



TRAFFIC IMPACT ANALYSIS

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NEC Wyoming Boulevard and Northeastern Boulevard Albuquerque, New Mexico Version 2



Prepared for:

Raising Cane's Restaurants, LLC

Kimley»Horn

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Prepared for:

Raising Cane's Restaurants, LLC
100 North Street, Suite 802
Baton Rouge, Louisiana 70802

Prepared By:

Kimley-Horn and Associates, Inc.
7740 North 16th Street, Suite 300
Phoenix, Arizona 85020

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Kimley»Horn



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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This report documents a Traffic Impact Study (TIS) for a proposed Raising Cane's Chicken Fingers (Cane's) development located on the northeast corner of the intersection of Wyoming Boulevard and Northeastern Boulevard in Albuquerque, NM. The development will consist of a 3,443 square-foot (SF) quick-serve restaurant (QSR) with drive-thru.

The Cane's location and study area intersections are identified in **Figure ES-1**.

No new access drives are proposed to be constructed with the development. An existing access drive is planned to be removed from the northeastern corner of the site.

Construction of the new development is anticipated to be completed by 2022 in one phase.

The scoping document for this analysis can be found in **Appendix A**.

1.2 REPORT PURPOSE AND OBJECTIVES

Kimley-Horn and Associates, Inc. has been retained by Raising Cane's Restaurants, LLC. to prepare a TIS for the proposed development. The analysis addresses traffic impacts of the proposed Cane's on surrounding streets and intersections. This traffic impact study was prepared to address the following objectives:

- Evaluate lane requirements on existing roadway links and at existing intersections within the study area;
- Determine future level of service (LOS) for existing study area intersections and recommend capacity improvement needs;
- Determine necessary lane configurations at driveways within the proposed development to provide acceptable future levels of service; and
- Evaluate the need for auxiliary lanes at study area intersections.

1.3 PRINCIPAL FINDINGS AND RECOMMENDATIONS

The proposed development is estimated to generate 1,622 daily trips, with 0 or negligible trips occurring in the AM peak hour and 112 trips occurring in the PM peak hour.

This analysis concludes that the proposed development will be accommodated by the surrounding street network, with the following findings and recommendations:

- The development will be accessed from an existing driveway connection on Driveway A. The proposed site access will be full access to accommodate passenger cars. No new driveways are proposed. An existing site driveway on the site's northeast corner is to be removed.

- Study area intersections operate at acceptable LOS in each analysis scenario, including existing, 2022 background and total, and 2032 background and total traffic scenarios with the following exceptions:
 - The westbound left-turn movement at Northeastern Boulevard (Intersection 1) shows LOS E in all study scenarios during the PM peak hour. Since the reported LOS and delay do not worsen from existing conditions, no mitigation is recommended as part of the proposed development.
 - Note: It is recommended that the City monitor signal timings at this location as traffic patterns change and evaluate if any adjustments to signal timings (e.g. splits, offsets, cycle length, etc.) could improve LOS for this movement.
 - The westbound left-turn movement at Driveway B (Intersection 4) shows LOS E in all study scenarios during both the AM and PM peak hours. Since the reported LOS and delay do not worsen from existing conditions, no mitigation is recommended as part of the proposed development.
 - Note: It is recommended that the City monitor signal timings at this location as traffic patterns change and evaluate if any adjustments to signal timings (e.g. splits, offsets, cycle length, etc.) could improve LOS for this movement.
- The 2032 horizon year queue length of the westbound left-turn movement on Northeastern Boulevard (Intersection 1) exceeds the existing striped storage length. The storage lane cannot be extended without reducing the left turn storage for the eastbound left turn at Intersection 2. Based on direction from the City, it is recommended that the EBL at Intersection 2 be removed and the WBL at Intersection 1 be extended. It is anticipated that the storage length can be increased to approximately 130 feet.
- The southbound approach at Intersection 2 exceeds the minimum requirements for a dedicated turn lane. Based on direction from the City it is recommended that the southbound approach be restriped to provide two egress lanes (a shared thru/left and a dedicated right) and one ingress lane.
- The proposed drive-thru and parking lot are expected to provide enough space for on-site circulation during typical- and high-traffic demands. Traffic from the drive-thru is unlikely to spill back onto Driveway A (Intersection 3).
- The intersection of Wyoming Boulevard and Northeastern Boulevard experienced 48 crashes from 2017 to 2019. The average crash rate at the intersection is 1.22 crashes per million entering vehicles. The rate of severe crashes is higher at the intersection than the regional average. However, because about 25% of crashes included in the data set were under-reported there are no recommended safety mitigations as part of this development.
 - It is recommended that the City continue to monitor this area on an ongoing basis as new crash data becomes available. Location-specific items the City may wish to consider are provided in Section **6.4 Crash Analysis**.

Recommended lane configuration is shown in **Figure 11**.

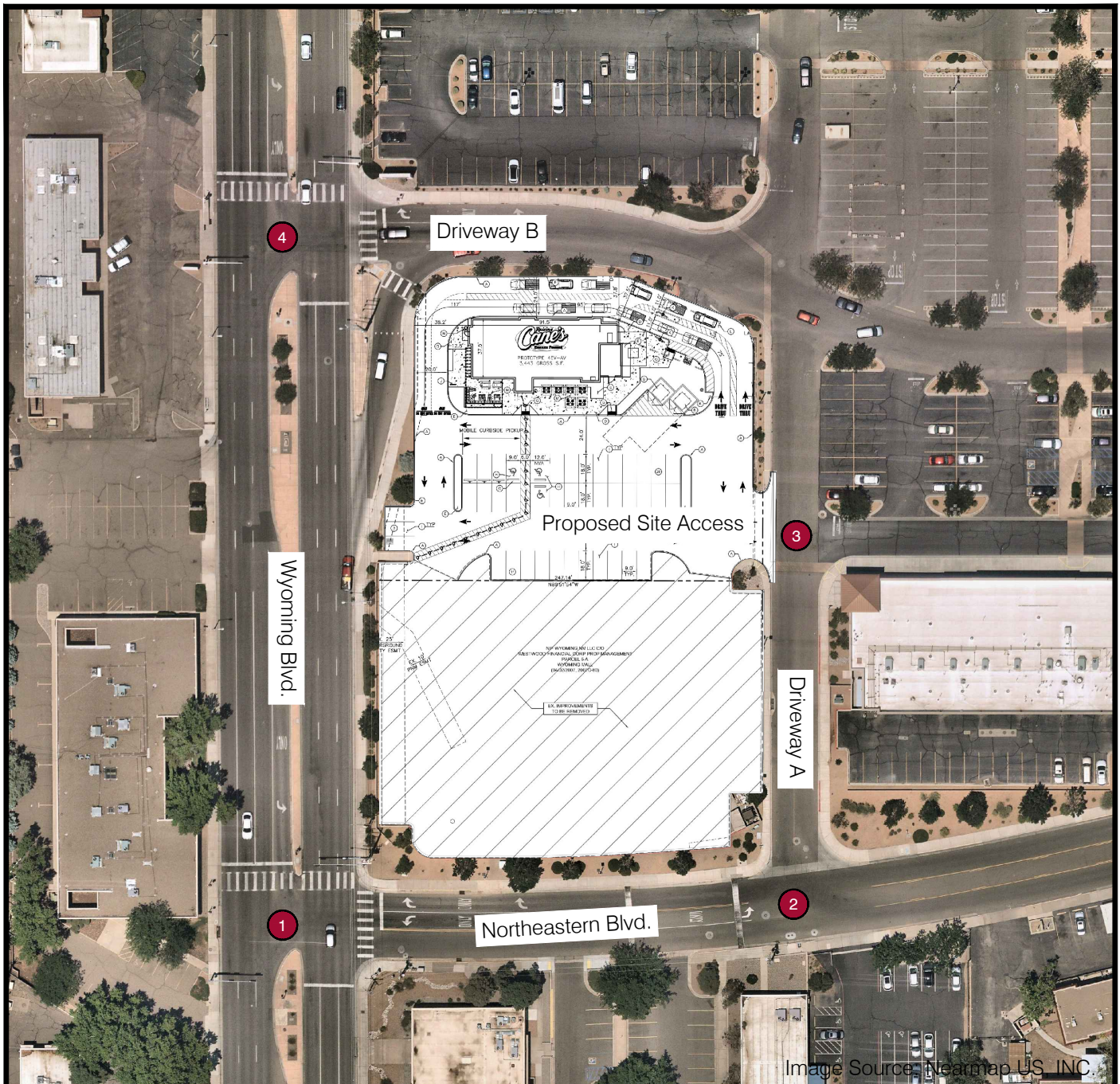


Image Source: Nearmap US, INC



Study Area Intersections:

1. Wyoming Boulevard / Northeastern Boulevard
2. Driveway A / Northeastern Boulevard
3. Driveway A / Proposed Site Access

Additional Analysis Intersections:

4. Wyoming Boulevard / Driveway B

2.0 PROPOSED DEVELOPMENT

2.1 SITE LOCATION

The proposed Cane's development consists of a quick-serve (QSR) restaurant with drive-thru located on the northeast corner of the intersection of Wyoming Boulevard and Northeastern Boulevard in Albuquerque, NM. The city of Albuquerque classifies the existing site's land use as mixed-use – moderate intensity (MX-M). The site is located on a parcel currently developed as a parking lot.

The project location is shown in **Figure 1**.

2.2 LAND USE AND SITE PLAN

The total site area is approximately 2.02-acres. The area to be developed is proposed to consist of a 3,443 SF fast-food restaurant with multi-lane drive-thru. The preliminary concept plan for the development is shown in **Figure 2**.

2.3 SITE ACCESSIBILITY

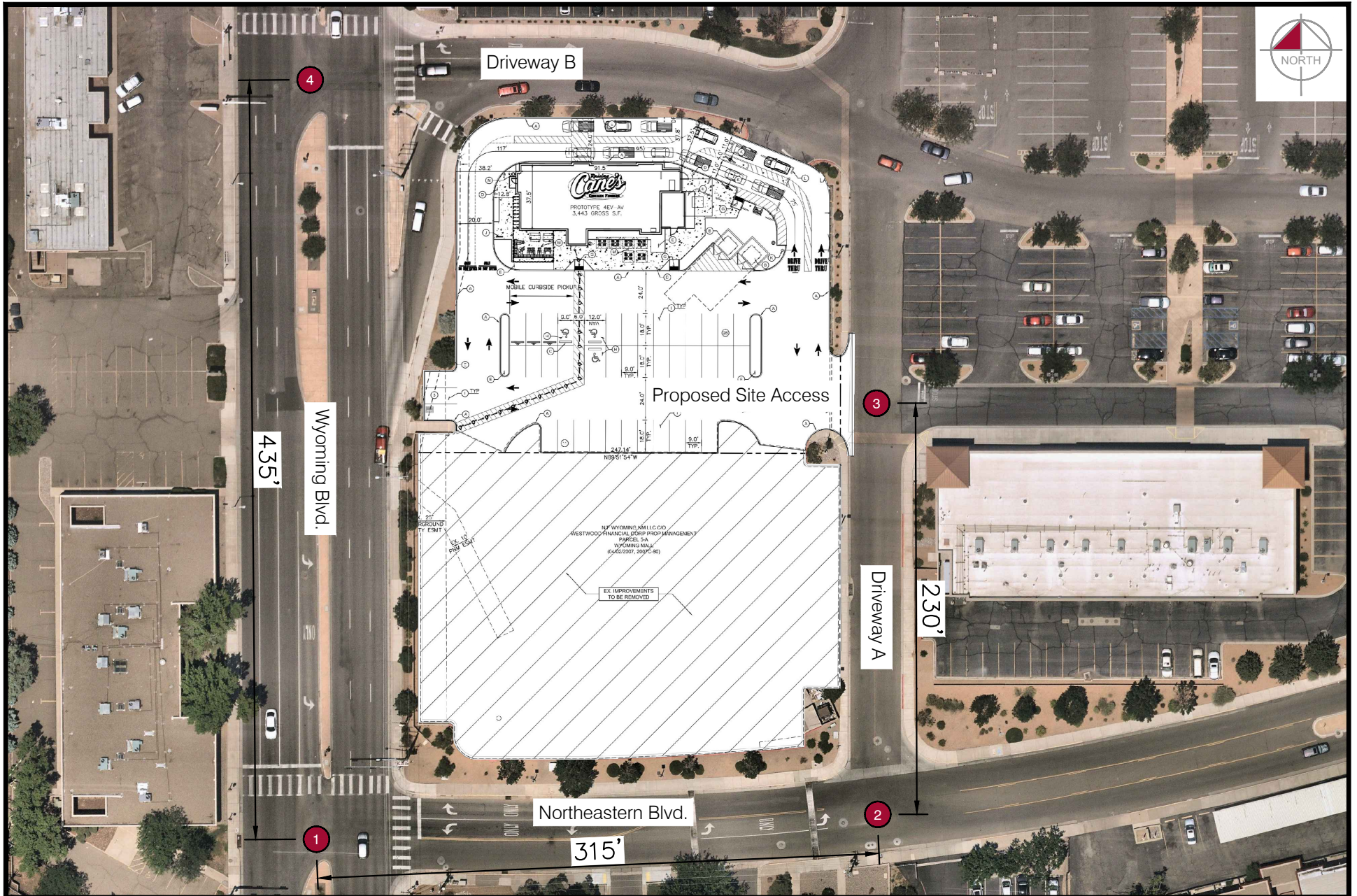
The site is accessed via a single driveway (Proposed Site Access) that intersects Driveway A. The Proposed Site Access is an existing full access driveway. Vehicles will enter the existing commercial development parking lot via Driveway A on Northeastern Boulevard or Driveway B on Wyoming Boulevard.

2.4 SITE CIRCULATION

The developer is proposing one site access located on Driveway A, per the provided site plan. The site access is proposed to remain full access and will primarily service passenger vehicles.

The southern portion of the development will include 42 parking stalls. The Northern portion of the development will include the 3,443 SF fast-food restaurant with drive-thru. Drive-thru traffic will enter on the east side of the restaurant, proceed along the north side of the restaurant, and exit on the west side of the restaurant. The proposed drive-thru will consist of two queuing lanes.





3.0 STUDY AREA

3.1 STUDY AREA

Per the TIS Scoping Meeting held virtually on August 20, 2021 with City of Albuquerque staff, the study area includes the Proposed Site Access, the adjacent unsignalized intersection of Northeastern Boulevard and Driveway A, and the signalized intersection of Wyoming Boulevard and Northeastern Boulevard.

The signalized intersection of Wyoming Boulevard and Driveway B was included in the analysis as an additional analysis Intersection due to its proximity to the site and the assumption that a portion of site generated trips will utilize that intersection to access the proposed development.

The proposed access drive and study area intersections are shown previously in **Figure 2**.

3.2 ADJACENT LAND USE

The area directly surrounding the site consists of commercial land uses. The site is surrounded by primarily residential land uses further away in all directions.

Interstate 40 (I-40) is located approximately 1 mile to the south and is accessed via a traffic interchange at Wyoming Boulevard.

4.0 EXISTING CONDITIONS

4.1 PHYSICAL CHARACTERISTICS

The primary existing roadway network within the study area includes Wyoming Boulevard, Northeastern Boulevard, Driveway A, and the Proposed Site Access. The existing lane configurations and intersection control types for the study intersections are shown in **Figure 3**.

Wyoming Boulevard is a north-south roadway within the study area, with three through travel lanes in each direction separated by a raised median. There is a curb, gutter, and sidewalk on both sides of the roadway.

Northeastern Boulevard is an east-west roadway within the study area, with one through travel lane in each direction. There are back-to-back, opposing left turn lanes with no median separation between Wyoming Boulevard and Driveway A. East of Driveway A, median separation begins with a two-way left-turn lane (TWLTL) before becoming a raised median further to the east. There is a curb, gutter, and sidewalk on both sides of the roadway.

Driveway A is a north-south driveway with one travel lane in each direction. There is a curb, gutter, and sidewalk on the entire west side and the southern part of the east side of the driveway adjacent to the site.

Driveway B is an east-west driveway with one travel lane in each direction. There is a curb, gutter, and sidewalk on the north side of the roadway only.

The **Proposed Site Access** is an east-west driveway with one travel lane in each direction. There is a curb and gutter on both sides of the driveway. The south side of the driveway has a crosswalk and curb ramps.

The Mid-Region Council of Governments (MRCOG) classifies Wyoming Boulevard as a principal arterial. Northeastern Boulevard is a local street unclassified by MRCOG. Driveway A, Driveway B, and the Proposed Site Access are private roads within a larger commercial development.

The posted speed limit for Wyoming Boulevard is 40 miles per hour (mph) and the posted speed limit for Northeastern Boulevard is 30 mph within the vicinity of the site. Driveway A, Driveway B, and the Proposed Site Access are private commercial driveways with no posted speed limits. The assumed speed limit for these driveways is 25 mph.

4.2 TRAFFIC VOLUMES

Peak period turning movement counts (TMCs) were collected on Tuesday, August 31, 2021 at the intersections of Wyoming Boulevard/Northeastern Boulevard, Driveway A/Northeastern Boulevard, Driveway A/Proposed Site Access, and Wyoming Boulevard/Driveway B. TMCs were collected between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM.

24-hour counts for Wyoming Boulevard north of Indian School Road were obtained from MRCOG. The data was collected on March 25, 2019 and shows a daily traffic volume of approximately 35,254 vehicles per day. 24-hour counts were unavailable from MRCOG for all other roadways studied.

The existing peak hour turning movements are shown in **Figure 4**. Detailed reports with AM and PM peak period turning movements are included in **Appendix B**.

4.3 EXISTING LEVEL OF SERVICE

The LOS at the existing study area intersection was evaluated using traffic count data described previously and existing intersection geometry and control, shown in **Figure 3**. Highway Capacity Manual (HCM) 6th Edition methodology is used to analyze intersection operations within Synchro 11 analysis software. For signalized intersections, LOS and delay are reported for each movement and the intersection as a whole. For unsignalized intersections, LOS and delay are reported for minor movements only and an overall intersection LOS or delay is not provided. Synchro analysis results are reported for the intersection of Wyoming Boulevard/Driveway B, which operates with non-NEMA signal phasing. HCM 6th Edition cannot analyze this type of phasing; Synchro analysis results are therefore reported for the intersection.

The analysis results are shown in **Table 1** and reported as “LOS/delay”. Delay is rounded to the nearest whole second. Note that an asterisk (*) denotes the movement had zero traffic volume during the study period. A dash (-) indicates a free movement. **Bolded** values indicate a movement is operating at an unacceptable LOS. LOS analysis reports for the existing condition are included in **Appendix C**.

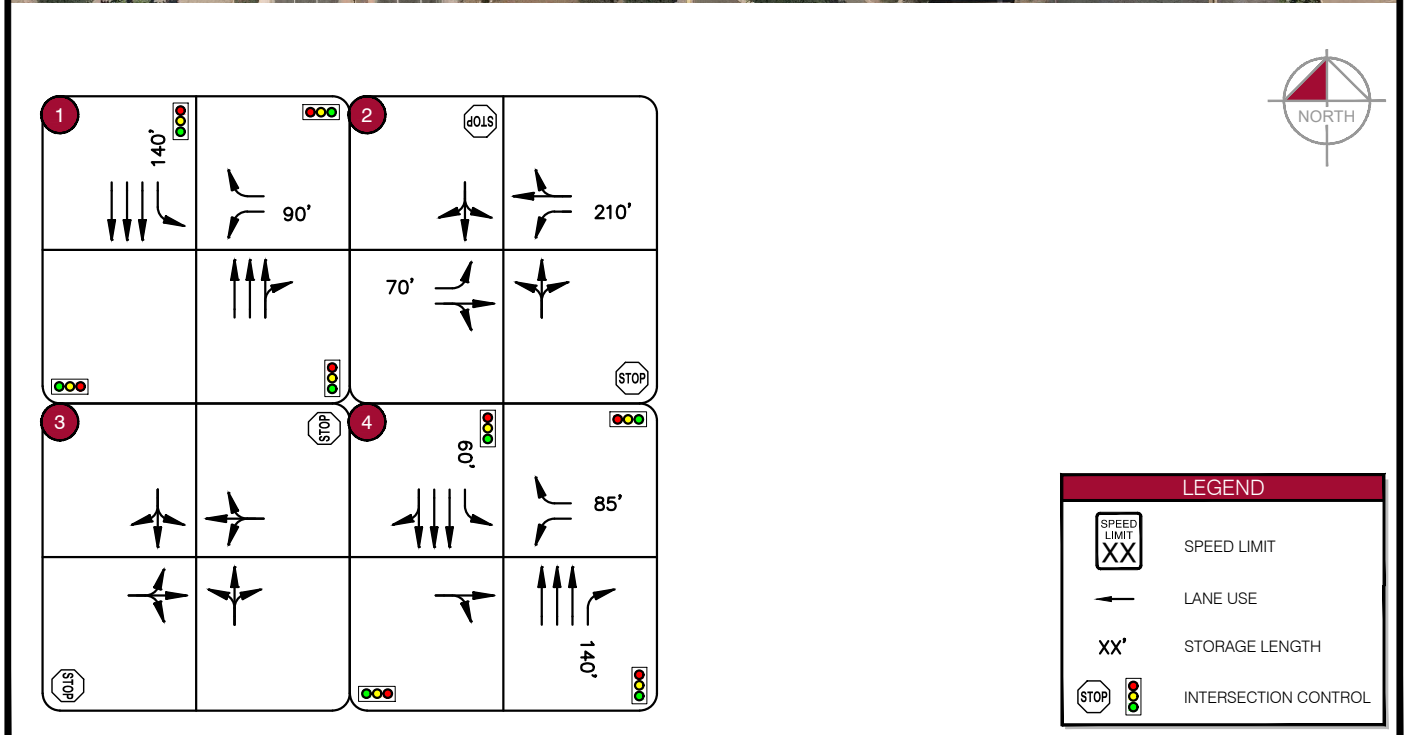
Table 1. Existing Level of Service and Delay

Intersection	NB Approach			SB Approach			EB Approach			WB Approach			Overall
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Wyoming Boulevard / Northeastern Boulevard													
AM Peak		A/2	A/3	A/1	A/1					D/52		D/49	A/3
PM Peak		A/3	A/4	A/2	A/1					E/57		D/52	A/5
2. Driveway A / Northeastern Boulevard													
AM Peak	*			A/10			A/7	-		A/7	-		-
PM Peak	B/11			B/13			A/8	-		*	-		-
3. Driveway A / Proposed Site Access													
AM Peak	*	-		A/7	-		A/9		A/9			-	
PM Peak	*	-		A/7	-		A/9		A/10			-	
4. Wyoming Boulevard / Driveway B													
AM Peak		A/10	A/4	A/3	A/2	*		*	E/60			A/4	A/7
PM Peak		B/17	A/7	A/6	A/5	*		*	E/69			B/11	B/15

The westbound left-turn (WBL) movement of the intersection of Wyoming Boulevard/Northeastern Boulevard (Intersection 1) operates at LOS E during the existing PM peak period.

The WBL movement of Wyoming Boulevard/Driveway B (Intersection 4) operates at LOS E in both the existing AM and PM peak periods.

All other movements operate at acceptable LOS D or better. All intersections operate at an acceptable overall LOS.





1 ← 1199(1221) ← 22(30) ↖ 20(42) ↖ 66(114) ↗ 1272(1582) ↗ 71(68)	2 ↖ 22(40) ↖ 31(98) ↖ 8(25) ↖ 67(120) ↖ 2(0) ↗ 9(14) ↗ 78(96) ↗ 1(2) ↗ 0(13) ↗ 0(16)
3 ↖ 2(0) ↖ 40(111) ↖ 5(6) ↖ 0(3) ↖ 13(27) ↗ 1(2) ↗ 10(35) ↗ 7(7)	4 ↖ 1151(1075) ↖ 22(30) ↖ 25(100) ↖ 59(169) ↗ 1195(1428) ↗ 87(192)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES

5.0 PROJECTED TRAFFIC

5.1 SITE TRAFFIC FORECASTS

5.1.1 TRIP GENERATION

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition* was used to estimate the number of new trips that are anticipated to be generated by the Cane's development. The ITE *Trip Generation Manual* is a widely accepted reference that contains a compilation of trip generation studies completed at sites throughout the country. Daily and peak hour trips, shown in Table 2, were calculated using the applicable regression equation/rates from the ITE *Trip Generation Manual*. The ITE *Trip Generation Manual* information is provided in **Appendix D**.

Table 2. Project Trip Generation

Land Use	Land Use Code	Size/Qty	Units	Total Trips						
				Weekday						
				Daily	AM Peak Hour*			PM Peak Hour		
					In	Out	Total	In	Out	Total
Fast-Food Restaurant w/ Drive-Thru	934	3.443	1,000 SF	1,622	0	0	0	58	54	112

**Note: AM Peak Hour trips are assumed to be zero or negligible. This is based on the following information:*

- The Cane’s restaurant will not open until 10:00 AM daily, which is outside the timeframe of the AM Peak Analysis Period.*
- The ITE Trip Generation Manual has intentionally removed restaurants that are closed for breakfast from the data set for the AM Peak Hour of adjacent street traffic. Therefore, data for the AM Peak Hour is not applicable for this development.*

The proposed development is estimated to generate **1,622** daily trips with **0** or negligible trips occurring during the AM peak hour and **112** trips occurring during the PM peak hour.

5.1.2 TRIP REDUCTIONS

Trip generation estimates in **Table 2** utilized ITE Land Use Code 934. This land use code is described as a fast-food restaurant with drive-thru. This land use generates significant pass-by traffic, meaning commuters may stop by the facility while traveling to their ultimate destination. Pass-by trips increase the volume of traffic to the site but do not increase the volume on the adjacent street network.

ITE Land Use Code 934 has published trip by-pass reduction rates of 49% and 50% for AM and PM trips, respectively. However, **no pass-by trip reduction or internal capture was assumed for the Cane's development in this analysis**. This represents a conservative estimate of the number of new trips anticipated to be added to the adjacent street network, as it is reasonable to assume that there will be some pass-by trips associated with the Cane's restaurant.

5.1.3 TRIP DISTRIBUTION

Trips were distributed based on the surrounding roadway system using MRCOG population data projections for 2040. Based on analysis of population projects it is anticipated that 26% of trips will travel to/from the north, 29% to/from the south, 24% to/from the east, and 21% to/from the west. A map showing the basis of trip distribution estimates is included in **Appendix E**.

Figure 5 illustrates the proposed trip distribution for the study area.

5.1.4 TRAFFIC ASSIGNMENT

Trips generated by the proposed development were assigned to the roadway network based on the trip distribution and likely travel patterns to and from the site. **Figure 6** shows the project development traffic assignment for the AM and PM peak periods.

