



TRAFFIC IMPACT ANALYSIS

NEC Wyoming Boulevard and Northeastern Boulevard Albuquerque, New Mexico Version 1

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Prepared for:

Westwood Financial

Kimley»Horn

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Prepared for:

Westwood Financial
440 E Barrett Parkway NW, Suite 40
Kennesaw, GA 30144

Prepared By:

Kimley-Horn and Associates, Inc.
1001 West Southern Avenue, Suite 131
Mesa, Arizona 85210



090100000

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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) performed for a proposed coffee shop (project) development located near the northeast corner of the intersection of Wyoming Boulevard NE and Northeastern Boulevard NE in Albuquerque, New Mexico. The site will include a 2,260 square-foot (SF) coffee shop with drive-through and is anticipated to be built out by 2024.

The project location and study area intersections are identified in **Figure ES-1**.

A new access drive is proposed to be constructed with the development. This access drive is proposed as a full access drive located on Driveway A south of an existing access drive.

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 Westwood Financial, to perform the TIS for the proposed development.

The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections. The specific objectives of this study are to:

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

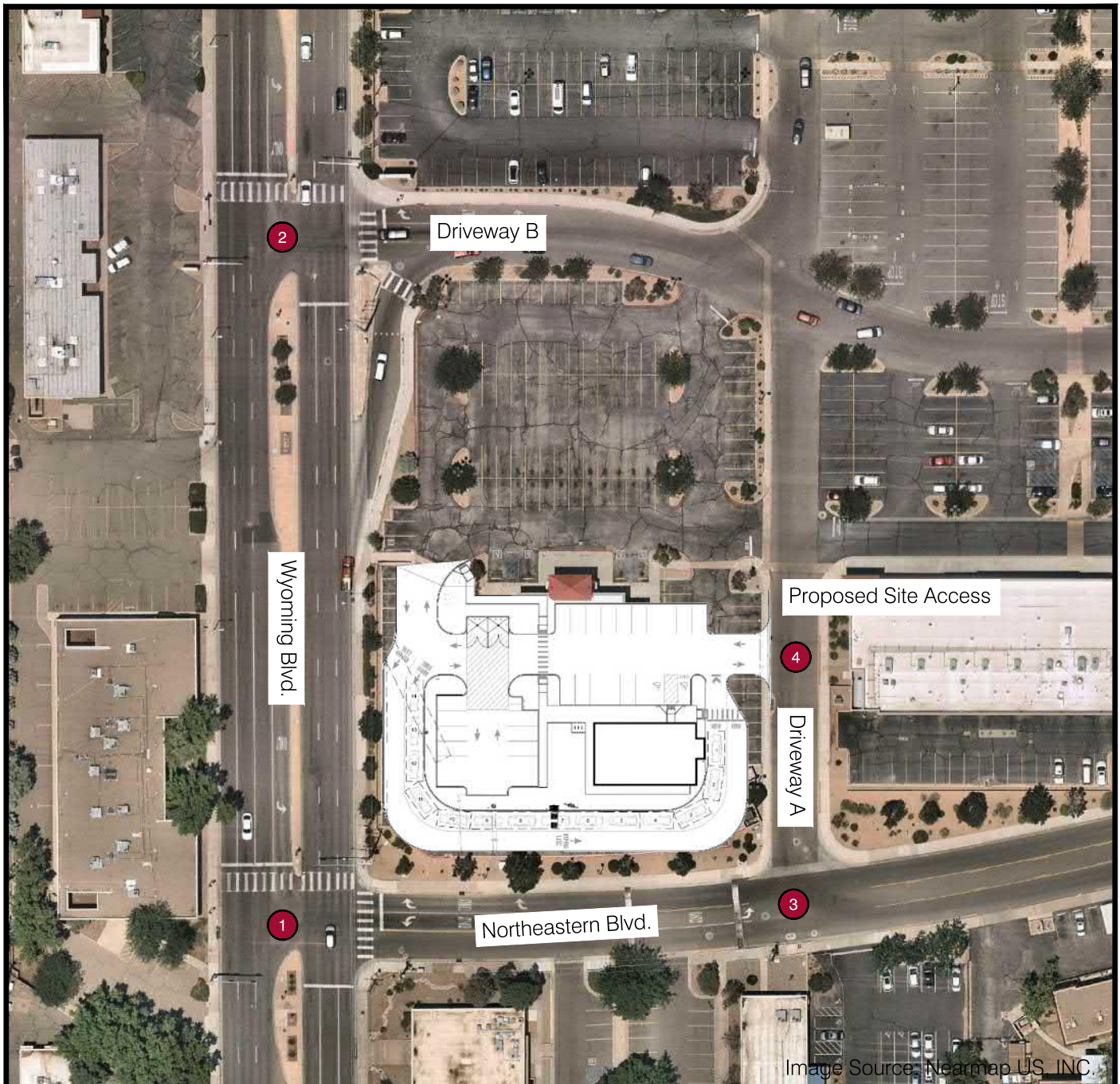
1.3 PRINCIPAL FINDINGS AND RECOMMENDATIONS

The proposed development is expected to generate 1,206 daily trips, with 194 trips occurring in the AM peak hour and 88 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 a new driveway connection on Driveway A. The proposed site access will be full access to accommodate passenger cars.
- Study area intersections and movements operate at acceptable LOS in each analysis scenario, including existing, 2024 background and total, and 2034 background and total traffic scenarios with the following exceptions:

- The westbound left-turn movement at Northeastern Boulevard NE (Intersection 1) shows LOS E in the 2034 background and total traffic study scenarios during the PM peak hour. Since the reported LOS and delay do not worsen from existing conditions to 2034 background and 2034 total traffic 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 intersection.
- The westbound left-turn movement at Driveway B (Intersection 2) 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 intersection.
- The WBL storage at Intersection 1 is constrained by the existing EBL storage at Intersection 3 and cannot be extended without reducing the striped storage length at Intersection 3. Based on direction from the City of Albuquerque and the plans for the fast-food development north of the site, the EBL lane at Intersection 3 will be removed and the WBL and WBR storage at Intersection 1 will be extended to provide approximately 225ft of storage. This new storage will accommodate the 203ft 95th percentile queue. The queues of all other left-turn movements impacted by the project are accommodated by the existing storage lengths in the 2034 horizon year.
- The proposed drive-thru and parking lot are expected to provide enough space for on-site circulation during typical- and high-demands time periods. Traffic from the drive-thru is unlikely to spill back onto Driveway A (Intersection 4).
- The intersection of Wyoming Boulevard NE / Northeastern Boulevard NE experienced 75 crashes from 2016 to 2020. Because about 25% of crashes included in the dataset 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.
- Recommended lane configuration is shown in **Figure 12**.



Study Area Intersections:

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



2.0 PROPOSED DEVELOPMENT

2.1 SITE LOCATION

The proposed coffee shop development consists of coffee shop with drive-through located near the northeast corner of the intersection of Wyoming Boulevard NE and Northeastern Boulevard NE in Albuquerque, New Mexico. The City of Albuquerque (City) classifies the existing site's land use mixed-use – moderate intensity (MX-M). The site had a vacant building that has recently been demolished and is located within an existing retail development. The project location is shown in **Figure 1**.

2.2 LAND USE AND SITE PLAN

The total site area is approximately 1.0 acres. The area to be developed is proposed to consist of a 2,260 SF coffee shop with drive-through. The preliminary site plan is illustrated 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 just south of an existing full access driveway. Vehicles will enter the existing commercial development parking lot via Driveway A on Northeastern Boulevard NE or Driveway B on Wyoming Boulevard NE.

2.4 SITE CIRCULATION

The developer is proposing one site access located on Driveway A, per the provided site plan (see **Figure 2**). The site access is proposed to remain full access and will primarily service passenger vehicles.

The northern and western portion of the development will include 29 parking stalls. The southeastern portion of the development will include the 2,260 SF coffee shop with drive-thru. Drive-thru traffic will enter the drive-thru on the west side of the development, proceed along the south side of the building, and exit on the east side of the building. The proposed drive-thru will consist of one queuing lane and one bypass lane.

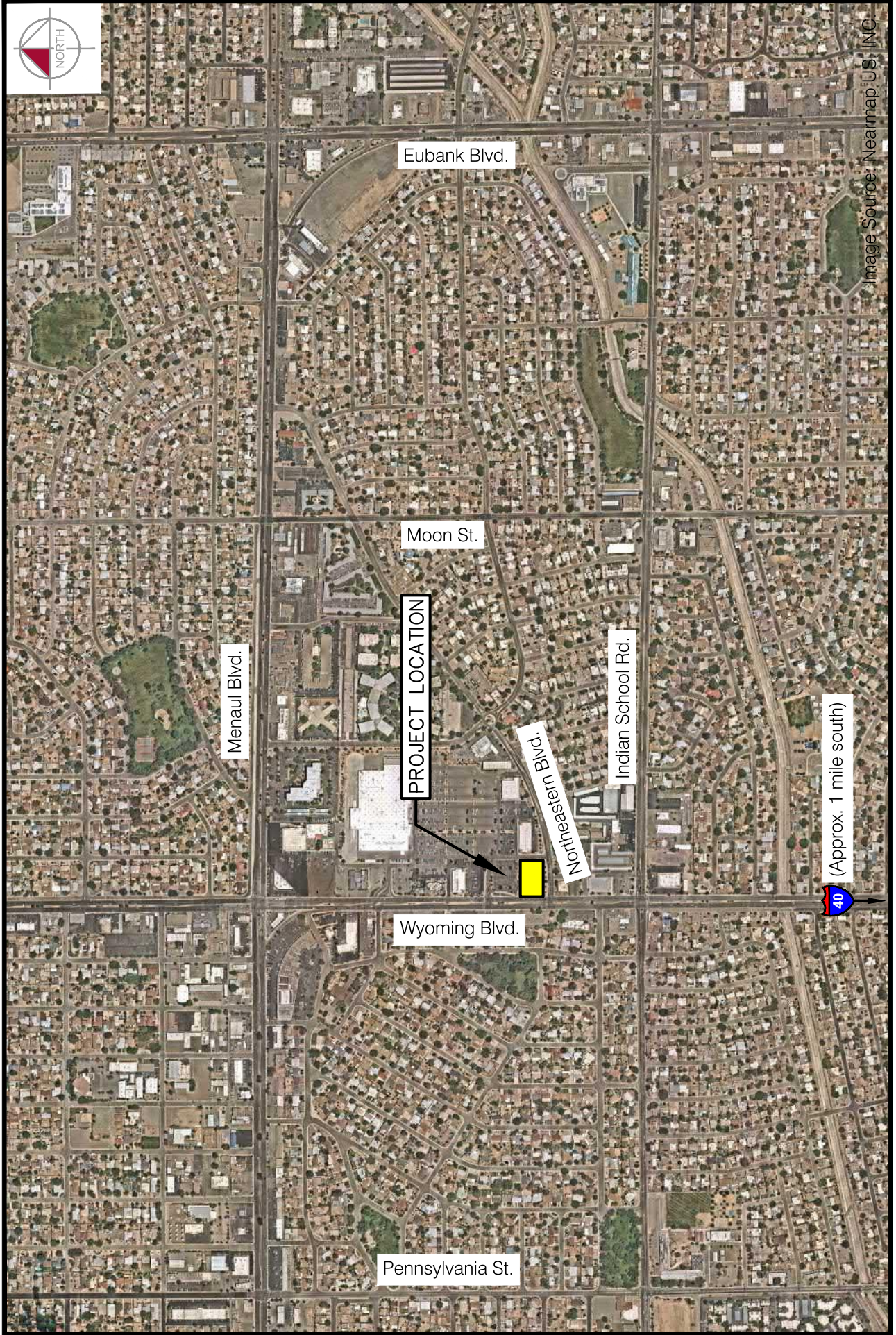
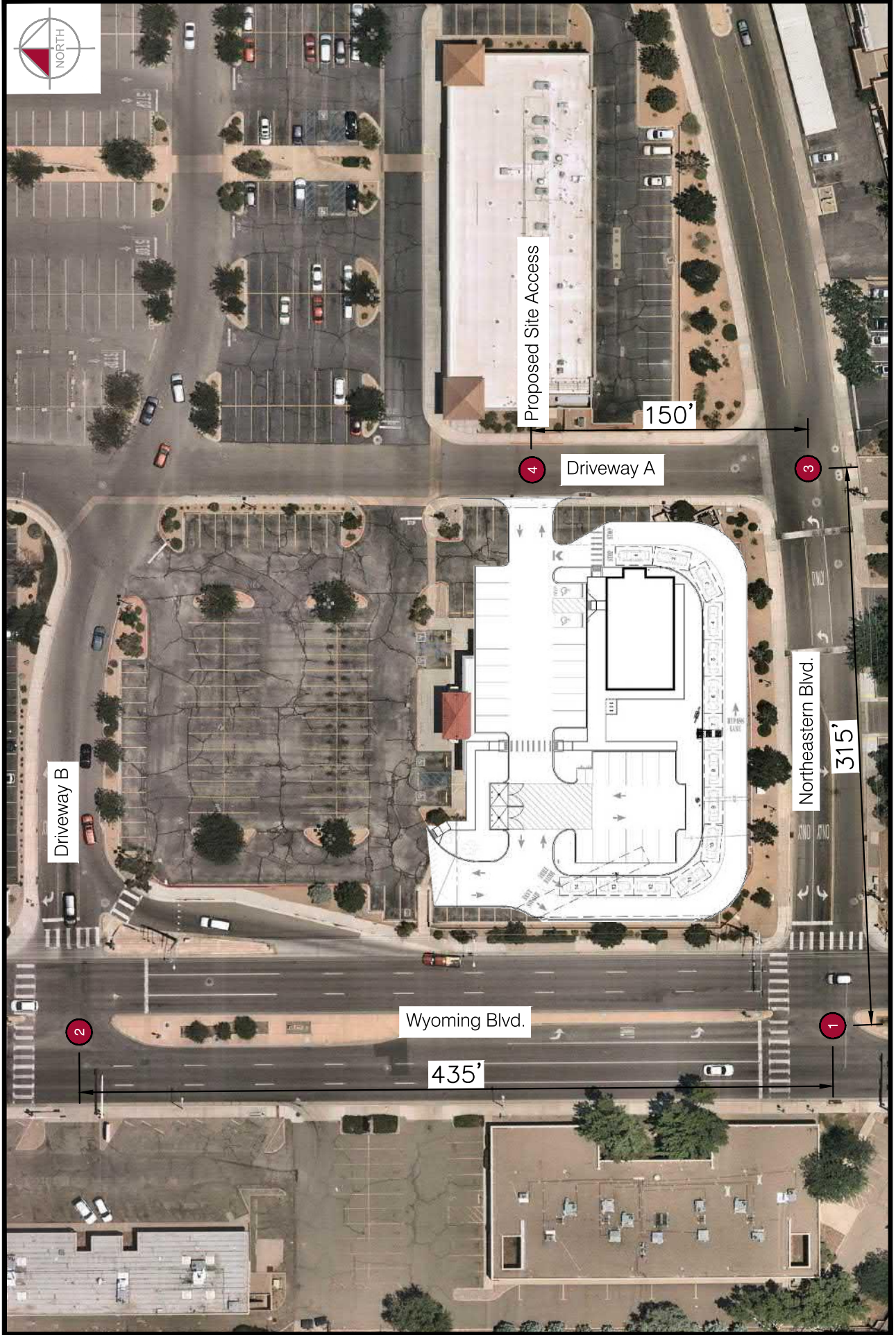


Figure 1
Vicinity Map



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February 2023

Figure 2
Preliminary Site Plan
NEC Wyoming Boulevard NE and Northeastern Boulevard NE | Traffic Impact Study

3.0 STUDY AREA

3.1 STUDY AREA

Per the TIS Scoping Meeting held virtually on December 13, 2022 with City of Albuquerque staff, the study area includes the following intersections:

- Wyoming Boulevard NE and Northeastern Boulevard NE (Intersection 1, signalized);
- Wyoming Boulevard NE and Driveway B (Intersection 2, signalized);
- Northeastern Boulevard NE and Driveway A (Intersection 3, unsignalized); and
- Proposed Site Access on Driveway A (Intersection 4, unsignalized).

The proposed access drive and study area intersections are shown previously in **Figure 2**. A more detailed site plan is provided in **Appendix B**.

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 NE.

4.0 EXISTING CONDITIONS

4.1 PHYSICAL CHARACTERISTICS

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

Wyoming Boulevard NE 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 NE 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 NE 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 Mid-Region Council of Governments (MRCOG) classifies Wyoming Boulevard NE as a principal arterial. Northeastern Boulevard NE 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 NE is 40 miles per hour (mph) and the posted speed limit for Northeastern Boulevard NE 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, January 10, 2023 at the following intersections:

- Wyoming Boulevard NE / Northeastern Boulevard NE
- Wyoming Boulevard NE / Driveway B; and
- Northeastern Boulevard NE / Driveway A.

The counts were performed between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM.

Movements in and out of the driveway on the south side of Northeastern Boulevard NE at Intersection 3 were not included in the recent count. For the purposes of this study, counts from a previous study used for movements in and out of that driveway on the south leg of the intersection. These counts were collected in 2021.

24-hour counts on Wyoming Boulevard NE just north of Northeastern Boulevard NE and on Northeastern Boulevard NE just east of Wyoming Boulevard NE were collected on Tuesday, January 10, 2023. These counts show a daily volume on Wyoming Boulevard NE of 34,162 vehicles per day (vpd) and a daily volume on Northeastern Boulevard NE of 3,271 vpd near the project site.

24-hour counts for Wyoming Boulevard NE north of Indian School Road were obtained from MRCOG. The data was collected on March 3, 2022 and shows a daily traffic volume of 38,622 vpd. 24-hour counts were unavailable from MRCOG for all other roadways studied.

The existing peak hour TMCs and daily volumes are shown in **Figure 4**. The existing and MRCOG traffic volume data are attached in **Appendix C**.

4.3 LEVEL OF SERVICE

The LOS at the existing study area intersections was evaluated using the traffic counts described previously and the 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 NE / Driveway B, which operates with non-NEMA signal phasing. HCM 6th Edition cannot analyze this type of phasing; Synchro methodology analysis results are therefore reported for the intersection.

The existing 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 D**.

Table 1. Existing Level of Service

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 NE / Northeastern Boulevard NE													
AM Peak		A/2	A/3	A/1	A/1					D/51		D/51	A/3
PM Peak		A/4	A/4	A/3	A/1					E/57		D/51	A/5
2. Wyoming Boulevard NE / Driveway B													
AM Peak		A/10	A/4	A/3	A/3			D/43		E/61		A/3	A/8
PM Peak		B/19	A/8	A/6	A/7			A/1		E/70		B/13	B/16
3. Driveway A / Northeastern Boulevard NE													
AM Peak	*			A/10			A/7	-		A/0	-		-
PM Peak	B/11			B/13			A/8	-		A/0	-		-

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

The WBL movement of Wyoming Boulevard NE / Driveway B (Intersection 2) operates at LOS E in both the existing AM and PM peak hours.

