile Queue, veh	1	7