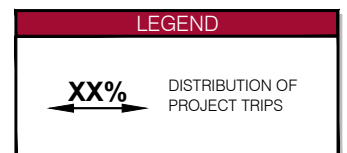
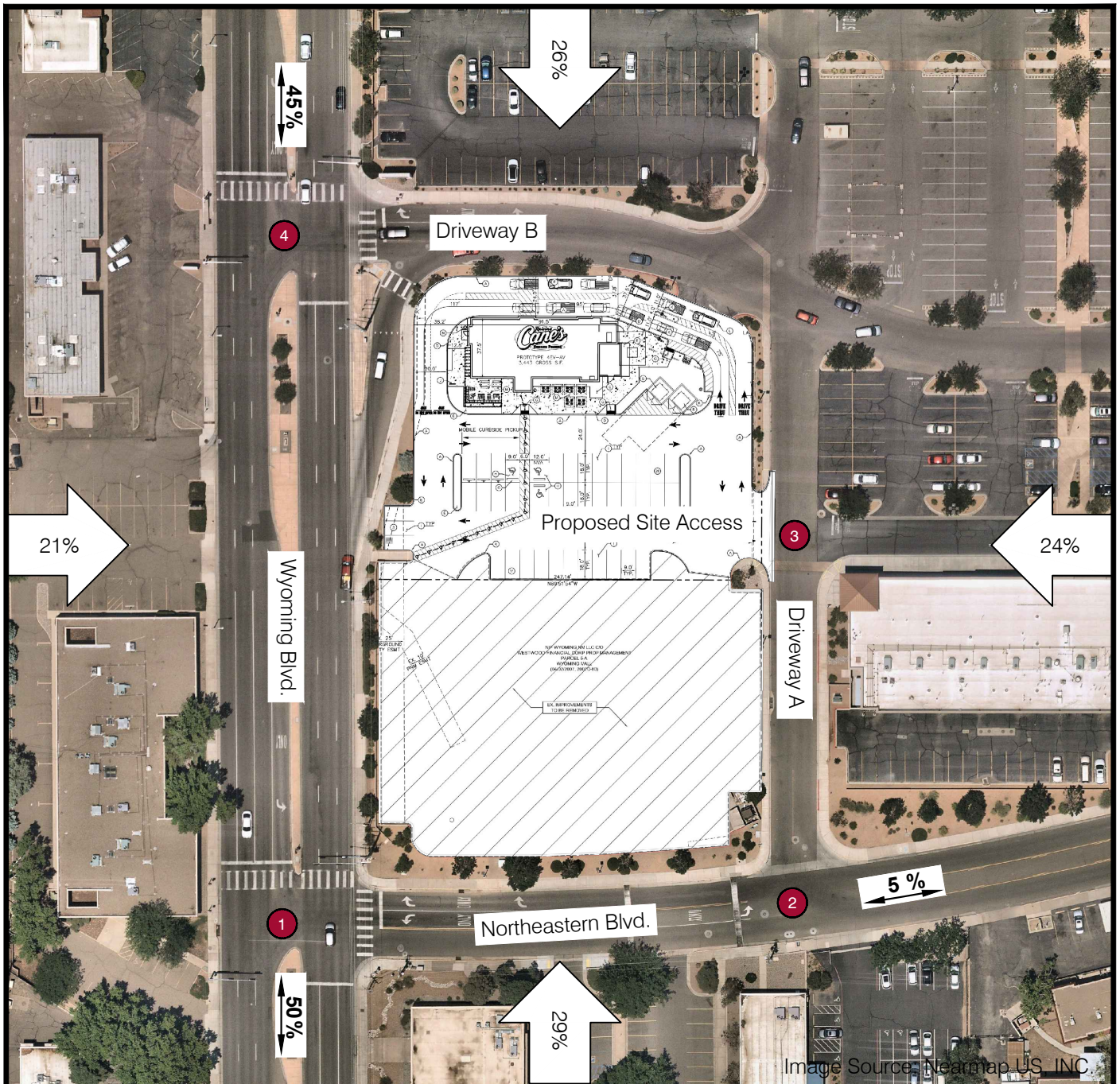
5.2 FUTURE TRAFFIC FORECASTING

Background traffic volumes for the anticipated buildout year of 2022 and horizon year 2032 were estimated using the ten-year historical traffic growth rate from 2010 to 2019. Traffic data for this calculation was obtained from MRCOG traffic counts. The 2020 annual growth rate was not included in the calculation for the average annual growth rate due to a significant change in traffic volumes associated with the COVID-19 pandemic.

The historical growth rate from 2010 to 2019 of 1% was applied to existing traffic volumes to obtain background traffic volumes for 2022 buildout and 2032 horizon years. The resulting background traffic volumes are shown in **Figure 7** and **Figure 8**, respectively.

5.3 TOTAL TRAFFIC

The results of the traffic assignment (**Figure 6**) for the project development were added to the background traffic volumes (**Figure 7** and **Figure 8**) to produce 2022 and 2032 total traffic volumes for the study area, shown in **Figure 9** and **Figure 10**, respectively.



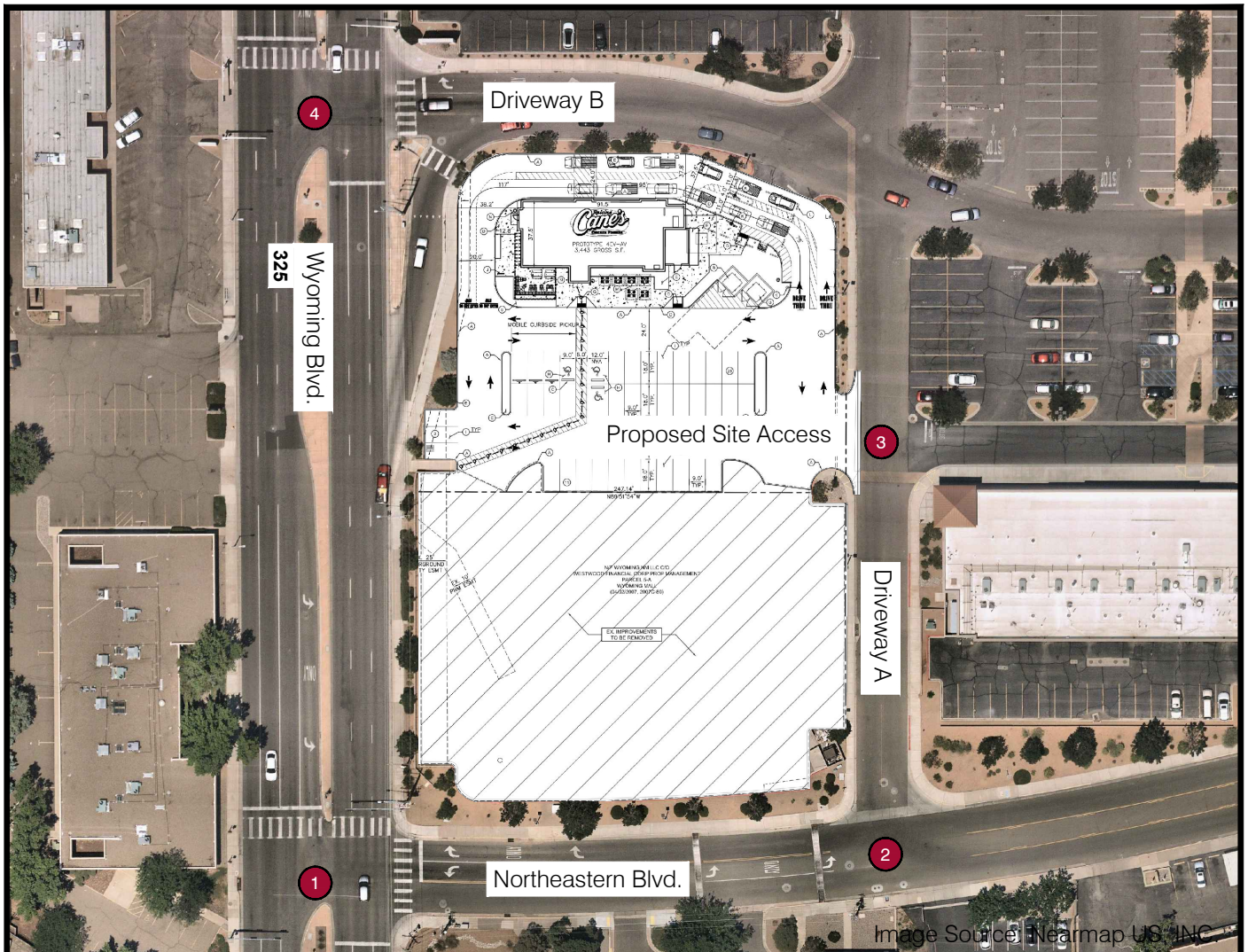
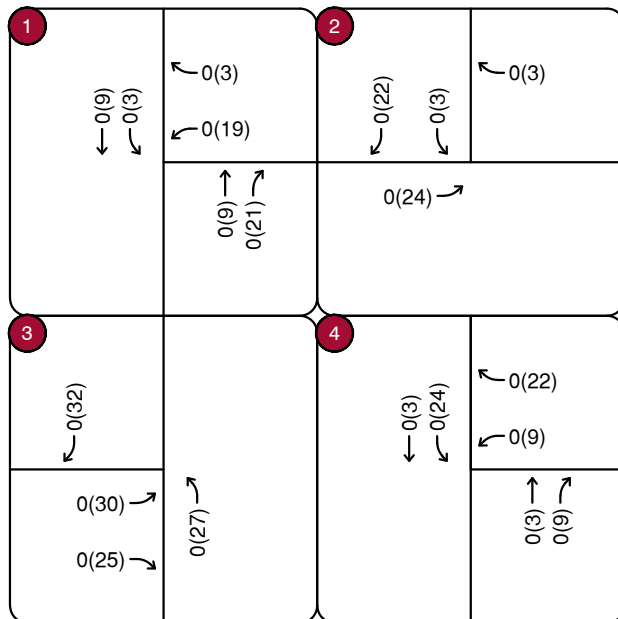
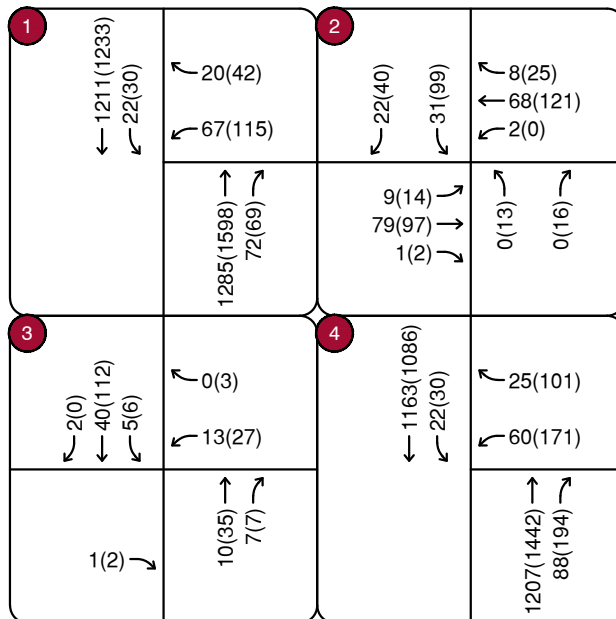
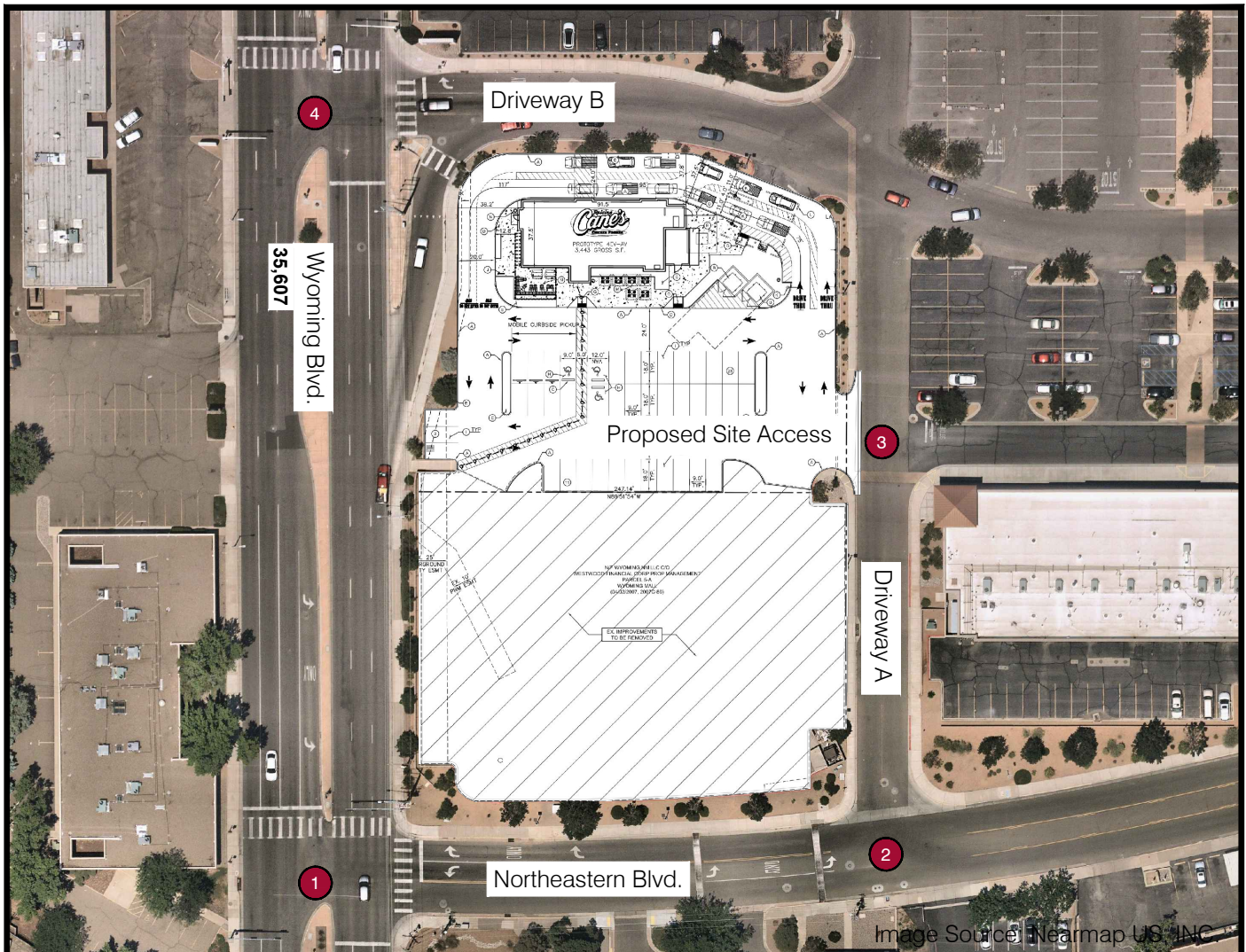


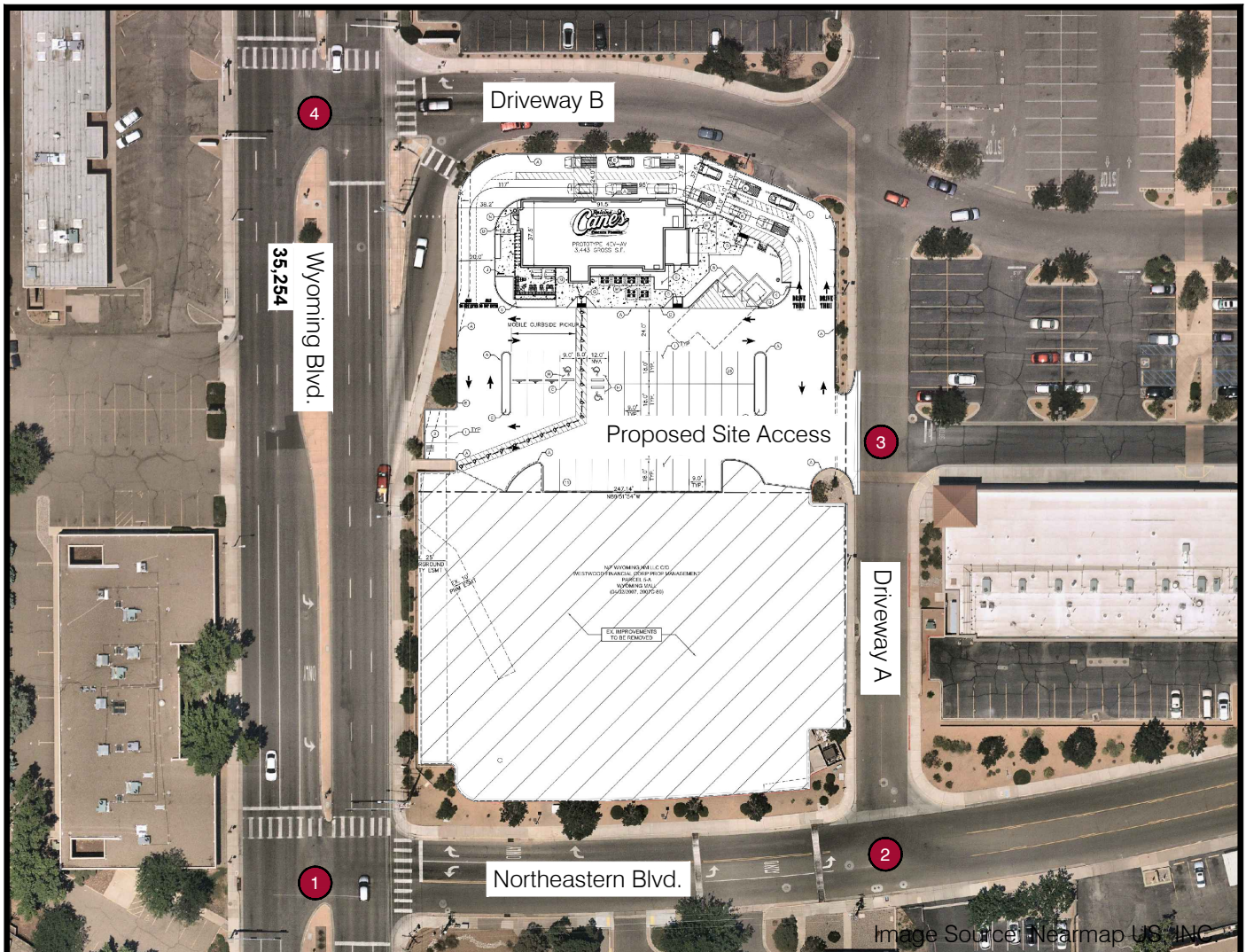
Image Source: Nearmap US, INC.



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES



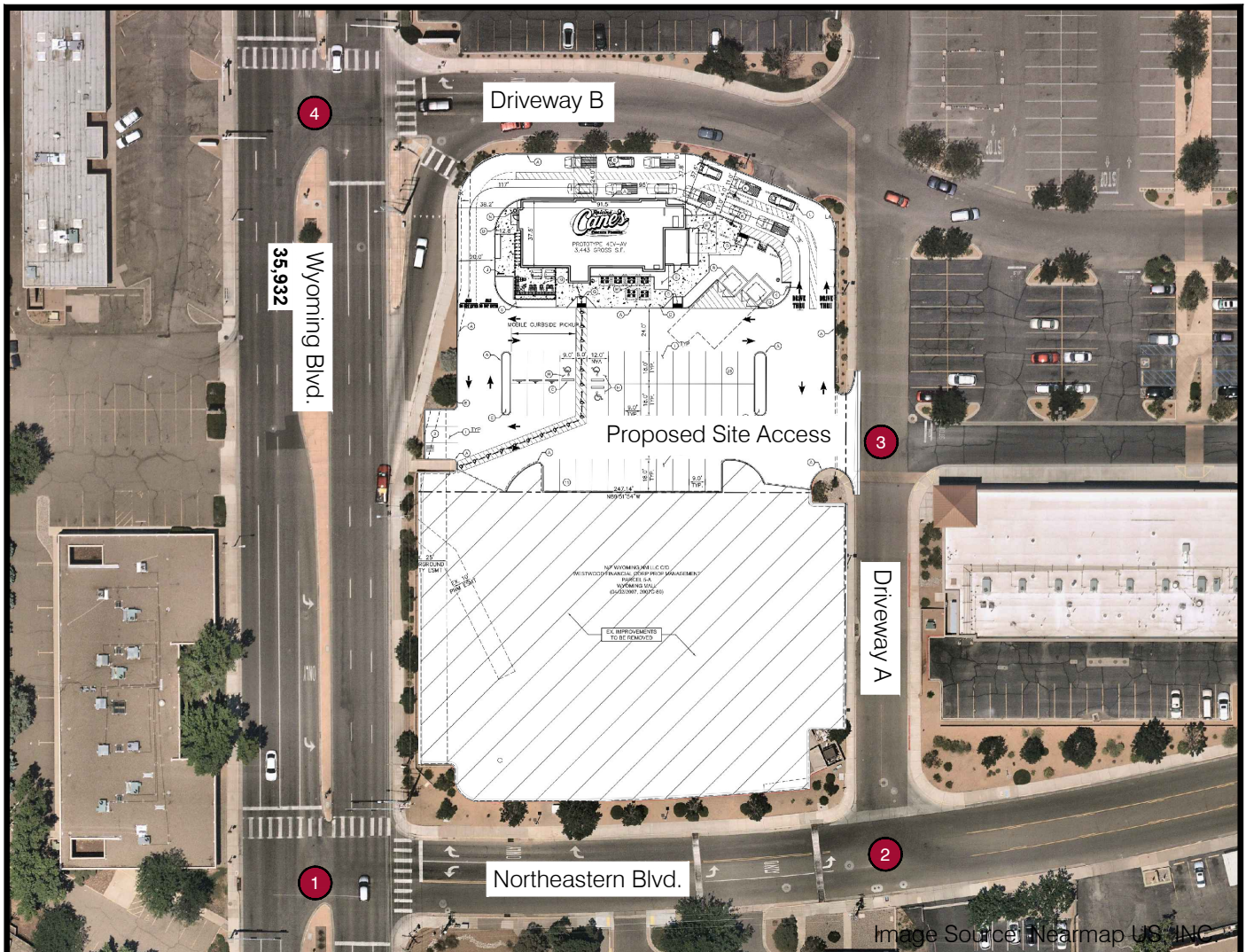
LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES



1 ← 1338(1362) ← 25(33) ↖ 22(47) ↖ 74(127) ↗ 1419(1765) ↗ 79(76)	2 ↖ 25(45) ↖ 35(109) ↗ 10(16) ↗ 87(107) ↗ 1(2) ↘ 0(15) ↘ 0(18)
3 ↖ 2(0) ↖ 45(124) ↖ 6(7) ↗ 0(3) ↗ 15(30) ↘ 1(2) ↘ 11(39) ↘ 8(8)	4 ↖ 1284(1199) ↖ 25(33) ↗ 28(112) ↗ 66(189) ↘ 1333(1593) ↘ 97(214)



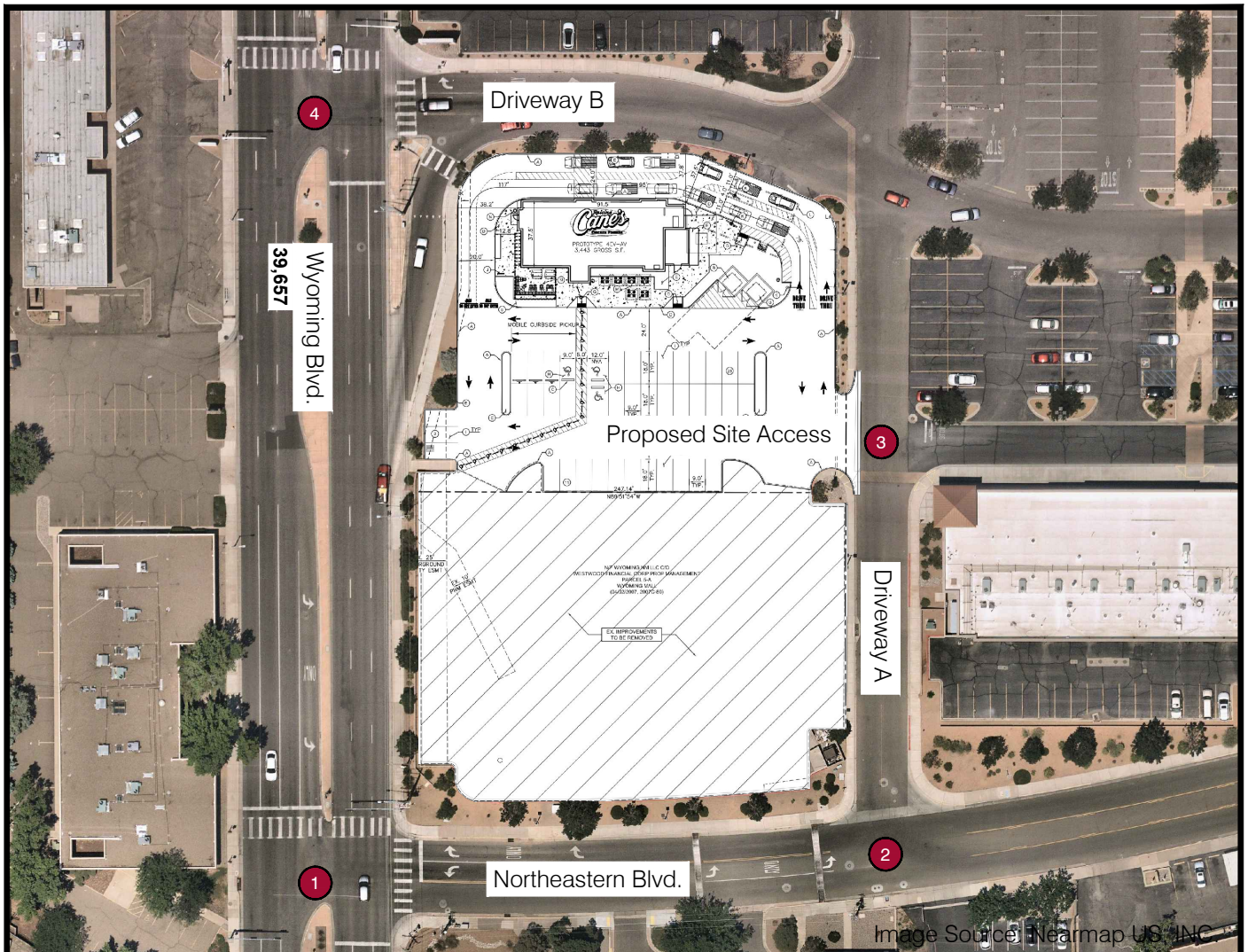
LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES



1 ← 1211(1242) ← 22(33) ↖ 20(45) ↖ 67(134) ↗ 1285(1607) ↗ 72(90)	2 ↖ 22(62) ↖ 31(102) ↗ 9(38) ↗ 79(97) ↗ 1(2) ↖ 0(13) ↖ 0(16)
3 ↖ 2(32) ↖ 40(112) ↖ 5(6) ↖ 0(30) ↖ 1(27) ↖ 0(27) ↖ 10(35) ↖ 7(7)	4 ↖ 0(3) ↖ 13(27) ↖ 1163(1089) ↖ 22(54) ↖ 25(123) ↖ 60(180) ↖ 1207(1445) ↖ 88(203)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES



1 ← 1338(1371) ← 25(36) ↖ 22(50) ↖ 74(146) ↗ 1419(1774) ↗ 79(97)	2 ↖ 25(67) ↖ 35(112) ↗ 10(40) ↗ 87(107) ↗ 1(2) ↘ 0(15) ↘ 0(18)
3 ↖ 2(32) ↖ 45(124) ↖ 6(7) ↗ 0(30) ↗ 1(27) ↖ 0(27) ↖ 11(39) ↖ 8(8)	4 ↖ 1284(1202) ↖ 25(57) ↗ 28(134) ↗ 66(198) ↘ 1333(1596) ↘ 97(223)



LEGEND	
← XX(X)	AM(PM) PEAK HOUR TRAFFIC VOLUMES
XXXX	AVERAGE DAILY TRAFFIC VOLUMES

6.0 TRAFFIC AND IMPROVEMENT ANALYSIS

6.1 LEVEL OF SERVICE ANALYSIS

The LOS for the study area intersections were evaluated using HCM 6th Edition methodology and Synchro 11 analysis software. Synchro analysis results are reported for the intersection of Wyoming Boulevard/Driveway B, which operates with non-NEMA signal phasing. HCM 6th Edition will not analyze this type of phasing; Synchro analysis results are therefore reported for the intersection. LOS analysis reports are included in **Appendix F** for background and **Appendix G** for total scenarios.

6.1.1 BACKGROUND TRAFFIC LEVEL OF SERVICE ANALYSIS

The study area intersections were evaluated based on the background traffic shown in **Figure 7** and **Figure 8** and the intersection geometry shown in **Figure 3**. The results of the analysis for the intersection and site driveways are shown in **Table 4** and **Table 5** for background year 2022 and 2032, respectively.

Delay is rounded to the nearest whole second. Note that an asterisk (*) denotes the movement had zero traffic volume during the study period. A dash (-) indicates a free movement. **Bolded** values indicate a movement is operating at an unacceptable LOS.

Table 3. 2022 Background Traffic Level of Service and Delay

Intersection	NB Approach			SB Approach			EB Approach			WB Approach			Overall	
	L	T	R	L	T	R	L	T	R	L	T	R		
1. Wyoming Boulevard / Northeastern Boulevard														
AM Peak		A/3	A/3	A/1	A/1					D/52		D/49	A/3	
PM Peak		A/3	A/4	A/2	A/1					E/57		D/52	A/5	
2. Driveway A / Northeastern Boulevard														
AM Peak	*			A/10			A/7	-			A/7	-		-
PM Peak	B/11			B/13			A/8	-			*	-		-
3. Driveway A / Proposed Site Access														
AM Peak	*	-		A/7	-		A/9			A/9			-	
PM Peak	*	-		A/7	-		A/9			A/10			-	
4. Wyoming Boulevard / Driveway B														
AM Peak		A/10	A/4	A/3	A/3	*		*		E/60		A/4	A/7	
PM Peak		B/17	A/8	A/6	A/5	*		*		E/69		B/11	B/15	

Table 4. 2032 Background Traffic Level of Service and Delay

Intersection	NB Approach			SB Approach			EB Approach			WB Approach			Overall
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Wyoming Boulevard / Northeastern Boulevard													
AM Peak		A/3	A/3	A/1	A/1					D/53		D/49	A/3
PM Peak		A/4	A/5	A/4	A/1					E/57		D/51	A/5
2. Driveway A / Northeastern Boulevard													
AM Peak	*			B/10			A/8	-		A/7	-		-
PM Peak	B/11			B/14			A/8	-		*	-		-
3. Driveway A / Proposed Site Access													
AM Peak	*	-		A/7	-		A/9			A/9			-
PM Peak	*	-		A/7	-		A/9			B/10			-
4. Wyoming Boulevard / Driveway B													
AM Peak		B/12	A/5	A/3	A/3	*		*		E/61		A/6	A/8
PM Peak		C/21	B/10	A/7	A/6	*		*		E/69		B/12	B/18

The WBL movement of Intersection 1 operates at LOS E during the PM peak periods of both the 2022 and 2032 background and horizon years.