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

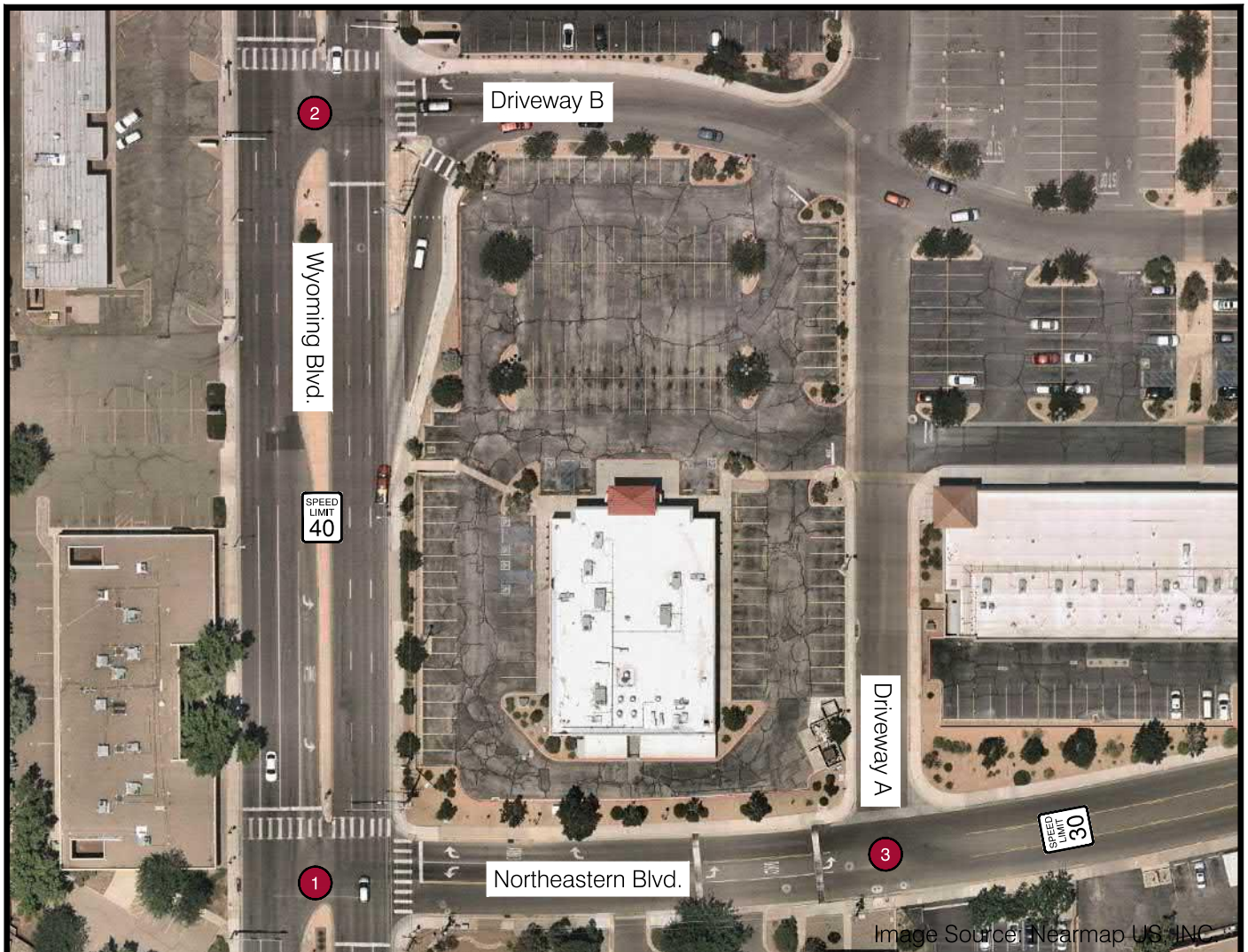
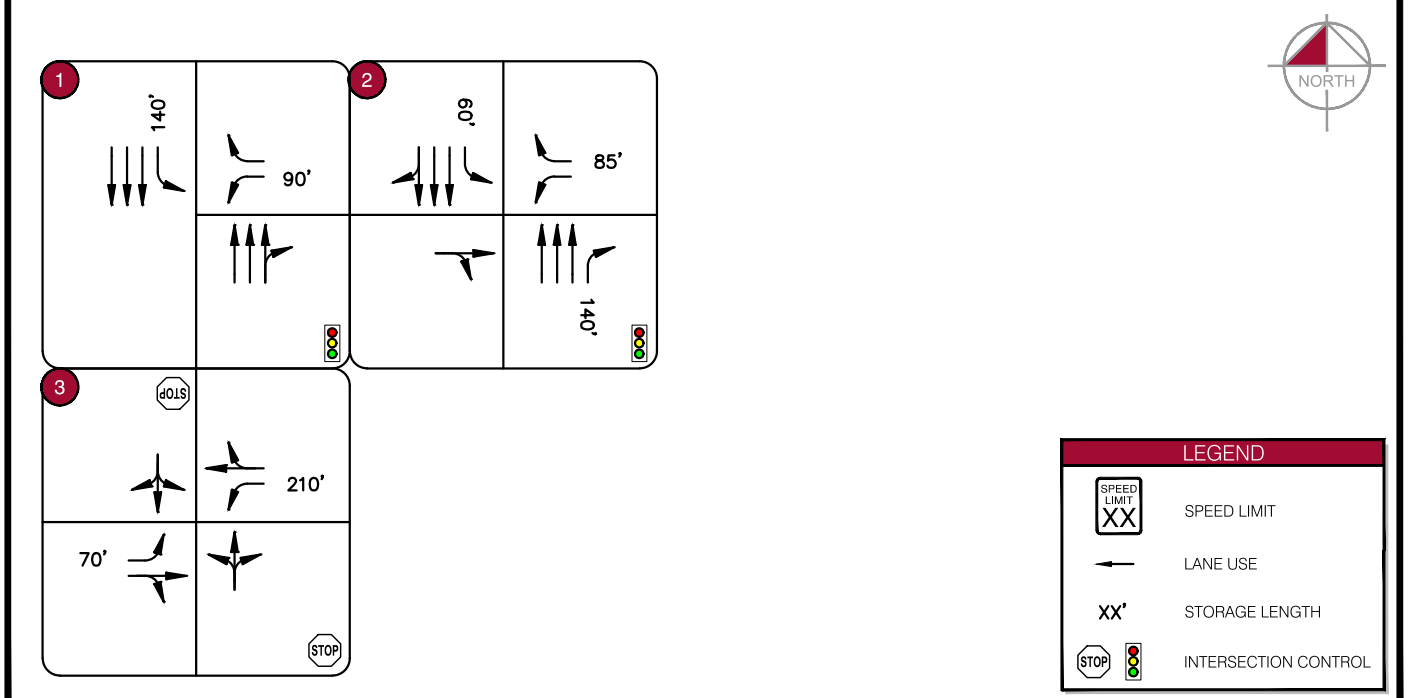
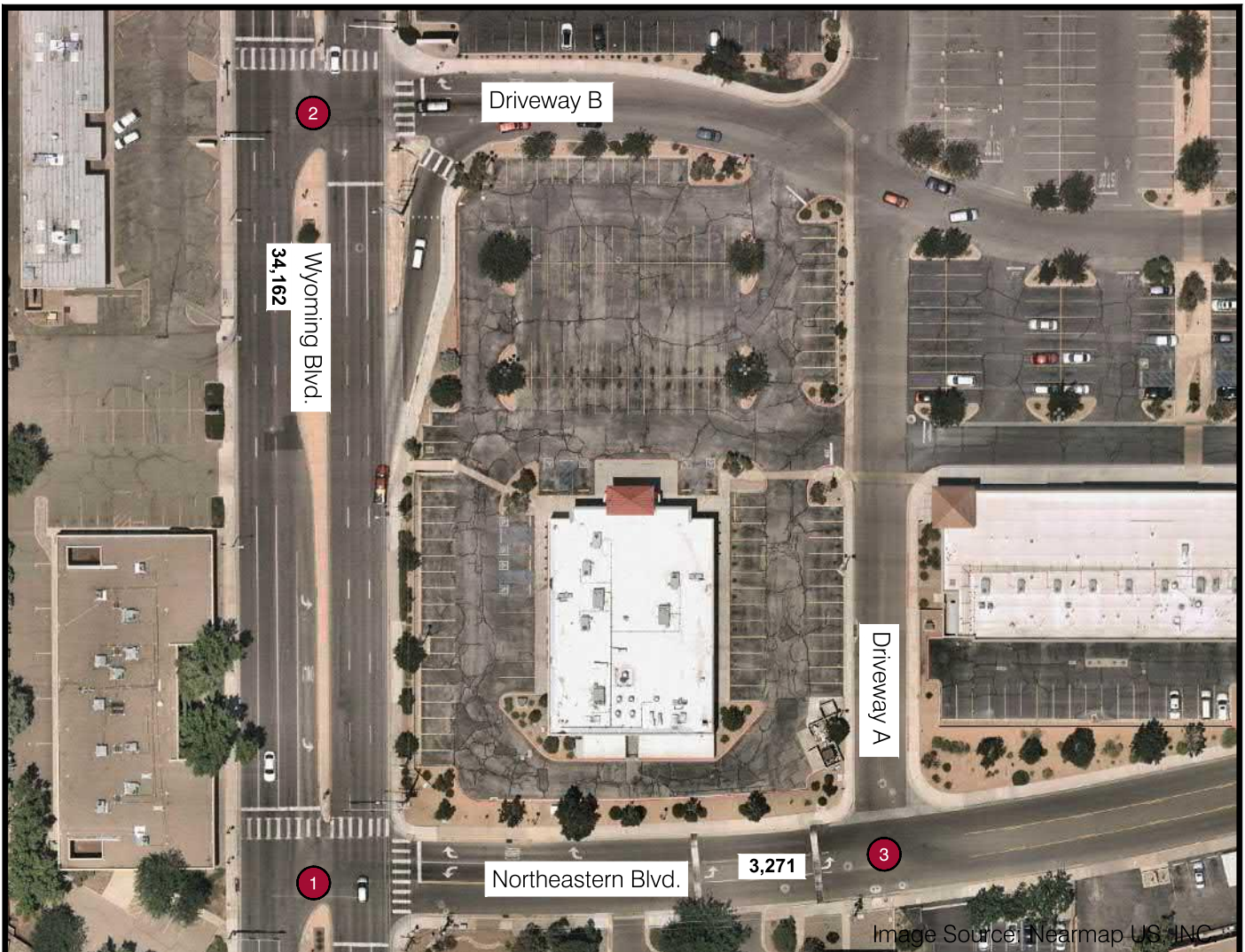


Image Source: Nearmap US, INC





1 ← 1140(1367) ← 22(42) ↖ 48(47) ↖ 58(127) ↑ 1112(1714) ↗ 39(82)	2 ↖ 19(94) ↖ 59(197) ↗ 1(2) ↗ 1071(1206) ↗ 10(29) ↘ 1(3) ↘ 0(1) ↑ 1092(1553) ↗ 68(208)
3 ↖ 22(48) ↖ 31(91) ↘ 5(14) ↘ 66(114) * 0(13) * 0(16)	

* Volumes for these movements were collected in 2021 for a previous study



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, 11th Edition* was used to estimate the number of new daily and peak hour trips anticipated to be generated by the proposed coffee shop development. Daily and peak hour trips, shown in **Table 2**, were calculated using the applicable average rate from the ITE *Trip Generation Manual*. Trip generation calculations can be found in **Appendix E**.

Table 2. Project Trip Generation

Land Use	ITE Code	Quantity	Units	Daily	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
Coffee/Donut Shop with Drive-Through Window	937	2.260	1,000 SF	1,206	99	95	194	44	44	88

The proposed development is expected to generate 1,206 daily trips, with 194 trips occurring in the AM peak hour and 88 trips occurring in PM peak hour.

5.1.2 TRIP REDUCTIONS

Trip generation estimates in **Table 2** utilized ITE Land Use Code 937. This land use code is described as a restaurant with drive-through. This land use typically 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 has no published pass-by trip reduction information for ITE Land Use Code 937. Even though pass-by reductions are likely warranted, **no pass-by trip reduction or internal capture was assumed for the 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 proposed coffee shop.

5.1.3 TRIP DISTRIBUTION

Trips were distributed to the surrounding roadway system based on 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 F**.

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

5.1.4 SITE 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

Table 3 shows the daily traffic volumes in the vicinity of the site and the corresponding growth rate. Background traffic volumes for the anticipated buildout year of 2024 and horizon year 2034 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.

Table 3. Traffic Growth

Roadway	2010 Daily Volume (vehicles per day, both directions)	2019 Daily Volume (vehicles per day, both directions)	Average Annual Growth Rate
Wyoming Boulevard NE north of Indian School Road NE	32,870	35,254	1%

The historical growth rate from 2010 to 2019 of 1% was applied to existing traffic volumes to obtain part of the background traffic volumes for 2024 buildout and 2034 horizon years.

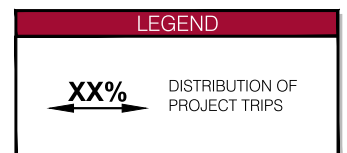
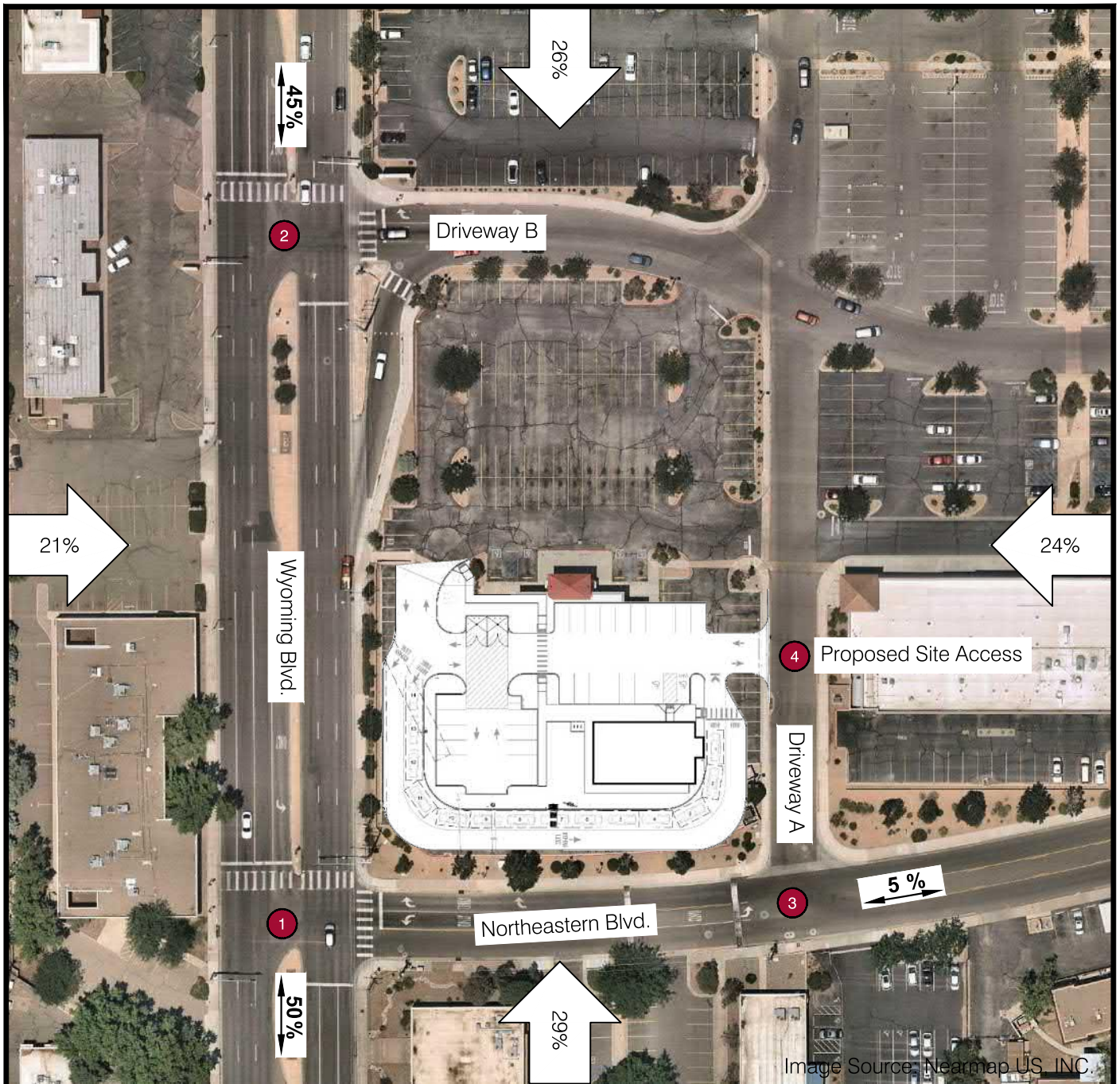
A fast-food restaurant is currently being constructed directly north of the project site. The trip assignment for this fast-food development can be found in **Appendix G** and was added after applying the 1% annual growth described above. The study that was conducted for the fast-food restaurant also included changes to the existing lane configuration around the site. This would include:

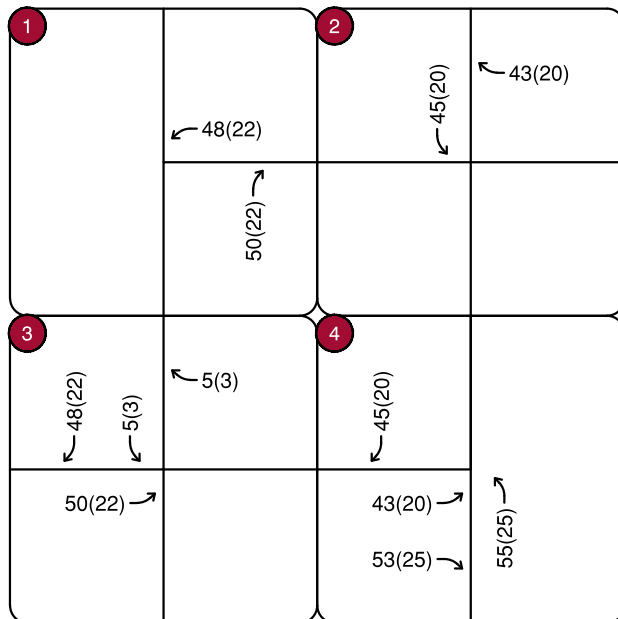
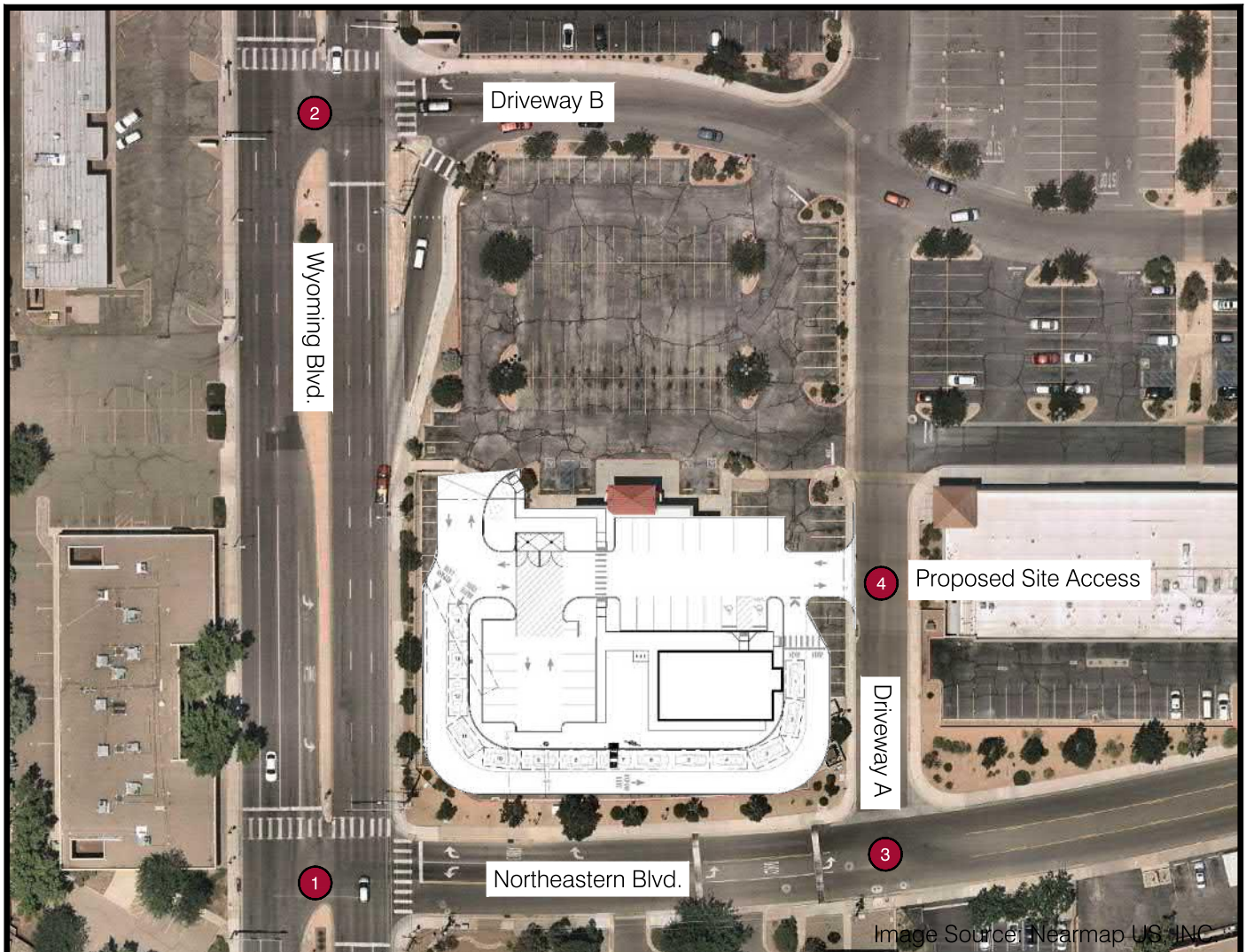
- Removing the exclusive eastbound left turn lane at Intersection 3;
- Extending the westbound left turn lane at Intersection 1 to include at least 130 feet of storage; and
- Changing the shared southbound left-through-right lane at Intersection 3 to separate left and right turn lanes

The background lane configurations are shown in **Figure 7** and the resulting 2024 and 2034 background traffic volumes (1% annual growth plus fast-food traffic assignment) are shown in **Figure 8** and **Figure 9**.

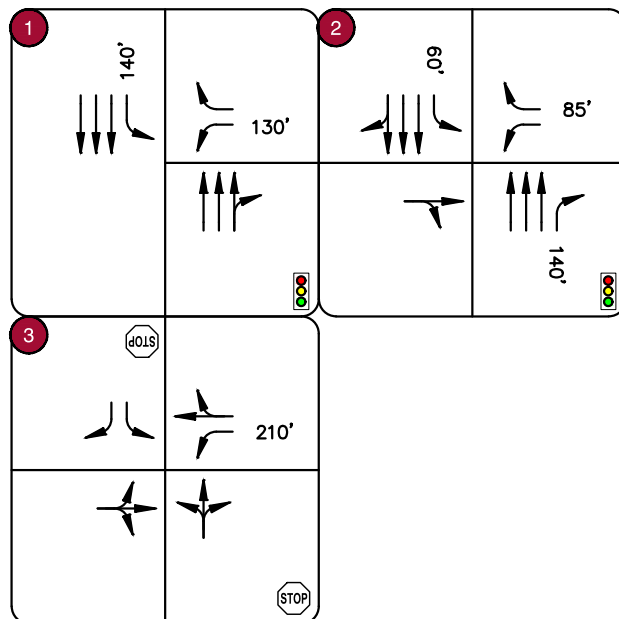
5.3 TOTAL TRAFFIC

The results of the traffic assignment (**Figure 6**) for the project development were added to the background traffic volumes (**Figure 8** and **Figure 9**) to produce 2024 and 2034 total traffic volumes for the study area, shown in **Figure 10** and **Figure 11**, respectively.

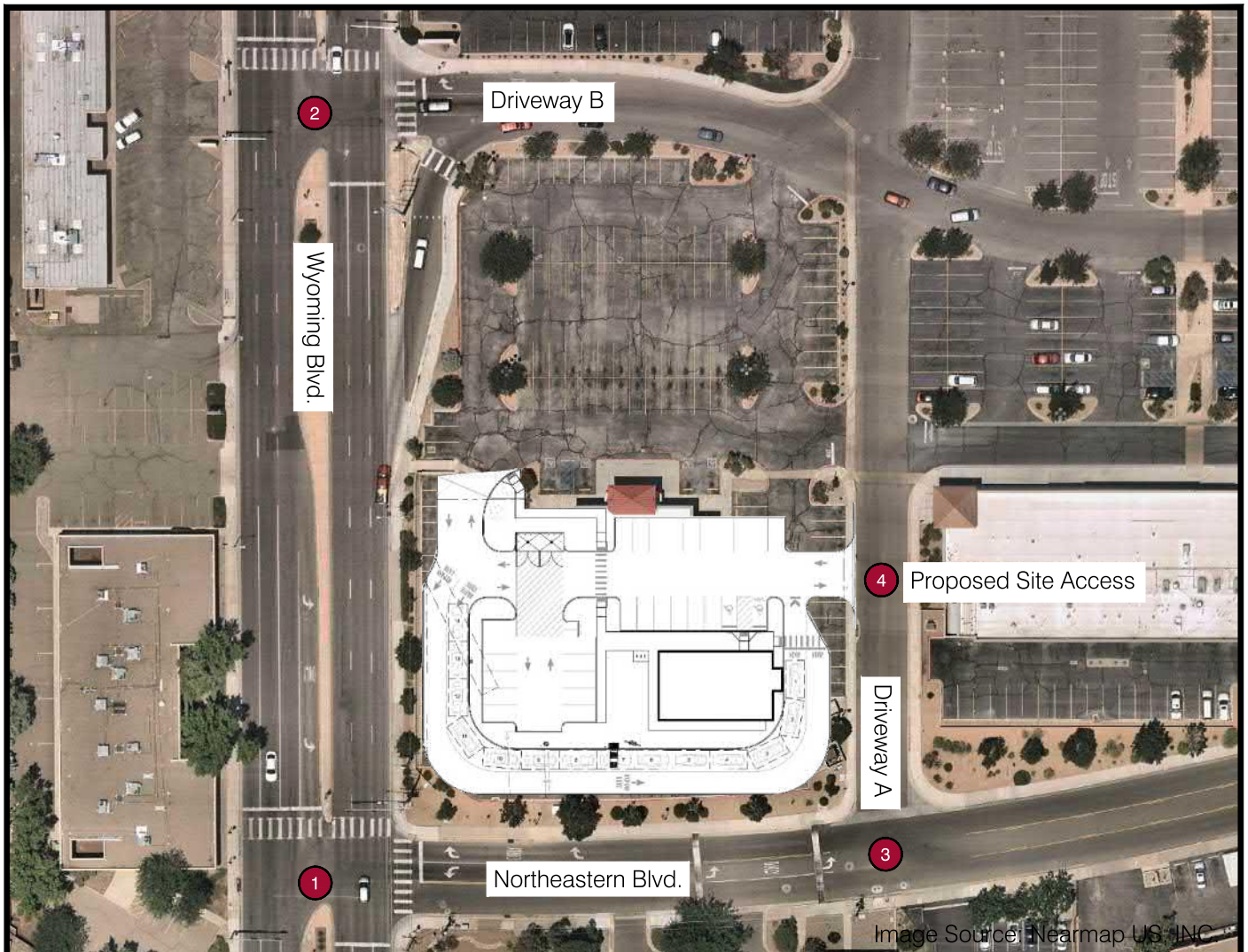




LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES



LEGEND	
	SPEED LIMIT
	LANE USE
	STORAGE LENGTH
	INTERSECTION CONTROL



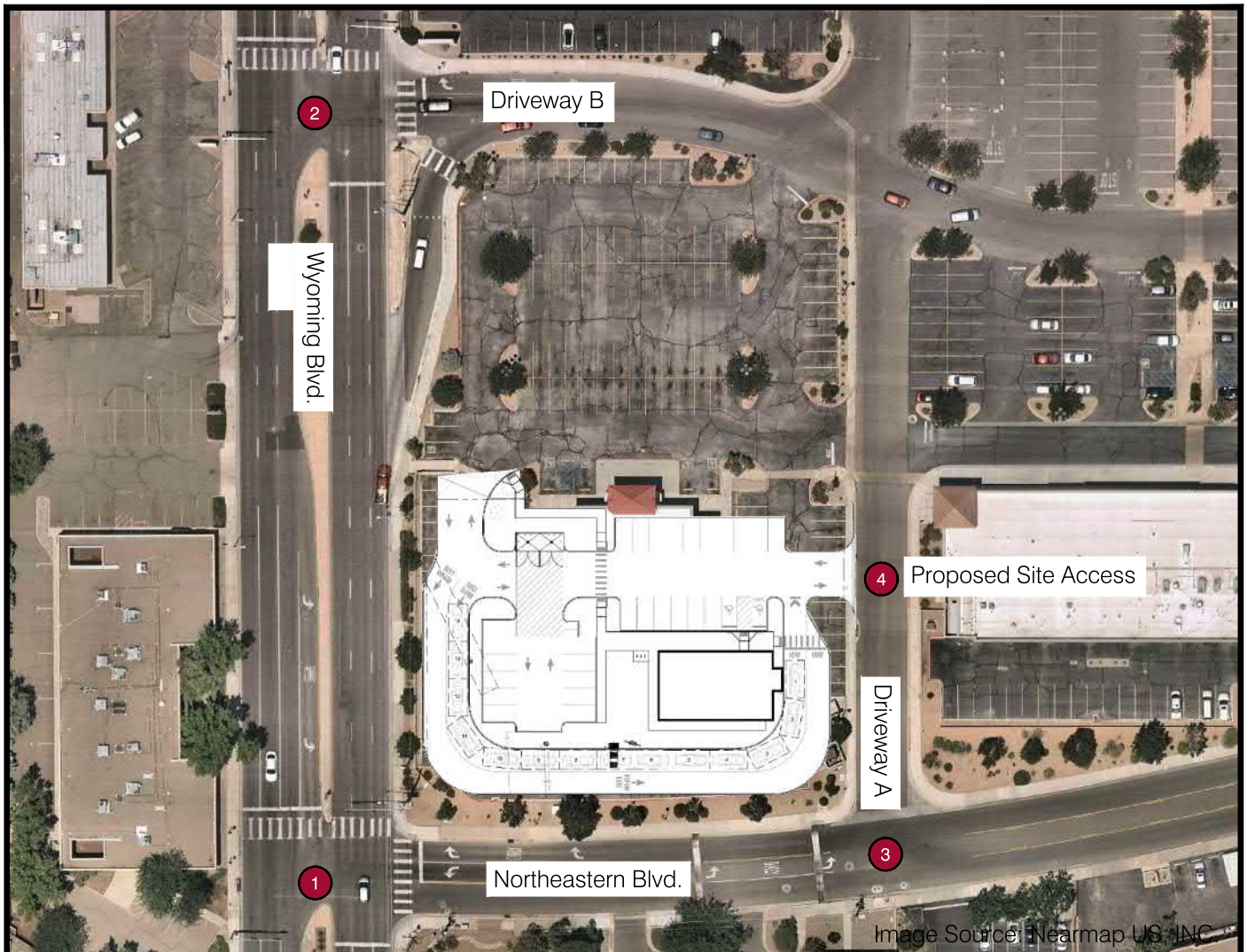
1 ← 1151(1390) ← 22(45) ↖ 48(50) ↖ 59(147)	2 ↖ 19(117) ↖ 60(208) ↗ 1(2) ↗ 1082(1221) ↗ 10(53)
3 ↖ 22(70) ↖ 31(95) ↗ 5(38) ↗ 67(115) ↖ 9(25) ↖ 80(132) ↗ 0(13) ↗ 0(16)	4 ↖ 54(165) ↗ 14(63) ↗ 1123(1740) ↗ 39(104) ↗ 1(3) ↗ 0(1) ↗ 1103(1572) ↗ 69(219)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES

Figure 8
2024 Background Traffic Volumes

LEGEND	
--------	--



1 ← 1272(1534) ← 25(50) ↖ 54(55) ↖ 65(161) ↗ 1241(1921) ↗ 44(112)	2 ↖ 1195(1348) ↖ 11(56) ↗ 1(3) ↗ 0(1) ↖ 21(127) ↖ 66(229) ↗ 1218(1736) ↗ 76(241)
3 ↖ 25(76) ↖ 35(105) ↗ 6(40) ↗ 74(127) ↖ 10(28) ↖ 88(146) ↗ 0(15) ↗ 0(18)	4 ↖ 59(180) ↗ 16(67)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES

Figure 9
2034 Background Traffic Volumes



1 ← 1151(1390) ← 22(45) ↖ 48(50) ↖ 107(169) ↗ 1123(1740) ↗ 89(126)	2 ↖ 62(137) ↖ 60(208) ↗ 1(2) ↗ 1082(1221) ↗ 55(73) ↘ 1(3) ↘ 0(1) ↗ 1103(1572) ↗ 69(219)
3 ↖ 70(92) ↖ 36(98) ↗ 55(60) ↗ 67(115) ↘ 0(13) ↘ 0(16)	4 ↖ 14(28) ↖ 80(132) ↗ 45(20) ↗ 54(165) ↘ 43(20) ↘ 53(25) ↗ 55(25) ↗ 14(63)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES



1 ← 1272(1534) ← 25(50) ↖ 54(55) ↖ 113(183)	2 ↖ 1(2) ← 1195(1348) ↖ 56(76) ↖ 64(147) ↖ 66(229)
3 ↖ 73(98) ↖ 40(108) ↖ 56(62) ↖ 74(127)	4 ↖ 15(31) ↖ 88(146) ↖ 45(20) ↖ 59(180)
↖ 0(15) ↖ 0(18)	↖ 43(20) ↖ 53(25)



LEGEND	
← XX(XX)	AM(PM) PEAK HOUR TRAFFIC VOLUMES

Figure 11
2034 Total Buildout 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 NE / 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 H** for background and **Appendix I** for total scenarios.

The LOS for the study area intersections for 2024 and 2034 was evaluated using the *Highway Capacity Manual 6th Edition* methodology for unsignalized intersections using *Synchro 11* analysis software.

6.1.1 BACKGROUND TRAFFIC LEVEL OF SERVICE ANALYSIS

The study area intersections were evaluated based on the background traffic shown in **Figure 8** and **Figure 9** and the intersection geometry shown in shown in **Figure 7**. The results of the analysis for the intersection and site driveways are shown in **Table 4** and

Table 5 for background year 2024 and 2034, 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 4. 2024 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 NE / Northeastern Boulevard NE													
AM Peak		A/2	A/3	A/1	A/1					D/51		D/50	A/3
PM Peak		A/4	A/5	A/4	A/1					D/51		D/45	A/6
2. Wyoming Boulevard NE / Driveway B													
AM Peak		A/10	A/4	A/3	A/3	*		D/43	E/62		A/3	A/8	
PM Peak		B/18	A/8	A/7	A/7	*		A/1	E/67		B/11	B/16	
3. Driveway A / Northeastern Boulevard NE													
AM Peak	*			B/10		A/9	A/7	-	A/0	-	-		
PM Peak	B/12			B/15		A/10	A/8	-	A/0	-	-		

Table 5. 2034 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 NE / Northeastern Boulevard NE													
AM Peak		A/2	A/3	A/1	A/1					D/51		D/51	A/4
PM Peak		A/5	A/6	A/7	A/1					E/55		D/48	A/6
2. Wyoming Boulevard NE / Driveway B													
AM Peak		B/11	A/4	A/3	A/3	*		D/42	E/62		A/4	A/9	
PM Peak		C/23	B/11	A/8	A/8	*		A/1	E/72		B/15	C/19	
3. Driveway A / Northeastern Boulevard NE													
AM Peak	*			B/10		A/9	A/8	-	A/0	-	-		
PM Peak	B/13			C/16		A/10	A/8	-	A/0	-	-		

Using HCM 6 methodologies and changing the phase splits to reduce delay, the WBL movement of Intersection 1 is reported as LOS E during the 2034 background analysis year PM peak hour. However, the average delay for the movement is 55.2 seconds, which pushes it in the LOS E range by only 0.2 seconds.

The WBL movement of Intersection 2 operates at LOS E in the 2024 and 2034 background analysis years in both the AM and PM peak hour.

All other movements and intersections operate at acceptable LOS in both the 2024 and 2034 background years.

6.1.2 TOTAL TRAFFIC LEVEL OF SERVICE ANALYSIS

The study area intersections were evaluated based on the total traffic shown in **Figure 10** and **Figure 11** and the recommended geometry shown in **Figure 12**. The results of this analysis are shown in **Table 6** and **Table 7** for the 2024 buildout year and the 2034 horizon year, respectively.

Table 6. 2024 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 NE / Northeastern Boulevard NE													
AM Peak		A/3	A/3	A/1	A/1					D/52		D/48	A/5
PM Peak		A/5	A/6	A/4	A/1					D/55		D/48	A/7
2. Wyoming Boulevard NE / Driveway B													
AM Peak		A/11	A/4	A/3	A/3	*		D/43	E/62		B/14	A/8	
PM Peak		B/18	A/8	A/8	A/7	*		A/1	E/70		B/13	B/16	
3. Driveway A / Northeastern Boulevard NE													
AM Peak	*			B/12		A/9	A/8	-	A/0	-	-		
PM Peak	B/13			C/16		A/10	A/8	-	A/0	-	-		
4. Driveway A / Proposed Site Access													
AM Peak	A/8	A/0			A/0	B/10						-	
PM Peak	A/8	A/0			A/0	B/10						-	

Table 7. 2034 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 NE / Northeastern Boulevard NE													
AM Peak		A/3	A/4	A/1	A/1					D/52		D/48	A/5
PM Peak		A/6	A/7	A/8	A/1					D/55		D/47	A/7
2. Wyoming Boulevard NE / Driveway B													
AM Peak		A/12	A/4	A/4	A/3	*		D/42	E/62		B/14	A/9	
PM Peak		C/25	B/12	B/11	A/8	*		A/1	E/72		B/15	C/20	
3. Driveway A / Northeastern Boulevard NE													
AM Peak	*			B/12		A/9	A/8	-	A/0	-	-		
PM Peak	B/14			C/18		A/10	A/8	-	A/0	-	-		
4. Driveway A / Proposed Site Access													
AM Peak	A/8	A/0			A/0	B/10						-	
PM Peak	A/8	A/0			A/0	B/11						-	

Using HCM 6 methodologies and changing the phase splits to reduce delay, the WBL movement of Intersection 2 operates at LOS E in both the AM and PM peak hours of the 2024 and 2034 total traffic analysis years.

All other movements and intersections operate at acceptable LOS in both the 2024 and 2034 total traffic analysis years.

6.2 LEFT-TURN QUEUE ANALYSIS

The queue analysis results for each study intersection left-turn movement are summarized in **Table 8**. As discussed previously, some of the lane configurations surrounding the project site will be changed due to the fast-food restaurant currently being constructed to the north of the project site and are reflected in the same table. Existing left-turn storage lengths were obtained via satellite imagery measurements rounded to the nearest five-foot increment. 95th percentile queue lengths for the 2034 horizon year were calculated using HCM 6 methodology except at Intersection 2, where Synchro methodology was used because it operates with non-NEMA phasing which cannot be analyzed by HCM 6. HCM 6 reports queues as number of vehicles. An average vehicle length of 25 feet was utilized to estimate total queue length in feet. Note that calculated values represent the movement's greatest queue length across both the AM and PM peak hours in the 2034 horizon year.