The WBL movement of Intersection 4 operates at LOS E in both the AM and PM peak periods of the 2022 and 2032 background and horizon years.

All other movements operate at acceptable LOS in both the 2022 and 2032 background and horizon years. All intersections operate at an acceptable overall LOS.

6.1.2 TOTAL TRAFFIC LEVEL OF SERVICE ANALYSIS

The study area intersections were evaluated based on the total traffic shown in **Figure 9** and **Figure 10** and the intersection geometry shown in **Figure 11**. The results of the analysis for the intersection and site driveway are shown in **Table 5** and **Table 6** for buildout year 2022 and horizon year 2032, respectively.

Based on direction from the City of Albuquerque, the following geometric modifications are to be made at Driveway A. These geometric changes are reflected in the results provided in **Table 5** and **Table 6**.

- The southbound approach at Intersection 2 is to be restriped as a two-lane approach with R3-8 series intersection control signage due to anticipated turning volumes. The total traffic LOS was modeled as a shared thru/left lane and a dedicated right turn lane for the southbound approach.
- The exclusive EBL turn lane at Intersection 2 is to be removed in favor of extending the WBL turn lane at Intersection 1. The total traffic LOS was modeled as a shared left/thru/right lane for the eastbound approach.

A passenger car turning exhibit is provided in **Appendix H**, which illustrates the proposed geometric changes at Driveway A.

Table 5. 2022 Total Traffic Level of Service and Delay

Intersection	NB Approach			SB Approach			EB Approach			WB Approach			Overall
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Wyoming Boulevard / Northeastern Boulevard													
AM Peak		A/3	A/3	A/1	A/1					D/52		D/49	A/3
PM Peak		A/4	A/5	A/3	A/1					E/57		D/50	A/6
2. Driveway A / Northeastern Boulevard													
AM Peak	*			B/10		A/9	A/7		-	A/7	-	-	-
PM Peak	B/11			B/14		A/10	A/8		-	*	-	-	-
3. Driveway A / Proposed Site Access													
AM Peak	*	-		A/7	-		A/9		A/9		-		-
PM Peak	A/8	-		A/7	-		B/10		B/11		-		-
4. Wyoming Boulevard / Driveway B													
AM Peak		A/10	A/4	A/3	A/3	*		*	*	E/60		A/4	A/7
PM Peak		B/19	A/8	A/7	A/6	*		*	*	E/69		B/12	B/16

Table 6. 2032 Total Traffic Level of Service and Delay

Intersection	NB Approach			SB Approach			EB Approach			WB Approach			Overall
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Wyoming Boulevard / Northeastern Boulevard													
AM Peak		A/3	A/3	A/1	A/1					D/53		D/49	A/3
PM Peak		A/5	A/5	A/5	A/1					E/56		D/50	A/6
2. Driveway A / Northeastern Boulevard													
AM Peak	*			B/10		A/9	A/8		-	A/7	-	-	-
PM Peak	B/12			C/16		A/10	A/8		-	*	-	-	-
3. Driveway A / Proposed Site Access													
AM Peak	*	-		A/7	-		A/9		A/9		-		-
PM Peak	A/8	-		A/7	-		B/10		B/11		-		-
4. Wyoming Boulevard / Driveway B													
AM Peak		B/12	A/5	A/3	A/3	*		*	*	E/61		A/6	A/8
PM Peak		C/23	B/11	A/8	A/6	*		*	*	E/70		B/13	B/19

The WBL movement of Intersection 1 operates at LOS E during the PM peak periods of both the 2022 and 2032 buildout and horizon years.

The WBL movement of Intersection 4 operates at LOS E in both the AM and PM peak periods of the 2022 and 2032 buildout and horizon years.

All other movements operate at acceptable LOS in the 2022 and 2032 background and horizon years.

6.2 LEFT-TURN QUEUE ANALYSIS

The queue analysis results for each impacted left-turn movement is summarized in **Table 7**. Existing left-turn lane storage lengths were obtained via satellite imagery measurements rounded to the nearest five-foot increment. 95th percentile queue lengths for the 2032 horizon year were calculated using Synchro methodology for signalized intersections and HCM methodology for unsignalized intersections. HCM reports queues as number of vehicles. An average vehicle length of 25 feet was utilized to estimate total

queue length. Note that calculated values represent the movement's greatest queue length across both the AM and PM peak periods in the 2032 horizon year.

Table 7. Left-Turn Storage

Intersection and Approach	Existing	Calculated
1. Wyoming Boulevard / Northeastern Boulevard		
Southbound Approach	140 ft	54 ft
Westbound Approach	90 ft	185 ft
2. Driveway A / Northeastern Boulevard		
Northbound Approach	^	25 ft *
Southbound Approach	^	45 ft
Eastbound Approach	70 ft	25 ft *
Westbound Approach	210 ft ^^	25 ft *
3. Driveway A / Proposed Site Access		
Northbound Approach	^	25 ft *
Southbound Approach	^	25 ft *
Eastbound Approach	^	25 ft *
Westbound Approach	^	25 ft *
4. Wyoming Boulevard / Driveway B		
Southbound Approach	60 ft	29 ft
Westbound Approach	250 ft**	234 ft

* 25-foot minimum for one (1) vehicle

** Trap Lane (250 ft to upstream intersection)

^ Shared through and left-turn movement

^^ Two-way left turn lane (210 ft to upstream raised median)

Bold indicates calculated queue length is greater than existing storage length.

The queue of the WBL movement of Intersection 1 exceeds its existing striped storage length. The WBL storage is constrained by the EBL storage at Intersection 2 and cannot be extended without reducing the striped storage length at Intersection 2. Based on direction from the City of Albuquerque the WBL at Intersection 1 is to be extended as much as possible with the removal of the EBL at Intersection 2. Based on preliminary striping layouts, the WBL can be extended to approximately 130 feet of storage. A passenger car turning exhibit is provided in **Appendix H**, which illustrates the proposed geometric changes at Driveway A. The queues of all other left-turn movements impacted by the project are accommodated by the existing storage lengths in the 2032 horizon year.

6.3 ON-SITE CIRCULATION ANALYSIS

Circulation patterns within the site can be modified to accommodate traffic loads in real-time. During typical traffic loads, drivers will turn right upon entering the site and enter the dual lane drive-thru directly to the north. When traffic loads exceed the drive-thru's capacity of approximately 17 vehicles, employees will reroute entering traffic west through the parking lot's southern aisle and back east through the northern aisle. This path will increase storage capacity by an additional 20 vehicles before overflowing into the intersection at Driveway A, increasing the maximum drive-thru capacity to approximately 37 vehicles.

The anticipated peak hour entering trips to the site is 58 vehicles. It is anticipated that the drive-thru queue will be maintained on site.

6.4 CRASH ANALYSIS

Crash count data (2017-2019) was obtained from the New Mexico Department of Transportation (NMDOT) for the intersection of Wyoming Boulevard and Northeastern Boulevard. Crash data was unavailable for other locations within the study area. Available data is provided in **Appendix I**.

6.4.1 CRASH ANALYSIS: NORTHEASTERN BLVD & WYOMING BLVD

During the three-year period, there were 48 crashes at the Wyoming Boulevard and Northeastern Boulevard intersection. The total crashes include 27 property damage only crashes, 21 injury crashes, and 0 fatal crashes. Crash data is summarized in **Table 8**.

Table 8: Crash Data

Wyoming Boulevard / Northeastern Boulevard				
Crash Severity	Year			Severity Total
	2017	2018	2019	
Property Damage Only Crash	8	14	5	27
Injury Crash	6	10	5	21
Fatal Crash	0	0	0	0
Annual Total	14	24	10	48

A significant portion of the crash data (13 of 48 reports) were under-reported and did not list the type of crash. Additionally, full crash reports with detailed descriptions of each crash were not provided. As a result, observations regarding specific crash patterns are limited.

Based on the available data, the following patterns are noted:

- Approximately one third of the crashes (17 out of 48) were reported as angle crashes.
 - 12 of 17 were “One Left Turn/Entering at an Angle”
 - The majority are attributed to “Failure to Yield Right of Way” or “Disregarded Traffic Signal”. Additional crash report details would be needed to provide additional context, but these could be indications that drivers are misjudging gaps, not receiving sufficient split time, and/or running red lights.
- Four of the crashes involved pedestrians, with three of the four crashes resulting in serious injury.
 - Two of the crashes occurred between a pedestrian and a left- or right-turning vehicle. Both were attributed to “Driver Inattention”.
 - One of the crashes occurred between a pedestrian and a vehicle going straight. The crash was attributed to “Pedestrian Error”.
 - Two of the crashes occurred during dark-lighted conditions and the other two crashes occurred during day-lighted conditions.
 - The available crash data does not provide enough context to clearly identify which leg of the intersection each crash occurred on. Therefore, location-specific patterns (if any) cannot be identified.
- Approximately one third of all crashes (15 out of 48) are attributed to drivers disregarding the traffic signal. Other frequently-reported crash factors include driver inattention (9 crashes) and failure to yield right-of-way (6 crashes).

Crash rate data (2015-2019) was obtained from MRCOG for the intersection of Wyoming Boulevard and Northeastern Boulevard. The total crash rate over the five-year period was 1.22 crashes per million entering vehicles. The rate of severe crashes at the intersection was found to be 1 to 1.5 times the regional average severity. This indicates that the intersection experiences more severe crashes on average compared to other intersections in the area.

It is recommended that the City continue to monitor this location for potential safety improvements as new crash data continues to become available. The list below summarizes items that the City may wish to take into consideration for further analysis. This list is based on the available crash data discussed above and a review of the existing intersection configuration using online sources (Google Street View, Nearmap Aerial Imagery, etc.). Links to additional resources are provided for reference.

- Failure to Yield / Disregard Traffic Signal / Driver Inattention:
 - o Consider reviewing existing clearance intervals (Walk, Flash Don't Walk, Yellow, and All Red) for compliance with the current edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*, City of Albuquerque Engineering Standards, and other applicable engineering guidance (e.g. ITE's *Guidelines for Determining Traffic Signal Change and Clearance Intervals*). Confirm walk speed, crossing distance, speed limits, and other variables and consider recalculating clearance intervals for the intersection, if needed.
 - https://safety.fhwa.dot.gov/provencountermeasures/yellow_xhg_intervals.cfm
 - o Consider reviewing existing signal timings to determine if sufficient time is being allocated to all phases, including left turns. If needed, consider retiming the intersection and reallocating split time based on current volumes (See Section **4.2Traffic Volumes**).
 - o Consider reviewing left turn phasing to determine if phasing changes (e.g. protected-only phasing) and/or equipment upgrades (e.g. detection, FYA, etc.) are warranted.
 - o Consider reviewing existing traffic signal equipment for compliance with current MUTCD, City standards, and current industry best practices to determine if equipment upgrades are warranted. For example, addressing deficiencies in the following areas (if applicable) may improve driver compliance:
 - Intersection Lighting Levels – Adequate street lighting can improve intersection conspicuity and pedestrian safety.
 - https://safety.fhwa.dot.gov/roadway_dept/night_visib/roadwayresources.cfm
 - <https://safety.fhwa.dot.gov/provencountermeasures/lighting.cfm>
 - Signal Faces – The MUTCD provides guidance on the required mounting height, size, and lateral placement of signal indications. Likewise, FHWA provides additional strategies for improving the visibility of signal indications which can be beneficial at locations where driver awareness is lacking.
 - <https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>
 - <https://safety.fhwa.dot.gov/intersection/stop/fhwasa15085.pdf> (see Category D)
 - Backplates – Per FHWA, signal heads that have backplates equipped with retroreflective borders are more visible and conspicuous in both daytime and nighttime conditions and have been shown to reduce crashes.
 - <https://safety.fhwa.dot.gov/provencountermeasures/backplate.cfm>

- Pedestrian Crashes:
 - o Based on Google Street View Imagery from February 2022, there is no signage restricting pedestrians from crossing outside of crosswalks. Consider installing pedestrian-level signage warning pedestrians not to cross outside of crosswalks (e.g. R9-2, R9-3bP, etc.).
 - o Consider evaluating existing pedestrian volumes and signal operations to determine if a crosswalk on the south leg of the intersection should be installed.
 - o Consider refreshed, high-visibility crosswalk striping and signage to improve visibility of pedestrians and improve driver attentiveness. Consider utilizing thermoplastic or tape materials for improved visibility and durability.

6.4.2 CRASH ANALYSIS: WYOMING BLVD & DRIVEWAY B

Crash data was not available for the intersection of Wyoming Blvd and Driveway B. However, the City has requested a review of the geometry, pavement markings, signs, and traffic signal features associated with the pedestrian crossing at this location.

Because crash data is not available, the following information is provided for information only. It is recommended that the City continue to monitor this location for potential safety improvements as new crash data continues to become available. The list below summarizes items that the City may wish to take into consideration for further analysis. This list is based on a review of the existing intersection configuration using online sources (Google Street View, Nearmap Aerial Imagery, etc.).

- General
 - o Consider evaluating intersection lighting levels to determine if additional street lighting is necessary.
 - o Consider evaluating existing ramps for ADA compliance (slopes, tactile domes, button placement/signage, etc.)
- East Leg Crosswalk
 - o Consider refreshing the pavement markings for improved visibility.
 - o Consider utilizing thermoplastic or tape materials for improved visibility and durability.
- North Leg Crosswalk
 - o Consider refreshing the pavement markings for improved visibility.
 - o Consider utilizing thermoplastic or tape materials for improved visibility and durability.
- South Leg (No Crosswalk)
 - o Consider evaluating existing pedestrian volumes and signal operations to determine if a crosswalk on the south leg of the intersection should be installed. If compliance has been observed to be an issue, consider increasing enforcement to discourage jaywalking.
 - o Consider reviewing the existing regulatory pedestrian signage for MUTCD compliance (e.g. sign size).
- Channelized Northbound Right Turn
 - o Consider installing pedestrian-level signage to warn pedestrians to “look for vehicles” before crossing in marked crosswalks.
 - o Based on Google Earth imagery from February 2022, the following items are noted:
 - R1-2 “Yield” Sign appears to be obstructing the W11-2 “Pedestrian” Warning Sign and plaque.
 - Consider adjusting sign placement and/or mounting heights to improve visibility and prevent the R1-2 “Yield” from obstructing the W11-2 “Pedestrian” warning sign. Consider overhead signage, if necessary.

- Consider installing a supplementary “W11-2” warning sign and plaque on the left (in the median island) for improved visibility.
- Consider replacing the R1-2 “Yield” with R1-5 “Yield Here to Pedestrians” sign.
- W11-2 “Pedestrian” warning sign does not appear to be retroreflective sheeting.
 - Consider replacing the existing panels with new, retroreflective panels.
- “Shark Teeth” yield markings and ladder-style crosswalk markings appear to be worn and may be undersized.
 - Consider refreshing the pavement markings for improved visibility.
 - Consider utilizing thermoplastic or tape materials for improved visibility and durability.
 - Consider evaluating and increasing the size of the yield markings for improved visibility. Refer to Figure 3B-16 of the MUTCD for guidance.

7.0 RECOMMENDATIONS

The proposed development is estimated to generate 1,622 daily trips, with 0 or negligible trips occurring in the AM peak hour and 112 trips occurring in the PM peak hour.

This analysis concludes that the proposed development will be accommodated by the surrounding street network, with the following findings and recommendations:

- The development will be accessed from an existing driveway connection on Driveway A. The proposed site access will be full access to accommodate passenger cars. No new driveways are proposed. An existing site driveway on the site's northeast corner is to be removed.
- Study area intersections operate at acceptable LOS in each analysis scenario, including existing, 2022 background and total, and 2032 background and total traffic scenarios with the following exceptions:
 - o The westbound left-turn movement at Northeastern Boulevard (Intersection 1) shows LOS E in all study scenarios during the PM peak hour. Since the reported LOS and delay do not worsen from existing conditions, no mitigation is recommended as part of the proposed development.
 - Note: It is recommended that the City monitor signal timings at this location as traffic patterns change and evaluate if any adjustments to signal timings (e.g. splits, offsets, cycle length, etc.) could improve LOS for this movement.
 - o The westbound left-turn movement at Driveway B (Intersection 4) shows LOS E in all study scenarios during both the AM and PM peak hours. Since the reported LOS and delay do not worsen from existing conditions, no mitigation is recommended as part of the proposed development.
 - Note: It is recommended that the City monitor signal timings at this location as traffic patterns change and evaluate if any adjustments to signal timings (e.g. splits, offsets, cycle length, etc.) could improve LOS for this movement.
- The 2032 horizon year queue length of the westbound left-turn movement on Northeastern Boulevard (Intersection 1) exceeds the existing striped storage length. The storage lane cannot be extended without reducing the left turn storage for the eastbound left turn at Intersection 2. Based on direction from the City, it is recommended that the EBL at Intersection 2 be removed and the WBL at Intersection 1 be extended. It is anticipated that the storage length can be increased to approximately 130 feet.
- The southbound approach at Intersection 2 exceeds the minimum requirements for a dedicated turn lane. Based on direction from the City it is recommended that the southbound approach be restriped to provide two egress lanes (a shared thru/left and a dedicated right) and one ingress lane.
- The proposed drive-thru and parking lot are expected to provide enough space for on-site circulation during typical- and high-traffic demands. Traffic from the drive-thru is unlikely to spill back onto Driveway A (Intersection 3).
- The intersection of Wyoming Boulevard and Northeastern Boulevard experienced 48 crashes from 2017 to 2019. The average crash rate at the intersection is 1.22 crashes per million entering

vehicles. The rate of severe crashes is higher at the intersection than the regional average. However, because about 25% of crashes included in the data set were under-reported there are no recommended safety mitigations as part of this development.

- o It is recommended that the City continue to monitor this area on an ongoing basis as new crash data becomes available. Location-specific items the City may wish to consider are provided in Section **6.4 Crash Analysis**.
- Recommended lane configuration is shown in **Figure 11**.

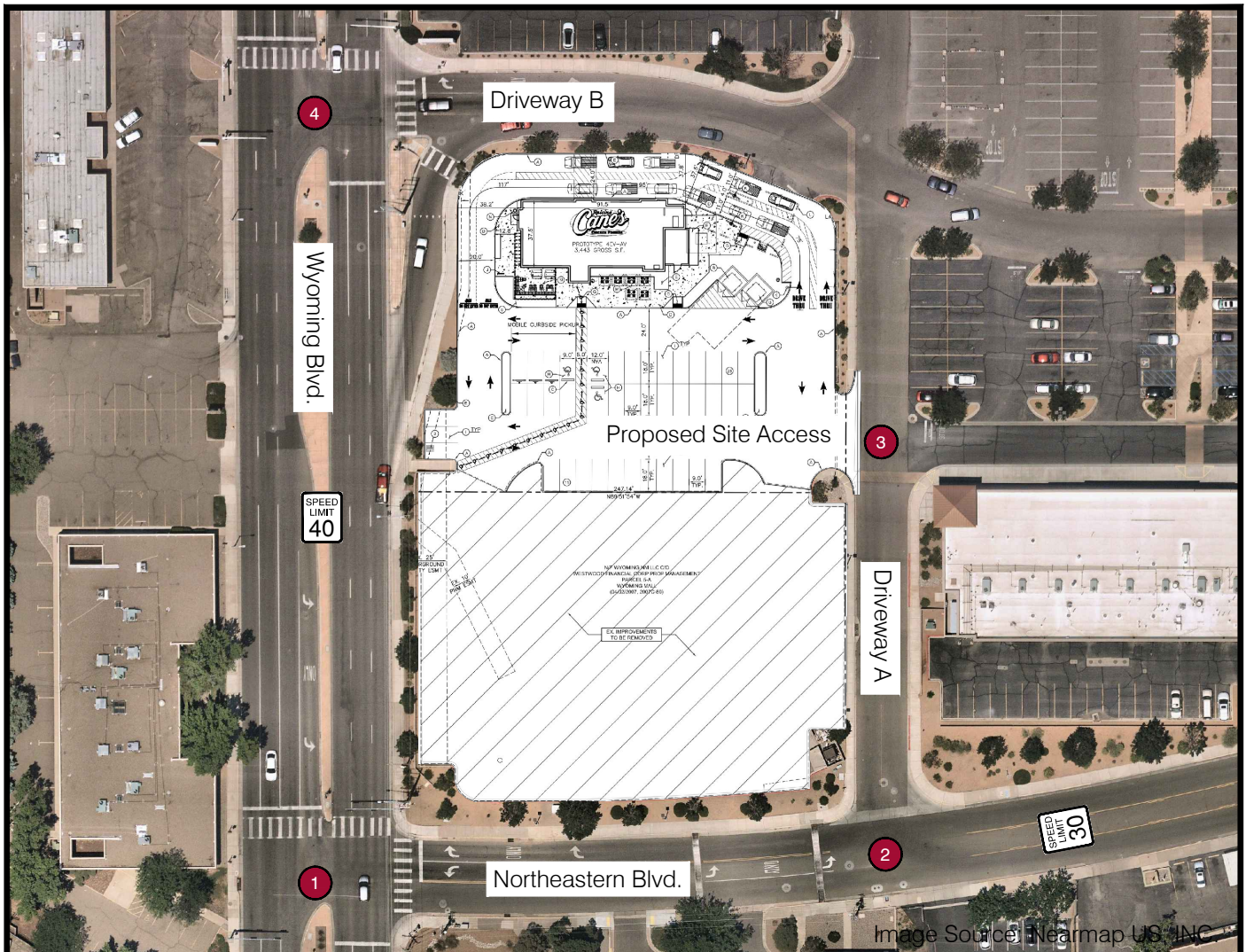
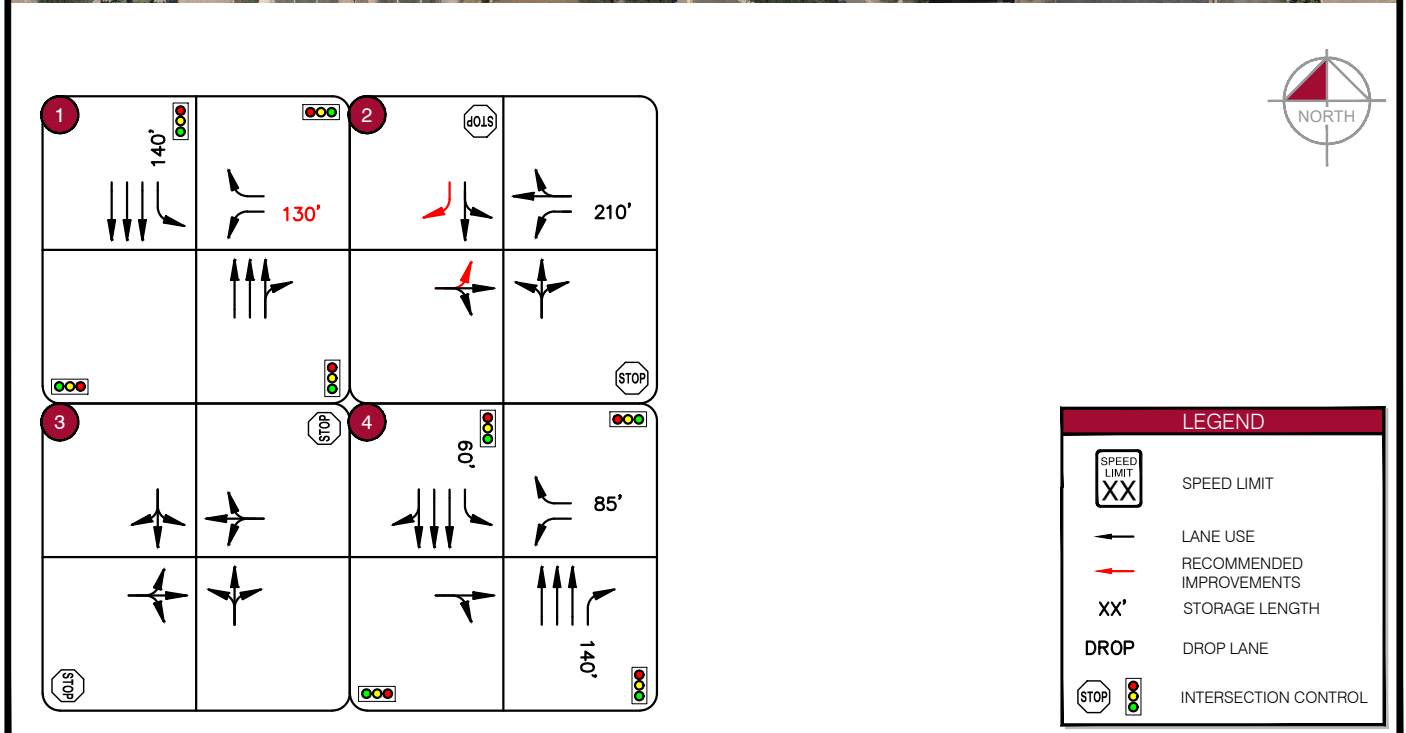


Image Source: Nearmap US, INC.



APPENDIX

- Appendix A: Analysis Scope
- Appendix B: Traffic Count Data
- Appendix C: Existing Synchro Reports
- Appendix D: Trip Generation Information
- Appendix E: Trip Distribution Map
- Appendix F: Background Synchro Reports
- Appendix G: Total Synchro Reports
- Appendix H: Passenger Car Turning Exhibit (Driveway A)
- Appendix I: Crash Data

APPENDIX A

ANALYSIS SCOPE

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Cassie Kussow
Kimley-Horn
1000 2nd Avenue, Suite 3900
Seattle, WA 98104

MEETING DATE: 08/20/2021

ATTENDEES: Cassie Kussow, Shannon Ness, and Taylor Dunkle from Kimley-Horn;
Matt Grush, Senior Engineer

PROJECT: Raising Cane's Chicken Fingers (Store RC 0705) 2400 Wyoming Blvd NE &
Northeastern, Zone Atlas # H-20-Z

REQUESTED CITY ACTION: ☐ Zone Change ☒ Site Development Plan

☐ Subdivision ☐ Building Permit ☐ Sector Plan ☐ Sector Plan Amendment

☐ Curb Cut Permit ☐ Conditional Use ☐ Annexation ☐ Site Plan Amendment

ASSOCIATED APPLICATION: New 3,443 square foot Raising Cane's Chicken Fingers Drive-Thru restaurant on the NE corner of Wyoming Blvd and Northeastern Blvd. Scope of work includes demolition of the existing Furr's restaurant building and construction of a new drive-thru restaurant and associated site improvements.

SCOPE OF REPORT:

The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 10th Edition.
Land Use Code 934 – Fast-Food Restaurant with Drive-Thru (Daily Rate: 470.95 trips per ksf, AM peak hour of generator rate: 50.97 trips per ksf, PM peak hour (4-6 p.m.) rate: 32.67 trips per ksf)
*Note Canes will open at 10 a.m. each day, which is outside the standard 7-9 a.m. AM peak period, so the peak hour of generator rates will be used for the AM/midday period.
2. Appropriate study area:
Signalized Intersections;
a. Intersection 1: Northeastern Blvd & Wyoming Blvd

Unsignalized Intersections;
a. Intersection 1: Entry to shopping center on Northeastern Blvd (south)
b. Intersection 2: Entry to Canes within shopping center (east) (site driveway)
3. Intersection turning movement counts
Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour – ~~Canes operational hours are 10 a.m. to 12 a.m. M-F. Recommending to collect data 11 a.m. – 1 p.m. for midday peak hour in lieu of AM peak hour. (mpg 8/27/2021)~~
Consultant to provide for all intersections listed above.

4. Type of intersection progression and factors to be used.
Type III arrival type (see "Highway Capacity Manual, current edition" or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

5. Boundaries of area to be used for trip distribution.
2 mile radius – commercial;

6. Basis for trip distribution.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial -

$$Ts = (Tt) (Sp) / (Sp)$$

Ts = Development to Individual Subarea Trips

Tt = Total Trips

Sp = Subarea Population

7. Traffic Assignment. Logical routing on the major street system.

8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
a. N/A

9. Method of intersection capacity analysis - planning or operational (see "2016 Highway Capacity Manual" or equivalent [i.e. HCS, Synchro, Teapac, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.
Implementation Year: 2022

10. Traffic conditions for analysis:
a. Existing analysis x yes ___ no - year (2021);
b. Project completion year without proposed development – 2022
c. Project completion year with proposed development – 2022
d. Other – 10-year horizon (2032)

11. Background traffic growth.
Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

12. Planned (programmed) traffic improvements.
List planned CIP improvements in study area and projected project implementation year:
a. N/A

13. Items to be included in the study:
a. Intersection analysis.
b. Recommended street, intersection and signal improvements.

- c. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility.
 - d. Transportation system impacts.
 - e. Other mitigating measures.
 - f. Accident analyses ☒ yes ☐ no; Location(s): Northeastern Blvd & Wyoming Blvd; Shopping Center Driveway & Northeastern Blvd
 - g. Weaving analyses ☐ yes ☒ no; Location(s):
14. Other: Include 3-years of crash data in accident analysis, develop intersection crash rate, and include comparison to normal averages from Albuquerque Area High Fatal and Injury Network (HFIN).

SUBMITTAL REQUIREMENTS:

- 1. Number of copies of report required
 - a. 1 digital copy
- 2. Submittal Fee – \$1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3362.

 P.E.

8/27/2021

Matt Grush, P.E., PTOE
Senior Engineer
City of Albuquerque, Planning
Transportation Development Section

Date

via: email
C: TIS Task Force Attendees, file

APPENDIX B

TRAFFIC COUNT DATA



(303) 216-2439
www.alltrafficdata.net

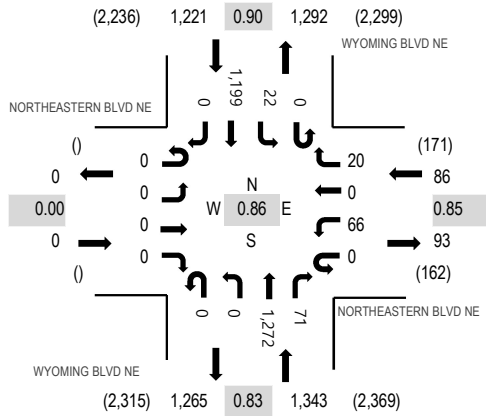
Location: 1 WYOMING BLVD NE & NORTHEASTERN BLVD NE AM

Date: Tuesday, August 31, 2021

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

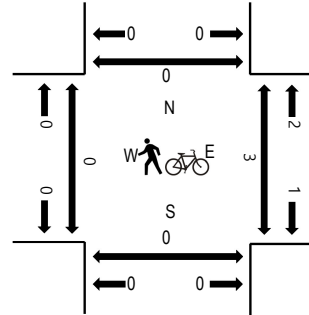
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTHEASTERN BLVD NE				NORTHEASTERN BLVD NE				WYOMING BLVD NE				WYOMING BLVD NE				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM	0	0	0	0	0	11	0	8	0	0	257	7	0	6	213	0	502	2,438	0	0	0	0
7:15 AM	0	0	0	0	0	10	0	9	0	0	230	8	0	4	284	0	545	2,595	0	0	0	0
7:30 AM	0	0	0	0	0	15	0	4	0	0	283	21	0	3	292	0	618	2,650	0	1	0	0
7:45 AM	0	0	0	0	0	16	0	7	0	0	386	19	0	6	339	0	773	2,583	0	1	0	0
8:00 AM	0	0	0	0	0	20	0	7	0	0	306	18	0	3	305	0	659	2,338	0	0	0	0
8:15 AM	0	0	0	0	0	15	0	2	0	0	297	13	0	10	263	0	600		0	1	0	0
8:30 AM	0	0	0	0	0	17	0	8	0	0	248	13	0	4	261	0	551		0	0	0	0
8:45 AM	0	0	0	0	0	14	0	8	0	0	239	24	0	3	240	0	528		0	0	0	0
Count Total	0	0	0	0	0	118	0	53	0	0	2,246	123	0	39	2,197	0	4,776		0	3	0	0
Peak Hour	0	0	0	0	0	66	0	20	0	0	1,272	71	0	22	1,199	0	2,650		0	3	0	0



ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

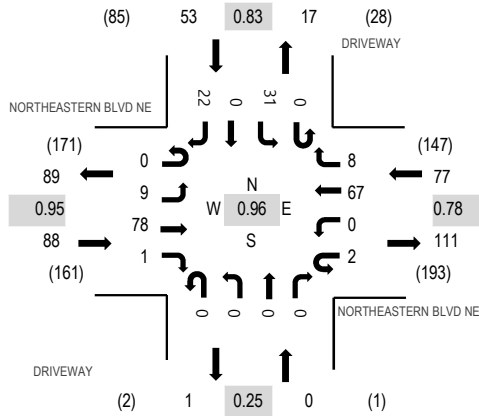
Location: 2 DRIVEWAY & NORTHEASTERN BLVD NE AM

Date: Tuesday, August 31, 2021

Peak Hour: 08:00 AM - 09:00 AM

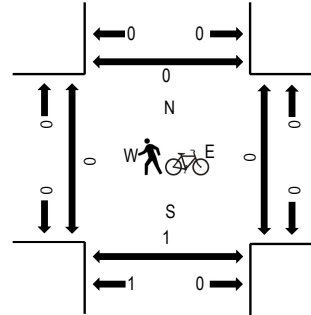
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTHEASTERN BLVD NE								NORTHEASTERN BLVD NE				DRIVEWAY				DRIVEWAY				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound				West	East	South	North						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right										
7:00 AM	0	0	13	0	0	0	14	1	0	0	0	1	0	2	1	5	37	176	1	0	0	1				
7:15 AM	0	1	11	0	0	0	19	1	0	0	0	0	0	3	0	3	38	196	0	0	0	0				
7:30 AM	0	4	20	0	0	0	15	2	0	0	0	0	0	4	0	2	47	209	0	0	0	0				
7:45 AM	0	1	23	0	0	0	17	1	0	0	0	0	0	5	0	7	54	215	0	0	0	0				
8:00 AM	0	2	18	0	1	0	24	1	0	0	0	0	0	7	0	4	57	218	0	0	0	0				
8:15 AM	0	2	21	0	1	0	10	4	0	0	0	0	0	8	0	5	51		0	0	0	0				
8:30 AM	0	2	16	0	0	0	17	2	0	0	0	0	0	7	0	9	53		0	0	0	0				
8:45 AM	0	3	23	1	0	0	16	1	0	0	0	0	0	9	0	4	57		0	0	1	0				
Count Total	0	15	145	1	2	0	132	13	0	0	0	1	0	45	1	39	394		1	0	1	1				
Peak Hour	0	9	78	1	2	0	67	8	0	0	0	0	0	31	0	22	218		0	0	1	0				



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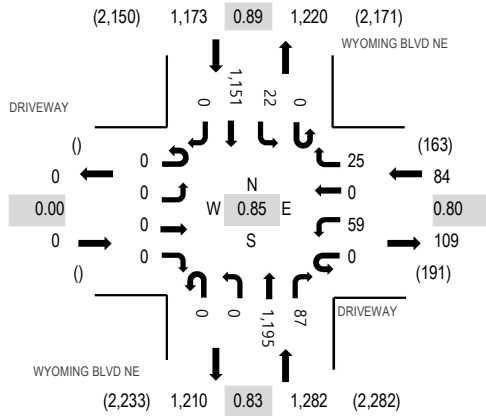
Location: 3 WYOMING BLVD NE & DRIVEWAY AM

Date: Tuesday, August 31, 2021

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

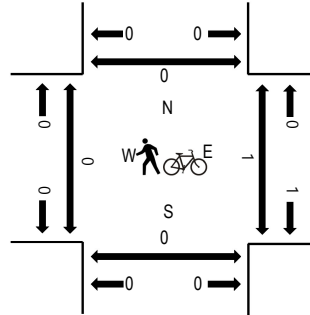
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	DRIVEWAY Eastbound				DRIVEWAY Westbound				WYOMING BLVD NE Northbound				WYOMING BLVD NE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	10	0	3	0	0	253	10	0	0	207	0	483	2,359	0	0	0	0
7:15 AM	0	0	0	0	0	11	0	2	0	0	222	15	0	3	290	0	543	2,491	0	0	0	0
7:30 AM	0	0	0	0	0	14	0	7	0	0	260	23	0	3	282	0	589	2,539	0	1	0	0
7:45 AM	0	0	0	0	0	17	0	6	0	0	362	22	0	8	329	0	744	2,483	0	0	0	0
8:00 AM	0	0	0	0	0	15	0	5	0	0	290	21	0	5	279	0	615	2,236	0	0	0	0
8:15 AM	0	0	0	0	0	13	0	7	0	0	283	21	0	6	261	0	591		0	0	0	0
8:30 AM	0	0	0	0	0	19	0	10	0	0	238	20	0	5	241	0	533		0	0	0	0
8:45 AM	0	0	0	0	0	19	0	5	0	0	218	24	0	5	226	0	497		0	0	0	0
Count Total	0	0	0	0	0	118	0	45	0	0	2,126	156	0	35	2,115	0	4,595		0	1	0	0
Peak Hour	0	0	0	0	0	59	0	25	0	0	1,195	87	0	22	1,151	0	2,539		0	1	0	0



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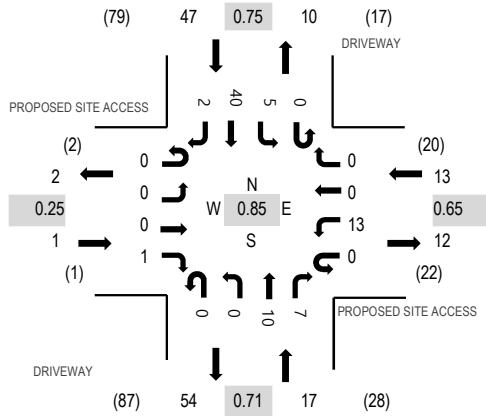
Location: 3 DRIVEWAY & PROPOSED SITE ACCESS AM

Date: Tuesday, August 31, 2021

Peak Hour: 08:00 AM - 09:00 AM

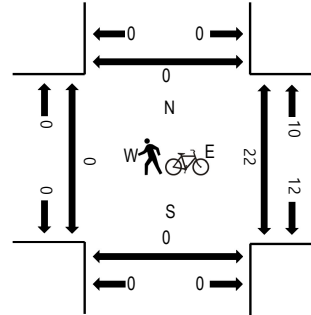
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	PROPOSED SITE ACCESS				PROPOSED SITE ACCESS				DRIVEWAY				DRIVEWAY				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	8	0	10	50	0	0	0	0
7:15 AM	0	0	0	0	0	2	0	0	0	0	1	1	0	0	5	0	9	56	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0	0	0	3	3	0	2	4	0	14	67	0	4	0	1
7:45 AM	0	0	0	0	0	2	0	0	0	0	1	1	0	3	10	0	17	76	0	3	1	0
8:00 AM	0	0	0	1	0	2	0	0	0	0	2	1	0	1	8	1	16	78	0	6	0	0
8:15 AM	0	0	0	0	0	5	0	0	0	0	4	2	0	1	8	0	20		0	3	0	0
8:30 AM	0	0	0	0	0	3	0	0	0	0	3	1	0	0	15	1	23		0	3	0	0
8:45 AM	0	0	0	0	0	3	0	0	0	0	1	3	0	3	9	0	19		0	10	0	0
Count Total	0	0	0	1	0	19	0	1	0	0	16	12	0	10	67	2	128		0	29	1	1
Peak Hour	0	0	0	1	0	13	0	0	0	0	10	7	0	5	40	2	78		0	22	0	0



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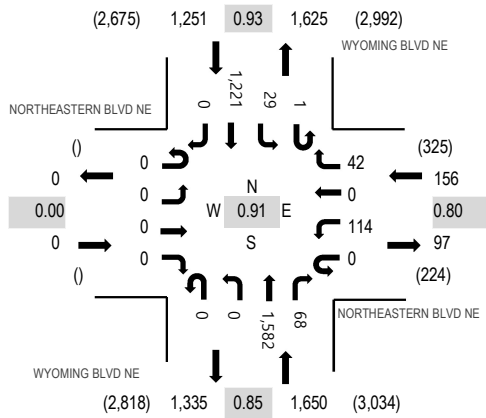
Location: 1 WYOMING BLVD NE & NORTHEASTERN BLVD NE PM

Date: Tuesday, August 31, 2021

Peak Hour: 04:00 PM - 05:00 PM

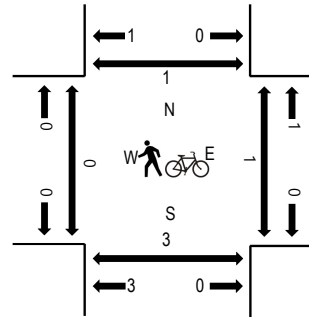
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTHEASTERN BLVD NE Eastbound				NORTHEASTERN BLVD NE Westbound				WYOMING BLVD NE Northbound				WYOMING BLVD NE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	28	0	11	0	0	472	16	0	5	311	0	843	3,057	0	1	0	1
4:15 PM	0	0	0	0	0	33	0	12	0	0	390	17	1	9	276	0	738	3,009	0	0	0	0
4:30 PM	0	0	0	0	0	28	0	10	0	0	406	19	0	7	327	0	797	2,995	0	0	3	0
4:45 PM	0	0	0	0	0	25	0	9	0	0	314	16	0	8	307	0	679	2,951	0	0	0	0
5:00 PM	0	0	0	0	0	41	0	12	0	0	340	19	1	11	371	0	795	2,977	0	0	0	0
5:15 PM	0	0	0	0	0	21	0	14	0	0	332	15	1	14	327	0	724		0	0	0	0
5:30 PM	0	0	0	0	0	29	0	12	0	0	336	15	0	24	337	0	753		0	0	0	0
5:45 PM	0	0	0	0	0	32	0	8	0	0	311	16	0	13	325	0	705		0	1	0	1
Count Total	0	0	0	0	0	237	0	88	0	0	2,901	133	3	91	2,581	0	6,034		0	2	3	2
Peak Hour	0	0	0	0	0	114	0	42	0	0	1,582	68	1	29	1,221	0	3,057		0	1	3	1



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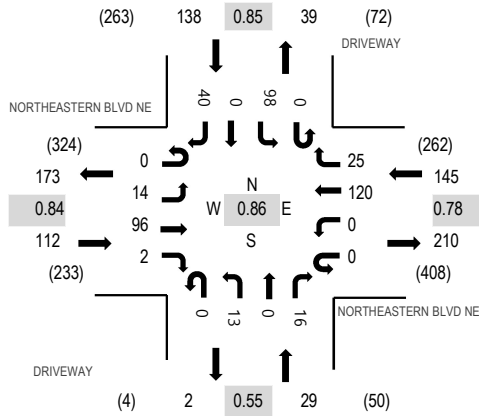
Location: 2 DRIVEWAY & NORTHEASTERN BLVD NE PM

Date: Tuesday, August 31, 2021

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

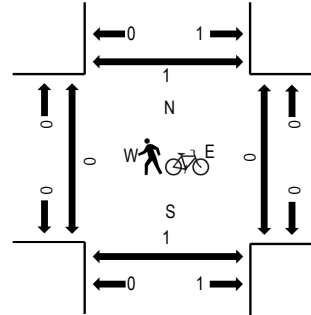
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTHEASTERN BLVD NE								NORTHEASTERN BLVD NE				DRIVEWAY				DRIVEWAY				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound				West	East	South	North						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right										
4:00 PM	0	2	21	0	1	0	18	7	0	12	0	8	0	17	0	9	95	396	0	1	0	0				
4:15 PM	0	3	25	0	0	0	32	4	0	12	0	10	0	22	0	9	117	424	0	0	1	1				
4:30 PM	0	4	21	1	0	0	22	5	0	1	0	5	0	21	0	9	89	400	0	0	0	0				
4:45 PM	0	4	20	1	0	0	29	6	0	0	0	0	0	28	0	7	95	417	0	0	0	0				
5:00 PM	0	3	30	0	0	0	37	10	0	0	0	1	0	27	0	15	123	412	0	0	0	0				
5:15 PM	0	2	27	0	0	0	23	7	0	0	1	0	0	24	0	9	93		0	0	0	0				
5:30 PM	0	1	38	0	0	0	29	6	0	0	0	0	0	18	0	14	106		0	1	0	0				
5:45 PM	0	3	25	2	1	0	21	4	0	0	0	0	0	18	0	16	90		0	0	0	0				
Count Total	0	22	207	4	2	0	211	49	0	25	1	24	0	175	0	88	808		0	2	1	1				
Peak Hour	0	14	96	2	0	0	120	25	0	13	0	16	0	98	0	40	424		0	0	1	1				

Interval Start Time	DRIVEWAY Eastbound				DRIVEWAY Westbound				WYOMING BLVD NE Northbound				WYOMING BLVD NE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	45	0	18	0	0	416	58	0	8	272	0	817	2,994	0	0	0	0
4:15 PM	0	0	0	0	0	46	0	24	0	0	361	44	0	11	238	0	724	2,935	0	1	0	0
4:30 PM	0	0	0	0	0	45	0	28	0	0	357	59	0	6	281	0	776	2,944	0	0	0	0
4:45 PM	0	0	0	0	0	33	0	30	0	0	294	31	0	5	284	0	677	2,905	0	0	0	0
5:00 PM	0	0	0	0	0	43	0	22	0	0	303	41	0	6	343	0	758	2,926	0	0	0	0
5:15 PM	0	0	0	0	0	38	0	25	0	0	310	45	1	3	311	0	733		0	0	0	0
5:30 PM	0	0	0	0	0	38	0	23	0	0	297	51	0	5	323	0	737		0	0	0	0
5:45 PM	0	0	0	0	0	44	0	22	0	0	276	52	0	6	298	0	698		0	0	0	0
Count Total	0	0	0	0	0	332	0	192	0	0	2,614	381	1	50	2,350	0	5,920		0	1	0	0
Peak Hour	0	0	0	0	0	169	0	100	0	0	1,428	192	0	30	1,075	0	2,994		0	1	0	0



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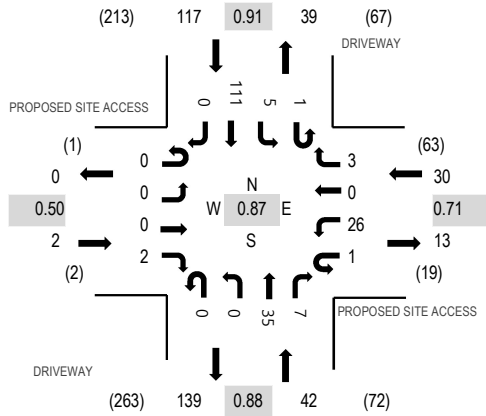
Location: 3 DRIVEWAY & PROPOSED SITE ACCESS PM

Date: Tuesday, August 31, 2021

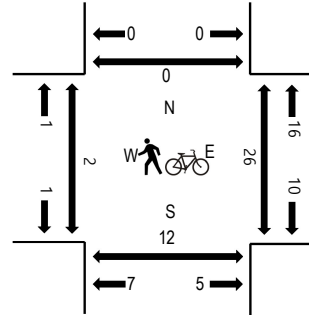
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	PROPOSED SITE ACCESS Eastbound				PROPOSED SITE ACCESS Westbound				DRIVEWAY Northbound				DRIVEWAY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	9	0	0	0	0	6	3	0	0	18	0	36	165	1	13	0	1
4:15 PM	0	0	0	0	0	6	0	1	0	1	6	0	0	0	25	0	39	184	0	13	0	1
4:30 PM	0	0	0	1	0	5	0	3	0	0	8	1	1	1	24	0	44	191	1	13	3	0
4:45 PM	0	0	0	0	0	5	0	0	0	0	6	4	0	1	30	0	46	186	0	6	3	0
5:00 PM	0	0	0	0	1	11	0	0	0	0	10	1	0	0	32	0	55	185	0	3	3	0
5:15 PM	0	0	0	1	0	5	0	0	0	0	11	1	0	3	25	0	46		1	4	3	0
5:30 PM	0	0	0	0	0	8	0	0	0	0	6	0	0	1	24	0	39		0	4	1	0
5:45 PM	0	0	0	0	0	7	0	2	0	0	7	1	0	1	27	0	45		0	6	0	0
Count Total	0	0	0	2	1	56	0	6	0	1	60	11	1	7	205	0	350		3	62	13	2
Peak Hour	0	0	0	2	1	26	0	3	0	0	35	7	1	5	111	0	191		2	26	12	0

MRCOG Traffic Counts
Summary Statistics
See notes, bottom of report

9/1/2021 10:19:18 AM

					Direction 1		Direction 2		AM Peak Hour					PM Peak Hour						
COGID	Route Name	Location Description	Count Date	Total Volume	Daily Volume	Dir	Daily Volume	Dir	Time Begin	Volume	% Daily	Dir Split	Pk Dir	Time Begin	Volume	% Daily	Dir Split	Pk Dir	Count Quality	Count Type
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/2010	32,870	15,881	S	16,989	N	745	2,154	6.55	0.53	S	1615	2,620	7.97	0.54	N	T	VC
235081	WYOMING	NORTH OF INDIAN SCHOOL	10/1/1991	37,950	19,210	N	18,740	S	715	2,446	6.45	0.60	S	1630	3,349	8.82	0.59	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/1992	41,034	20,818	N	20,216	S	700	2,804	6.83	0.64	S	1645	3,700	9.02	0.60	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/2001	42,695	21,754	N	20,941	S	730	3,006	7.04	0.58	S	1645	3,934	9.21	0.58	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/1998	41,095	19,498	S	21,597	N	730	2,826	6.88	0.55	S	1630	3,657	8.90	0.59	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/2004	39,315	20,013	N	19,302	S	715	2,744	6.98	0.56	S	1645	3,629	9.23	0.60	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/2007	32,239	16,034	N	16,205	S	700	2,102	6.52	0.61	S	1630	2,982	9.25	0.60	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/1/1995	44,021	21,525	N	22,496	S	715	3,298	7.49	0.67	S	1700	3,933	8.93	0.58	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	2/12/2013	39,747	20,164	N	19,583	S	715	2,580	6.49	0.59	S	1645	3,753	9.44	0.58	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	5/12/2020	27,660	13,946	N	13,714	S	1000	1,730	6.25	0.53	N	1630	2,323	8.40	0.55	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	7/14/2020	32,518	16,288	N	16,230	S	1000	1,987	6.11	0.52	N	1630	2,904	8.93	0.52	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	5/18/2021	32,335	17,549	N	14,786	S	730	2,041	6.31	0.56	N	1515	2,524	7.81	0.61	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	3/1/2016	38,468	19,014	N	19,454	S	730	2,704	7.03	0.55	S	1630	3,207	8.34	0.53	N	T	Vol
235081	WYOMING	NORTH OF INDIAN SCHOOL	3/25/2019	35,254	17,982	N	17,272	S	715	2,475	7.02	0.53	S	1630	2,892	8.20	0.57	N	T	VC
235081	WYOMING	NORTH OF INDIAN SCHOOL	10/20/2020	34,129	16,937	N	17,192	S	715	1,836	5.38	0.56	S	1615	3,041	8.91	0.54	N	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/1/2004	10,954	5,386	E	5,568	W	730	760	6.94	0.79	W	1630	1,130	10.32	0.61	E	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	4/1/2002	14,144	6,962	W	7,182	E	715	974	6.89	0.76	W	1645	1,505	10.64	0.68	E	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	10/1/1993	15,764	7,935	E	7,829	W	715	1,233	7.82	0.81	W	1645	1,658	10.52	0.68	E	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	5/1/1999	15,587	7,811	W	7,776	E	730	1,288	8.26	0.78	W	1645	1,583	10.16	0.66	E	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	11/1/1990	14,855	7,809	W	7,046	E	730	1,331	8.96	0.81	W	1645	1,666	11.22	0.66	E	Q	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	5/1/1996	16,469	8,445	W	8,024	E	715	1,226	7.44	0.86	W	1645	1,567	9.51	0.67	E	T	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/1/2008	15,470	8,819	E	6,651	W	730	1,148	7.42	0.66	W	1645	1,754	11.34	0.70	E	Q	Vol
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/19/2011	12,168	6,454	E	5,714	W	900	620	5.10	0.63	W	1645	1,181	9.71	0.60	E	T	VC
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/1/2014	11,146	5,684	E	5,462	W	730	673	6.04	0.71	W	1630	1,021	9.16	0.66	E	T	VC
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/18/2017	13,165	6,685	E	6,480	W	1000	776	5.89	0.63	W	1645	1,257	9.55	0.58	E	T	VC
235161	INDIAN SCHOOL	EAST OF PENNSYLVANIA	12/18/2018	13,130	6,538	E	6,592	W	745	716	5.45	0.75	W	1630	1,195	9.10	0.62	E	T	VC
235441	INDIAN SCHOOL	EAST OF WYOMING	4/1/2002	15,298	8,049	E	7,249	W	730	1,115	7.29	0.67	W	1645	1,469	9.60	0.70	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	2/1/1992	15,837	7,551	W	8,286	E	715	1,274	8.04	0.77	W	1630	1,739	10.98	0.69	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	8/1/1993	16,456	7,756	E	8,700	W	715	1,237	7.52	0.82	W	1645	1,710	10.39	0.64	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	4/1/2006	12,018	5,914	E	6,104	W	730	947	7.88	0.73	W	1645	1,188	9.89	0.62	E	T	Vol

					Direction 1		Direction 2		AM Peak Hour					PM Peak Hour						
COGID	Route Name	Location Description	Count Date	Total Volume	Daily Volume	Dir	Daily Volume	Dir	Time Begin	Volume	% Daily	Dir Split	Pk Dir	Time Begin	Volume	% Daily	Dir Split	Pk Dir	Count Quality	Count Type
235441	INDIAN SCHOOL	EAST OF WYOMING	4/1/1996	17,268	7,670	E	9,598	W	715	1,120	6.49	0.81	W	1645	1,589	9.20	0.63	E	Q	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	4/1/2009	13,744	6,842	E	6,902	W	730	924	6.72	0.70	W	1700	1,247	9.07	0.62	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	4/10/2012	13,427	6,235	E	7,192	W	730	900	6.70	0.68	W	1645	1,272	9.47	0.55	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	4/8/2014	12,066	5,664	E	6,402	W	715	851	7.05	0.75	W	1645	1,022	8.47	0.59	E	T	VC
235441	INDIAN SCHOOL	EAST OF WYOMING	4/25/2017	12,496	5,998	E	6,498	W	730	992	7.94	0.74	W	1645	1,243	9.95	0.57	E	T	Vol
235441	INDIAN SCHOOL	EAST OF WYOMING	4/19/2021	11,560	5,517	E	6,043	W	730	731	6.32	0.67	W	1645	1,066	9.22	0.56	E	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/2009	31,813	16,470	S	15,343	N	730	2,285	7.18	0.57	S	1600	2,499	7.86	0.54	N	T	VC
239801	WYOMING	NORTH OF CONSTITUTION	2/1/1992	37,240	18,322	N	18,918	S	700	2,736	7.35	0.68	S	1615	3,263	8.76	0.61	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/2003	46,169	23,753	N	22,416	S	715	3,454	7.48	0.55	S	1615	4,041	8.75	0.64	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/1993	39,638	19,426	N	20,212	S	715	2,772	6.99	0.64	S	1630	3,418	8.62	0.59	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/2006	35,223	15,742	N	19,481	S	730	2,341	6.65	0.60	S	1645	3,113	8.84	0.53	S	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/1999	36,660	17,874	N	18,786	S	715	2,702	7.37	0.61	S	1645	3,262	8.90	0.57	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	9/1/1996	42,423	19,966	N	22,457	S	715	2,856	6.73	0.62	S	1630	3,759	8.86	0.54	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	10/30/2012	37,284	18,548	N	18,736	S	730	2,569	6.89	0.59	S	1630	3,448	9.25	0.58	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	10/20/2015	35,404	17,586	N	17,818	S	715	2,760	7.80	0.58	S	1545	3,298	9.32	0.59	N	T	Vol
239801	WYOMING	NORTH OF CONSTITUTION	10/23/2018	35,473	17,853	N	17,620	S	715	2,670	7.53	0.57	S	1645	3,096	8.73	0.58	N	T	Vol

Notes:

- Daily volumes are averages for a 24 hour period.
- AM Peak Period: 6 AM to 9 AM; PM Peak Period: 3 PM to 6 PM.
- Peak **hours** are defined by the maximum hourly 2-way volume occurring during the peak **period**.
- 'Time Begin' is the beginning time of the peak hour (24 hour military time)
- Peak hour % is the percentage of 2-way volume appearing in the peak hour.
- 'Dir Split' is the directional split: the percentage of the 2-way peak hour volume traveling in the peak direction.
- 'Pk Dir' indicates the peak direction. E.g., 'E' means "Eastbound".
- 'Count Quality' is defined by NMDOT and MRCOG count standards. 'T' indicates a good count. 'Q' indicates a count that meets NMDOT standards but does not meet MRCOG standards. 'F' indicates a bad count.
- 'Count Type': 'Vol' refers to a regular volume tube count; 'VC' refers to a vehicle classification count.