Table 8. Left-Turn Storage

Intersection and Approach	Existing	With Fast Food	Calculated
1. Wyoming Boulevard NE / Northeastern Boulevard NE			
Southbound Approach	140 ft	140 ft	59 ft
Westbound Approach	90 ft	225 ft	203 ft
2. Wyoming Boulevard NE / Driveway B			
Southbound Approach	60 ft	60 ft	36 ft
Westbound Approach	250 ft**	250 ft**	242 ft
3. Driveway A / Northeastern Boulevard NE			
Northbound Approach	^	^	25 ft*
Southbound Approach	^	25 ft*	25 ft*
Eastbound Approach	70 ft	^	^
Westbound Approach	210 ft^^	210 ft^^	25 ft*
4. Driveway A / Proposed Site Access			
Northbound Approach	-	-	25 ft*
Southbound Approach	-	-	25 ft*
Eastbound Approach	-	-	25 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)

- Intersection does not exist in this scenario

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

The WBL storage at Intersection 1 is constrained by the existing EBL storage at Intersection 3 and cannot be extended without reducing the striped storage length at Intersection 3. Based on direction from the City of Albuquerque and the plans for the fast-food development being constructed north of the site, the EBL lane at Intersection 3 will be removed and the WBL and WBR storage at Intersection 1 will be extended to provide approximately 225ft of storage. This new storage will accommodate the 203ft 95th percentile WBL queue shown in **Table 8**. The queues of all other left-turn movements impacted by the project are accommodated by the existing storage lengths in the 2034 horizon year.

6.3 ON-SITE CIRCULATION

Coffee shop drive-through traffic will enter the development on the east side at the Proposed Site Access and proceed along the north side of the property and turn to the south to enter the drive-through. The drive-through lane then continues along the southern edge of the property and curves to the north to the drive-through exit.

Per the site plan shown in **Figure 2**, the drive-through is anticipated to have a single drive-through lane with a bypass lane. The drive-through lane is currently designed to accommodate up to 14 vehicles at once, which is more than the City of Albuquerque's minimum requirement of 12 vehicles. The bypass lane will help with drive-through efficiency by allowing vehicles further back in the queue to receive their order and leave if their order is completed ahead of others. It will also allow vehicles who choose to exit the queue before ordering to leave the drive-through instead of waiting for the vehicles ahead of them to clear.

During peak periods, the development can accommodate an additional four vehicles queued in the drive-through lane before blocking the main development parking area for a total of 18 vehicles. Based on this information, it is anticipated that the drive-through queue will be maintained on site.

6.4 CRASH SUMMARY

Crash data (2016-2020) was obtained from the New Mexico Department of Transportation (NMDOT) for the intersection of Wyoming Boulevard NE / Northeastern Boulevard NE. Crash data was unavailable for other locations within the study area. Available data is provided in **Appendix J**.

During the five-year period, there were 75 reported crashes at the Wyoming Boulevard NE / Northeastern Boulevard NE intersection. The total crashes include 50 property damage only crashes, 25 injury crashes, and 0 fatal crashes. Crash data is summarized in **Table 9**.

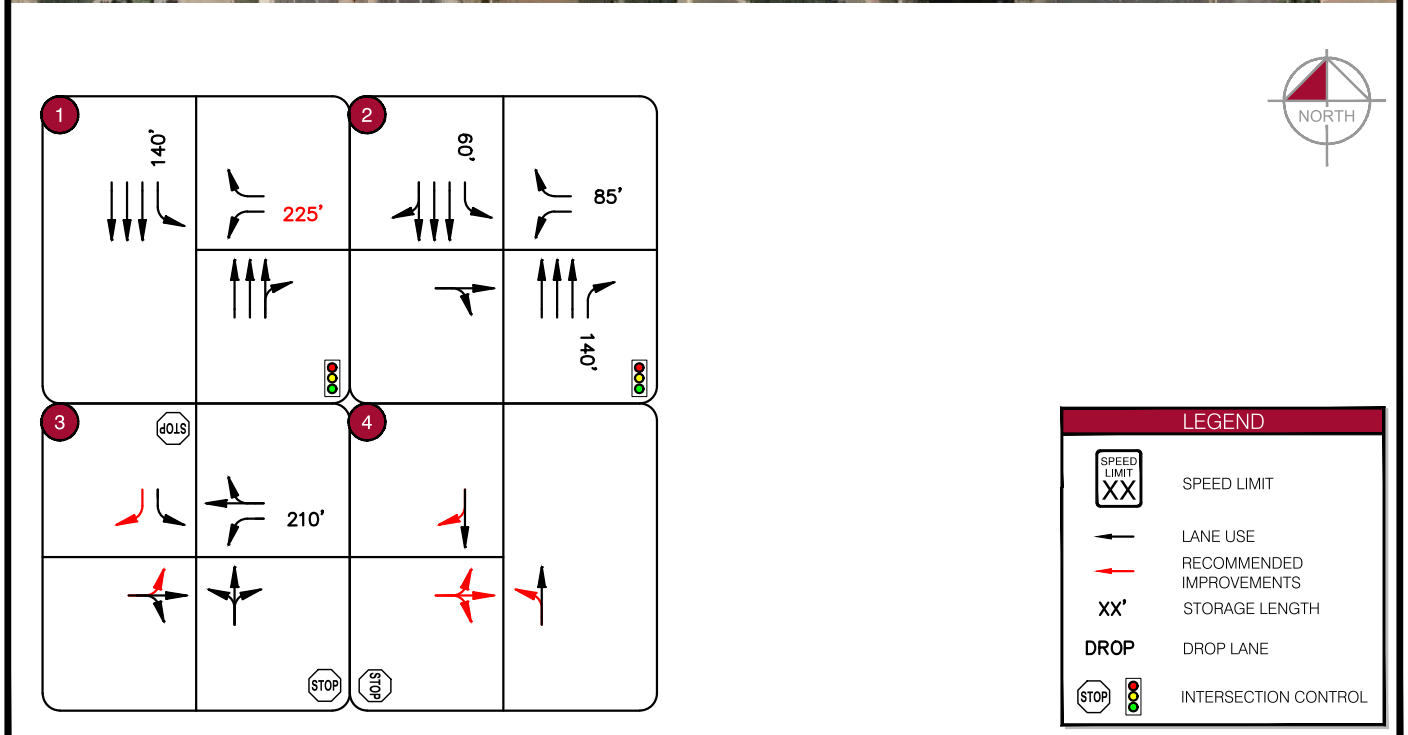
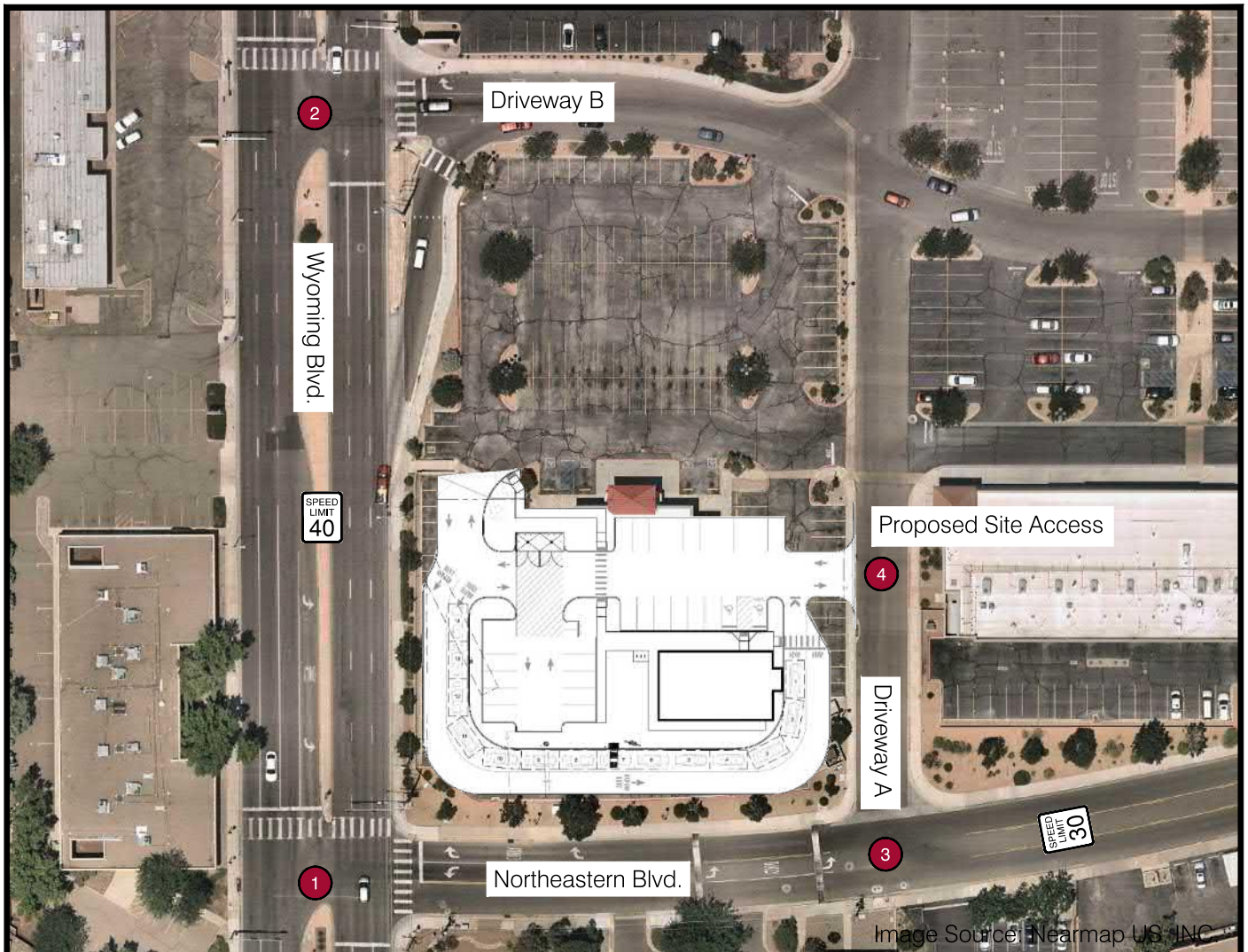
Table 9. Crash Data Summary

Wyoming Boulevard NE / Northeastern Boulevard NE						
Crash Severity	Year					Severity
	2016	2017	2018	2019	2020	Total
Property Damage Only Crash	11	9	14	5	11	50
Injury Crash	2	6	11	5	1	25
Fatal Crash	0	0	0	0	0	0
Annual Total	13	15	25	10	12	75

A portion of the crash data (17 of 75 reports) were under-reported and did not list the type of crash. As a result, specific crash patterns could not be identified. However, of the crashes that were fully reported, the following items are noted:

- About a third of the crashes (23 out of 75) mentioned a left turn.
- Five of the crashes involved pedestrians.
- About a quarter of all crashes (18 out of 75) are attributed to drivers disregarding the traffic signal.
- Other frequently-reported crash factors include driver inattention (14 crashes) and failure to yield right-of-way (7 crashes).

Because a large percentage of crashes were under-reported and crash patterns cannot be identified, there are no crash-related mitigations recommended at this time. However, it is recommended that the City continue to monitor this location for potential safety improvements as new crash data becomes available.



7.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed development is expected to generate 1,206 daily trips, with 194 trips occurring in the AM peak hour and 88 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 a new driveway connection on Driveway A. The proposed site access will be full access to accommodate passenger cars.
- Study area intersections and movements operate at acceptable LOS in each analysis scenario, including existing, 2024 background and total, and 2034 background and total traffic scenarios with the following exceptions:
 - The westbound left-turn movement at Northeastern Boulevard NE (Intersection 1) shows LOS E in the 2034 background and total traffic study scenarios during the PM peak hour. Since the reported LOS and delay do not worsen from existing conditions to 2034 background and 2034 total traffic 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 intersection.
 - The westbound left-turn movement at Driveway B (Intersection 2) 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 intersection.
- The WBL storage at Intersection 1 is constrained by the existing EBL storage at Intersection 3 and cannot be extended without reducing the striped storage length at Intersection 3. Based on direction from the City of Albuquerque and the plans for the fast-food development north of the site, the EBL lane at Intersection 3 will be removed and the WBL and WBR storage at Intersection 1 will be extended to provide approximately 225ft of storage. This new storage will accommodate the 203ft 95th percentile queue. The queues of all other left-turn movements impacted by the project are accommodated by the existing storage lengths in the 2034 horizon year.
- The proposed drive-thru and parking lot are expected to provide enough space for on-site circulation during typical- and high-demands time periods. Traffic from the drive-thru is unlikely to spill back onto Driveway A (Intersection 4).
- The intersection of Wyoming Boulevard NE / Northeastern Boulevard NE experienced 75 crashes from 2016 to 2020. Because about 25% of crashes included in the dataset 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.

- Recommended lane configuration is shown in **Figure 12**.

APPENDIX

- Appendix A: Scope of Study
- Appendix B: Preliminary Site Plan
- Appendix C: Traffic Count Data
- Appendix D: Existing Synchro Reports
- Appendix E: Trip Generation
- Appendix F: Trip Distribution Map
- Appendix G: Fast-Food Restaurant Trip Assignment
- Appendix H: Background Traffic Synchro Reports
- Appendix I: Total Traffic Synchro Reports
- Appendix J: NMDOT Crash Data

APPENDIX A

SCOPE OF STUDY

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Keith Christian
Kimley-Horn
1001 West Southern Avenue, Suite 131
Mesa, AZ 85210

MEETING DATE: 12-13-22

ATTENDEES: Keith Christian, Liz Willmot, Nicole Wolf, and Regina Okoye from the consultant team;
Matt Grush from the City of Albuquerque

PROJECT: Quick Service Restaurant – Wyoming Blvd, Zone Atlas #H-20

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 2,260 square foot quick serve restaurant on the northeast corner of Wyoming Blvd and Northeastern Blvd. Scope of work includes construction of a new quick serve restaurant with 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, 11th Edition.
 - ITE Land Use Code 937 – Coffee/Donut Shop with Drive-Through Window
 - Daily Rate: 533.57 trips per ksf
 - AM peak hour of adjacent street traffic (7-9am) rate: 85.88 trips per ksf
 - PM peak hour of adjacent street traffic (4-6pm) rate: 38.99 trips per ksf

2. Appropriate study area:

Signalized Intersections;

- a. Intersection 1: Wyoming Blvd/Northeastern Blvd
- b. Intersection 2: Wyoming Blvd/Shopping Center Entrance 400ft north of Northeastern Blvd

Unsignalized Intersections;

- a. Shopping center driveway 250ft east of Wyoming Blvd on north side of Northeastern Blvd

Driveway Intersections: all site drives.

3. Intersection turning movement counts

- Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour
- 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. Raising Cane’s restaurant just north of proposed site
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: 2024
10. Traffic conditions for analysis:
 - a. Existing analysis X yes ___ no - year (2023);
 - b. Project completion year without proposed development – 2024
 - c. Project completion year with proposed development – 2024
 - d. Other – 10-year horizon (2034)
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. Menaul/Wyoming intersection reconstruction – Project will be mentioned in the TIS, but does not need to be considered in the analysis
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 Xyes ___ no; Location(s): 3 year analysis at the 2 signalized study intersections and the 1 unsignalized study intersection listed previously
- g. Drive thru queue analysis – Albuquerque requires space for at least 12 vehicles

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.

1/4/2023

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

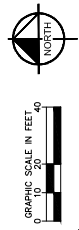
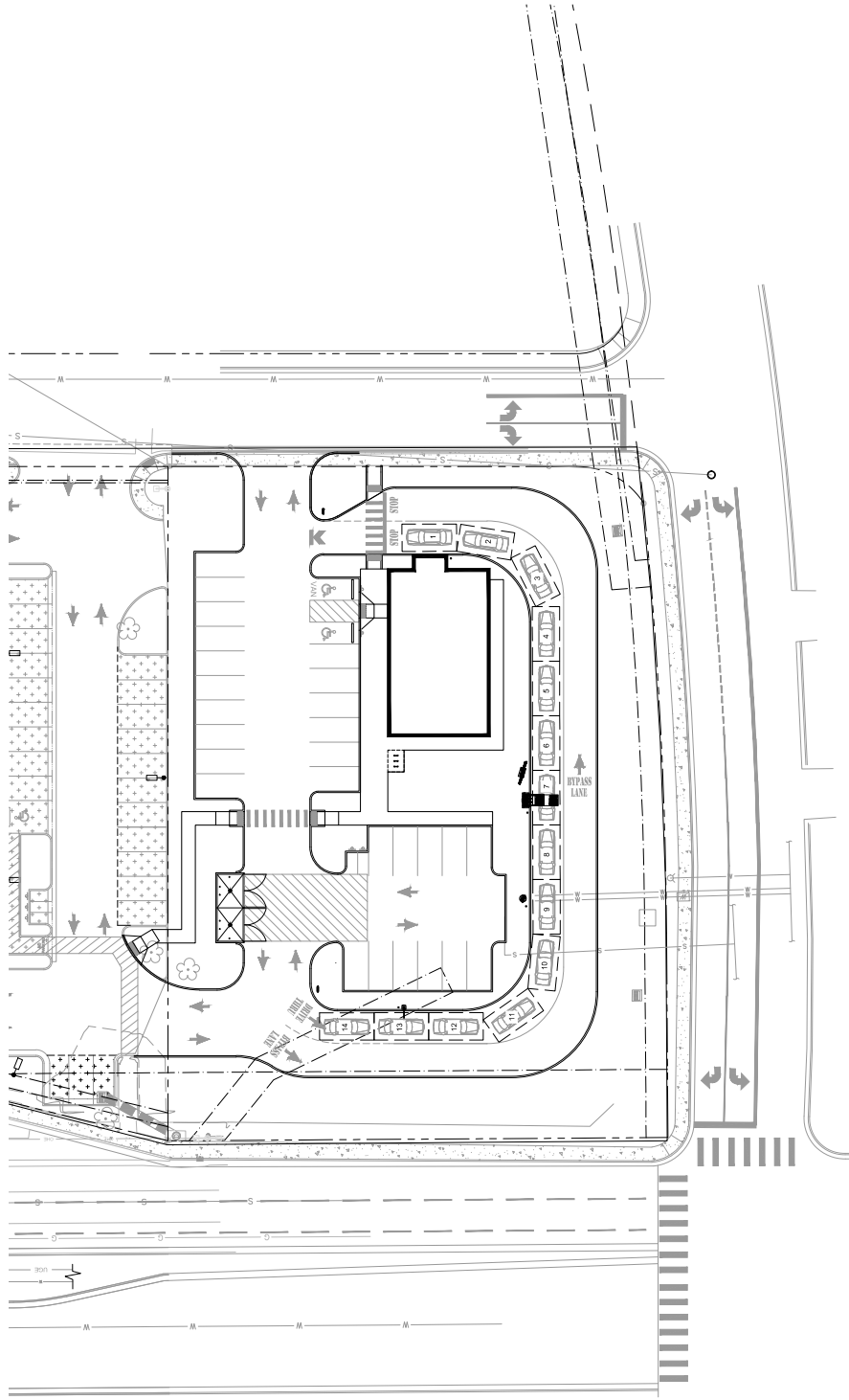
Date

via: email

C: TIS Task Force Attendees, file

APPENDIX B

PRELIMINARY SITE PLAN



APPENDIX C

TRAFFIC COUNT DATA



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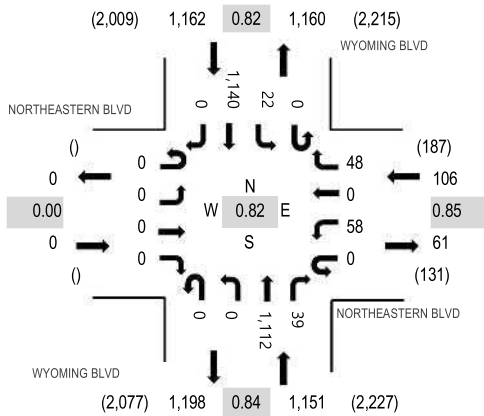
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Date: Tuesday, January 10, 2023

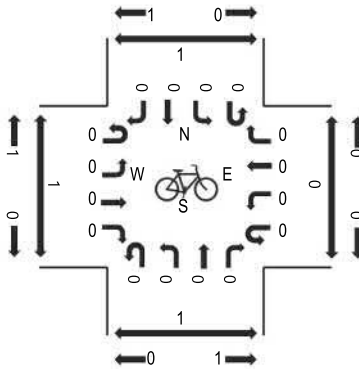
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Peak 15-Minutes: 07:45 AM - 08:00 AM