APPENDIX C

EXISTING SYNCHRO REPORTS

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	66	20	1272	71	22	1199
Future Volume (veh/h)	66	20	1272	71	22	1199
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	25	1533	86	25	1362
Peak Hour Factor	0.80	0.80	0.83	0.83	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	125	111	4151	233	305	4285
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5115	277	312	5274
Grp Volume(v), veh/h	82	25	1055	564	25	1362
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1820	312	1702
Q Serve(g_s), s	4.9	1.6	7.9	7.9	0.8	0.0
Cycle Q Clear(g_c), s	4.9	1.6	7.9	7.9	8.8	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	125	111	2856	1528	305	4285
V/C Ratio(X)	0.66	0.23	0.37	0.37	0.08	0.32
Avail Cap(c_a), veh/h	453	403	2856	1528	305	4285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	49.9	48.3	2.1	2.1	0.4	0.0
Incr Delay (d2), s/veh	2.2	0.4	0.4	0.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7	1.3	1.6	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.1	48.7	2.4	2.8	0.9	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	107		1619			1387
Approach Delay, s/veh	51.3		2.5			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				97.3	12.7	97.3
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				72.0	28.0	72.0
Max Q Clear Time (g_c+l1), s				9.9	6.9	10.8
Green Ext Time (p_c), s				26.3	0.1	22.1
Intersection Summary						
HCM 6th Ctrl Delay			3.2			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	78	1	2	67	8	0	0	0	31	0	22
Future Vol, veh/h	9	78	1	2	67	8	0	0	0	31	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	74	74	74	25	25	25	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	96	1	3	91	11	0	0	0	37	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	102	0	0	97	0	0	235	227	97	222	222	97
Stage 1	-	-	-	-	-	-	119	119	-	103	103	-
Stage 2	-	-	-	-	-	-	116	108	-	119	119	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1490	-	-	1496	-	-	720	672	959	734	677	959
Stage 1	-	-	-	-	-	-	885	797	-	903	810	-
Stage 2	-	-	-	-	-	-	889	806	-	885	797	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1490	-	-	1496	-	-	695	666	959	729	671	959
Mov Cap-2 Maneuver	-	-	-	-	-	-	695	666	-	729	671	-
Stage 1	-	-	-	-	-	-	879	791	-	897	808	-
Stage 2	-	-	-	-	-	-	863	804	-	878	791	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			0			9.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1490	-	-	1496	-	-	810
HCM Lane V/C Ratio	-	0.007	-	-	0.002	-	-	0.079
HCM Control Delay (s)	0	7.4	-	-	7.4	-	-	9.8
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Future Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	65	65	65	71	71	71	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	20	0	0	0	14	10	7	55	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	90	95	57	92	91	19	58	0	0	24	0	0
Stage 1	71	71	-	19	19	-	-	-	-	-	-	-
Stage 2	19	24	-	73	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	895	795	1009	892	799	1059	1546	-	-	1591	-	-
Stage 1	939	836	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	937	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	891	791	1009	885	795	1059	1546	-	-	1591	-	-
Mov Cap-2 Maneuver	891	791	-	885	795	-	-	-	-	-	-	-
Stage 1	939	832	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	929	831	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.6		9.2			0			0.8			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1546	-	-	1009	885	1591	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.023	0.004	-	-				
HCM Control Delay (s)	0	-	-	8.6	9.2	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	59	0	25	0	1195	87	22	1151	0
Future Volume (vph)	0	0	0	59	0	25	0	1195	87	22	1151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.150		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	279	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			70			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.91	0.91	0.91	0.83	0.83	0.83	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	65	0	27	0	1440	105	25	1323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	65	0	27	0	1440	105	25	1323	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings 4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4			4			2	2	1 2	
Switch Phase													
Minimum Initial (s)	8.0			8.0			8.0			18.0	18.0	3.0	
Minimum Split (s)	36.0			36.0			36.0			23.0	23.0	8.0	
Total Split (s)	33.0			33.0			33.0			63.8	63.8	13.2	
Total Split (%)	30.0%			30.0%			30.0%			58.0%	58.0%	12.0%	
Maximum Green (s)	27.0			27.0			27.0			58.8	58.8	9.7	
Yellow Time (s)	4.0			4.0			4.0			4.0	4.0	3.0	
All-Red Time (s)	2.0			2.0			2.0			1.0	1.0	0.5	
Lost Time Adjust (s)	0.0			0.0			0.0			0.0	0.0	0.0	
Total Lost Time (s)	6.0			6.0			6.0			5.0	5.0	3.5	
Lead/Lag									Lag	Lag	Lead		
Lead-Lag Optimize?									Yes	Yes	Yes		
Vehicle Extension (s)	2.0			2.0			2.0			4.0	4.0	1.5	
Recall Mode	None			None			None			C-Max	C-Max	None	
Walk Time (s)	7.0			7.0			7.0			7.0	7.0		
Flash Dont Walk (s)	23.0			23.0			23.0			10.0	10.0		
Pedestrian Calls (#/hr)	0			0			0			0	0		
Act Effct Green (s)				10.2			10.2			75.2	75.2	89.6 93.8	
Actuated g/C Ratio				0.09			0.09			0.68	0.68	0.81 0.85	
v/c Ratio				0.50			0.14			0.41	0.10	0.06 0.31	
Control Delay				60.2			4.4			9.5	3.9	2.5 2.4	
Queue Delay				0.0			0.0			0.2	0.0	0.0 0.0	
Total Delay				60.2			4.4			9.8	3.9	2.5 2.4	
LOS				E			A			A	A	A A	
Approach Delay					43.8				9.4				2.4
Approach LOS					D				A				A
Intersection Summary													
Area Type:	Other												
Cycle Length: 110													
Actuated Cycle Length: 110													
Offset: 96.8 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 70													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.50													
Intersection Signal Delay: 7.3						Intersection LOS: A							
Intersection Capacity Utilization 38.9%						ICU Level of Service A							
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	114	42	1582	68	30	1221
Future Volume (veh/h)	114	42	1582	68	30	1221
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	48	1861	80	32	1299
Peak Hour Factor	0.87	0.87	0.85	0.85	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	161	143	4148	178	225	4219
Arrive On Green	0.09	0.09	0.83	0.83	1.00	1.00
Sat Flow, veh/h	1781	1585	5188	215	228	5274
Grp Volume(v), veh/h	131	48	1261	680	32	1299
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1832	228	1702
Q Serve(g_s), s	8.7	3.4	12.3	12.3	2.5	0.0
Cycle Q Clear(g_c), s	8.7	3.4	12.3	12.3	14.8	0.0
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	161	143	2813	1513	225	4219
V/C Ratio(X)	0.81	0.34	0.45	0.45	0.14	0.31
Avail Cap(c_a), veh/h	371	330	2813	1513	225	4219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	53.6	51.2	2.9	2.9	0.9	0.0
Incr Delay (d2), s/veh	3.7	0.5	0.5	1.0	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	1.4	2.7	3.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.3	51.7	3.4	3.8	2.2	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	179		1941			1331
Approach Delay, s/veh	55.8		3.6			0.2
Approach LOS	E		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			104.2		15.8	104.2
Change Period (Y+Rc), s			5.0		5.0	5.0
Max Green Setting (Gmax), s			85.0		25.0	85.0
Max Q Clear Time (g_c+l1), s			14.3		10.7	16.8
Green Ext Time (p_c), s			37.9		0.2	22.3
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	96	2	0	120	25	13	0	16	98	0	40
Future Vol, veh/h	14	96	2	0	120	25	13	0	16	98	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	77	77	77	33	33	33	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	113	2	0	156	32	39	0	48	120	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	188	0	0	115	0	0	343	334	114	342	319	172
Stage 1	-	-	-	-	-	-	146	146	-	172	172	-
Stage 2	-	-	-	-	-	-	197	188	-	170	147	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1386	-	-	1474	-	-	611	586	939	612	598	872
Stage 1	-	-	-	-	-	-	857	776	-	830	756	-
Stage 2	-	-	-	-	-	-	805	745	-	832	775	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1386	-	-	1474	-	-	572	579	939	575	591	872
Mov Cap-2 Maneuver	-	-	-	-	-	-	572	579	-	575	591	-
Stage 1	-	-	-	-	-	-	847	767	-	820	756	-
Stage 2	-	-	-	-	-	-	760	745	-	780	766	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			10.6			12.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	729	1386	-	-	1474	-	-	638
HCM Lane V/C Ratio	0.121	0.012	-	-	-	-	-	0.264
HCM Control Delay (s)	10.6	7.6	-	-	0	-	-	12.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	1.1

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	27	0	3	0	35	7	6	111	0
Future Vol, veh/h	0	0	2	27	0	3	0	35	7	6	111	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	63	63	63	88	88	88	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	43	0	5	0	40	8	7	122	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	183	184	122	182	180	44	122	0	0	48	0	0
Stage 1	136	136	-	44	44	-	-	-	-	-	-	-
Stage 2	47	48	-	138	136	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	778	710	929	779	714	1026	1465	-	-	1559	-	-
Stage 1	867	784	-	970	858	-	-	-	-	-	-	-
Stage 2	967	855	-	865	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	772	706	929	773	710	1026	1465	-	-	1559	-	-
Mov Cap-2 Maneuver	772	706	-	773	710	-	-	-	-	-	-	-
Stage 1	867	780	-	970	858	-	-	-	-	-	-	-
Stage 2	963	855	-	857	780	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.9		9.8			0			0.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1465	-	-	929	793	1559	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.06	0.004	-	-				
HCM Control Delay (s)	0	-	-	8.9	9.8	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	169	0	100	0	1428	192	30	1075	0
Future Volume (vph)	0	0	0	169	0	100	0	1428	192	30	1075	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.098		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	183	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						104			119			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.92	0.92	0.92	0.85	0.85	0.85	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	184	0	109	0	1680	226	31	1120	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	184	0	109	0	1680	226	31	1120	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)		12			12			12			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)	60		60	15		9	60		9	15		60
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings 4: Wyoming Blvd & Driveway B

														
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Detector Phase	4			4			4			2		2	1 2	
Switch Phase														
Minimum Initial (s)	8.0			8.0			8.0			18.0		18.0	3.0	
Minimum Split (s)	36.0			36.0			36.0			23.0		23.0	8.0	
Total Split (s)	36.0			36.0			36.0			69.6		69.6	14.4	
Total Split (%)	30.0%			30.0%			30.0%			58.0%		58.0%	12.0%	
Maximum Green (s)	30.0			30.0			30.0			64.6		64.6	10.9	
Yellow Time (s)	4.0			4.0			4.0			4.0		4.0	3.0	
All-Red Time (s)	2.0			2.0			2.0			1.0		1.0	0.5	
Lost Time Adjust (s)	0.0			0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	6.0			6.0			6.0			5.0		5.0	3.5	
Lead/Lag								Lag	Lag	Lead				
Lead-Lag Optimize?								Yes	Yes	Yes				
Vehicle Extension (s)	2.0			2.0			2.0			4.0		4.0	1.5	
Recall Mode	None			None			None			C-Max		C-Max	None	
Walk Time (s)	7.0			7.0			7.0			7.0		7.0		
Flash Dont Walk (s)	23.0			23.0			23.0			10.0		10.0		
Pedestrian Calls (#/hr)	0			0			0			0		0		
Act Effct Green (s)				20.0			20.0			72.5		72.5	87.0 90.5	
Actuated g/C Ratio				0.17			0.17			0.60		0.60	0.72 0.75	
v/c Ratio				0.78			0.31			0.55		0.23	0.10 0.29	
Control Delay				69.4			10.6			16.3		7.3	5.7 5.4	
Queue Delay				0.0			0.0			0.7		0.0	0.0 0.0	
Total Delay				69.4			10.6			17.0		7.3	5.7 5.4	
LOS				E			B			B A		A A	A A	
Approach Delay					47.5				15.9				5.4	
Approach LOS					D				B				A	
Intersection Summary														
Area Type:	Other													
Cycle Length: 120														
Actuated Cycle Length: 120														
Offset: 105.6 (88%), Referenced to phase 2:NBSB, Start of Green														
Natural Cycle: 75														
Control Type: Actuated-Coordinated														
Maximum v/c Ratio: 0.78														
Intersection Signal Delay: 15.0						Intersection LOS: B								
Intersection Capacity Utilization 44.5%						ICU Level of Service A								
Analysis Period (min) 15														

Splits and Phases: 4: Wyoming Blvd & Driveway B



APPENDIX D

TRIP GENERATION INFORMATION

Land Use: 934

Fast-Food Restaurant with Drive-Through Window

Description

This category includes fast-food restaurants with drive-through windows. This type of restaurant is characterized by a large drive-through clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Non-drive-through patrons generally order at a cash register and pay before they eat. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 46 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively. For the one dense multi-use urban site with data, the same AM and PM peak hours were observed.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977

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

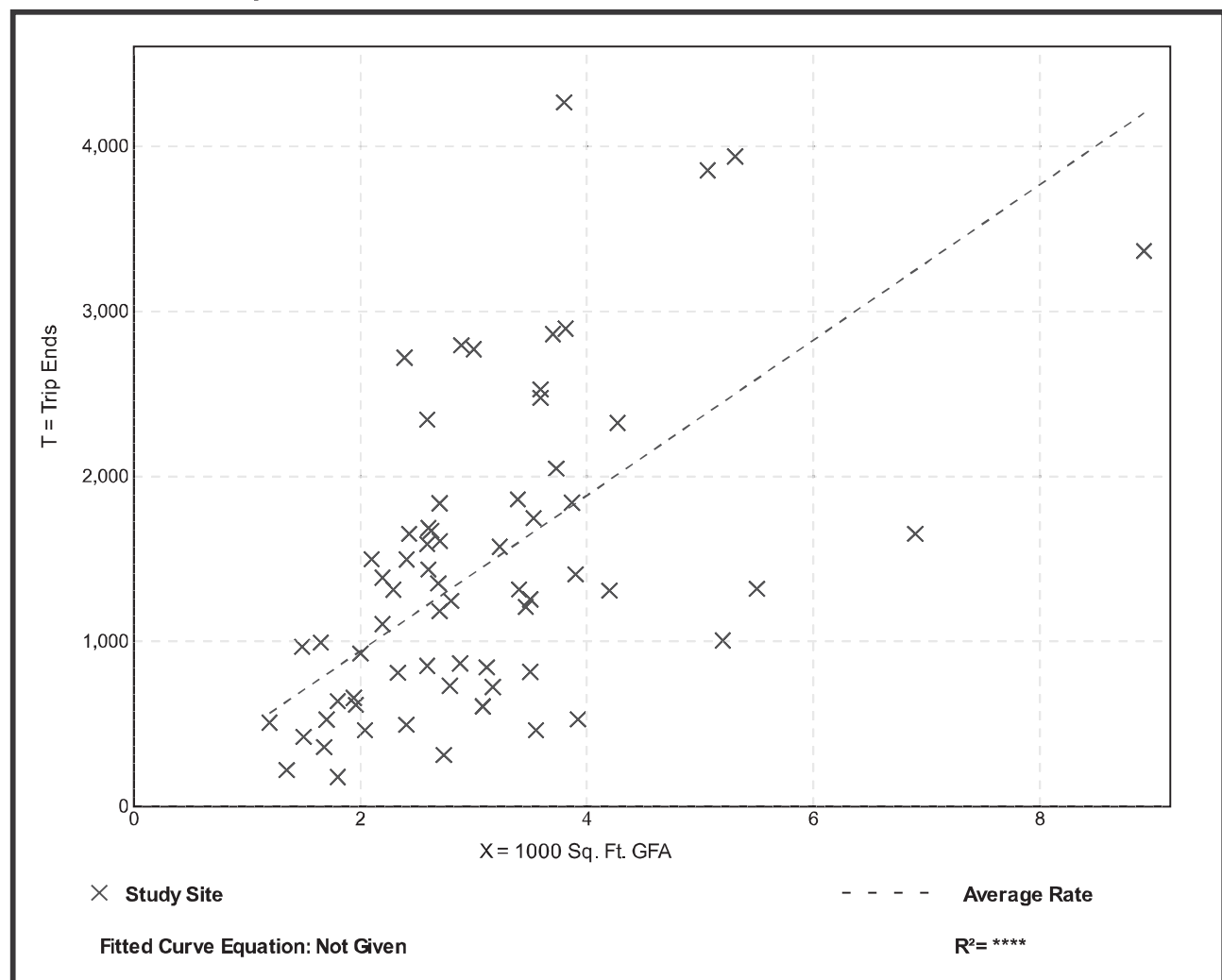
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 67
1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
470.95	98.89 - 1137.66	244.44

Data Plot and Equation



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

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 185

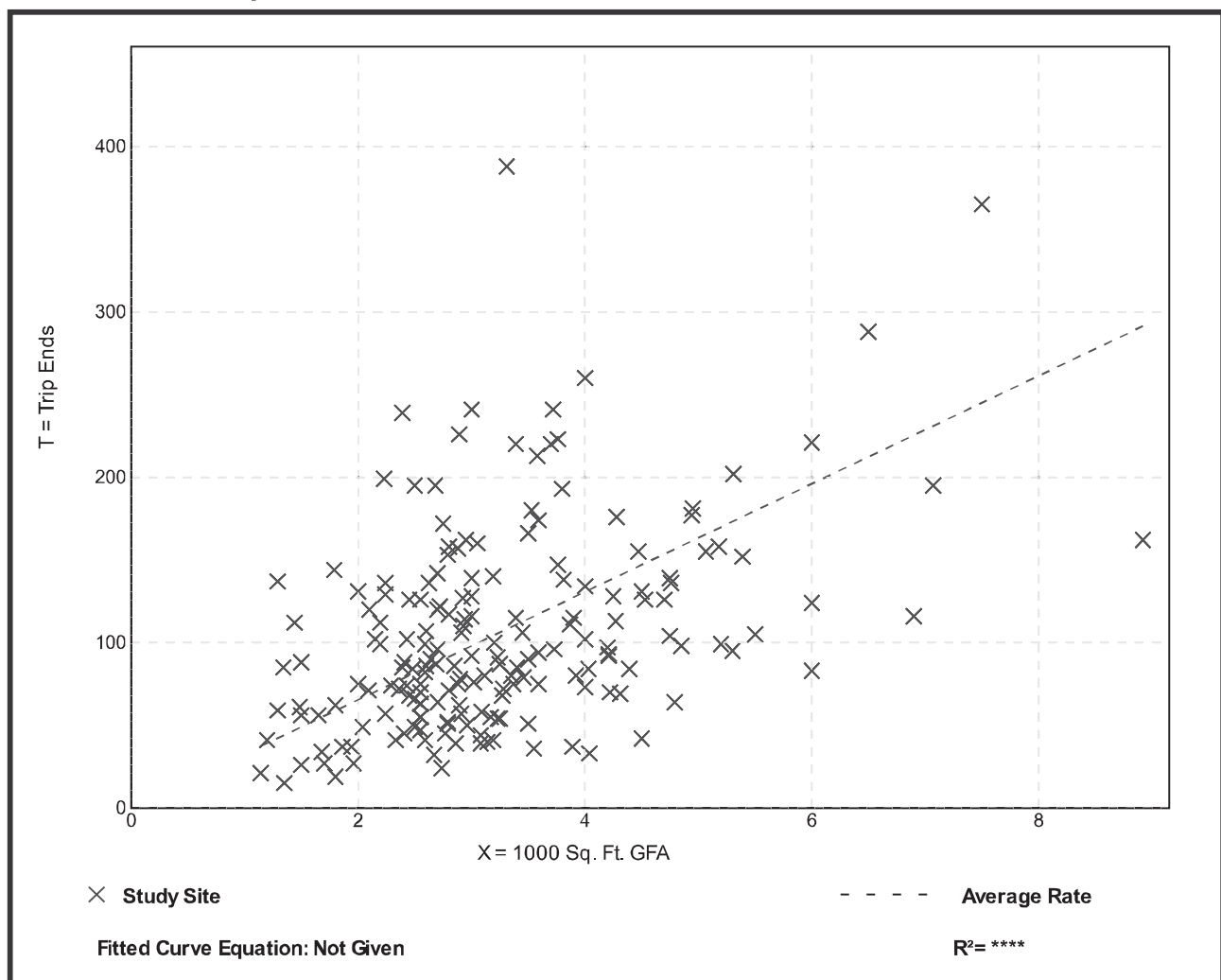
1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.67	8.17 - 117.22	17.87

Data Plot and Equation



Trip Generation Planner (ITE 10th Edition) - Summary Report

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

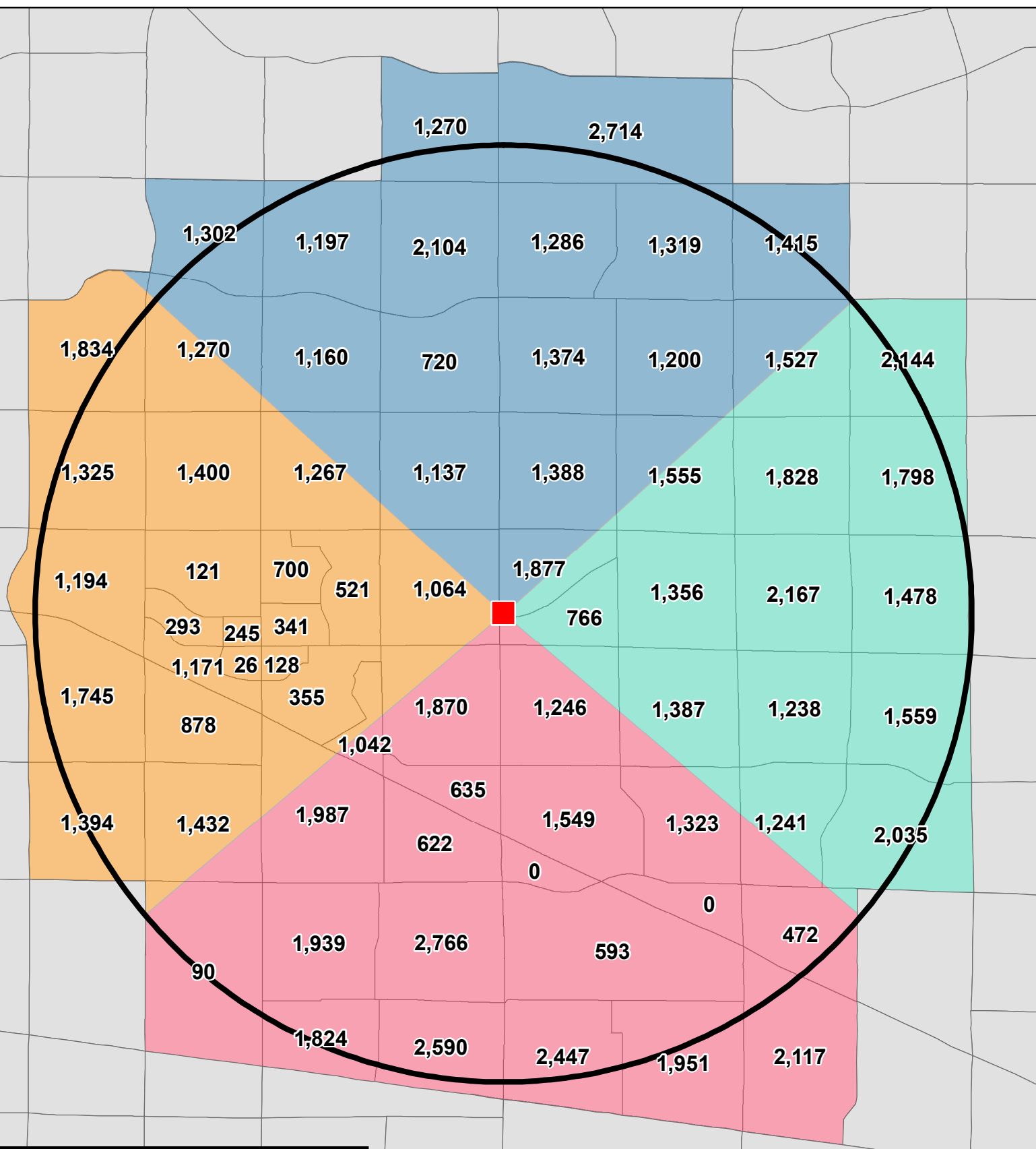
NEC Wyoming Blvd & Northeastern Blvd
06931344

ITE Code	Internal Capture Land Use	Land Use Description	Independent Variable	Setting/Location	No. of Units	Avg Rate or Eq	Rates			Total Trips						
							Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out
934		Fast-Food Restaurant w/ D.T.	1,000 Sq Ft	General Urban/Suburban	3.443	Avg	470.95		32.67	1,622		112			58	54
Grand Total										1,622		112			58	54

- Notes:
- (1) AM and/or PM rates correspond to peak hour of generator
 - (2) Land use was removed in *Trip Generation, 10 Edition*, trip generation data from the *ITE Trip Generation, 9th Edition*

APPENDIX E

TRIP DISTRIBUTION MAP



Trip Distribution Foundation



Site

Zone



East



North



South

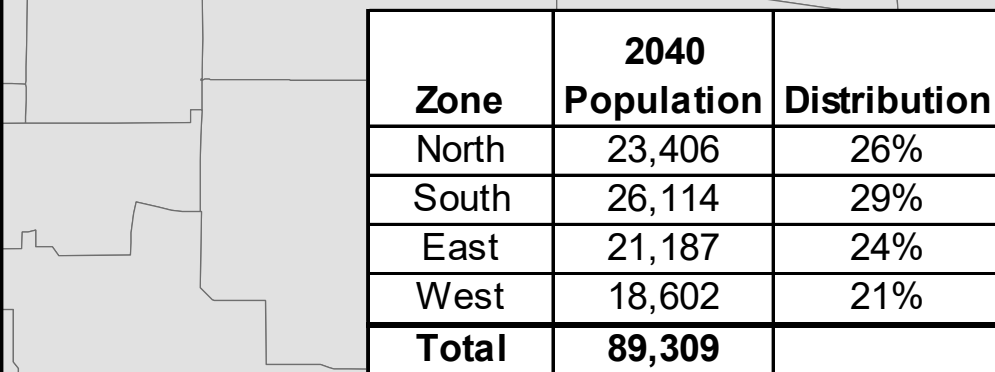


West



X,XXX 2040 Population

Zone	2040 Population	Distribution
North	23,406	26%
South	26,114	29%
East	21,187	24%
West	18,602	21%
Total	89,309	