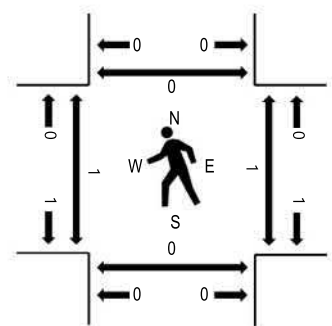
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTHEASTERN BLVD Eastbound				NORTHEASTERN BLVD Westbound				WYOMING BLVD Northbound				WYOMING BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	8	0	12	0	0	282	5	0	5	167	0	479	2,366	1	0	0	0
7:15 AM	0	0	0	0	0	8	0	15	0	0	252	6	0	6	279	0	566	2,419	0	0	0	0
7:30 AM	0	0	0	0	0	11	0	15	0	0	277	6	0	6	270	0	585	2,396	0	0	0	0
7:45 AM	0	0	0	0	0	22	0	9	0	0	335	14	0	9	347	0	736	2,285	0	0	0	0
8:00 AM	0	0	0	0	0	17	0	9	0	0	248	13	0	1	244	0	532	2,057	1	1	0	0
8:15 AM	0	0	0	0	0	12	0	8	0	0	272	13	0	7	231	0	543		0	0	0	0
8:30 AM	0	0	0	0	0	16	0	6	0	0	219	14	0	2	217	0	474		0	0	0	0
8:45 AM	0	0	0	0	0	15	0	4	0	0	252	19	0	5	213	0	508		1	1	0	1
Count Total	0	0	0	0	0	109	0	78	0	0	2,137	90	0	41	1,968	0	4,423		3	2	0	1
Peak Hour	0	0	0	0	0	58	0	48	0	0	1,112	39	0	22	1,140	0	2,419		1	1	0	0



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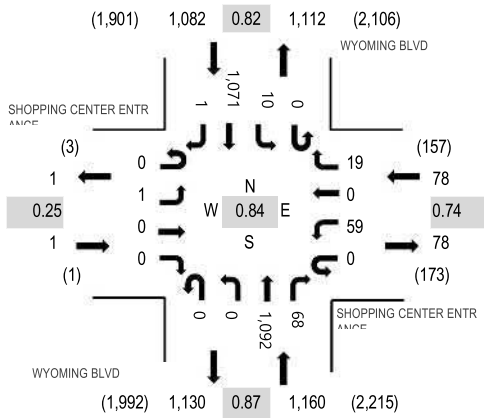
Location: 2 WYOMING BLVD & SHOPPING CENTER ENTRANCE AM

Date: Tuesday, January 10, 2023

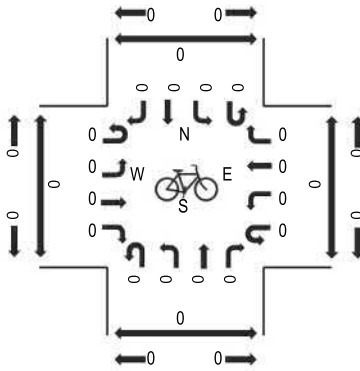
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Peak 15-Minutes: 07:45 AM - 08:00 AM

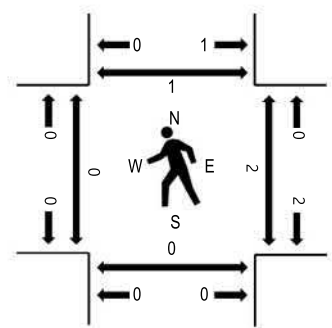
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SHOPPING CENTER ENTRANCE				SHOPPING CENTER ENTRANCE				WYOMING BLVD Northbound				WYOMING BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	15	0	2	0	0	278	16	0	3	161	0	475	2,291	1	0	0	1
7:15 AM	0	0	0	0	0	12	0	3	0	0	250	17	0	4	271	0	557	2,321	0	0	0	1
7:30 AM	0	1	0	0	0	21	0	4	0	0	278	14	0	2	248	1	569	2,291	0	1	0	0
7:45 AM	0	0	0	0	0	11	0	6	0	0	328	16	0	2	327	0	690	2,176	0	1	0	0
8:00 AM	0	0	0	0	0	15	0	6	0	0	236	21	0	2	225	0	505	1,983	0	0	0	0
8:15 AM	0	0	0	0	0	13	0	4	0	1	261	18	0	3	227	0	527		1	0	0	0
8:30 AM	0	0	0	0	0	9	0	8	1	0	200	24	0	1	211	0	454		1	0	0	0
8:45 AM	0	0	0	0	0	16	0	12	0	0	229	27	0	3	209	1	497		1	0	0	1
Count Total	0	1	0	0	0	112	0	45	1	1	2,060	153	0	20	1,879	2	4,274		4	2	0	3
Peak Hour	0	1	0	0	0	59	0	19	0	0	1,092	68	0	10	1,071	1	2,321		0	2	0	1



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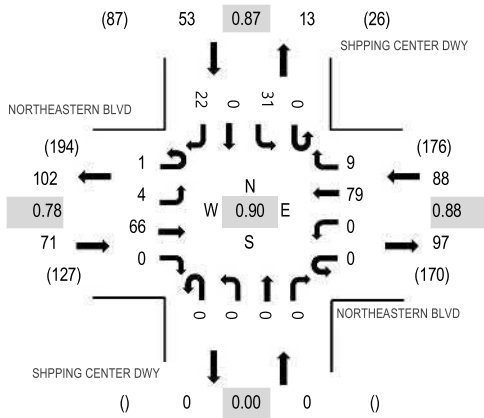
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Date: Tuesday, January 10, 2023

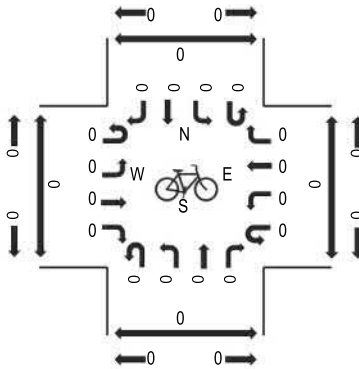
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Peak 15-Minutes: 07:45 AM - 08:00 AM

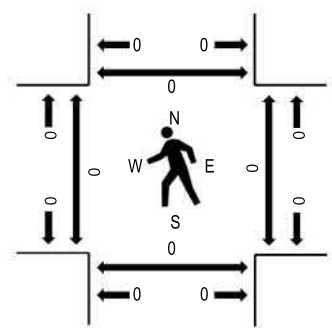
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTHEASTERN BLVD Eastbound				NORTHEASTERN BLVD Westbound				SHPPING CENTER DWY Northbound				SHPPING CENTER DWY 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	1	9	0	0	0	20	1	0	0	0	0	0	2	0	0	33	179	0	0	0	0
7:15 AM	0	0	10	0	0	0	25	1	0	0	0	0	0	4	0	1	41	194	0	0	0	1
7:30 AM	0	2	10	0	0	0	23	1	0	0	0	0	0	7	0	3	46	205	0	0	0	0
7:45 AM	1	1	18	0	0	0	27	1	0	0	0	0	0	6	0	5	59	212	0	0	0	0
8:00 AM	0	0	13	0	0	0	17	1	0	0	0	0	0	7	0	10	48	211	0	0	0	0
8:15 AM	0	2	19	0	0	0	19	3	0	0	0	0	0	6	0	3	52		0	0	0	0
8:30 AM	0	1	16	0	0	0	16	4	0	0	0	0	0	12	0	4	53		0	0	0	0
8:45 AM	0	3	21	0	0	0	13	4	0	0	0	0	0	10	0	7	58		0	0	0	1
Count Total	1	10	116	0	0	0	160	16	0	0	0	0	0	54	0	33	390		0	0	0	2
Peak Hour	1	4	66	0	0	0	79	9	0	0	0	0	0	31	0	22	212		0	0	0	0



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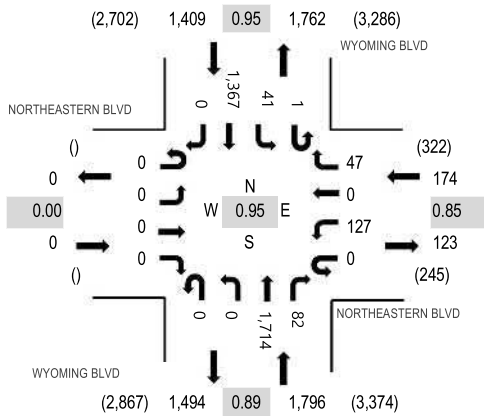
Location: 1 WYOMING BLVD & NORTHEASTERN BLVD PM

Date: Tuesday, January 10, 2023

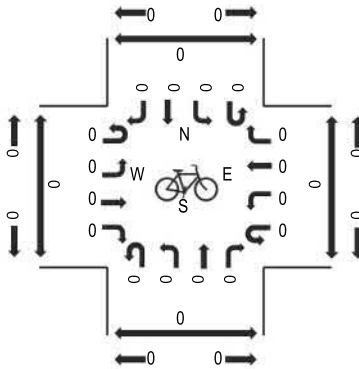
Peak Hour: 04:30 PM - 05:30 PM

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

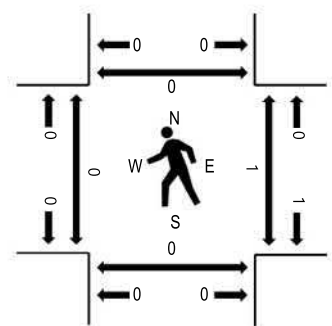
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTHEASTERN BLVD Eastbound				NORTHEASTERN BLVD Westbound				WYOMING BLVD Northbound				WYOMING BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	36	0	6	0	0	472	35	0	7	346	0	902	3,311	0	1	0	1
4:15 PM	0	0	0	0	0	28	0	8	0	0	394	15	0	9	283	0	737	3,300	2	0	0	1
4:30 PM	0	0	0	0	0	34	0	14	0	0	432	16	0	8	353	0	857	3,379	0	1	0	0
4:45 PM	0	0	0	0	0	23	0	13	0	0	409	23	1	14	332	0	815	3,292	0	0	0	0
5:00 PM	0	0	0	0	0	44	0	7	0	0	443	23	0	6	368	0	891	3,087	0	0	0	0
5:15 PM	0	0	0	0	0	26	0	13	0	0	430	20	0	13	314	0	816		0	0	0	0
5:30 PM	0	0	0	0	0	37	0	10	0	0	345	12	0	16	350	0	770		1	0	0	1
5:45 PM	0	0	0	0	0	19	0	4	0	0	285	20	0	8	274	0	610		0	0	0	0
Count Total	0	0	0	0	0	247	0	75	0	0	3,210	164	1	81	2,620	0	6,398		3	2	0	3
Peak Hour	0	0	0	0	0	127	0	47	0	0	1,714	82	1	41	1,367	0	3,379		0	1	0	0



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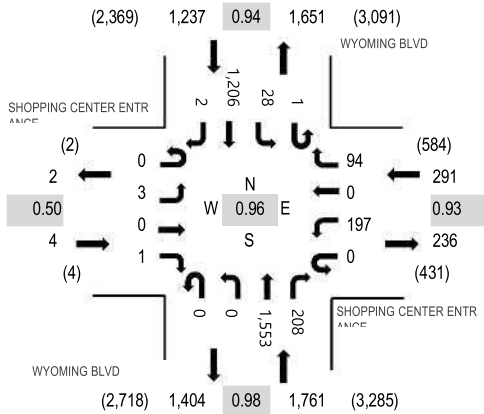
Location: 2 WYOMING BLVD & SHOPPING CENTER ENTRANCE PM

Date: Tuesday, January 10, 2023

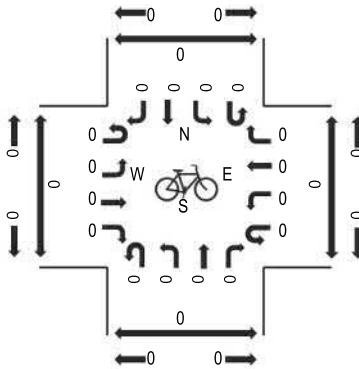
Peak Hour: 04:30 PM - 05:30 PM

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

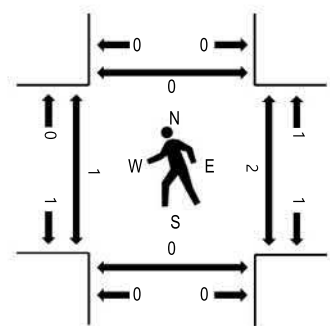
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SHOPPING CENTER ENTRANCE				SHOPPING CENTER ENTRANCE				WYOMING BLVD Northbound				WYOMING BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	58	0	23	0	0	428	50	0	3	301	0	863	3,230	0	0	0	0
4:15 PM	0	0	0	0	0	46	0	26	0	0	359	43	0	8	252	0	734	3,226	0	0	0	0
4:30 PM	0	0	0	0	0	48	0	27	0	0	395	51	0	7	306	1	835	3,293	1	2	0	0
4:45 PM	0	1	0	0	0	44	0	22	0	0	370	52	0	6	303	0	798	3,210	0	0	0	0
5:00 PM	0	1	0	1	0	50	0	27	0	0	405	45	1	7	321	1	859	3,012	0	0	0	0
5:15 PM	0	1	0	0	0	55	0	18	0	0	383	60	0	8	276	0	801		0	0	0	0
5:30 PM	0	0	0	0	0	57	0	23	0	0	307	48	0	7	310	0	752		0	0	0	0
5:45 PM	0	0	0	0	0	42	0	18	0	0	256	33	0	3	248	0	600		0	0	0	0
Count Total	0	3	0	1	0	400	0	184	0	0	2,903	382	1	49	2,317	2	6,242		1	2	0	0
Peak Hour	0	3	0	1	0	197	0	94	0	0	1,553	208	1	28	1,206	2	3,293		1	2	0	0



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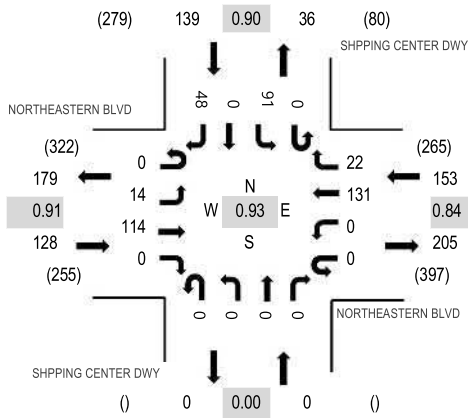
Location: 3 SHPPING CENTER DWY & NORTHEASTERN BLVD PM

Date: Tuesday, January 10, 2023

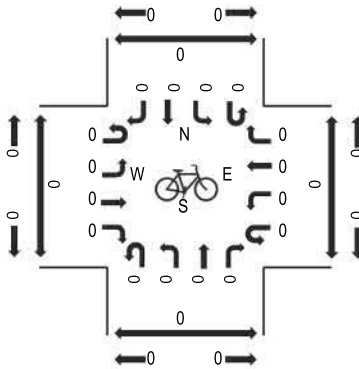
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

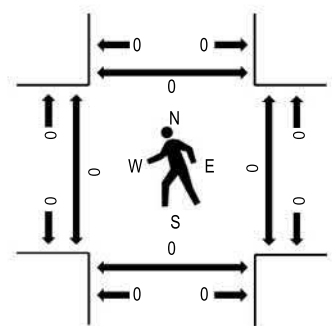
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTHEASTERN BLVD				NORTHEASTERN BLVD				SHPPING CENTER DWY				SHPPING CENTER DWY				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	11	31	0	0	0	20	7	0	0	0	0	0	24	0	16	109	401	0	0	0	1	
4:15 PM	0	2	25	0	0	0	26	7	0	0	0	0	0	22	0	14	96	403	0	0	0	1	
4:30 PM	0	4	21	0	0	0	29	1	0	0	0	0	0	20	0	16	91	420	0	0	0	0	
4:45 PM	0	3	33	0	0	0	31	6	0	0	0	0	0	22	0	10	105	416	0	0	0	0	
5:00 PM	0	1	31	0	0	0	40	6	0	0	0	0	0	24	0	9	111	398	0	0	0	0	
5:15 PM	0	6	29	0	0	0	31	9	0	0	0	0	0	25	0	13	113		0	0	0	0	
5:30 PM	0	3	25	0	0	0	29	2	0	0	0	0	0	18	0	10	87		1	0	0	0	
5:45 PM	0	9	21	0	0	0	18	3	0	0	0	0	0	26	0	10	87		0	0	0	0	
Count Total	0	39	216	0	0	0	224	41	0	0	0	0	0	181	0	98	799		1	0	0	2	
Peak Hour	0	14	114	0	0	0	131	22	0	0	0	0	0	91	0	48	420		0	0	0	0	



All Traffic Data Services

SITE 1_E - NORTHEASTERN BLVD EAST OF WYOMING BLVD

Time	EB	WB	Total
1/10/2023	3	2	5
1/10/2023 12:15:00 AM	2	1	3
1/10/2023 12:30:00 AM	3	1	4
1/10/2023 12:45:00 AM	2	1	3
1/10/2023 1:00:00 AM	3	3	6
1/10/2023 1:15:00 AM	2	3	5
1/10/2023 1:30:00 AM	1	1	2
1/10/2023 1:45:00 AM	1	0	1
1/10/2023 2:00:00 AM	0	2	2
1/10/2023 2:15:00 AM	1	0	1
1/10/2023 2:30:00 AM	2	0	2
1/10/2023 2:45:00 AM	0	0	0
1/10/2023 3:00:00 AM	1	4	5
1/10/2023 3:15:00 AM	0	0	0
1/10/2023 3:30:00 AM	2	3	5
1/10/2023 3:45:00 AM	0	1	1
1/10/2023 4:00:00 AM	2	1	3
1/10/2023 4:15:00 AM	0	1	1
1/10/2023 4:30:00 AM	0	1	1
1/10/2023 4:45:00 AM	2	4	6
1/10/2023 5:00:00 AM	2	3	5
1/10/2023 5:15:00 AM	2	1	3
1/10/2023 5:30:00 AM	4	2	6
1/10/2023 5:45:00 AM	3	6	9
1/10/2023 6:00:00 AM	4	10	14
1/10/2023 6:15:00 AM	6	14	20
1/10/2023 6:30:00 AM	8	11	19
1/10/2023 6:45:00 AM	6	10	16
1/10/2023 7:00:00 AM	10	20	30
1/10/2023 7:15:00 AM	12	23	35
1/10/2023 7:30:00 AM	12	26	38
1/10/2023 7:45:00 AM	23	31	54
1/10/2023 8:00:00 AM	14	26	40
1/10/2023 8:15:00 AM	20	20	40
1/10/2023 8:30:00 AM	16	22	38
1/10/2023 8:45:00 AM	24	19	43
1/10/2023 9:00:00 AM	22	22	44
1/10/2023 9:15:00 AM	22	27	49
1/10/2023 9:30:00 AM	24	28	52
1/10/2023 9:45:00 AM	21	24	45
1/10/2023 10:00:00 AM	18	25	43
1/10/2023 10:15:00 AM	22	29	51
1/10/2023 10:30:00 AM	18	31	49
1/10/2023 10:45:00 AM	21	29	50
1/10/2023 11:00:00 AM	20	33	53
1/10/2023 11:15:00 AM	19	24	43
1/10/2023 11:30:00 AM	25	43	68
1/10/2023 11:45:00 AM	25	34	59
Total	450	622	1,072
Percentage	42.0%	58.0%	
Peak Hour	8:45 AM	11:00 AM	11:00 AM
Volume	92	134	223
PHF	0.958	0.779	0.820



All Traffic Data Services

SITE 1_E - NORTHEASTERN BLVD EAST OF WYOMING BLVD

Time	EB	WB	Total
1/10/2023 12:00:00 PM	31	33	64
1/10/2023 12:15:00 PM	33	35	68
1/10/2023 12:30:00 PM	26	32	58
1/10/2023 12:45:00 PM	31	36	67
1/10/2023 1:00:00 PM	23	45	68
1/10/2023 1:15:00 PM	29	32	61
1/10/2023 1:30:00 PM	21	38	59
1/10/2023 1:45:00 PM	13	35	48
1/10/2023 2:00:00 PM	24	34	58
1/10/2023 2:15:00 PM	27	41	68
1/10/2023 2:30:00 PM	27	47	74
1/10/2023 2:45:00 PM	32	33	65
1/10/2023 3:00:00 PM	33	53	86
1/10/2023 3:15:00 PM	30	56	86
1/10/2023 3:30:00 PM	28	53	81
1/10/2023 3:45:00 PM	31	63	94
1/10/2023 4:00:00 PM	42	42	84
1/10/2023 4:15:00 PM	24	36	60
1/10/2023 4:30:00 PM	24	48	72
1/10/2023 4:45:00 PM	37	36	73
1/10/2023 5:00:00 PM	29	51	80
1/10/2023 5:15:00 PM	33	39	72
1/10/2023 5:30:00 PM	28	47	75
1/10/2023 5:45:00 PM	28	23	51
1/10/2023 6:00:00 PM	25	27	52
1/10/2023 6:15:00 PM	27	29	56
1/10/2023 6:30:00 PM	19	30	49
1/10/2023 6:45:00 PM	15	25	40
1/10/2023 7:00:00 PM	21	19	40
1/10/2023 7:15:00 PM	9	22	31
1/10/2023 7:30:00 PM	14	19	33
1/10/2023 7:45:00 PM	8	14	22
1/10/2023 8:00:00 PM	8	9	17
1/10/2023 8:15:00 PM	15	14	29
1/10/2023 8:30:00 PM	4	6	10
1/10/2023 8:45:00 PM	9	8	17
1/10/2023 9:00:00 PM	12	14	26
1/10/2023 9:15:00 PM	8	7	15
1/10/2023 9:30:00 PM	8	7	15
1/10/2023 9:45:00 PM	7	6	13
1/10/2023 10:00:00 PM	4	6	10
1/10/2023 10:15:00 PM	7	5	12
1/10/2023 10:30:00 PM	4	7	11
1/10/2023 10:45:00 PM	5	2	7
1/10/2023 11:00:00 PM	4	6	10
1/10/2023 11:15:00 PM	4	3	7
1/10/2023 11:30:00 PM	1	1	2
1/10/2023 11:45:00 PM	3	0	3
Total	925	1,274	2,199
Percentage	42.1%	57.9%	
Peak Hour	3:15 PM	3:00 PM	3:00 PM
Volume	131	225	347
PHF	0.780	0.893	0.923
Grand Total	1,375	1,896	3,271
Percentage	42.0%	58.0%	



All Traffic Data Services

SITE 1_N - WYOMING BLVD NORTH OF NORTHEASTERN BLVD

Time	NB	SB	Total
1/10/2023	19	19	38
1/10/2023 12:15:00 AM	23	22	45
1/10/2023 12:30:00 AM	26	24	50
1/10/2023 12:45:00 AM	20	21	41
1/10/2023 1:00:00 AM	19	12	31
1/10/2023 1:15:00 AM	13	14	27
1/10/2023 1:30:00 AM	10	11	21
1/10/2023 1:45:00 AM	15	15	30
1/10/2023 2:00:00 AM	10	9	19
1/10/2023 2:15:00 AM	6	12	18
1/10/2023 2:30:00 AM	5	9	14
1/10/2023 2:45:00 AM	13	10	23
1/10/2023 3:00:00 AM	9	8	17
1/10/2023 3:15:00 AM	4	4	8
1/10/2023 3:30:00 AM	9	6	15
1/10/2023 3:45:00 AM	17	5	22
1/10/2023 4:00:00 AM	13	12	25
1/10/2023 4:15:00 AM	15	15	30
1/10/2023 4:30:00 AM	17	15	32
1/10/2023 4:45:00 AM	26	18	44
1/10/2023 5:00:00 AM	24	25	49
1/10/2023 5:15:00 AM	30	32	62
1/10/2023 5:30:00 AM	38	48	86
1/10/2023 5:45:00 AM	67	81	148
1/10/2023 6:00:00 AM	49	79	128
1/10/2023 6:15:00 AM	88	117	205
1/10/2023 6:30:00 AM	99	145	244
1/10/2023 6:45:00 AM	172	165	337
1/10/2023 7:00:00 AM	294	172	466
1/10/2023 7:15:00 AM	267	285	552
1/10/2023 7:30:00 AM	292	276	568
1/10/2023 7:45:00 AM	344	356	700
1/10/2023 8:00:00 AM	257	245	502
1/10/2023 8:15:00 AM	280	238	518
1/10/2023 8:30:00 AM	225	219	444
1/10/2023 8:45:00 AM	256	218	474
1/10/2023 9:00:00 AM	236	202	438
1/10/2023 9:15:00 AM	218	240	458
1/10/2023 9:30:00 AM	267	206	473
1/10/2023 9:45:00 AM	264	245	509
1/10/2023 10:00:00 AM	236	210	446
1/10/2023 10:15:00 AM	224	226	450
1/10/2023 10:30:00 AM	278	260	538
1/10/2023 10:45:00 AM	278	276	554
1/10/2023 11:00:00 AM	302	260	562
1/10/2023 11:15:00 AM	315	228	543
1/10/2023 11:30:00 AM	305	273	578
1/10/2023 11:45:00 AM	315	276	591
Total	6,309	5,864	12,173
Percentage	51.8%	48.2%	
Peak Hour	11:00 AM	7:15 AM	7:15 AM
Volume	1,237	1,162	2,322
PHF	0.982	0.816	0.829



All Traffic Data Services

SITE 1_N - WYOMING BLVD NORTH OF NORTHEASTERN BLVD

Time	NB	SB	Total
1/10/2023 12:00:00 PM	314	291	605
1/10/2023 12:15:00 PM	305	297	602
1/10/2023 12:30:00 PM	308	308	616
1/10/2023 12:45:00 PM	313	311	624
1/10/2023 1:00:00 PM	281	284	565
1/10/2023 1:15:00 PM	325	292	617
1/10/2023 1:30:00 PM	323	311	634
1/10/2023 1:45:00 PM	327	266	593
1/10/2023 2:00:00 PM	289	292	581
1/10/2023 2:15:00 PM	331	285	616
1/10/2023 2:30:00 PM	327	326	653
1/10/2023 2:45:00 PM	387	343	730
1/10/2023 3:00:00 PM	332	335	667
1/10/2023 3:15:00 PM	387	354	741
1/10/2023 3:30:00 PM	396	345	741
1/10/2023 3:45:00 PM	416	315	731
1/10/2023 4:00:00 PM	478	353	831
1/10/2023 4:15:00 PM	402	292	694
1/10/2023 4:30:00 PM	446	361	807
1/10/2023 4:45:00 PM	423	347	770
1/10/2023 5:00:00 PM	450	374	824
1/10/2023 5:15:00 PM	443	327	770
1/10/2023 5:30:00 PM	355	366	721
1/10/2023 5:45:00 PM	289	282	571
1/10/2023 6:00:00 PM	313	275	588
1/10/2023 6:15:00 PM	256	253	509
1/10/2023 6:30:00 PM	223	230	453
1/10/2023 6:45:00 PM	203	204	407
1/10/2023 7:00:00 PM	175	195	370
1/10/2023 7:15:00 PM	175	176	351
1/10/2023 7:30:00 PM	140	181	321
1/10/2023 7:45:00 PM	131	156	287
1/10/2023 8:00:00 PM	116	149	265
1/10/2023 8:15:00 PM	103	134	237
1/10/2023 8:30:00 PM	100	120	220
1/10/2023 8:45:00 PM	105	129	234
1/10/2023 9:00:00 PM	81	109	190
1/10/2023 9:15:00 PM	79	94	173
1/10/2023 9:30:00 PM	76	77	153
1/10/2023 9:45:00 PM	80	79	159
1/10/2023 10:00:00 PM	53	72	125
1/10/2023 10:15:00 PM	52	78	130
1/10/2023 10:30:00 PM	51	49	100
1/10/2023 10:45:00 PM	47	50	97
1/10/2023 11:00:00 PM	50	54	104
1/10/2023 11:15:00 PM	35	47	82
1/10/2023 11:30:00 PM	27	43	70
1/10/2023 11:45:00 PM	34	26	60
Total	11,352	10,637	21,989
Percentage	51.6%	48.4%	
Peak Hour	4:30 PM	4:45 PM	4:30 PM
Volume	1,762	1,414	3,171
PHF	0.979	0.945	0.962
Grand Total	17,661	16,501	34,162
Percentage	51.7%	48.3%	

**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	5,988	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:

1. Daily volumes are averages for a 24 hour period.
2. AM Peak Period: 6 AM to 9 AM; PM Peak Period: 3 PM to 6 PM.
3. Peak **hours** are defined by the maximum hourly 2-way volume occurring during the peak **period**.
4. 'Time Begin' is the beginning time of the peak hour (24 hour military time)
5. Peak hour % is the percentage of 2-way volume appearing in the peak hour.
6. 'Dir Split' is the directional split: the percentage of the 2-way peak hour volume traveling in the peak direction.
7. 'Pk Dir' indicates the peak direction. E.g., 'E' means "Eastbound".
8. '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.
9. 'Count Type': 'Vol' refers to a regular volume tube count; 'VC' refers to a vehicle classification count.

**MRCOG Traffic Counts
Summary Statistics**

See notes, bottom of report

1/13/2023 3:47:31 PM

COGID	Route Name	Location Description	Count Date	Total Volume	Direction 1			Direction 2			AM Peak Hour				PM Peak Hour				Count Type			
					Daily Volume	Dir	Dir	Daily Volume	Dir	Dir	Volume	% Daily	Dir Split	Pk Dir	Time Begin	Volume	% Daily	Dir Split		Pk Dir	Count Quality	T
235081	WYOMING	NORTH OF INDIAN SCHOOL	5/3/2022	38,622	19,532	N	N	19,090	S	S	730	7.13	0.51	N	1645	3,470	8.98	0.53	N	T		Vol

Notes:

1. Daily volumes are averages for a 24 hour period.
2. AM Peak Period: 6 AM to 9 AM; PM Peak Period: 3 PM to 6 PM.
3. Peak **hours** are defined by the maximum hourly 2-way volume occurring during the peak **period**.
4. 'Time Begin' is the beginning time of the peak hour (24 hour military time)
5. Peak hour % is the percentage of 2-way volume appearing in the peak hour.
6. 'Dir Split' is the directional split: the percentage of the 2-way peak hour volume traveling in the peak direction.
7. 'Pk Dir' indicates the peak direction. E.g., 'E' means "Eastbound".
8. '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.
9. 'Count Type': 'Vol' refers to a regular volume tube count; 'VC' refers to a vehicle classification count.

APPENDIX D

EXISTING SYNCHRO REPORTS

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	58	48	1112	39	22	1140
Future Volume (veh/h)	58	48	1112	39	22	1140
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	68	56	1356	48	27	1390
Peak Hour Factor	0.85	0.85	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	127	113	4243	150	364	4279
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5231	179	384	5274
Grp Volume(v), veh/h	68	56	912	492	27	1390
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1838	384	1702
Q Serve(g_s), s	4.1	3.7	6.5	6.5	0.6	0.0
Cycle Q Clear(g_c), s	4.1	3.7	6.5	6.5	7.1	0.0
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	127	113	2853	1540	364	4279
V/C Ratio(X)	0.54	0.50	0.32	0.32	0.07	0.32
Avail Cap(c_a), veh/h	453	403	2853	1540	364	4279
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	0.96	0.96
Uniform Delay (d), s/veh	49.3	49.2	2.0	2.0	0.3	0.0
Incr Delay (d2), s/veh	1.3	1.3	0.3	0.5	0.4	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	1.8	1.5	1.1	1.3	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.7	50.5	2.3	2.5	0.6	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	124		1404			1417
Approach Delay, s/veh	50.6		2.4			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+I1), s				8.5	6.1	9.1
Green Ext Time (p_c), s				20.6	0.2	22.8
Intersection Summary						
HCM 6th Ctrl Delay			3.3			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023

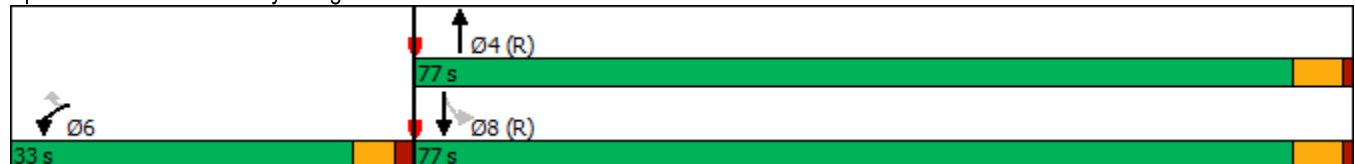


Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↰	↑↑↑	↰	↑↑↑
Traffic Volume (vph)	58	48	1112	22	1140
Future Volume (vph)	58	48	1112	22	1140
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔		↔		↔↔↔	↔	↔	↔↔↔	
Traffic Volume (vph)	1	0	0	59	0	19	0	1092	68	10	1071	1
Future Volume (vph)	1	0	0	59	0	19	0	1092	68	10	1071	1
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						0.950		
Satd. Flow (prot)	0	1770	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.950		0.755						0.178		
Satd. Flow (perm)	0	1770	0	1406	0	1583	0	5085	1583	332	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			64			
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	0.78	0.78	0.78	0.84	0.84	0.84	0.82	0.82	0.82
Adj. Flow (vph)	4	0	0	76	0	24	0	1300	81	12	1306	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	76	0	24	0	1300	81	12	1307	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20		20		100	20	20	100	
Trailing Detector (ft)	0	0		0		0		0	0	0	0	
Detector 1 Position(ft)	0	0		0		0		0	0	0	0	
Detector 1 Size(ft)	20	6		20		20		6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1 2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		10.9		10.9		10.9		74.5	74.5	88.9	93.1	
Actuated g/C Ratio		0.10		0.10		0.10		0.68	0.68	0.81	0.85	
v/c Ratio		0.02		0.55		0.12		0.38	0.07	0.03	0.30	
Control Delay		43.0		61.3		2.7		9.6	3.6	2.6	2.6	
Queue Delay		0.0		0.0		0.0		0.2	0.0	0.0	0.0	
Total Delay		43.0		61.3		2.7		9.7	3.6	2.6	2.6	
LOS		D		E		A		A	A	A	A	
Approach Delay		43.0			47.2			9.4			2.6	
Approach LOS		D			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: 0.55												
Intersection Signal Delay: 7.6	Intersection LOS: A											
Intersection Capacity Utilization 48.6%	ICU Level of Service A											
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	66	0	0	79	9	0	0	0	31	0	22
Future Vol, veh/h	5	66	0	0	79	9	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	100	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	86	86	86	25	25	25	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	96	0	0	92	10	0	0	0	49	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	102	0	0	96	0	0	225	212	96	207	207	97
Stage 1	-	-	-	-	-	-	110	110	-	97	97	-
Stage 2	-	-	-	-	-	-	115	102	-	110	110	-
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	-	-	1498	-	-	730	685	960	751	690	959
Stage 1	-	-	-	-	-	-	895	804	-	910	815	-
Stage 2	-	-	-	-	-	-	890	811	-	895	804	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1490	-	-	1498	-	-	701	682	960	748	687	959
Mov Cap-2 Maneuver	-	-	-	-	-	-	701	682	-	748	687	-
Stage 1	-	-	-	-	-	-	891	800	-	905	815	-
Stage 2	-	-	-	-	-	-	858	811	-	891	800	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	0	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1490	-	-	1498	-	-	823
HCM Lane V/C Ratio	-	0.005	-	-	-	-	-	0.102
HCM Control Delay (s)	0	7.4	-	-	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰↱↲		↰	↰↱↲
Traffic Volume (veh/h)	127	47	1714	82	42	1367
Future Volume (veh/h)	127	47	1714	82	42	1367
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	151	56	1823	87	46	1486
Peak Hour Factor	0.84	0.84	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	181	161	4069	194	227	4161
Arrive On Green	0.10	0.10	0.81	0.81	1.00	1.00
Sat Flow, veh/h	1781	1585	5162	238	235	5274
Grp Volume(v), veh/h	151	56	1242	668	46	1486
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1828	235	1702
Q Serve(g_s), s	10.0	3.9	12.8	12.8	4.0	0.0
Cycle Q Clear(g_c), s	10.0	3.9	12.8	12.8	16.8	0.0
Prop In Lane	1.00	1.00		0.13	1.00	
Lane Grp Cap(c), veh/h	181	161	2774	1489	227	4161
V/C Ratio(X)	0.83	0.35	0.45	0.45	0.20	0.36
Avail Cap(c_a), veh/h	371	330	2774	1489	227	4161
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	0.91	0.91
Uniform Delay (d), s/veh	52.9	50.2	3.2	3.2	1.1	0.0
Incr Delay (d2), s/veh	3.8	0.5	0.5	1.0	1.8	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	4.7	1.6	3.0	3.4	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.7	50.7	3.8	4.2	2.9	0.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	207		1910			1532
Approach Delay, s/veh	55.0		3.9			0.3
Approach LOS	E		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			102.8		17.2	102.8
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			14.8		12.0	18.8
Green Ext Time (p_c), s			36.7		0.2	28.4
Intersection Summary						
HCM 6th Ctrl Delay			5.3			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

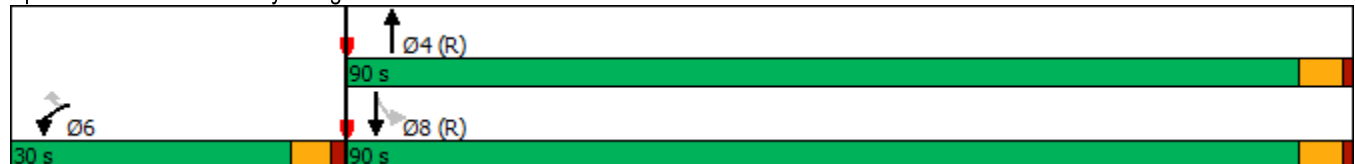
02/07/2023

	↖	↗	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑↑↑	↘	↑↑↑
Traffic Volume (vph)	127	47	1714	42	1367
Future Volume (vph)	127	47	1714	42	1367
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	90.0	90.0	90.0
Total Split (%)	25.0%	25.0%	75.0%	75.0%	75.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 31.2 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	1	197	0	94	0	1553	208	29	1206	2
Future Volume (vph)	3	0	1	197	0	94	0	1553	208	29	1206	2
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		0.963				0.850			0.850			
Flt Protected		0.965		0.950						0.950		
Satd. Flow (prot)	0	1731	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.965		0.750						0.102		
Satd. Flow (perm)	0	1731	0	1397	0	1583	0	5085	1583	190	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				84			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	0.38	0.38	0.38	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	8	0	3	210	0	100	0	1618	217	32	1311	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	210	0	100	0	1618	217	32	1313	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20		20		100	20	20		100
Trailing Detector (ft)	0	0		0		0		0	0	0		0
Detector 1 Position(ft)	0	0		0		0		0	0	0		0
Detector 1 Size(ft)	20	6		20		20		6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94						94				94
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt		NA
Protected Phases		4						2		1		1 2
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	36.0	36.0		36.0		36.0		69.6	69.6	14.4		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	30.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		22.2		22.2		22.2		69.3	69.3	84.8	88.3	
Actuated g/C Ratio		0.18		0.18		0.18		0.58	0.58	0.71	0.74	
v/c Ratio		0.03		0.81		0.28		0.55	0.22	0.10	0.35	
Control Delay		0.2		69.8		12.8		18.2	8.0	6.3	6.5	
Queue Delay		0.0		0.0		0.0		0.7	0.0	0.0	0.0	
Total Delay		0.2		69.8		12.8		18.9	8.0	6.3	6.5	
LOS		A		E		B		B	A	A	A	
Approach Delay		0.3			51.4			17.6			6.5	
Approach LOS		A			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: 70												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.81												
Intersection Signal Delay: 16.3				Intersection LOS: B								
Intersection Capacity Utilization 57.5%				ICU Level of Service B								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	114	0	0	131	22	13	0	16	91	0	48
Future Vol, veh/h	14	114	0	0	131	22	13	0	16	91	0	48
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	100	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	25	25	25	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	137	0	0	166	28	52	0	64	96	0	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	194	0	0	137	0	0	377	365	137	383	351	180
Stage 1	-	-	-	-	-	-	171	171	-	180	180	-
Stage 2	-	-	-	-	-	-	206	194	-	203	171	-
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	1379	-	-	1447	-	-	580	563	911	575	573	863
Stage 1	-	-	-	-	-	-	831	757	-	822	750	-
Stage 2	-	-	-	-	-	-	796	740	-	799	757	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1379	-	-	1447	-	-	541	556	911	530	566	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	541	556	-	530	566	-
Stage 1	-	-	-	-	-	-	821	748	-	812	750	-
Stage 2	-	-	-	-	-	-	749	740	-	734	748	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	11.2	12.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	1379	-	-	1447	-	-	611
HCM Lane V/C Ratio	0.166	0.012	-	-	-	-	-	0.239
HCM Control Delay (s)	11.2	7.6	-	-	0	-	-	12.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.9