APPENDIX F

BACKGROUND SYNCHRO REPORTS

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	67	20	1285	72	22	1211
Future Volume (veh/h)	67	20	1285	72	22	1211
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	25	1548	87	25	1376
Peak Hour Factor	0.80	0.80	0.83	0.83	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	125	111	4150	233	301	4284
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5115	278	307	5274
Grp Volume(v), veh/h	84	25	1065	570	25	1376
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1820	307	1702
Q Serve(g_s), s	5.1	1.6	8.1	8.1	0.9	0.0
Cycle Q Clear(g_c), s	5.1	1.6	8.1	8.1	8.9	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	125	111	2856	1527	301	4284
V/C Ratio(X)	0.67	0.22	0.37	0.37	0.08	0.32
Avail Cap(c_a), veh/h	453	403	2856	1527	301	4284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	49.9	48.3	2.1	2.1	0.4	0.0
Incr Delay (d2), s/veh	2.3	0.4	0.4	0.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7	1.4	1.6	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.2	48.7	2.5	2.8	0.9	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	109		1635			1401
Approach Delay, s/veh	51.4		2.6			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				97.3	12.7	97.3
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				72.0	28.0	72.0
Max Q Clear Time (g_c+l1), s				10.1	7.1	10.9
Green Ext Time (p_c), s				26.7	0.1	22.5
Intersection Summary						
HCM 6th Ctrl Delay			3.2			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	79	1	2	68	8	0	0	0	31	0	22
Future Vol, veh/h	9	79	1	2	68	8	0	0	0	31	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	74	74	74	25	25	25	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	98	1	3	92	11	0	0	0	37	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	99	0	0	238	230	99	225	225	98
Stage 1	-	-	-	-	-	-	121	121	-	104	104	-
Stage 2	-	-	-	-	-	-	117	109	-	121	121	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1489	-	-	1494	-	-	716	670	957	730	674	958
Stage 1	-	-	-	-	-	-	883	796	-	902	809	-
Stage 2	-	-	-	-	-	-	888	805	-	883	796	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1489	-	-	1494	-	-	691	664	957	725	668	958
Mov Cap-2 Maneuver	-	-	-	-	-	-	691	664	-	725	668	-
Stage 1	-	-	-	-	-	-	877	790	-	896	807	-
Stage 2	-	-	-	-	-	-	862	803	-	876	790	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			0			9.9		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1489	-	-	1494	-	-	806
HCM Lane V/C Ratio	-	0.007	-	-	0.002	-	-	0.079
HCM Control Delay (s)	0	7.4	-	-	7.4	-	-	9.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Future Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	65	65	65	71	71	71	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	20	0	0	0	14	10	7	55	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	90	95	57	92	91	19	58	0	0	24	0	0
Stage 1	71	71	-	19	19	-	-	-	-	-	-	-
Stage 2	19	24	-	73	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	895	795	1009	892	799	1059	1546	-	-	1591	-	-
Stage 1	939	836	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	937	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	891	791	1009	885	795	1059	1546	-	-	1591	-	-
Mov Cap-2 Maneuver	891	791	-	885	795	-	-	-	-	-	-	-
Stage 1	939	832	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	929	831	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	8.6			9.2			0			0.8		
HCM LOS	A			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1546	-	-	1009	885	1591	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.023	0.004	-	-				
HCM Control Delay (s)	0	-	-	8.6	9.2	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	60	0	25	0	1207	88	22	1163	0
Future Volume (vph)	0	0	0	60	0	25	0	1207	88	22	1163	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.147		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	274	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			70			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.91	0.91	0.91	0.83	0.83	0.83	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	66	0	27	0	1454	106	25	1337	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	66	0	27	0	1454	106	25	1337	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4			4			2	2	1 2	
Switch Phase													
Minimum Initial (s)	8.0			8.0			8.0			18.0	18.0	3.0	
Minimum Split (s)	36.0			36.0			36.0			23.0	23.0	8.0	
Total Split (s)	33.0			33.0			33.0			63.8	63.8	13.2	
Total Split (%)	30.0%			30.0%			30.0%			58.0%	58.0%	12.0%	
Maximum Green (s)	27.0			27.0			27.0			58.8	58.8	9.7	
Yellow Time (s)	4.0			4.0			4.0			4.0	4.0	3.0	
All-Red Time (s)	2.0			2.0			2.0			1.0	1.0	0.5	
Lost Time Adjust (s)	0.0			0.0			0.0			0.0	0.0	0.0	
Total Lost Time (s)	6.0			6.0			6.0			5.0	5.0	3.5	
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0			2.0			2.0			4.0	4.0	1.5	
Recall Mode	None			None			None			C-Max	C-Max	None	
Walk Time (s)	7.0			7.0			7.0			7.0	7.0		
Flash Dont Walk (s)	23.0			23.0			23.0			10.0	10.0		
Pedestrian Calls (#/hr)	0			0			0			0	0		
Act Effct Green (s)				10.2			10.2			75.0	75.0	89.6 93.8	
Actuated g/C Ratio				0.09			0.09			0.68	0.68	0.81 0.85	
v/c Ratio				0.50			0.14			0.42	0.10	0.06 0.31	
Control Delay				60.2			4.3			9.7	4.0	2.5 2.5	
Queue Delay				0.0			0.0			0.2	0.0	0.0 0.0	
Total Delay				60.2			4.3			9.9	4.0	2.5 2.5	
LOS				E			A			A	A	A A	
Approach Delay					44.0				9.5				2.5
Approach LOS					D				A				A
Intersection Summary													
Area Type:	Other												
Cycle Length: 110													
Actuated Cycle Length: 110													
Offset: 96.8 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 70													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.50													
Intersection Signal Delay: 7.4						Intersection LOS: A							
Intersection Capacity Utilization 39.2%						ICU Level of Service A							
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	115	42	1598	69	30	1233
Future Volume (veh/h)	115	42	1598	69	30	1233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	48	1880	81	32	1312
Peak Hour Factor	0.87	0.87	0.85	0.85	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	162	144	4145	178	221	4216
Arrive On Green	0.09	0.09	0.83	0.83	1.00	1.00
Sat Flow, veh/h	1781	1585	5188	216	224	5274
Grp Volume(v), veh/h	132	48	1274	687	32	1312
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1831	224	1702
Q Serve(g_s), s	8.7	3.4	12.5	12.6	2.6	0.0
Cycle Q Clear(g_c), s	8.7	3.4	12.5	12.6	15.2	0.0
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	162	144	2811	1512	221	4216
V/C Ratio(X)	0.81	0.33	0.45	0.45	0.14	0.31
Avail Cap(c_a), veh/h	371	330	2811	1512	221	4216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	53.6	51.1	2.9	2.9	1.0	0.0
Incr Delay (d2), s/veh	3.8	0.5	0.5	1.0	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	1.4	2.7	3.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.3	51.6	3.4	3.9	2.3	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	180		1961			1344
Approach Delay, s/veh	55.8		3.6			0.2
Approach LOS	E		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			104.1		15.9	104.1
Change Period (Y+Rc), s			5.0		5.0	5.0
Max Green Setting (Gmax), s			85.0		25.0	85.0
Max Q Clear Time (g_c+l1), s			14.6		10.7	17.2
Green Ext Time (p_c), s			38.5		0.2	22.7
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	97	2	0	121	25	13	0	16	99	0	40
Future Vol, veh/h	14	97	2	0	121	25	13	0	16	99	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	77	77	77	33	33	33	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	114	2	0	157	32	39	0	48	121	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	189	0	0	116	0	0	345	336	115	344	321	173
Stage 1	-	-	-	-	-	-	147	147	-	173	173	-
Stage 2	-	-	-	-	-	-	198	189	-	171	148	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1385	-	-	1473	-	-	609	585	937	610	596	871
Stage 1	-	-	-	-	-	-	856	775	-	829	756	-
Stage 2	-	-	-	-	-	-	804	744	-	831	775	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1385	-	-	1473	-	-	570	578	937	573	589	871
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	578	-	573	589	-
Stage 1	-	-	-	-	-	-	846	766	-	819	756	-
Stage 2	-	-	-	-	-	-	759	744	-	779	766	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0			10.6			12.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	727	1385	-	-	1473	-	-	636
HCM Lane V/C Ratio	0.121	0.012	-	-	-	-	-	0.267
HCM Control Delay (s)	10.6	7.6	-	-	0	-	-	12.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	1.1

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	27	0	3	0	35	7	6	112	0
Future Vol, veh/h	0	0	2	27	0	3	0	35	7	6	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	63	63	63	88	88	88	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	43	0	5	0	40	8	7	123	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	184	185	123	183	181	44	123	0	0	48	0	0
Stage 1	137	137	-	44	44	-	-	-	-	-	-	-
Stage 2	47	48	-	139	137	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	777	709	928	778	713	1026	1464	-	-	1559	-	-
Stage 1	866	783	-	970	858	-	-	-	-	-	-	-
Stage 2	967	855	-	864	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	771	705	928	772	709	1026	1464	-	-	1559	-	-
Mov Cap-2 Maneuver	771	705	-	772	709	-	-	-	-	-	-	-
Stage 1	866	779	-	970	858	-	-	-	-	-	-	-
Stage 2	963	855	-	856	779	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.9		9.8			0			0.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1464	-	-	928	792	1559	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.06	0.004	-	-				
HCM Control Delay (s)	0	-	-	8.9	9.8	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	171	0	101	0	1442	194	30	1086	0
Future Volume (vph)	0	0	0	171	0	101	0	1442	194	30	1086	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.095		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	177	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						104			119			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.92	0.92	0.92	0.85	0.85	0.85	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	186	0	110	0	1696	228	31	1131	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	186	0	110	0	1696	228	31	1131	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4		4		2	2	1	1	2	
Switch Phase													
Minimum Initial (s)	8.0			8.0		8.0		18.0	18.0	3.0			
Minimum Split (s)	36.0			36.0		36.0		23.0	23.0	8.0			
Total Split (s)	36.0			36.0		36.0		69.6	69.6	14.4			
Total Split (%)	30.0%			30.0%		30.0%		58.0%	58.0%	12.0%			
Maximum Green (s)	30.0			30.0		30.0		64.6	64.6	10.9			
Yellow Time (s)	4.0			4.0		4.0		4.0	4.0	3.0			
All-Red Time (s)	2.0			2.0		2.0		1.0	1.0	0.5			
Lost Time Adjust (s)	0.0			0.0		0.0		0.0	0.0	0.0			
Total Lost Time (s)	6.0			6.0		6.0		5.0	5.0	3.5			
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0			2.0		2.0		4.0	4.0	1.5			
Recall Mode	None			None		None		C-Max	C-Max	None			
Walk Time (s)	7.0			7.0		7.0		7.0	7.0				
Flash Dont Walk (s)	23.0			23.0		23.0		10.0	10.0				
Pedestrian Calls (#/hr)	0			0		0		0	0				
Act Effct Green (s)				20.2			20.2			72.3	72.3	86.8	90.3
Actuated g/C Ratio				0.17			0.17			0.60	0.60	0.72	0.75
v/c Ratio				0.78			0.31			0.55	0.23	0.10	0.30
Control Delay				69.3			10.8			16.6	7.5	5.7	5.4
Queue Delay				0.0			0.0			0.7	0.0	0.0	0.0
Total Delay				69.3			10.8			17.4	7.5	5.7	5.4
LOS				E			B			B	A	A	A
Approach Delay					47.5						16.2		5.4
Approach LOS					D						B		A
Intersection Summary													
Area Type:	Other												
Cycle Length: 120													
Actuated Cycle Length: 120													
Offset: 105.6 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 75													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.78													
Intersection Signal Delay: 15.3				Intersection LOS: B									
Intersection Capacity Utilization 44.8%				ICU Level of Service A									
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	74	22	1419	79	25	1338
Future Volume (veh/h)	74	22	1419	79	25	1338
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	28	1710	95	28	1520
Peak Hour Factor	0.80	0.80	0.83	0.83	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	126	112	4149	230	262	4280
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5119	275	260	5274
Grp Volume(v), veh/h	92	28	1175	630	28	1520
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1821	260	1702
Q Serve(g_s), s	5.6	1.8	9.4	9.4	1.4	0.0
Cycle Q Clear(g_c), s	5.6	1.8	9.4	9.4	10.8	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	126	112	2853	1526	262	4280
V/C Ratio(X)	0.73	0.25	0.41	0.41	0.11	0.36
Avail Cap(c_a), veh/h	453	403	2853	1526	262	4280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	50.1	48.3	2.2	2.2	0.6	0.0
Incr Delay (d2), s/veh	3.0	0.4	0.4	0.8	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.7	1.6	1.9	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.1	48.8	2.6	3.0	1.3	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	120		1805			1548
Approach Delay, s/veh	52.1		2.8			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				97.2	12.8	97.2
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				72.0	28.0	72.0
Max Q Clear Time (g_c+l1), s				11.4	7.6	12.8
Green Ext Time (p_c), s				31.2	0.1	26.5
Intersection Summary						
HCM 6th Ctrl Delay				3.3		
HCM 6th LOS				A		
Notes						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection

Int Delay, s/veh 2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	87	1	2	75	9	0	0	0	35	0	25
Future Vol, veh/h	10	87	1	2	75	9	0	0	0	35	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	74	74	74	25	25	25	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	107	1	3	101	12	0	0	0	42	0	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	113	0	0	108	0	0	260	251	108	245	245	107
Stage 1	-	-	-	-	-	-	132	132	-	113	113	-
Stage 2	-	-	-	-	-	-	128	119	-	132	132	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1476	-	-	1483	-	-	693	652	946	709	657	947
Stage 1	-	-	-	-	-	-	871	787	-	892	802	-
Stage 2	-	-	-	-	-	-	876	797	-	871	787	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1476	-	-	1483	-	-	666	645	946	703	650	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	666	645	-	703	650	-
Stage 1	-	-	-	-	-	-	864	781	-	885	800	-
Stage 2	-	-	-	-	-	-	846	795	-	864	781	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			0			10		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1476	-	-	1483	-	-	788
HCM Lane V/C Ratio	-	0.008	-	-	0.002	-	-	0.092
HCM Control Delay (s)	0	7.5	-	-	7.4	-	-	10
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	15	0	0	0	11	8	6	45	2
Future Vol, veh/h	0	0	1	15	0	0	0	11	8	6	45	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	65	65	65	71	71	71	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	23	0	0	0	15	11	8	62	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	101	106	64	103	102	21	65	0	0	26	0	0
Stage 1	80	80	-	21	21	-	-	-	-	-	-	-
Stage 2	21	26	-	82	81	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	880	784	1000	877	788	1056	1537	-	-	1588	-	-
Stage 1	929	828	-	998	878	-	-	-	-	-	-	-
Stage 2	998	874	-	926	828	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	876	780	1000	870	784	1056	1537	-	-	1588	-	-
Mov Cap-2 Maneuver	876	780	-	870	784	-	-	-	-	-	-	-
Stage 1	929	824	-	998	878	-	-	-	-	-	-	-
Stage 2	998	874	-	918	824	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.6		9.3			0			0.8			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1537	-	-	1000	870	1588	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.027	0.005	-	-				
HCM Control Delay (s)	0	-	-	8.6	9.3	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶		↷		↶		↶↶↶	↶	↷	↶↶↶	
Traffic Volume (vph)	0	0	0	66	0	28	0	1333	97	25	1284	0
Future Volume (vph)	0	0	0	66	0	28	0	1333	97	25	1284	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.117		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	218	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			70			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.91	0.91	0.91	0.83	0.83	0.83	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	73	0	31	0	1606	117	29	1476	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	0	31	0	1606	117	29	1476	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings 4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4			4			2		2	1 2
Switch Phase													
Minimum Initial (s)	8.0			8.0			8.0			18.0		18.0	3.0
Minimum Split (s)	36.0			36.0			36.0			23.0		23.0	8.0
Total Split (s)	33.0			33.0			33.0			63.8		63.8	13.2
Total Split (%)	30.0%			30.0%			30.0%			58.0%		58.0%	12.0%
Maximum Green (s)	27.0			27.0			27.0			58.8		58.8	9.7
Yellow Time (s)	4.0			4.0			4.0			4.0		4.0	3.0
All-Red Time (s)	2.0			2.0			2.0			1.0		1.0	0.5
Lost Time Adjust (s)	0.0			0.0			0.0			0.0		0.0	0.0
Total Lost Time (s)	6.0			6.0			6.0			5.0		5.0	3.5
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0			2.0			2.0			4.0		4.0	1.5
Recall Mode	None			None			None			C-Max		C-Max	None
Walk Time (s)	7.0			7.0			7.0			7.0		7.0	
Flash Dont Walk (s)	23.0			23.0			23.0			10.0		10.0	
Pedestrian Calls (#/hr)	0			0			0			0		0	
Act Effct Green (s)				10.7			10.7			72.7		72.7	89.1 93.3
Actuated g/C Ratio				0.10			0.10			0.66		0.66	0.81 0.85
v/c Ratio				0.54			0.15			0.48		0.11	0.07 0.34
Control Delay				61.0			5.9			11.4		5.0	2.8 2.7
Queue Delay				0.0			0.0			0.2		0.0	0.0 0.0
Total Delay				61.0			5.9			11.6		5.0	2.8 2.7
LOS				E			A			B		A	A A
Approach Delay					44.6				11.2				2.7
Approach LOS					D				B				A
Intersection Summary													
Area Type:	Other												
Cycle Length: 110													
Actuated Cycle Length: 110													
Offset: 96.8 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 70													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.54													
Intersection Signal Delay: 8.4						Intersection LOS: A							
Intersection Capacity Utilization 41.6%						ICU Level of Service A							
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	127	47	1765	76	33	1362
Future Volume (veh/h)	127	47	1765	76	33	1362
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	54	2076	89	35	1449
Peak Hour Factor	0.87	0.87	0.85	0.85	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	176	157	4106	175	186	4175
Arrive On Green	0.10	0.10	0.82	0.82	1.00	1.00
Sat Flow, veh/h	1781	1585	5190	215	183	5274
Grp Volume(v), veh/h	146	54	1405	760	35	1449
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1832	183	1702
Q Serve(g_s), s	9.7	3.8	15.4	15.5	4.7	0.0
Cycle Q Clear(g_c), s	9.7	3.8	15.4	15.5	20.2	0.0
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	176	157	2784	1498	186	4175
V/C Ratio(X)	0.83	0.34	0.50	0.51	0.19	0.35
Avail Cap(c_a), veh/h	371	330	2784	1498	186	4175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.92	0.92
Uniform Delay (d), s/veh	53.1	50.4	3.4	3.4	1.6	0.0
Incr Delay (d2), s/veh	3.8	0.5	0.7	1.2	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	1.5	3.5	4.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.8	50.9	4.1	4.6	3.7	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	200		2165			1484
Approach Delay, s/veh	55.2		4.3			0.3
Approach LOS	E		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			103.1		16.9	103.1
Change Period (Y+Rc), s			5.0		5.0	5.0
Max Green Setting (Gmax), s			85.0		25.0	85.0
Max Q Clear Time (g_c+l1), s			17.5		11.7	22.2
Green Ext Time (p_c), s			43.9		0.2	26.8
Intersection Summary						
HCM 6th Ctrl Delay			5.4			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	107	2	0	134	28	15	0	18	109	0	45
Future Vol, veh/h	16	107	2	0	134	28	15	0	18	109	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	77	77	77	33	33	33	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	126	2	0	174	36	45	0	55	133	0	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	210	0	0	128	0	0	385	375	127	385	358	192
Stage 1	-	-	-	-	-	-	165	165	-	192	192	-
Stage 2	-	-	-	-	-	-	220	210	-	193	166	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1361	-	-	1458	-	-	573	556	923	573	568	850
Stage 1	-	-	-	-	-	-	837	762	-	810	742	-
Stage 2	-	-	-	-	-	-	782	728	-	809	761	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1361	-	-	1458	-	-	530	548	923	533	560	850
Mov Cap-2 Maneuver	-	-	-	-	-	-	530	548	-	533	560	-
Stage 1	-	-	-	-	-	-	825	751	-	799	742	-
Stage 2	-	-	-	-	-	-	732	728	-	751	750	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			11.1			13.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	690	1361	-	-	1458	-	-	598
HCM Lane V/C Ratio	0.145	0.014	-	-	-	-	-	0.314
HCM Control Delay (s)	11.1	7.7	-	-	0	-	-	13.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	1.3

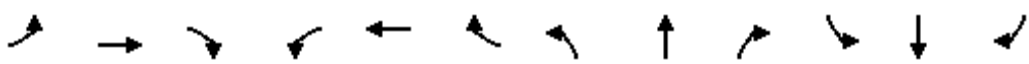
HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	0	2	30	0	3	0	39	8	7	124	0
Future Vol, veh/h	0	0	2	30	0	3	0	39	8	7	124	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	63	63	63	88	88	88	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	48	0	5	0	44	9	8	136	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	203	205	136	203	201	49	136	0	0	53	0	0
Stage 1	152	152	-	49	49	-	-	-	-	-	-	-
Stage 2	51	53	-	154	152	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	755	691	913	755	695	1020	1448	-	-	1553	-	-
Stage 1	850	772	-	964	854	-	-	-	-	-	-	-
Stage 2	962	851	-	848	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	748	687	913	748	691	1020	1448	-	-	1553	-	-
Mov Cap-2 Maneuver	748	687	-	748	691	-	-	-	-	-	-	-
Stage 1	850	767	-	964	854	-	-	-	-	-	-	-
Stage 2	958	851	-	839	767	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		10			0			0.4			
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1448	-	-	913	767	1553	-	-				
HCM Lane V/C Ratio	-	-	-	0.004	0.068	0.005	-	-				
HCM Control Delay (s)	0	-	-	9	10	7.3	0	-				
HCM Lane LOS	A	-	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗		↖		↗		↑↑↑	↗	↖	↑↑↑	
Traffic Volume (vph)	0	0	0	189	0	112	0	1593	214	33	1199	0
Future Volume (vph)	0	0	0	189	0	112	0	1593	214	33	1199	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.069		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	129	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						105			119			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.92	0.92	0.92	0.85	0.85	0.85	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	205	0	122	0	1874	252	34	1249	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	205	0	122	0	1874	252	34	1249	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4		4		4		2		2	1	2		
Switch Phase													
Minimum Initial (s)	8.0		8.0		8.0		18.0		18.0	3.0			
Minimum Split (s)	36.0		36.0		36.0		23.0		23.0	8.0			
Total Split (s)	36.0		36.0		36.0		69.6		69.6	14.4			
Total Split (%)	30.0%		30.0%		30.0%		58.0%		58.0%	12.0%			
Maximum Green (s)	30.0		30.0		30.0		64.6		64.6	10.9			
Yellow Time (s)	4.0		4.0		4.0		4.0		4.0	3.0			
All-Red Time (s)	2.0		2.0		2.0		1.0		1.0	0.5			
Lost Time Adjust (s)	0.0		0.0		0.0		0.0		0.0	0.0			
Total Lost Time (s)	6.0		6.0		6.0		5.0		5.0	3.5			
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0		2.0		2.0		4.0		4.0	1.5			
Recall Mode	None		None		None		C-Max		C-Max	None			
Walk Time (s)	7.0		7.0		7.0		7.0		7.0				
Flash Dont Walk (s)	23.0		23.0		23.0		10.0		10.0				
Pedestrian Calls (#/hr)	0		0		0		0		0				
Act Effct Green (s)				21.8		21.8		70.3		70.3	85.2	88.7	
Actuated g/C Ratio				0.18		0.18		0.59		0.59	0.71	0.74	
v/c Ratio				0.80		0.33		0.63		0.26	0.12	0.33	
Control Delay				68.8		12.2		19.8		9.6	6.5	6.2	
Queue Delay				0.0		0.0		1.5		0.4	0.0	0.0	
Total Delay				68.8		12.2		21.3		10.0	6.5	6.2	
LOS				E		B		C		B	A	A	
Approach Delay					47.7						20.0		6.2
Approach LOS					D						B		A
Intersection Summary													
Area Type:	Other												
Cycle Length: 120													
Actuated Cycle Length: 120													
Offset: 105.6 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 80													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.80													
Intersection Signal Delay: 17.7				Intersection LOS: B									
Intersection Capacity Utilization 48.7%				ICU Level of Service A									
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



APPENDIX G

TOTAL SYNCHRO REPORTS

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	67	20	1285	72	22	1211
Future Volume (veh/h)	67	20	1285	72	22	1211
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	25	1548	87	25	1376
Peak Hour Factor	0.80	0.80	0.83	0.83	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	125	111	4150	233	301	4284
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5115	278	307	5274
Grp Volume(v), veh/h	84	25	1065	570	25	1376
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1820	307	1702
Q Serve(g_s), s	5.1	1.6	8.1	8.1	0.9	0.0
Cycle Q Clear(g_c), s	5.1	1.6	8.1	8.1	8.9	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	125	111	2856	1527	301	4284
V/C Ratio(X)	0.67	0.22	0.37	0.37	0.08	0.32
Avail Cap(c_a), veh/h	453	403	2856	1527	301	4284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	49.9	48.3	2.1	2.1	0.4	0.0
Incr Delay (d2), s/veh	2.3	0.4	0.4	0.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7	1.4	1.6	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.2	48.7	2.5	2.8	0.9	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	109		1635			1401
Approach Delay, s/veh	51.4		2.6			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				97.3	12.7	97.3
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				72.0	28.0	72.0
Max Q Clear Time (g_c+l1), s				10.1	7.1	10.9
Green Ext Time (p_c), s				26.7	0.1	22.5
Intersection Summary						
HCM 6th Ctrl Delay			3.2			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔			↔	↔
Traffic Vol, veh/h	9	79	1	2	68	8	0	0	0	31	0	22
Future Vol, veh/h	9	79	1	2	68	8	0	0	0	31	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	210	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	74	74	74	25	25	25	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	98	1	3	92	11	0	0	0	37	0	27
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	99	0	0	238	230	99	225	225	98
Stage 1	-	-	-	-	-	-	121	121	-	104	104	-
Stage 2	-	-	-	-	-	-	117	109	-	121	121	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1489	-	-	1494	-	-	716	670	957	730	674	958
Stage 1	-	-	-	-	-	-	883	796	-	902	809	-
Stage 2	-	-	-	-	-	-	888	805	-	883	796	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1489	-	-	1494	-	-	691	663	957	724	667	958
Mov Cap-2 Maneuver	-	-	-	-	-	-	691	663	-	724	667	-
Stage 1	-	-	-	-	-	-	876	790	-	895	807	-
Stage 2	-	-	-	-	-	-	862	803	-	876	790	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			0			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1489	-	-	1494	-	-	724	958			
HCM Lane V/C Ratio	-	0.007	-	-	0.002	-	-	0.052	0.028			
HCM Control Delay (s)	0	7.4	0	-	7.4	-	-	10.2	8.9			
HCM Lane LOS	A	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.2	0.1			

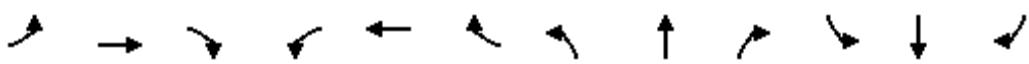
HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Future Vol, veh/h	0	0	1	13	0	0	0	10	7	5	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	65	65	65	71	71	71	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	20	0	0	0	14	10	7	55	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	90	95	57	90	91	19	58	0	0	24	0	0
Stage 1	71	71	-	19	19	-	-	-	-	-	-	-
Stage 2	19	24	-	71	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	895	795	1009	895	799	1059	1546	-	-	1591	-	-
Stage 1	939	836	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	939	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	891	791	1009	891	795	1059	1546	-	-	1591	-	-
Mov Cap-2 Maneuver	891	791	-	891	795	-	-	-	-	-	-	-
Stage 1	939	832	-	1000	880	-	-	-	-	-	-	-
Stage 2	1000	875	-	933	831	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.6		9.1			0			0.8			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1546	-	-	1009	891	1591	-	-				
HCM Lane V/C Ratio	-	-	-	0.001	0.022	0.004	-	-				
HCM Control Delay (s)	0	-	-	8.6	9.1	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶		↷		↶		↶↶↶	↶	↷	↶↶↶	
Traffic Volume (vph)	0	0	0	60	0	25	0	1207	88	22	1163	0
Future Volume (vph)	0	0	0	60	0	25	0	1207	88	22	1163	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.147		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	274	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			70			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.91	0.91	0.91	0.83	0.83	0.83	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	66	0	27	0	1454	106	25	1337	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	66	0	27	0	1454	106	25	1337	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4		4		4		2		2	1	2		
Switch Phase													
Minimum Initial (s)	8.0		8.0		8.0		18.0		18.0	3.0			
Minimum Split (s)	36.0		36.0		36.0		23.0		23.0	8.0			
Total Split (s)	33.0		33.0		33.0		63.8		63.8	13.2			
Total Split (%)	30.0%		30.0%		30.0%		58.0%		58.0%	12.0%			
Maximum Green (s)	27.0		27.0		27.0		58.8		58.8	9.7			
Yellow Time (s)	4.0		4.0		4.0		4.0		4.0	3.0			
All-Red Time (s)	2.0		2.0		2.0		1.0		1.0	0.5			
Lost Time Adjust (s)	0.0		0.0		0.0		0.0		0.0	0.0			
Total Lost Time (s)	6.0		6.0		6.0		5.0		5.0	3.5			
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0		2.0		2.0		4.0		4.0	1.5			
Recall Mode	None		None		None		C-Max		C-Max	None			
Walk Time (s)	7.0		7.0		7.0		7.0		7.0				
Flash Dont Walk (s)	23.0		23.0		23.0		10.0		10.0				
Pedestrian Calls (#/hr)	0		0		0		0		0				
Act Effct Green (s)				10.2		10.2		75.0		75.0	89.6	93.8	
Actuated g/C Ratio				0.09		0.09		0.68		0.68	0.81	0.85	
v/c Ratio				0.50		0.14		0.42		0.10	0.06	0.31	
Control Delay				60.2		4.3		9.7		4.0	2.5	2.5	
Queue Delay				0.0		0.0		0.2		0.0	0.0	0.0	
Total Delay				60.2		4.3		9.9		4.0	2.5	2.5	
LOS				E		A		A		A	A	A	
Approach Delay					44.0						9.5		2.5
Approach LOS					D						A		A
Intersection Summary													
Area Type:	Other												
Cycle Length: 110													
Actuated Cycle Length: 110													
Offset: 96.8 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 70													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.50													
Intersection Signal Delay: 7.4				Intersection LOS: A									
Intersection Capacity Utilization 39.2%				ICU Level of Service A									
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	134	45	1607	90	33	1242
Future Volume (veh/h)	134	45	1607	90	33	1242
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	52	1891	106	35	1321
Peak Hour Factor	0.87	0.87	0.85	0.85	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	184	164	4024	225	211	4153
Arrive On Green	0.10	0.10	0.81	0.81	1.00	1.00
Sat Flow, veh/h	1781	1585	5116	277	216	5274
Grp Volume(v), veh/h	154	52	1299	698	35	1321
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1821	216	1702
Q Serve(g_s), s	10.2	3.6	13.8	13.9	3.5	0.0
Cycle Q Clear(g_c), s	10.2	3.6	13.8	13.9	17.4	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	184	164	2768	1481	211	4153
V/C Ratio(X)	0.84	0.32	0.47	0.47	0.17	0.32
Avail Cap(c_a), veh/h	371	330	2768	1481	211	4153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	52.8	49.9	3.4	3.4	1.2	0.0
Incr Delay (d2), s/veh	3.8	0.4	0.6	1.1	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	1.5	3.3	3.7	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.6	50.3	4.0	4.5	2.8	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	206		1997			1356
Approach Delay, s/veh	55.0		4.1			0.3
Approach LOS	E		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			102.6		17.4	102.6
Change Period (Y+Rc), s			5.0		5.0	5.0
Max Green Setting (Gmax), s			85.0		25.0	85.0
Max Q Clear Time (g_c+l1), s			15.9		12.2	19.4
Green Ext Time (p_c), s			39.3		0.2	23.1
Intersection Summary						
HCM 6th Ctrl Delay			5.6			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	↕
Traffic Vol, veh/h	38	97	2	0	121	28	13	0	16	102	0	62
Future Vol, veh/h	38	97	2	0	121	28	13	0	16	102	0	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	210	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	77	77	77	33	33	33	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	114	2	0	157	36	39	0	48	124	0	76
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	193	0	0	116	0	0	418	398	115	404	381	175
Stage 1	-	-	-	-	-	-	205	205	-	175	175	-
Stage 2	-	-	-	-	-	-	213	193	-	229	206	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1380	-	-	1473	-	-	545	540	937	557	552	868
Stage 1	-	-	-	-	-	-	797	732	-	827	754	-
Stage 2	-	-	-	-	-	-	789	741	-	774	731	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1380	-	-	1473	-	-	484	521	937	514	533	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	484	521	-	514	533	-
Stage 1	-	-	-	-	-	-	769	706	-	798	754	-
Stage 2	-	-	-	-	-	-	720	741	-	708	705	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			0			11.3			12.4		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	660	1380	-	-	1473	-	-	514	868			
HCM Lane V/C Ratio	0.133	0.032	-	-	-	-	-	0.242	0.087			
HCM Control Delay (s)	11.3	7.7	0	-	0	-	-	14.2	9.5			
HCM Lane LOS	B	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.9	0.3			