APPENDIX E

TRIP GENERATION

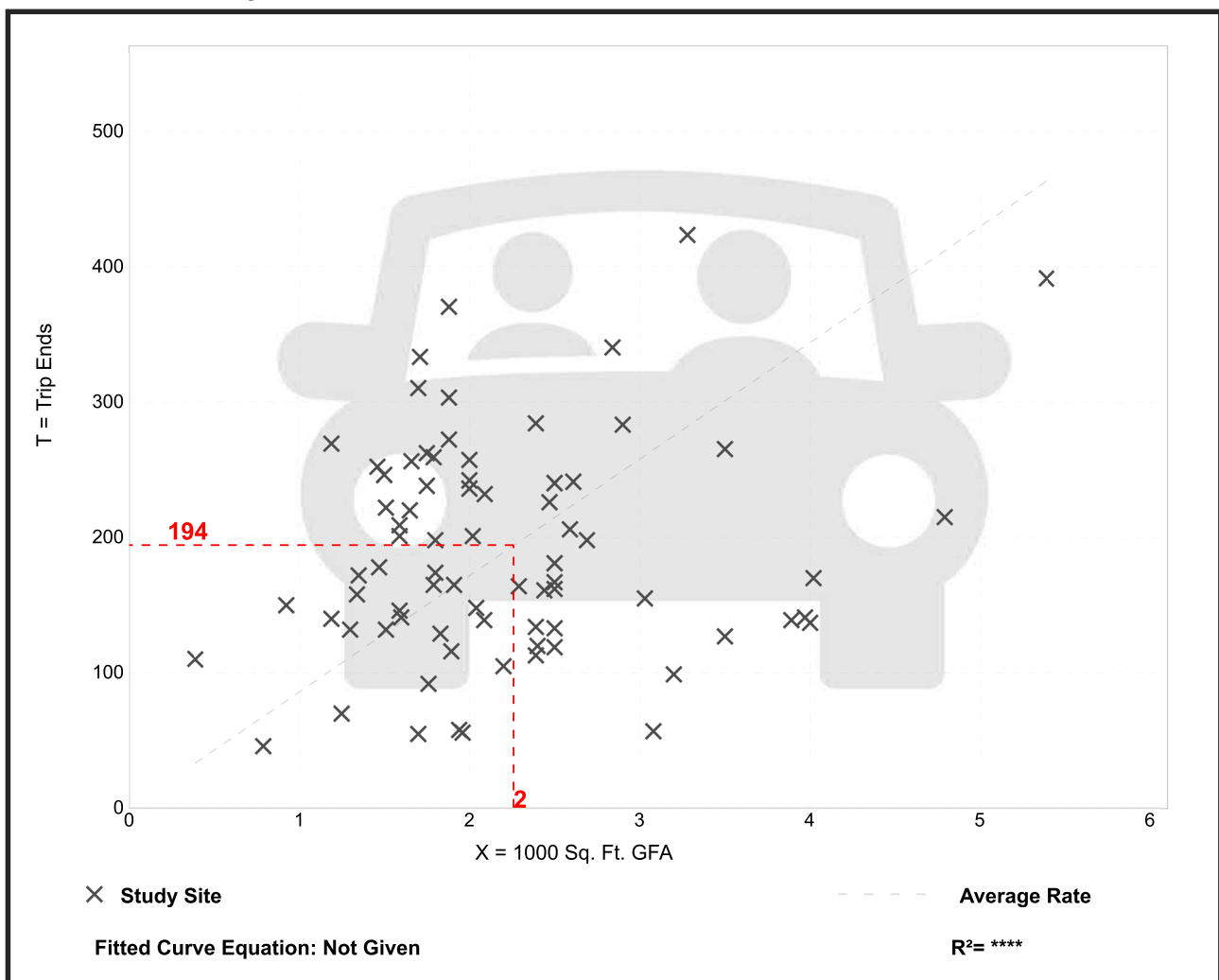
Coffee/Donut Shop with Drive-Through Window (937)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 78
 Avg. 1000 Sq. Ft. GFA: 2
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
85.88	18.51 - 282.05	44.92

Data Plot and Equation



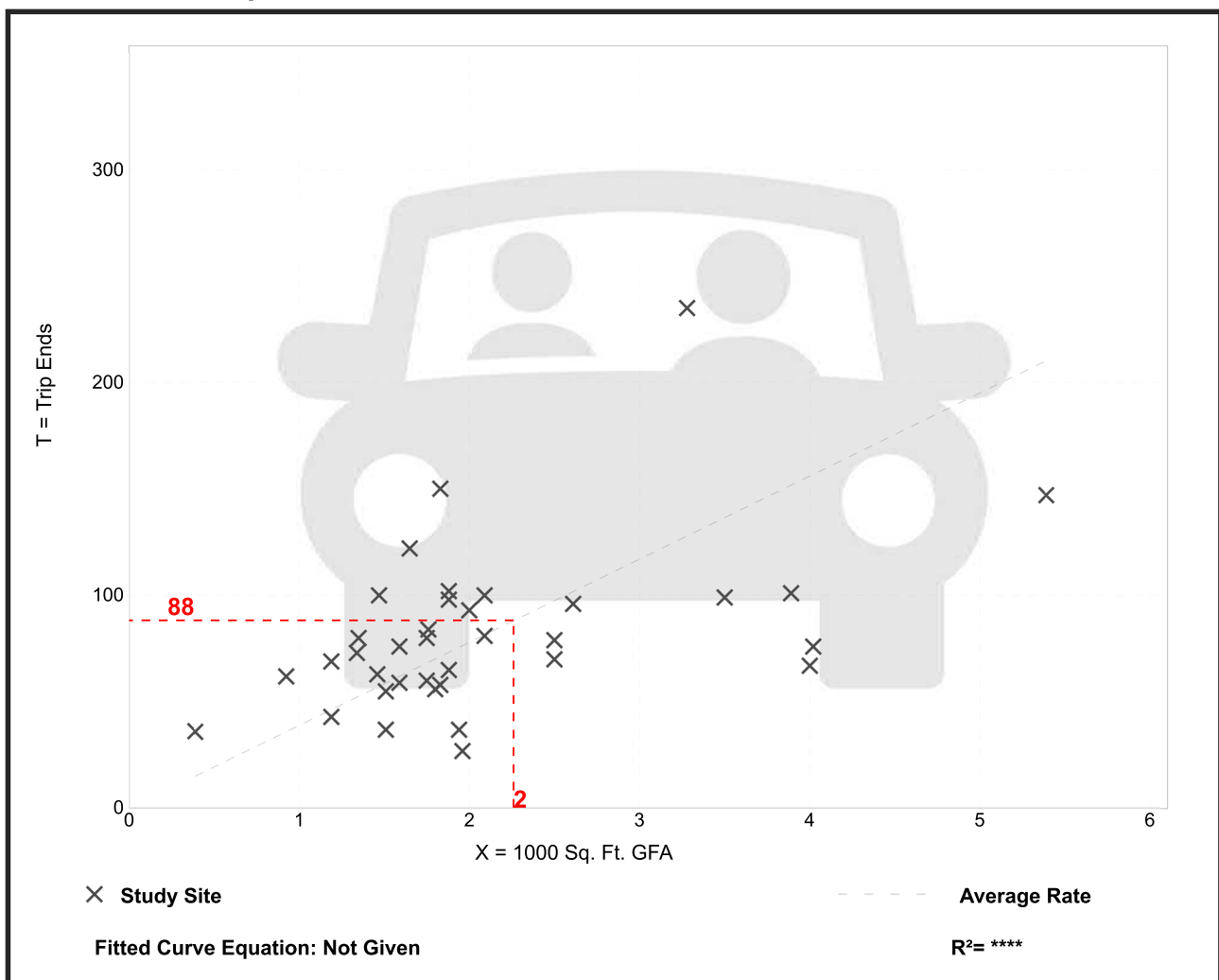
Coffee/Donut Shop with Drive-Through Window (937)

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: 36
 Avg. 1000 Sq. Ft. GFA: 2
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
38.99	13.78 - 92.31	17.79

Data Plot and Equation



Coffee/Donut Shop with Drive-Through Window (937)

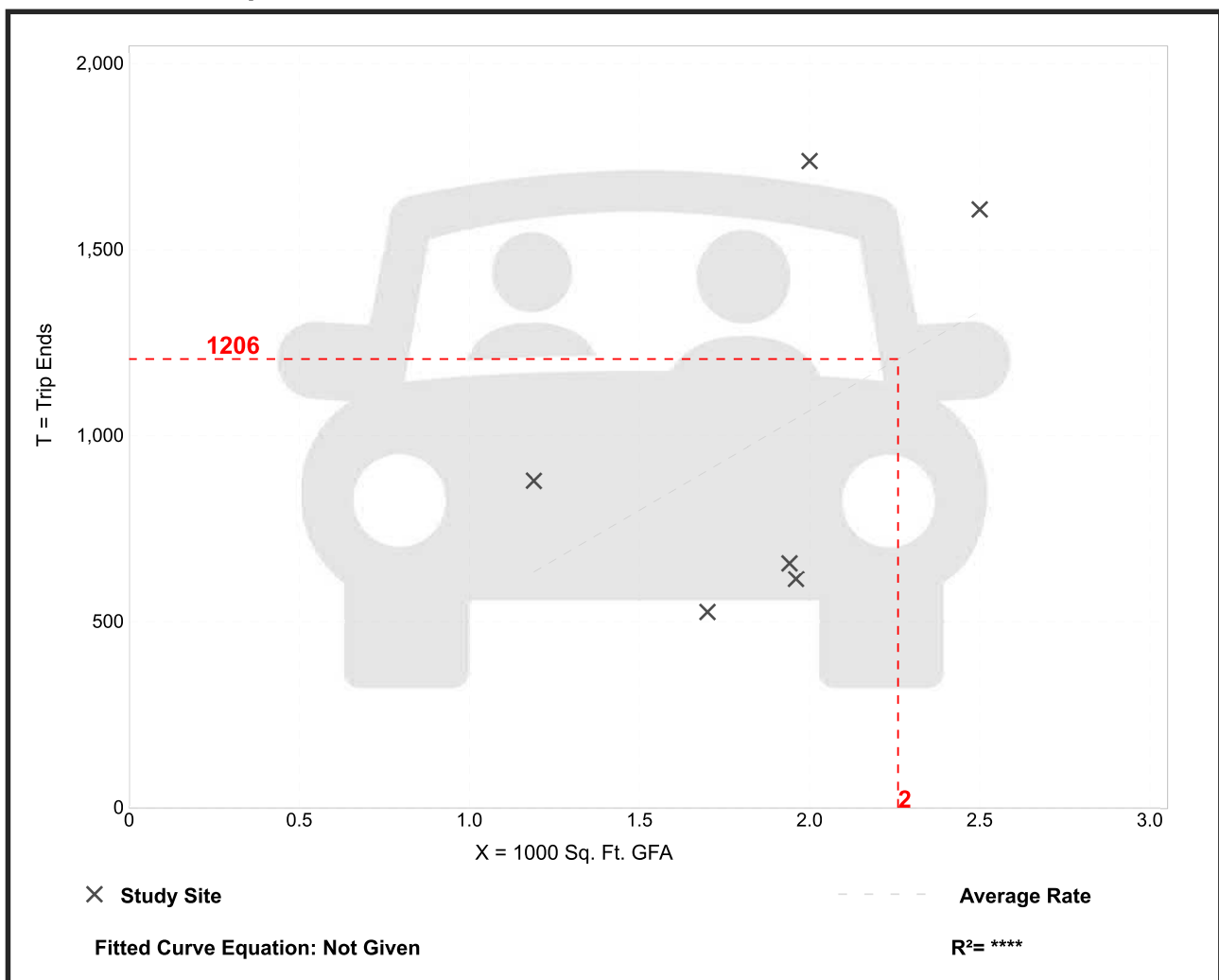
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
533.57	309.41 - 869.00	243.65

Data Plot and Equation



APPENDIX F

TRIP DISTRIBUTION MAP

APPENDIX G

FAST-FOOD RESTAURANT TRIP ASSIGNMENT

APPENDIX H

BACKGROUND TRAFFIC SYNCHRO REPORTS

2024 ANALYSIS YEAR

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	59	48	1123	39	22	1151
Future Volume (veh/h)	59	48	1123	39	22	1151
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	69	56	1370	48	27	1404
Peak Hour Factor	0.85	0.85	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	127	113	4244	149	360	4279
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5233	177	379	5274
Grp Volume(v), veh/h	69	56	921	497	27	1404
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1838	379	1702
Q Serve(g_s), s	4.1	3.7	6.6	6.6	0.6	0.0
Cycle Q Clear(g_c), s	4.1	3.7	6.6	6.6	7.2	0.0
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	127	113	2852	1541	360	4279
V/C Ratio(X)	0.54	0.50	0.32	0.32	0.08	0.33
Avail Cap(c_a), veh/h	453	403	2852	1541	360	4279
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	0.96	0.96
Uniform Delay (d), s/veh	49.4	49.2	2.0	2.0	0.3	0.0
Incr Delay (d2), s/veh	1.4	1.3	0.3	0.6	0.4	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	1.9	1.5	1.1	1.3	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.7	50.4	2.3	2.5	0.6	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	125		1418			1431
Approach Delay, s/veh	50.6		2.4			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+I1), s				8.6	6.1	9.2
Green Ext Time (p_c), s				21.0	0.2	23.2
Intersection Summary						
HCM 6th Ctrl Delay			3.4			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↰	↑↑↑	↰	↑↑↑
Traffic Volume (vph)	59	48	1123	22	1151
Future Volume (vph)	59	48	1123	22	1151
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110

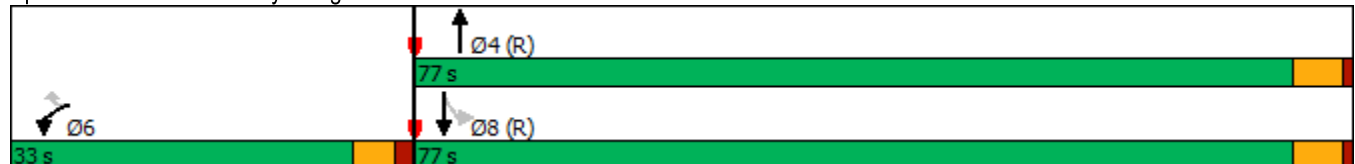
Actuated Cycle Length: 110

Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	60	0	19	0	1103	69	10	1082	1
Future Volume (vph)	1	0	0	60	0	19	0	1103	69	10	1082	1
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						0.950		
Satd. Flow (prot)	0	1770	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.950		0.755						0.175		
Satd. Flow (perm)	0	1770	0	1406	0	1583	0	5085	1583	326	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			64			
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	0.78	0.78	0.78	0.84	0.84	0.84	0.82	0.82	0.82
Adj. Flow (vph)	4	0	0	77	0	24	0	1313	82	12	1320	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	77	0	24	0	1313	82	12	1321	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20		20		100	20	20		100
Trailing Detector (ft)	0	0		0		0		0	0	0		0
Detector 1 Position(ft)	0	0		0		0		0	0	0		0
Detector 1 Size(ft)	20	6		20		20		6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94						94				94
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt		NA
Protected Phases		4						2		1		1 2
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		10.9		10.9		10.9		74.3	74.3	88.9	93.1	
Actuated g/C Ratio		0.10		0.10		0.10		0.68	0.68	0.81	0.85	
v/c Ratio		0.02		0.55		0.12		0.38	0.08	0.03	0.31	
Control Delay		43.0		61.5		2.7		9.7	3.7	2.6	2.7	
Queue Delay		0.0		0.0		0.0		0.2	0.0	0.0	0.0	
Total Delay		43.0		61.5		2.7		9.9	3.7	2.6	2.7	
LOS		D		E		A		A	A	A	A	
Approach Delay		43.0			47.5			9.5			2.7	
Approach LOS		D			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: 0.55												
Intersection Signal Delay: 7.7				Intersection LOS: A								
Intersection Capacity Utilization 48.8%				ICU Level of Service A								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		↕
Traffic Vol, veh/h	5	67	0	0	80	9	0	0	0	31	0	22
Future Vol, veh/h	5	67	0	0	80	9	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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	86	86	86	25	25	25	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	97	0	0	93	10	0	0	0	49	0	35
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	97	0	0	227	214	97	209	-	98
Stage 1	-	-	-	-	-	-	111	111	-	98	-	-
Stage 2	-	-	-	-	-	-	116	103	-	111	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1489	-	-	1496	-	-	728	684	959	745	0	958
Stage 1	-	-	-	-	-	-	894	804	-	908	0	-
Stage 2	-	-	-	-	-	-	889	810	-	894	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1489	-	-	1496	-	-	699	681	959	745	-	958
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	681	-	745	-	-
Stage 1	-	-	-	-	-	-	890	800	-	903	-	-
Stage 2	-	-	-	-	-	-	857	810	-	890	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0			0			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1489	-	-	1496	-	-	745	958			
HCM Lane V/C Ratio	-	0.005	-	-	-	-	-	0.066	0.036			
HCM Control Delay (s)	0	7.4	0	-	0	-	-	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 Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	147	50	1740	104	45	1390
Future Volume (veh/h)	147	50	1740	104	45	1390
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	175	60	1851	111	49	1511
Peak Hour Factor	0.84	0.84	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	208	185	3902	233	214	4044
Arrive On Green	0.12	0.12	0.79	0.79	1.00	1.00
Sat Flow, veh/h	1781	1585	5095	295	223	5274
Grp Volume(v), veh/h	175	60	1278	684	49	1511
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1817	223	1702
Q Serve(g_s), s	10.6	3.8	13.7	13.8	5.3	0.0
Cycle Q Clear(g_c), s	10.6	3.8	13.7	13.8	19.1	0.0
Prop In Lane	1.00	1.00		0.16	1.00	
Lane Grp Cap(c), veh/h	208	185	2696	1439	214	4044
V/C Ratio(X)	0.84	0.32	0.47	0.48	0.23	0.37
Avail Cap(c_a), veh/h	453	403	2696	1439	214	4044
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	0.91	0.91
Uniform Delay (d), s/veh	47.6	44.6	3.8	3.8	1.5	0.0
Incr Delay (d2), s/veh	3.5	0.4	0.6	1.1	2.2	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	4.9	1.5	3.3	3.8	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.0	44.9	4.4	4.9	3.8	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	235		1962			1560
Approach Delay, s/veh	49.5		4.6			0.4
Approach LOS	D		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			92.1		17.9	92.1
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			15.8		12.6	21.1
Green Ext Time (p_c), s			34.1		0.3	26.4
Intersection Summary						
HCM 6th Ctrl Delay			5.6			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