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	27	27	0	3	27	35	7	6	112	32
Future Vol, veh/h	30	0	27	27	0	3	27	35	7	6	112	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	63	63	63	88	88	88	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	29	43	0	5	31	40	8	7	123	35
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	264	265	141	275	278	44	158	0	0	48	0	0
Stage 1	155	155	-	106	106	-	-	-	-	-	-	-
Stage 2	109	110	-	169	172	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	689	640	907	677	630	1026	1422	-	-	1559	-	-
Stage 1	847	769	-	900	807	-	-	-	-	-	-	-
Stage 2	896	804	-	833	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	672	623	907	642	613	1026	1422	-	-	1559	-	-
Mov Cap-2 Maneuver	672	623	-	642	613	-	-	-	-	-	-	-
Stage 1	828	765	-	880	789	-	-	-	-	-	-	-
Stage 2	872	786	-	802	752	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10.1		10.8			3			0.3			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1422	-	-	766	667	1559	-	-				
HCM Lane V/C Ratio	0.022	-	-	0.081	0.071	0.004	-	-				
HCM Control Delay (s)	7.6	0	-	10.1	10.8	7.3	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.2	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	180	0	123	0	1445	203	54	1089	0
Future Volume (vph)	0	0	0	180	0	123	0	1445	203	54	1089	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.093		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	173	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						120			125			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.92	0.92	0.92	0.85	0.85	0.85	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	196	0	134	0	1700	239	56	1134	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	196	0	134	0	1700	239	56	1134	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4		4		2	2	1	1	2	
Switch Phase													
Minimum Initial (s)	8.0			8.0		8.0		18.0	18.0	3.0			
Minimum Split (s)	36.0			36.0		36.0		23.0	23.0	8.0			
Total Split (s)	36.0			36.0		36.0		69.6	69.6	14.4			
Total Split (%)	30.0%			30.0%		30.0%		58.0%	58.0%	12.0%			
Maximum Green (s)	30.0			30.0		30.0		64.6	64.6	10.9			
Yellow Time (s)	4.0			4.0		4.0		4.0	4.0	3.0			
All-Red Time (s)	2.0			2.0		2.0		1.0	1.0	0.5			
Lost Time Adjust (s)	0.0			0.0		0.0		0.0	0.0	0.0			
Total Lost Time (s)	6.0			6.0		6.0		5.0	5.0	3.5			
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0			2.0		2.0		4.0	4.0	1.5			
Recall Mode	None			None		None		C-Max	C-Max	None			
Walk Time (s)	7.0			7.0		7.0		7.0	7.0				
Flash Dont Walk (s)	23.0			23.0		23.0		10.0	10.0				
Pedestrian Calls (#/hr)	0			0		0		0	0				
Act Effct Green (s)				21.0		21.0		71.6	71.6	86.0	89.5		
Actuated g/C Ratio				0.18		0.18		0.60	0.60	0.72	0.75		
v/c Ratio				0.80		0.36		0.56	0.24	0.19	0.30		
Control Delay				69.3		11.5		17.7	8.3	6.7	5.7		
Queue Delay				0.0		0.0		0.9	0.0	0.0	0.0		
Total Delay				69.3		11.5		18.6	8.3	6.7	5.7		
LOS				E		B		B	A	A	A		
Approach Delay					45.8					17.4			
Approach LOS					D					B			
Intersection Summary													
Area Type:	Other												
Cycle Length: 120													
Actuated Cycle Length: 120													
Offset: 105.6 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 75													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.80													
Intersection Signal Delay: 16.1				Intersection LOS: B									
Intersection Capacity Utilization 52.1%				ICU Level of Service A									
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	74	22	1419	79	25	1338
Future Volume (veh/h)	74	22	1419	79	25	1338
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	28	1710	95	28	1520
Peak Hour Factor	0.80	0.80	0.83	0.83	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	126	112	4149	230	262	4280
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5119	275	260	5274
Grp Volume(v), veh/h	92	28	1175	630	28	1520
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1821	260	1702
Q Serve(g_s), s	5.6	1.8	9.4	9.4	1.4	0.0
Cycle Q Clear(g_c), s	5.6	1.8	9.4	9.4	10.8	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	126	112	2853	1526	262	4280
V/C Ratio(X)	0.73	0.25	0.41	0.41	0.11	0.36
Avail Cap(c_a), veh/h	453	403	2853	1526	262	4280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	50.1	48.3	2.2	2.2	0.6	0.0
Incr Delay (d2), s/veh	3.0	0.4	0.4	0.8	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.7	1.6	1.9	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.1	48.8	2.6	3.0	1.3	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	120		1805			1548
Approach Delay, s/veh	52.1		2.8			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				97.2	12.8	97.2
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				72.0	28.0	72.0
Max Q Clear Time (g_c+l1), s				11.4	7.6	12.8
Green Ext Time (p_c), s				31.2	0.1	26.5
Intersection Summary						
HCM 6th Ctrl Delay			3.3			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔			↔	↔
Traffic Vol, veh/h	10	87	1	2	75	9	0	0	0	35	0	25
Future Vol, veh/h	10	87	1	2	75	9	0	0	0	35	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	210	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	74	74	74	25	25	25	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	107	1	3	101	12	0	0	0	42	0	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	113	0	0	108	0	0	260	251	108	245	245	107
Stage 1	-	-	-	-	-	-	132	132	-	113	113	-
Stage 2	-	-	-	-	-	-	128	119	-	132	132	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1476	-	-	1483	-	-	693	652	946	709	657	947
Stage 1	-	-	-	-	-	-	871	787	-	892	802	-
Stage 2	-	-	-	-	-	-	876	797	-	871	787	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1476	-	-	1483	-	-	665	645	946	703	650	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	665	645	-	703	650	-
Stage 1	-	-	-	-	-	-	863	780	-	884	800	-
Stage 2	-	-	-	-	-	-	846	795	-	863	780	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			0			9.8		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1476	-	-	1483	-	-	703	947			
HCM Lane V/C Ratio	-	0.008	-	-	0.002	-	-	0.06	0.032			
HCM Control Delay (s)	0	7.5	0	-	7.4	-	-	10.4	8.9			
HCM Lane LOS	A	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.2	0.1			

HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	15	0	0	0	11	8	6	45	2
Future Vol, veh/h	0	0	1	15	0	0	0	11	8	6	45	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	65	65	65	71	71	71	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	23	0	0	0	15	11	8	62	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	101	106	64	101	102	21	65	0	0	26	0	0
Stage 1	80	80	-	21	21	-	-	-	-	-	-	-
Stage 2	21	26	-	80	81	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	880	784	1000	880	788	1056	1537	-	-	1588	-	-
Stage 1	929	828	-	998	878	-	-	-	-	-	-	-
Stage 2	998	874	-	929	828	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	876	780	1000	876	784	1056	1537	-	-	1588	-	-
Mov Cap-2 Maneuver	876	780	-	876	784	-	-	-	-	-	-	-
Stage 1	929	824	-	998	878	-	-	-	-	-	-	-
Stage 2	998	874	-	923	824	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.6		9.2			0			0.8			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1537	-	-	1000	876	1588	-	-				
HCM Lane V/C Ratio	-	-	-	0.001	0.026	0.005	-	-				
HCM Control Delay (s)	0	-	-	8.6	9.2	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶		↷		↶		↶↶↶	↶	↷	↶↶↶	
Traffic Volume (vph)	0	0	0	66	0	28	0	1333	97	25	1284	0
Future Volume (vph)	0	0	0	66	0	28	0	1333	97	25	1284	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.117		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	218	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			70			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.91	0.91	0.91	0.83	0.83	0.83	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	73	0	31	0	1606	117	29	1476	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	0	31	0	1606	117	29	1476	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

														
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Detector Phase	4			4		4		2	2	1	1	2		
Switch Phase														
Minimum Initial (s)	8.0			8.0		8.0		18.0	18.0	3.0				
Minimum Split (s)	36.0			36.0		36.0		23.0	23.0	8.0				
Total Split (s)	33.0			33.0		33.0		63.8	63.8	13.2				
Total Split (%)	30.0%			30.0%		30.0%		58.0%	58.0%	12.0%				
Maximum Green (s)	27.0			27.0		27.0		58.8	58.8	9.7				
Yellow Time (s)	4.0			4.0		4.0		4.0	4.0	3.0				
All-Red Time (s)	2.0			2.0		2.0		1.0	1.0	0.5				
Lost Time Adjust (s)	0.0			0.0		0.0		0.0	0.0	0.0				
Total Lost Time (s)	6.0			6.0		6.0		5.0	5.0	3.5				
Lead/Lag								Lag	Lag	Lead				
Lead-Lag Optimize?								Yes	Yes	Yes				
Vehicle Extension (s)	2.0			2.0		2.0		4.0	4.0	1.5				
Recall Mode	None			None		None		C-Max	C-Max	None				
Walk Time (s)	7.0			7.0		7.0		7.0	7.0					
Flash Dont Walk (s)	23.0			23.0		23.0		10.0	10.0					
Pedestrian Calls (#/hr)	0			0		0		0	0					
Act Effct Green (s)				10.7			10.7			72.7	72.7	89.1	93.3	
Actuated g/C Ratio				0.10			0.10			0.66	0.66	0.81	0.85	
v/c Ratio				0.54			0.15			0.48	0.11	0.07	0.34	
Control Delay				61.0			5.9			11.4	5.0	2.8	2.7	
Queue Delay				0.0			0.0			0.2	0.0	0.0	0.0	
Total Delay				61.0			5.9			11.6	5.0	2.8	2.7	
LOS				E			A			B	A	A	A	
Approach Delay					44.6						11.2	2.7		
Approach LOS					D						B	A		
Intersection Summary														
Area Type:	Other													
Cycle Length: 110														
Actuated Cycle Length: 110														
Offset: 96.8 (88%), Referenced to phase 2:NBSB, Start of Green														
Natural Cycle: 70														
Control Type: Actuated-Coordinated														
Maximum v/c Ratio: 0.54														
Intersection Signal Delay: 8.4				Intersection LOS: A										
Intersection Capacity Utilization 41.6%				ICU Level of Service A										
Analysis Period (min) 15														

Splits and Phases: 4: Wyoming Blvd & Driveway B



Queues

1: Wyoming Blvd & Northeastern Blvd

					
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	93	28	1805	28	1520
v/c Ratio	0.54	0.16	0.42	0.16	0.35
Control Delay	58.8	17.5	3.2	5.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.1
Total Delay	58.8	17.5	3.2	5.0	2.8
Queue Length 50th (ft)	64	0	100	3	73
Queue Length 95th (ft)	100	22	134	13	109
Internal Link Dist (ft)	237		557		347
Turn Bay Length (ft)	90			140	
Base Capacity (vph)	450	423	4266	171	4297
Starvation Cap Reductn	0	0	0	0	1407
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.07	0.42	0.16	0.53
Intersection Summary					

Queues

4: Wyoming Blvd & Driveway B

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	73	31	1606	117	29	1476
v/c Ratio	0.54	0.15	0.48	0.11	0.07	0.34
Control Delay	61.0	5.9	11.4	5.0	2.8	2.7
Queue Delay	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	61.0	5.9	11.6	5.0	2.8	2.7
Queue Length 50th (ft)	50	0	201	11	3	72
Queue Length 95th (ft)	95	13	258	37	9	109
Internal Link Dist (ft)			347			261
Turn Bay Length (ft)		85		100	60	
Base Capacity (vph)	346	430	3358	1069	396	4307
Starvation Cap Reductn	0	0	833	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.07	0.64	0.11	0.07	0.34
Intersection Summary						

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	146	50	1774	97	36	1371
Future Volume (veh/h)	146	50	1774	97	36	1371
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	57	2087	114	38	1459
Peak Hour Factor	0.87	0.87	0.85	0.85	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	198	176	3992	217	177	4112
Arrive On Green	0.11	0.11	0.81	0.81	1.00	1.00
Sat Flow, veh/h	1781	1585	5125	269	177	5274
Grp Volume(v), veh/h	168	57	1430	771	38	1459
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1822	177	1702
Q Serve(g_s), s	11.1	4.0	16.9	17.1	6.2	0.0
Cycle Q Clear(g_c), s	11.1	4.0	16.9	17.1	23.4	0.0
Prop In Lane	1.00	1.00		0.15	1.00	
Lane Grp Cap(c), veh/h	198	176	2742	1467	177	4112
V/C Ratio(X)	0.85	0.32	0.52	0.53	0.21	0.35
Avail Cap(c_a), veh/h	371	330	2742	1467	177	4112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.92	0.92
Uniform Delay (d), s/veh	52.3	49.2	3.9	3.9	2.1	0.0
Incr Delay (d2), s/veh	3.8	0.4	0.7	1.3	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.6	4.1	4.8	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.2	49.5	4.6	5.3	4.6	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	225		2201			1497
Approach Delay, s/veh	54.5		4.9			0.3
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				101.6	18.4	101.6
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				85.0	25.0	85.0
Max Q Clear Time (g_c+l1), s				19.1	13.1	25.4
Green Ext Time (p_c), s				44.3	0.3	27.0
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 6th TWSC

2: Driveway A & Northeastern Blvd

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	↕
Traffic Vol, veh/h	40	107	2	0	134	31	15	0	18	112	0	67
Future Vol, veh/h	40	107	2	0	134	31	15	0	18	112	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	210	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	77	77	77	33	33	33	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	126	2	0	174	40	45	0	55	137	0	82
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	214	0	0	128	0	0	456	435	127	443	416	194
Stage 1	-	-	-	-	-	-	221	221	-	194	194	-
Stage 2	-	-	-	-	-	-	235	214	-	249	222	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1356	-	-	1458	-	-	515	514	923	525	527	847
Stage 1	-	-	-	-	-	-	781	720	-	808	740	-
Stage 2	-	-	-	-	-	-	768	725	-	755	720	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1356	-	-	1458	-	-	452	495	923	480	508	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	452	495	-	480	508	-
Stage 1	-	-	-	-	-	-	752	693	-	778	740	-
Stage 2	-	-	-	-	-	-	694	725	-	684	693	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			0			11.8			13.3		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	626	1356	-	-	1458	-	-	480	847			
HCM Lane V/C Ratio	0.16	0.035	-	-	-	-	-	0.285	0.096			
HCM Control Delay (s)	11.8	7.8	0	-	0	-	-	15.5	9.7			
HCM Lane LOS	B	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-	-	1.2	0.3			

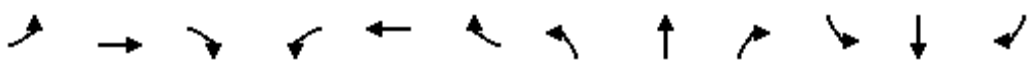
HCM 6th TWSC

3: Driveway A & Proposed Site Access

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	27	30	0	3	27	39	8	7	124	32
Future Vol, veh/h	30	0	27	30	0	3	27	39	8	7	124	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	63	63	63	88	88	88	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	29	48	0	5	31	44	9	8	136	35
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	283	285	154	295	298	49	171	0	0	53	0	0
Stage 1	170	170	-	111	111	-	-	-	-	-	-	-
Stage 2	113	115	-	184	187	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	669	624	892	657	614	1020	1406	-	-	1553	-	-
Stage 1	832	758	-	894	804	-	-	-	-	-	-	-
Stage 2	892	800	-	818	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	651	606	892	622	596	1020	1406	-	-	1553	-	-
Mov Cap-2 Maneuver	651	606	-	622	596	-	-	-	-	-	-	-
Stage 1	813	753	-	873	786	-	-	-	-	-	-	-
Stage 2	867	782	-	786	741	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10.3		11.1			2.8			0.3			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1406	-	-	747	645	1553	-	-				
HCM Lane V/C Ratio	0.022	-	-	0.083	0.081	0.005	-	-				
HCM Control Delay (s)	7.6	0	-	10.3	11.1	7.3	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-				

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻		↻		↻		↻↻↻	↻	↻	↻↻↻	
Traffic Volume (vph)	0	0	0	198	0	134	0	1596	223	57	1202	0
Future Volume (vph)	0	0	0	198	0	134	0	1596	223	57	1202	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		85	0		100	60		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted				0.757						0.068		
Satd. Flow (perm)	0	1863	0	1410	0	1583	0	5085	1583	127	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						120			124			
Link Speed (mph)		20			20			40			40	
Link Distance (ft)		119			272			427			341	
Travel Time (s)		4.1			9.3			7.3			5.8	
Peak Hour Factor	0.25	0.25	0.25	0.92	0.92	0.92	0.85	0.85	0.85	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	215	0	146	0	1878	262	59	1252	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	215	0	146	0	1878	262	59	1252	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)		12			12			12			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		9	15		9	15		9	15		9
Number of Detectors		2		1		1		2	1	1	2	
Detector Template		Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)		100		20		20		100	20	20	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)		6		20		20		6	20	20	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	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type				D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases				4		4			2	1 2		

Lanes, Volumes, Timings

4: Wyoming Blvd & Driveway B

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Detector Phase	4			4		4		2	2	1	1	2	
Switch Phase													
Minimum Initial (s)	8.0			8.0		8.0		18.0	18.0	3.0			
Minimum Split (s)	36.0			36.0		36.0		23.0	23.0	8.0			
Total Split (s)	36.0			36.0		36.0		69.6	69.6	14.4			
Total Split (%)	30.0%			30.0%		30.0%		58.0%	58.0%	12.0%			
Maximum Green (s)	30.0			30.0		30.0		64.6	64.6	10.9			
Yellow Time (s)	4.0			4.0		4.0		4.0	4.0	3.0			
All-Red Time (s)	2.0			2.0		2.0		1.0	1.0	0.5			
Lost Time Adjust (s)	0.0			0.0		0.0		0.0	0.0	0.0			
Total Lost Time (s)	6.0			6.0		6.0		5.0	5.0	3.5			
Lead/Lag								Lag	Lag	Lead			
Lead-Lag Optimize?								Yes	Yes	Yes			
Vehicle Extension (s)	2.0			2.0		2.0		4.0	4.0	1.5			
Recall Mode	None			None		None		C-Max	C-Max	None			
Walk Time (s)	7.0			7.0		7.0		7.0	7.0				
Flash Dont Walk (s)	23.0			23.0		23.0		10.0	10.0				
Pedestrian Calls (#/hr)	0			0		0		0	0				
Act Effct Green (s)				22.4		22.4		69.7	69.7	84.6	88.1		
Actuated g/C Ratio				0.19		0.19		0.58	0.58	0.70	0.73		
v/c Ratio				0.82		0.37		0.64	0.27	0.22	0.34		
Control Delay				69.9		12.9		21.3	10.7	7.6	6.4		
Queue Delay				0.0		0.0		2.1	0.5	0.0	0.0		
Total Delay				69.9		12.9		23.4	11.2	7.6	6.4		
LOS				E		B		C	B	A	A		
Approach Delay					46.9					21.9			
Approach LOS					D					C			
Intersection Summary													
Area Type:	Other												
Cycle Length: 120													
Actuated Cycle Length: 120													
Offset: 105.6 (88%), Referenced to phase 2:NBSB, Start of Green													
Natural Cycle: 80													
Control Type: Actuated-Coordinated													
Maximum v/c Ratio: 0.82													
Intersection Signal Delay: 19.0				Intersection LOS: B									
Intersection Capacity Utilization 56.0%				ICU Level of Service B									
Analysis Period (min) 15													

Splits and Phases: 4: Wyoming Blvd & Driveway B



Queues

1: Wyoming Blvd & Northeastern Blvd

					
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	168	57	2201	38	1459
v/c Ratio	0.72	0.25	0.55	0.42	0.37
Control Delay	67.1	34.0	5.9	27.1	3.7
Queue Delay	0.0	0.0	0.1	0.0	0.3
Total Delay	67.1	34.0	6.0	27.1	3.9
Queue Length 50th (ft)	127	26	195	6	83
Queue Length 95th (ft)	185	60	259	m54	125
Internal Link Dist (ft)	237		557		347
Turn Bay Length (ft)	90			140	
Base Capacity (vph)	368	345	3966	91	3994
Starvation Cap Reductn	0	0	0	0	1607
Spillback Cap Reductn	0	22	339	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.18	0.61	0.42	0.61
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

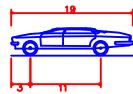
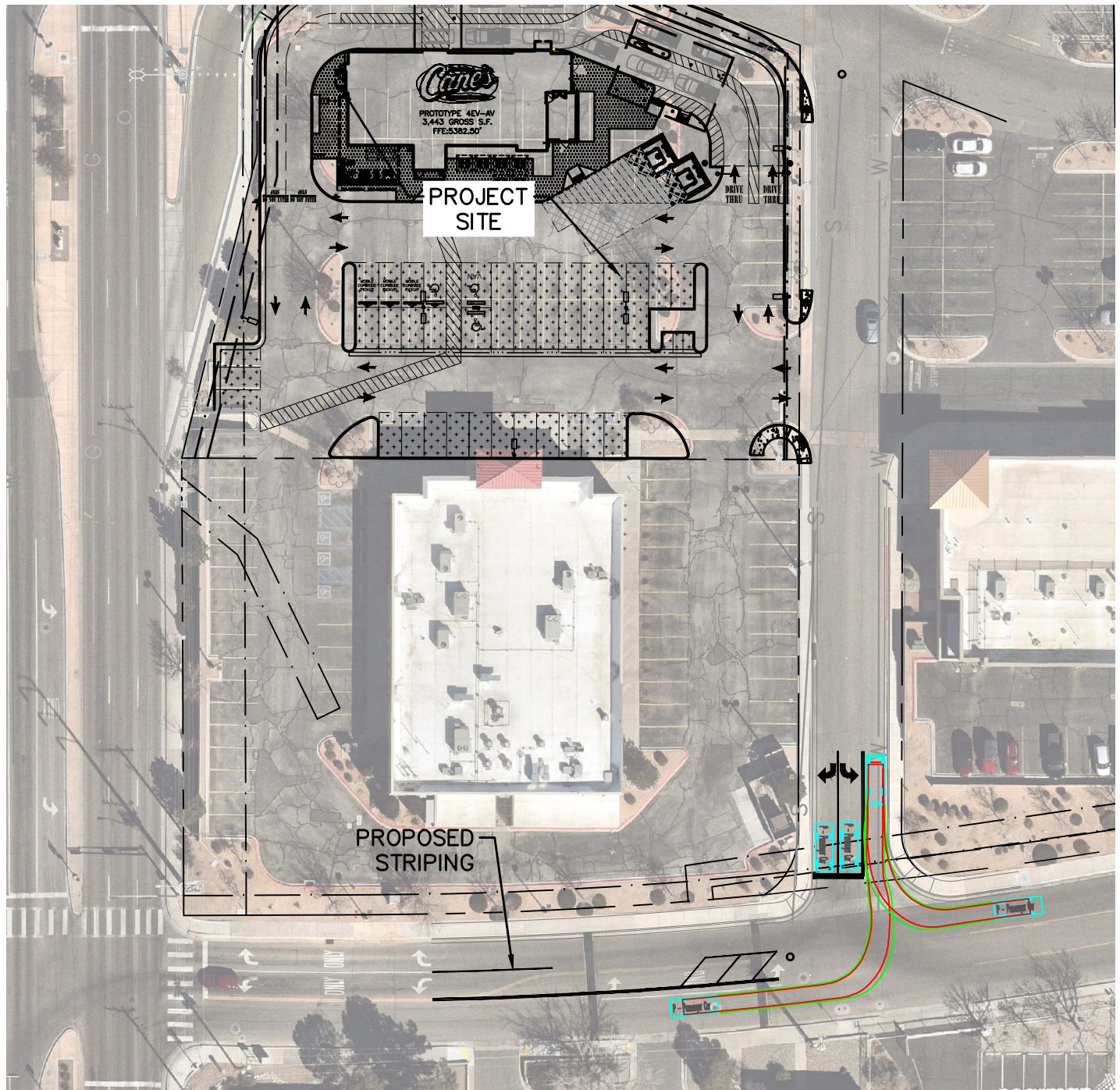
Queues

4: Wyoming Blvd & Driveway B

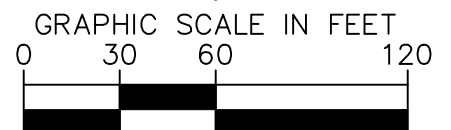
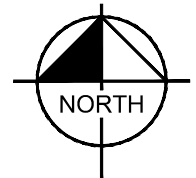
						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	215	146	1878	262	59	1252
v/c Ratio	0.82	0.37	0.64	0.27	0.22	0.34
Control Delay	69.9	12.9	21.3	10.7	7.6	6.4
Queue Delay	0.0	0.0	2.1	0.5	0.0	0.0
Total Delay	69.9	12.9	23.4	11.2	7.6	6.4
Queue Length 50th (ft)	161	17	344	48	11	110
Queue Length 95th (ft)	234	69	442	138	29	167
Internal Link Dist (ft)			347			261
Turn Bay Length (ft)		85		100	60	
Base Capacity (vph)	352	485	2952	971	273	3705
Starvation Cap Reductn	0	0	885	369	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.30	0.91	0.44	0.22	0.34
Intersection Summary						

APPENDIX H

PASSENGER CAR TURNING EXHIBIT (DRIVEWAY A)



P - Passenger Car
Overall Length 19.000ft
Overall Width 7.000ft
Overall Body Height 4.300ft
Min Body Ground Clearance 1'11.5ft
Track Width 6.000ft
Lock-to-lock time 4.00s
Max Steering Angle (Virtual) 31.60°



Kimley»Horn

7740 NORTH 16TH STREET
SUITE 300
PHOENIX, AZ 85020
PHONE: (602) 944-5500 |
www.kimley-horn.com

PROJECT:

RC0705

TITLE:

PASSENGER CAR
TURNING EXHIBIT

CLIENT:

RAISING CANE'S

JOB NO.: 069313444

SCALE: 1" = X0'

DATE: 03/11/2022

SHEET:

EXHIBIT A

APPENDIX I

CRASH DATA

CRASH REPORT NUMBER	CRASH DATE	CRASH YEAR	MONTH	TIME OF CRASH	HOUR OF CRASH	DAY OF WEEK	LAW ENFORCEMENT AGENCY
710372075	1/17/2017	2017	January	11:32	11 a.m.	Tuesday	ALBUQUERQUE POLICE DEPARTMENT
710399261	1/22/2017	2017	January	17:33	5 p.m.	Sunday	ALBUQUERQUE POLICE DEPARTMENT
23433955	3/15/2017	2017	March	12:30	12 p.m.	Wednesday	STATION REPORT
710363391	4/12/2017	2017	April	14:58	2 p.m.	Wednesday	ALBUQUERQUE POLICE DEPARTMENT
23449589	4/15/2017	2017	April	15:15	3 p.m.	Saturday	STATION REPORT
710399934	7/16/2017	2017	July	14:24	2 p.m.	Sunday	ALBUQUERQUE POLICE DEPARTMENT
710442082	7/17/2017	2017	July	18:08	6 p.m.	Monday	ALBUQUERQUE POLICE DEPARTMENT
710401117	10/6/2017	2017	October	20:12	8 p.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
23422157	10/11/2017	2017	October	14:40	2 p.m.	Wednesday	STATION REPORT
710271367	10/28/2017	2017	October	11:57	11 a.m.	Saturday	ALBUQUERQUE POLICE DEPARTMENT
710443338	11/27/2017	2017	November	14:05	2 p.m.	Monday	ALBUQUERQUE POLICE DEPARTMENT
710443919	11/29/2017	2017	November	9:29	9 a.m.	Wednesday	ALBUQUERQUE POLICE DEPARTMENT
710444040	11/29/2017	2017	November	21:20	9 p.m.	Wednesday	ALBUQUERQUE POLICE DEPARTMENT
710441799	12/12/2017	2017	December	17:24	5 p.m.	Tuesday	ALBUQUERQUE POLICE DEPARTMENT
710456652	1/4/2018	2018	January	8:18	8 a.m.	Thursday	ALBUQUERQUE POLICE DEPARTMENT
710448178	2/20/2018	2018	February	12:44	12 p.m.	Tuesday	ALBUQUERQUE POLICE DEPARTMENT
23450297	3/22/2018	2018	March	12:00	12 p.m.	Thursday	STATION REPORT
23473330	3/22/2018	2018	March	16:00	4 p.m.	Thursday	STATION REPORT
710456831	3/22/2018	2018	March	20:35	8 p.m.	Thursday	ALBUQUERQUE POLICE DEPARTMENT
710540351	3/29/2018	2018	March	20:14	8 p.m.	Thursday	ALBUQUERQUE POLICE DEPARTMENT
710458765	4/13/2018	2018	April	13:04	1 p.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
710541806	5/10/2018	2018	May	12:50	12 p.m.	Thursday	ALBUQUERQUE POLICE DEPARTMENT
710543175	5/14/2018	2018	May	9:12	9 a.m.	Monday	ALBUQUERQUE POLICE DEPARTMENT
710540375	5/19/2018	2018	May	13:25	1 p.m.	Saturday	ALBUQUERQUE POLICE DEPARTMENT
23475690	5/31/2018	2018	May	4:30	4 a.m.	Thursday	STATION REPORT
710541819	6/1/2018	2018	June	14:00	2 p.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
710542130	6/9/2018	2018	June	14:54	2 p.m.	Saturday	ALBUQUERQUE POLICE DEPARTMENT
710443071	6/21/2018	2018	June	12:00	12 p.m.	Thursday	ALBUQUERQUE POLICE DEPARTMENT
23437894	6/21/2018	2018	June	Left Blank	Left Blank	Thursday	STATION REPORT
23444340	7/14/2018	2018	July	15:00	3 p.m.	Saturday	STATION REPORT
710544426	7/22/2018	2018	July	12:55	12 p.m.	Sunday	ALBUQUERQUE POLICE DEPARTMENT
710456113	7/24/2018	2018	July	8:21	8 a.m.	Tuesday	ALBUQUERQUE POLICE DEPARTMENT
23438273	8/3/2018	2018	August	21:00	9 p.m.	Friday	STATION REPORT
710539284	8/6/2018	2018	August	13:00	1 p.m.	Monday	ALBUQUERQUE POLICE DEPARTMENT
710548421	9/1/2018	2018	September	12:54	12 p.m.	Saturday	ALBUQUERQUE POLICE DEPARTMENT
710547086	9/12/2018	2018	September	14:21	2 p.m.	Wednesday	ALBUQUERQUE POLICE DEPARTMENT
710555826	12/3/2018	2018	December	14:53	2 p.m.	Monday	ALBUQUERQUE POLICE DEPARTMENT
23483454	12/3/2018	2018	December	Left Blank	Left Blank	Monday	STATION REPORT
710557692	2/2/2019	2019	February	21:11	9 p.m.	Saturday	ALBUQUERQUE POLICE DEPARTMENT
710557871	2/15/2019	2019	February	11:20	11 a.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
23483856	3/4/2019	2019	March	15:05	3 p.m.	Monday	STATION REPORT
710544318	4/5/2019	2019	April	22:20	10 p.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
23466992	6/26/2019	2019	June	10:45	10 a.m.	Wednesday	STATION REPORT
710570183	7/10/2019	2019	July	16:42	4 p.m.	Wednesday	ALBUQUERQUE POLICE DEPARTMENT
23483970	7/22/2019	2019	July	14:25	2 p.m.	Monday	STATION REPORT
710558088	10/4/2019	2019	October	23:49	11 p.m.	Friday	ALBUQUERQUE POLICE DEPARTMENT
30144571	12/3/2019	2019	December	12:40	12 p.m.	Tuesday	ALBUQUERQUE POLICE DEPARTMENT
710381413	5/12/2019	2019	May	19:54	7 p.m.	Sunday	NEW MEXICO STATE POLICE (NMSP)

CRASH REPORT NUMBER	COUNTY	CITY	LOCATION	PRIMARY STREET	SECONDARY STREET	LANDMARK/LOCATION
710372075	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710399261	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
23433955	BERNALILLO	ALBUQUERQUE	1	WYOMING	NORTHEASTERN	
710363391	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
23449589	BERNALILLO	ALBUQUERQUE	1	WYOMING	NORTHERN BLVD NE	
710399934	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	WYOMING BLVD NE AT NORTHEASTERN BLVD NE
710442082	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710401117	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
23422157	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTH EASTERN	
710271367	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710443338	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		NORTHEASTERN AVE NE
710443919	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		NORTHEASTERN NE
710444040	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710441799	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		
710456652	BERNALILLO	ALBUQUERQUE	1	NORTHEASTERN BLVD NE	WYOMING BLVD NE	
710448178	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
23450297	BERNALILLO	ALBUQUERQUE	1	WYOMING	NORTHEASTERN	
23473330	BERNALILLO	ALBUQUERQUE	1	WYOMING AND NORTHEASTERN NE		
710456831	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710540351	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710458765	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710541806	BERNALILLO	ALBUQUERQUE	1	NORTHEASTERN BLVD NE	WYOMING BLVD NE	
710543175	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710540375	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
23475690	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710541819	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710542130	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710443071	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
23437894	BERNALILLO	ALBUQUERQUE	1	NORTHEASTERN BLVD NE	WYOMING	
23444340	BERNALILLO	ALBUQUERQUE	1	NORTHEASTERN BLVD NE	WYOMING BLVD NE	
710544426	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710456113	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
23438273	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		
710539284	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710548421	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710547086	BERNALILLO	ALBUQUERQUE	1	NORTHEASTERN AVE NE	WYOMING BLVD NE	
710555826	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
23483454	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD	NORTH EASTERN	
710557692	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHERN BLVD NE	
710557871	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		NORTHEASTERN ST NE
23483856	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD	NORTHEASTERN BLVD	
710544318	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD	NORTHEASTERN AVE NE	
23466992	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
710570183	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE		IN FRONT OF 2033 WYOMING BLVD NE
23483970	BERNALILLO	ALBUQUERQUE	1	NOR EASTERN BLVD NE	WYOMING (WESTERN COMMERCE BANK)	
710558088	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	
30144571	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN AVE NE	
710381413	BERNALILLO	ALBUQUERQUE	1	WYOMING BLVD NE	NORTHEASTERN BLVD NE	

CRASH REPORT NUMBER	GIS-DERIVED ROUTE NAME	GIS-DERIVED MILEPOST	CRASH DIRECTION	DIRECTION FROM INTERSECTION OR LANDMARK	DISTANCE FROM LANDMARK	DISTANCE FROM LANDMARK MEASUREMENT UNIT	NUMBER OF PEOPLE KILLED IN CRASH	NUMBER OF PEOPLE WITH SUSPECTED SERIOUS INJURIES (CLASS A) IN CRASH
710372075			S				0	1
710399261			S				0	0
23433955			S				0	0
710363391			N				0	0
23449589			N				0	0
710399934			N				0	0
710442082			S				0	0
710401117			S				0	0
23422157			S				0	0
710271367			N				0	0
710443338			S	N	400	FT	0	0
710443919			E	N	100	FT	0	0
710444040			N				0	0
710441799			E				0	2
710456652			W				0	0
710448178			N				0	0
23450297			S				0	0
23473330							0	0
710456831			N	N			0	0
710540351			S				0	0
710458765			N				0	0
710541806			W				0	0
710543175			N				0	0
710540375			N				0	0
23475690			S				0	0
710541819			N				0	0
710542130			S				0	0
710443071			N				0	0
23437894			W				0	0
23444340			W				0	0
710544426			N				0	0
710456113			N				0	0
23438273			N				0	0
710539284			N				0	0
710548421			E				0	0
710547086			E				0	0
710555826			S	S			0	0
23483454			S				0	0
710557692			E				0	0
710557871			N	N	100	FT	0	1
23483856			N				0	0
710544318			S				0	0
23466992			N				0	0
710570183			N				0	0
23483970			NW				0	0
710558088			N	N			0	0
30144571			N				0	0
710381413			N				0	0

CRASH REPORT NUMBER	NUMBER OF PEOPLE WITH SUSPECTED MINOR INJURIES (CLASS B) IN CRASH	NUMBER OF PEOPLE WITH POSSIBLE INJURIES (CLASS C) IN CRASH	NUMBER OF PEOPLE INJURED (CLASS A+B+C) IN CRASH	NUMBER OF PEOPLE NOT INJURED (CLASS O) IN CRASH	TOTAL NUMBER OF PEOPLE IN CRASH	NUMBER OF VEHICLES, BICYCLES, AND PEDESTRIANS INVOLVED	NUMBER OF PEOPLE IN MOTOR VEHICLES	NUMBER OF PEOPLE NOT IN MOTOR VEHICLES
710372075	0	0	1	1	2	2	2	0
710399261	0	1	1	1	2	2	2	0
23433955	0	0	0	4	4	2	4	0
710363391	0	0	0	2	2	2	2	0
23449589	0	0	0	2	2	2	2	0
710399934	0	0	0	2	2	2	2	0
710442082	0	0	0	1	1	1	1	0
710401117	0	0	0	4	4	2	4	0
23422157	0	0	0	2	2	2	2	0
710271367	0	2	2	0	2	2	2	0
710443338	0	1	1	2	3	2	3	0
710443919	0	1	1	2	3	2	3	0
710444040	0	0	0	1	1	1	1	0
710441799	0	0	2	1	3	3	1	2
710456652	0	0	0	2	2	2	2	0
710448178	1	2	3	1	4	2	4	0
23450297	0	0	0	2	2	2	2	0
23473330	0	1	1	1	2	2	2	0
710456831	0	0	0	2	2	2	2	0
710540351	0	0	0	3	3	2	3	0
710458765	0	2	2	1	3	2	3	0
710541806	0	1	1	1	2	2	2	0
710543175	0	2	2	0	2	2	2	0
710540375	0	4	4	0	4	4	4	0
23475690	0	0	0	2	2	2	2	0
710541819	0	0	0	3	3	3	3	0
710542130	0	1	1	4	5	2	4	1
710443071	0	0	0	2	2	2	2	0
23437894	0	0	0	2	2	2	2	0
23444340	0	0	0	2	2	2	2	0
710544426	1	0	1	3	4	2	4	0
710456113	0	2	2	1	3	2	3	0
23438273	0	0	0	2	2	2	2	0
710539284	0	0	0	2	2	2	2	0
710548421	0	0	0	2	2	2	2	0
710547086	0	2	2	2	4	2	4	0
710555826	0	0	0	5	5	2	5	0
23483454	0	0	0	2	2	2	2	0
710557692	0	1	1	3	4	2	3	1
710557871	0	0	1	1	2	2	1	1
23483856	0	0	0	2	2	2	2	0
710544318	0	0	0	2	2	2	2	0
23466992	0	0	0	2	2	2	2	0
710570183	0	0	0	4	4	2	4	0
23483970	0	0	0	2	2	2	2	0
710558088	0	1	1	1	2	2	2	0
30144571	0	1	1	2	3	2	3	0
710381413	0	1	1	4	5	2	5	0

CRASH REPORT NUMBER	NUMBER OF MOTOR VEHICLES INVOLVED	CRASH SEVERITY	CRASH CLASSIFICATION	CRASH ANALYSIS	HIGHEST FACTOR CONTRIBUTING TO CRASH	WEATHER
710372075	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear
710399261	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear
23433955	2	Property Damage Only Crash	Other Vehicle	Left Blank	Disregarded Traffic Signal	Clear
710363391	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Disregarded Traffic Signal	Clear
23449589	2	Property Damage Only Crash	Other Vehicle	Left Blank	Disregarded Traffic Signal	Clear
710399934	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear
710442082	1	Property Damage Only Crash	Rollover	Rollover - Right Side of Road	None	Raining
710401117	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear
23422157	2	Property Damage Only Crash	Other Vehicle	Left Blank	Disregarded Traffic Signal	Clear
710271367	2	Injury Crash	Other Vehicle	Other Vehicle - From Opposite Direction/One Left Turn	Disregarded Traffic Signal	Clear
710443338	2	Injury Crash	Other Vehicle	Other Vehicle - From Opposite Direction/One Left Turn	Disregarded Traffic Signal	Clear
710443919	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	None	Clear
710444040	1	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Both Going Straight	Avoid No Contact - Vehicle	Clear
710441799	1	Injury Crash	Pedestrian	Pedestrian Collision - Vehicle Going Straight	Pedestrian Error	Clear
710456652	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Vehicle Backing	Driver Inattention	Clear
710448178	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Disregarded Traffic Signal	Clear
23450297	2	Property Damage Only Crash	Other Vehicle	Left Blank	Missing Data	Clear
23473330	2	Injury Crash	Vehicle on Other Road	Left Blank	Driver Inattention	Clear
710456831	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - Both Going Straight/Entering At Angle	Improper Lane Change	Clear
710540351	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Rear End Collision	Alcohol/Drug Involved	Clear
710458765	2	Injury Crash	Other Vehicle	Other Vehicle - Both Going Straight/Entering At Angle	Disregarded Traffic Signal	Clear
710541806	2	Injury Crash	Other Vehicle	Other Vehicle - From Same Direction/Rear End Collision	Following Too Closely	Clear
710543175	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Disregarded Traffic Signal	Clear
710540375	4	Injury Crash	Other Vehicle	Other Vehicle - From Same Direction/Rear End Collision	Driver Inattention	Clear
23475690	2	Property Damage Only Crash	Other Vehicle	Left Blank	Missing Data	Clear
710541819	3	Property Damage Only Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Driver Inattention	Clear
710542130	1	Injury Crash	Pedestrian	Pedestrian Collision - Vehicle Turning Right	Driver Inattention	Clear
710443071	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Opposite Direction/One Right Turn	Driver Inattention	Clear
23437894	2	Property Damage Only Crash	Other Vehicle	Left Blank	Missing Data	Left Blank
23444340	2	Property Damage Only Crash	Vehicle on Other Road	Left Blank	Disregarded Traffic Signal	Clear
710544426	2	Injury Crash	Other Vehicle	Other Vehicle - Both Going Straight/Entering At Angle	Disregarded Traffic Signal	Clear
710456113	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Disregarded Traffic Signal	Clear
23438273	2	Property Damage Only Crash	Other Vehicle	Left Blank	Speed Too Fast for Conditions	Raining
710539284	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Opposite Direction/One Left Turn	None	Clear
710548421	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - One Right Turn/Entering At Angle	Driver Inattention	Clear
710547086	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear
710555826	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Sideswipe Collision	Improper Lane Change	Clear
23483454	2	Property Damage Only Crash	Other Vehicle	Left Blank	Failed to Yield Right of Way	Clear
710557692	1	Injury Crash	Pedestrian	Pedestrian Collision - Vehicle Turning Left	Driver Inattention	Clear
710557871	1	Injury Crash	Pedestrian	Pedestrian Collision - Vehicle Going Straight	Avoid No Contact - Other	Clear
23483856	2	Property Damage Only Crash	Other Vehicle	Left Blank	Improper Lane Change	Clear
710544318	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Both Going Straight	Excessive Speed	Clear
23466992	2	Property Damage Only Crash	Other Vehicle	Left Blank	Disregarded Traffic Signal	Clear
710570183	2	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Opposite Direction/One Left Turn	Driver Inattention	Clear
23483970	2	Property Damage Only Crash	Other Vehicle	Left Blank	Other - No Driver Error	Clear
710558088	2	Injury Crash	Other Vehicle	Other Vehicle - Both Going Straight/Entering At Angle	Improper Lane Change	Clear
30144571	2	Injury Crash	Other Vehicle	Other Vehicle - From Opposite Direction/Both Going Straight	Disregarded Traffic Signal	Clear
710381413	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Disregarded Traffic Signal	Clear

CRASH REPORT NUMBER	LIGHTING	HIT AND RUN CRASH	ALCOHOL INVOLVEMENT	DRUG INVOLVEMENT	PEDESTRIAN INVOLVEMENT	MOTORCYCLE INVOLVEMENT	PEDALCYCLE INVOLVEMENT	HEAVY TRUCK INVOLVEMENT
710372075	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710399261	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23433955	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710363391	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23449589	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710399934	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710442082	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710401117	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23422157	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710271367	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710443338	Daylight	Yes	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710443919	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710444040	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710441799	Dark-Lighted	No	Not Involved	Not Involved	Involved	Not Involved	Not Involved	Not Involved
710456652	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710448178	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23450297	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23473330	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710456831	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710540351	Dark-Lighted	Yes	Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710458765	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710541806	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710543175	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710540375	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23475690	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710541819	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710542130	Daylight	No	Not Involved	Not Involved	Involved	Not Involved	Not Involved	Not Involved
710443071	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23437894	Left Blank	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23444340	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710544426	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710456113	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23438273	Dark-Not Lighted	Yes	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710539284	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710548421	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Involved
710547086	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710555826	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23483454	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710557692	Dark-Lighted	No	Not Involved	Not Involved	Involved	Not Involved	Not Involved	Not Involved
710557871	Daylight	No	Not Involved	Not Involved	Involved	Not Involved	Not Involved	Not Involved
23483856	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710544318	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23466992	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710570183	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
23483970	Daylight	Yes	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710558088	Dark-Lighted	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
30144571	Daylight	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved
710381413	Dusk	No	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved

CRASH REPORT NUMBER	HAZARDOUS MATERIAL INVOLVEMENT	STATE HIGHWAY DEPT. PROPERTY	INVOLVEMENT OF NON- LOCAL DRIVER	ROAD SYSTEM: URBAN, RURAL OR RURAL INTERSTATE	MAXIMUM VEHICLE DAMAGE	FIRST HARMFUL EVENT OCCURRED	ROAD CHARACTER	ROAD GRADE
710372075	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710399261	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23433955	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710363391	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23449589	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710399934	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	On Grade
710442082	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710401117	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
23422157	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710271367	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710443338	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	On Grade
710443919	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710444040	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710441799	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710456652	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710448178	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23450297	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
23473330	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710456831	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710540351	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710458765	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710541806	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710543175	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710540375	Not Involved	Both Local and	Out Of State	Urban	Disabling	On Roadway	Straight	Level
23475690	Not Involved		Local Drivers	Urban	Missing Data	On Roadway	Left Blank	Left Blank
710541819	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710542130	Not Involved		Local Drivers	Urban	No Damage	On Roadway	Straight	Level
710443071	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23437894	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Left Blank	Left Blank
23444340	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710544426	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710456113	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23438273	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710539284	Not Involved		Local Drivers	Urban	Appearance	On Roadway	Straight	Level
710548421	Not Involved	Both Local and	Out Of State	Urban	Appearance	On Roadway	Straight	On Grade
710547086	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710555826	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23483454	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710557692	Not Involved		Local Drivers	Urban	Functional	On Roadway	Straight	Level
710557871	Not Involved		Local Drivers	Urban	Appearance	Off Roadway	Straight	Level
23483856	Not Involved		Local Drivers	Urban	Missing Data	On Roadway	Straight	Level
710544318	Not Involved		Out Of State	Urban	Appearance	On Roadway	Straight	Level
23466992	Not Involved		Local Drivers	Urban	Missing Data	On Roadway	Straight	Level
710570183	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
23483970	Not Involved		Local Drivers	Urban	No Damage	On Roadway	Straight	Level
710558088	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
30144571	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level
710381413	Not Involved		Local Drivers	Urban	Disabling	On Roadway	Straight	Level

CRASH REPORT NUMBER	TRIBAL JURISDICTION	GIS-DERIVED RESERVATION	GIS-DERIVED STATE HIGHWAY TRANSPORTATION DISTRICT	GIS-DERIVED STATE POLICE DISTRICT	GIS-DERIVED STATE HIGHWAY MAINTENANCE DISTRICT	GIS-DERIVED UTM X COORDINATE	GIS-DERIVED UTM Y COORDINATE	GIS-DERIVED LATITUDE COORDINATE
710372075	No		3	5	3	358655.5967	3885641.133	35.103680
710399261	No		3	5	3	358655.5967	3885641.133	35.103680
23433955	No		3	5	3	358655.5967	3885641.133	35.103680
710363391	No		3	5	3	358655.5967	3885641.133	35.103680
23449589	No		3	5	3	358655.5967	3885641.133	35.103680
710399934	No		3	5	3	358655.5967	3885641.133	35.103680
710442082	No		3	5	3	358655.5967	3885641.133	35.103680
710401117	No		3	5	3	358655.5967	3885641.133	35.103680
23422157	No		3	5	3	358655.5967	3885641.133	35.103680
710271367	No		3	5	3	358655.5967	3885641.133	35.103680
710443338	No		3	5	3	358655.5967	3885641.133	35.103680
710443919	No		3	5	3	358655.5967	3885641.133	35.103680
710444040	No		3	5	3	358655.5967	3885641.133	35.103680
710441799	No		3	5	3	358655.6026	3885641.132	35.103680
710456652	No		3	5	3	358655.5967	3885641.133	35.103681
710448178	No		3	5	3	358655.5967	3885641.133	35.103681
23450297	No		3	5	3	358655.5967	3885641.133	35.103681
23473330	No		3	5	3	358655.5967	3885641.133	35.103681
710456831	No		3	5	3	358655.5967	3885641.133	35.103681
710540351	No		3	5	3	358655.5967	3885641.133	35.103681
710458765	No		3	5	3	358655.5967	3885641.133	35.103681
710541806	No		3	5	3	358655.5967	3885641.133	35.103681
710543175	No		3	5	3	358655.5967	3885641.133	35.103681
710540375	No		3	5	3	358655.5967	3885641.133	35.103681
23475690	No		3	5	3	358655.5967	3885641.133	35.103681
710541819	No		3	5	3	358655.5967	3885641.133	35.103681
710542130	No		3	5	3	358655.5967	3885641.133	35.103681
710443071	No		3	5	3	358655.5967	3885641.133	35.103681
23437894	No		3	5	3	358655.5967	3885641.133	35.103681
23444340	No		3	5	3	358655.5967	3885641.133	35.103681
710544426	No		3	5	3	358655.5967	3885641.133	35.103681
710456113	No		3	5	3	358655.5967	3885641.133	35.103681
23438273	No		3	5	3	358655.5967	3885641.133	35.103681
710539284	No		3	5	3	358655.5967	3885641.133	35.103681
710548421	No		3	5	3	358655.5967	3885641.133	35.103681
710547086	No		3	5	3	358655.5967	3885641.133	35.103681
710555826	No		3	5	3	358655.5967	3885641.133	35.103681
23483454	No		3	5	3	358655.5967	3885641.133	35.103681
710557692	No		3	5	3	358655.58	3885641.184	35.103681
710557871	No		3	5	3	358655.58	3885641.184	35.103681
23483856	No		3	5	3	358655.58	3885641.184	35.103681
710544318	No		3	5	3	358655.58	3885641.184	35.103681
23466992	No		3	5	3	358655.58	3885641.184	35.103681
710570183	No		3	5	3	358655.58	3885641.184	35.103681
23483970	No		3	5	3	358655.58	3885641.184	35.103681
710558088	No		3	5	3	358655.58	3885641.184	35.103681
30144571	No		3	5	3	358655.58	3885641.184	35.103681
710381413	No		3	5	3	358668.0262	3885644.208	35.103710

CRASH REPORT NUMBER	GIS-DERIVED LONGITUDE COORDINATE	ORIGINAL LATITUDE	ORIGINAL LONGITUDE	ORIGINAL UCR NUMBER	CASE NUMBER	STATION REPORT	TRACS DATA
710372075	-106.550850				710372075	Left Blank	Yes
710399261	-106.550850				710399261	Left Blank	Yes
23433955	-106.550850				170025280	Yes	No
710363391	-106.550850				710363391	Left Blank	Yes
23449589	-106.550850				AP170036179	Yes	No
710399934	-106.550850				710399934	Left Blank	Yes
710442082	-106.550850				710442082	Left Blank	Yes
710401117	-106.550850				710401117	Left Blank	Yes
23422157	-106.550850				170099735	Yes	No
710271367	-106.550850				710271367	Left Blank	Yes
710443338	-106.550850				710443338	Left Blank	Yes
710443919	-106.550850				710443919	Left Blank	Yes
710444040	-106.550850				710444040	Left Blank	Yes
710441799	-106.550850				710441799	Left Blank	Yes
710456652	-106.550846				710456652	Left Blank	Yes
710448178	-106.550846				710448178	Left Blank	Yes
23450297	-106.550846				180028271	Yes	No
23473330	-106.550846				180029525	Yes	No
710456831	-106.550846				710456831	Left Blank	Yes
710540351	-106.550846				710540351	Left Blank	Yes
710458765	-106.550846				710458765	Left Blank	Yes
710541806	-106.550846				710541806	Left Blank	Yes
710543175	-106.550846				710543175	Left Blank	Yes
710540375	-106.550846				710540375	Left Blank	Yes
23475690	-106.550846				180064732	Yes	No
710541819	-106.550846				710541819	Left Blank	Yes
710542130	-106.550846				710542130	Left Blank	Yes
710443071	-106.550846				710443071	Left Blank	Yes
23437894	-106.550846				180059939	Yes	No
23444340	-106.550846				18-67693	Yes	No
710544426	-106.550846				710544426	Left Blank	Yes
710456113	-106.550846				710456113	Left Blank	Yes
23438273	-106.550846				18-75156	Yes	No
710539284	-106.550846				710539284	Left Blank	Yes
710548421	-106.550846				710548421	Left Blank	Yes
710547086	-106.550846				710547086	Left Blank	Yes
710555826	-106.550846				710555826	Left Blank	Yes
23483454	-106.550846				180115442	Yes	No
710557692	-106.550846				710557692	Left Blank	Yes
710557871	-106.550846				710557871	Left Blank	Yes
23483856	-106.550846				190020805	Yes	No
710544318	-106.550846				710544318	Left Blank	Yes
23466992	-106.550846				190058440	Yes	No
710570183	-106.550846				710570183	Left Blank	Yes
23483970	-106.550846				190067089	Yes	No
710558088	-106.550846				710558088	Left Blank	Yes
30144571	-106.550846			710569002	710569002	Left Blank	Yes
710381413	-106.550710	35.103716	-106.55072		710381413	Left Blank	Yes