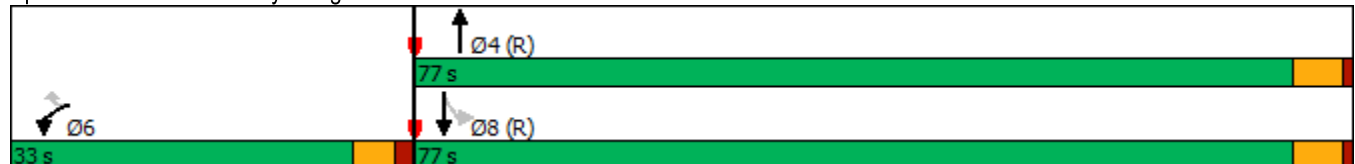
02/07/2023

	↖	↗	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑↑↑	↘	↓↓↓
Traffic Volume (vph)	147	50	1740	45	1390
Future Volume (vph)	147	50	1740	45	1390
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	1	208	0	117	0	1572	219	53	1221	2
Future Volume (vph)	3	0	1	208	0	117	0	1572	219	53	1221	2
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		0.963				0.850			0.850			
Flt Protected		0.965		0.950						0.950		
Satd. Flow (prot)	0	1731	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.965		0.750						0.097		
Satd. Flow (perm)	0	1731	0	1397	0	1583	0	5085	1583	181	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55				107			134			
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	0.38	0.38	0.38	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	8	0	3	221	0	124	0	1638	228	58	1327	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	221	0	124	0	1638	228	58	1329	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	1	2		1		1		2	1	1	2	
Detector Template	Left	Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20		20		100	20	20	100	
Trailing Detector (ft)	0	0		0		0		0	0	0	0	
Detector 1 Position(ft)	0	0		0		0		0	0	0	0	
Detector 1 Size(ft)	20	6		20		20		6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		21.0		21.0		21.0		62.1	62.1	76.0	79.5	
Actuated g/C Ratio		0.19		0.19		0.19		0.56	0.56	0.69	0.72	
v/c Ratio		0.03		0.83		0.32		0.57	0.24	0.19	0.36	
Control Delay		0.2		66.8		11.2		17.7	7.5	7.0	6.5	
Queue Delay		0.0		0.0		0.0		0.4	0.0	0.0	0.0	
Total Delay		0.2		66.8		11.2		18.2	7.5	7.0	6.5	
LOS		A		E		B		B	A	A	A	
Approach Delay		0.3			46.8			16.9			6.6	
Approach LOS		A			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: 0.83												
Intersection Signal Delay: 15.7				Intersection LOS: B								
Intersection Capacity Utilization 58.7%				ICU Level of Service B								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		↕
Traffic Vol, veh/h	38	115	0	0	132	25	13	0	16	95	0	70
Future Vol, veh/h	38	115	0	0	132	25	13	0	16	95	0	70
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	25	25	25	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	139	0	0	167	32	52	0	64	100	0	74
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	199	0	0	139	0	0	451	430	139	446	-	183
Stage 1	-	-	-	-	-	-	231	231	-	183	-	-
Stage 2	-	-	-	-	-	-	220	199	-	263	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1373	-	-	1445	-	-	519	518	909	523	0	859
Stage 1	-	-	-	-	-	-	772	713	-	819	0	-
Stage 2	-	-	-	-	-	-	782	736	-	742	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1373	-	-	1445	-	-	461	499	909	473	-	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	461	499	-	473	-	-
Stage 1	-	-	-	-	-	-	744	687	-	790	-	-
Stage 2	-	-	-	-	-	-	715	736	-	665	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0			12			12.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	633	1373	-	-	1445	-	-	473	859			
HCM Lane V/C Ratio	0.183	0.033	-	-	-	-	-	0.211	0.086			
HCM Control Delay (s)	12	7.7	0	-	0	-	-	14.6	9.6			
HCM Lane LOS	B	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0	-	-	0.8	0.3			

2034 ANALYSIS YEAR

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	54	1241	44	25	1272
Future Volume (veh/h)	65	54	1241	44	25	1272
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	76	64	1513	54	30	1551
Peak Hour Factor	0.85	0.85	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	128	114	4238	151	317	4276
Arrive On Green	0.07	0.07	0.84	0.84	1.00	1.00
Sat Flow, veh/h	1781	1585	5230	181	328	5274
Grp Volume(v), veh/h	76	64	1018	549	30	1551
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1838	328	1702
Q Serve(g_s), s	4.6	4.3	7.6	7.6	0.9	0.0
Cycle Q Clear(g_c), s	4.6	4.3	7.6	7.6	8.6	0.0
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	128	114	2850	1539	317	4276
V/C Ratio(X)	0.59	0.56	0.36	0.36	0.09	0.36
Avail Cap(c_a), veh/h	453	403	2850	1539	317	4276
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	49.5	49.4	2.1	2.1	0.4	0.0
Incr Delay (d2), s/veh	1.6	1.6	0.4	0.6	0.6	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	2.1	1.8	1.3	1.5	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.2	51.0	2.4	2.7	0.9	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	140		1567			1581
Approach Delay, s/veh	51.1		2.5			0.2
Approach LOS	D		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			97.1		12.9	97.1
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			9.6		6.6	10.6
Green Ext Time (p_c), s			24.8		0.2	27.4
Intersection Summary						
HCM 6th Ctrl Delay			3.5			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↰	↑↑↑	↰	↑↑↑
Traffic Volume (vph)	65	54	1241	25	1272
Future Volume (vph)	65	54	1241	25	1272
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

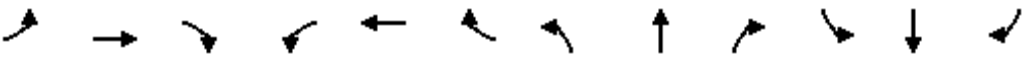
Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔		↔		↑↑↑	↔	↔	↑↑↑	
Traffic Volume (vph)	1	0	0	66	0	21	0	1218	76	11	1195	1
Future Volume (vph)	1	0	0	66	0	21	0	1218	76	11	1195	1
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						0.950		
Satd. Flow (prot)	0	1770	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.950		0.755						0.143		
Satd. Flow (perm)	0	1770	0	1406	0	1583	0	5085	1583	266	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						55			64			
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	0.78	0.78	0.78	0.84	0.84	0.84	0.82	0.82	0.82
Adj. Flow (vph)	4	0	0	85	0	27	0	1450	90	13	1457	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	85	0	27	0	1450	90	13	1458	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20		20		100	20	20		100
Trailing Detector (ft)	0	0		0		0		0	0	0		0
Detector 1 Position(ft)	0	0		0		0		0	0	0		0
Detector 1 Size(ft)	20	6		20		20		6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94						94				94
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt		NA
Protected Phases		4						2		1		1 2
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1 2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		11.5		11.5		11.5		72.0	72.0	88.3	92.5	
Actuated g/C Ratio		0.10		0.10		0.10		0.65	0.65	0.80	0.84	
v/c Ratio		0.02		0.58		0.13		0.44	0.09	0.03	0.34	
Control Delay		42.0		62.0		4.0		11.2	4.3	2.8	3.0	
Queue Delay		0.0		0.0		0.0		0.2	0.0	0.0	0.0	
Total Delay		42.0		62.0		4.0		11.4	4.3	2.8	3.0	
LOS		D		E		A		B	A	A	A	
Approach Delay		42.0			48.0			11.0			3.0	
Approach LOS		D			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: 0.58												
Intersection Signal Delay: 8.6	Intersection LOS: A											
Intersection Capacity Utilization 51.0%	ICU Level of Service A											
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		↕
Traffic Vol, veh/h	6	74	0	0	88	10	0	0	0	35	0	25
Future Vol, veh/h	6	74	0	0	88	10	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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	86	86	86	25	25	25	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	107	0	0	102	12	0	0	0	56	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	114	0	0	107	0	0	253	239	107	233	-	108
Stage 1	-	-	-	-	-	-	125	125	-	108	-	-
Stage 2	-	-	-	-	-	-	128	114	-	125	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1475	-	-	1484	-	-	700	662	947	722	0	946
Stage 1	-	-	-	-	-	-	879	792	-	897	0	-
Stage 2	-	-	-	-	-	-	876	801	-	879	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1475	-	-	1484	-	-	668	658	947	718	-	946
Mov Cap-2 Maneuver	-	-	-	-	-	-	668	658	-	718	-	-
Stage 1	-	-	-	-	-	-	874	787	-	892	-	-
Stage 2	-	-	-	-	-	-	839	801	-	874	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0			0			9.8		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1475	-	-	1484	-	-	718	946			
HCM Lane V/C Ratio	-	0.006	-	-	-	-	-	0.077	0.042			
HCM Control Delay (s)	0	7.5	0	-	0	-	-	10.4	9			
HCM Lane LOS	A	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3	0.1			

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	161	55	1921	112	50	1534
Future Volume (veh/h)	161	55	1921	112	50	1534
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	192	65	2044	119	54	1667
Peak Hour Factor	0.84	0.84	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	223	198	3908	227	178	4042
Arrive On Green	0.13	0.13	0.79	0.79	1.00	1.00
Sat Flow, veh/h	1781	1585	5105	286	183	5274
Grp Volume(v), veh/h	192	65	1407	756	54	1667
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1819	183	1702
Q Serve(g_s), s	12.7	4.5	17.6	17.8	10.5	0.0
Cycle Q Clear(g_c), s	12.7	4.5	17.6	17.8	28.3	0.0
Prop In Lane	1.00	1.00		0.16	1.00	
Lane Grp Cap(c), veh/h	223	198	2695	1440	178	4042
V/C Ratio(X)	0.86	0.33	0.52	0.53	0.30	0.41
Avail Cap(c_a), veh/h	430	383	2695	1440	178	4042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.88	0.88
Uniform Delay (d), s/veh	51.5	47.9	4.4	4.5	2.7	0.0
Incr Delay (d2), s/veh	3.8	0.4	0.7	1.4	3.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	1.8	4.6	5.3	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	55.3	48.3	5.2	5.8	6.5	0.3
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	257		2163			1721
Approach Delay, s/veh	53.5		5.4			0.5
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				100.0	20.0	100.0
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				81.0	29.0	81.0
Max Q Clear Time (g_c+l1), s				19.8	14.7	30.3
Green Ext Time (p_c), s				41.2	0.3	30.9
Intersection Summary						
HCM 6th Ctrl Delay			6.3			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↑↑	↘	↑↑↑
Traffic Volume (vph)	161	55	1921	50	1534
Future Volume (vph)	161	55	1921	50	1534
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	34.0	34.0	86.0	86.0	86.0
Total Split (%)	28.3%	28.3%	71.7%	71.7%	71.7%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120

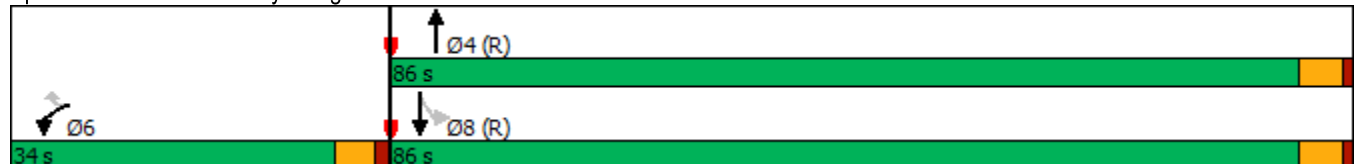
Actuated Cycle Length: 120

Offset: 31.2 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔		↔		↑↑↑	↔	↔	↑↑↑	
Traffic Volume (vph)	3	0	1	229	0	127	0	1736	241	56	1348	2
Future Volume (vph)	3	0	1	229	0	127	0	1736	241	56	1348	2
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		0.963				0.850			0.850			
Flt Protected		0.965		0.950						0.950		
Satd. Flow (prot)	0	1731	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.965		0.750						0.072		
Satd. Flow (perm)	0	1731	0	1397	0	1583	0	5085	1583	134	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				97			123			
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	0.38	0.38	0.38	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	8	0	3	244	0	135	0	1808	251	61	1465	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	244	0	135	0	1808	251	61	1467	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20		20		100	20	20	100	
Trailing Detector (ft)	0	0		0		0		0	0	0	0	
Detector 1 Position(ft)	0	0		0		0		0	0	0	0	
Detector 1 Size(ft)	20	6		20		20		6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1 2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	36.0	36.0		36.0		36.0		69.6	69.6	14.4		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	30.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		24.6		24.6		24.6		67.0	67.0	82.4	85.9	
Actuated g/C Ratio		0.20		0.20		0.20		0.56	0.56	0.69	0.72	
v/c Ratio		0.03		0.86		0.34		0.64	0.27	0.22	0.40	
Control Delay		0.2		71.9		15.0		21.8	10.5	8.1	7.7	
Queue Delay		0.0		0.0		0.0		1.6	0.5	0.0	0.0	
Total Delay		0.2		71.9		15.0		23.4	11.0	8.1	7.7	
LOS		A		E		B		C	B	A	A	
Approach Delay		0.3			51.6			21.8			7.7	
Approach LOS		A			D			C			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: 0.86

Intersection Signal Delay: 19.2

Intersection LOS: B

Intersection Capacity Utilization 63.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔		↔		↔
Traffic Vol, veh/h	40	127	0	0	146	28	15	0	18	105	0	76
Future Vol, veh/h	40	127	0	0	146	28	15	0	18	105	0	76
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	25	25	25	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	153	0	0	185	35	60	0	72	111	0	80
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	153	0	0	492	469	153	488	-	203
Stage 1	-	-	-	-	-	-	249	249	-	203	-	-
Stage 2	-	-	-	-	-	-	243	220	-	285	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1349	-	-	1428	-	-	487	492	893	490	0	838
Stage 1	-	-	-	-	-	-	755	701	-	799	0	-
Stage 2	-	-	-	-	-	-	761	721	-	722	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1349	-	-	1428	-	-	428	473	893	437	-	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	473	-	437	-	-
Stage 1	-	-	-	-	-	-	726	674	-	768	-	-
Stage 2	-	-	-	-	-	-	688	721	-	638	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0			12.7			13.4		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	598	1349	-	-	1428	-	-	437	838			
HCM Lane V/C Ratio	0.221	0.036	-	-	-	-	-	0.253	0.095			
HCM Control Delay (s)	12.7	7.8	0	-	0	-	-	16	9.7			
HCM Lane LOS	B	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0	-	-	1	0.3			

APPENDIX I

TOTAL TRAFFIC SYNCHRO REPORTS

2024 ANALYSIS YEAR

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	107	48	1123	89	22	1151
Future Volume (veh/h)	107	48	1123	89	22	1151
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	126	56	1370	109	27	1404
Peak Hour Factor	0.85	0.85	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	159	142	3953	314	333	4186
Arrive On Green	0.09	0.09	0.82	0.82	1.00	1.00
Sat Flow, veh/h	1781	1585	4990	384	357	5274
Grp Volume(v), veh/h	126	56	967	512	27	1404
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1801	357	1702
Q Serve(g_s), s	7.6	3.7	7.9	7.9	0.8	0.0
Cycle Q Clear(g_c), s	7.6	3.7	7.9	7.9	8.7	0.0
Prop In Lane	1.00	1.00		0.21	1.00	
Lane Grp Cap(c), veh/h	159	142	2791	1477	333	4186
V/C Ratio(X)	0.79	0.40	0.35	0.35	0.08	0.34
Avail Cap(c_a), veh/h	453	403	2791	1477	333	4186
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	0.95	0.95
Uniform Delay (d), s/veh	49.1	47.3	2.5	2.5	0.4	0.0
Incr Delay (d2), s/veh	3.3	0.7	0.3	0.6	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	3.5	1.5	1.6	1.8	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.4	48.0	2.8	3.1	0.8	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	182		1479			1431
Approach Delay, s/veh	51.1		2.9			0.2
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				95.2	14.8	95.2
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+I1), s				9.9	9.6	10.7
Green Ext Time (p_c), s				22.6	0.2	23.1
Intersection Summary						
HCM 6th Ctrl Delay			4.5			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023

	↖	↗	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑↑↑	↘	↑↑↑
Traffic Volume (vph)	107	48	1123	22	1151
Future Volume (vph)	107	48	1123	22	1151
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110

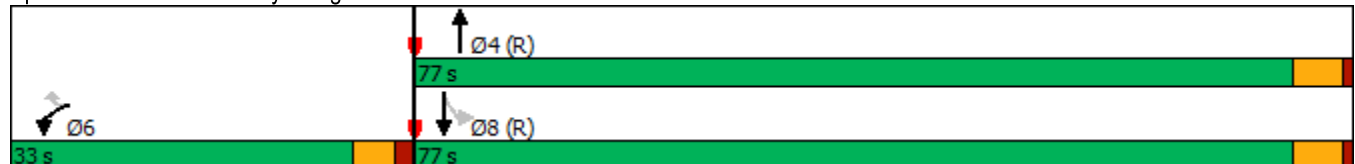
Actuated Cycle Length: 110

Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	60	0	62	0	1103	69	55	1082	1
Future Volume (vph)	1	0	0	60	0	62	0	1103	69	55	1082	1
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						0.950		
Satd. Flow (prot)	0	1770	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.950		0.755						0.171		
Satd. Flow (perm)	0	1770	0	1406	0	1583	0	5085	1583	319	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79			64			
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	0.78	0.78	0.78	0.84	0.84	0.84	0.82	0.82	0.82
Adj. Flow (vph)	4	0	0	77	0	79	0	1313	82	67	1320	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	77	0	79	0	1313	82	67	1321	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20		20		100	20	20		100
Trailing Detector (ft)	0	0		0		0		0	0	0		0
Detector 1 Position(ft)	0	0		0		0		0	0	0		0
Detector 1 Size(ft)	20	6		20		20		6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94						94				94
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt		NA
Protected Phases		4						2		1		1 2
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1 2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		10.9		10.9		10.9		70.6	70.6	86.1	89.6	
Actuated g/C Ratio		0.10		0.10		0.10		0.64	0.64	0.78	0.81	
v/c Ratio		0.02		0.55		0.35		0.40	0.08	0.15	0.32	
Control Delay		43.0		61.5		14.1		10.6	3.7	3.2	3.0	
Queue Delay		0.0		0.0		0.0		0.3	0.0	0.0	0.0	
Total Delay		43.0		61.5		14.1		10.8	3.7	3.2	3.0	
LOS		D		E		B		B	A	A	A	
Approach Delay		43.0			37.5			10.4			3.0	
Approach LOS		D			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: 0.55												
Intersection Signal Delay: 8.4	Intersection LOS: A											
Intersection Capacity Utilization 48.8%	ICU Level of Service A											
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		↕
Traffic Vol, veh/h	55	67	0	0	80	14	0	0	0	36	0	70
Future Vol, veh/h	55	67	0	0	80	14	0	0	0	36	0	70
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	86	86	86	25	25	25	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	97	0	0	93	16	0	0	0	57	0	111
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	109	0	0	97	0	0	414	366	97	358	-	101
Stage 1	-	-	-	-	-	-	257	257	-	101	-	-
Stage 2	-	-	-	-	-	-	157	109	-	257	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1481	-	-	1496	-	-	549	562	959	597	0	954
Stage 1	-	-	-	-	-	-	748	695	-	905	0	-
Stage 2	-	-	-	-	-	-	845	805	-	748	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1481	-	-	1496	-	-	464	530	959	571	-	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	464	530	-	571	-	-
Stage 1	-	-	-	-	-	-	705	655	-	853	-	-
Stage 2	-	-	-	-	-	-	747	805	-	705	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.4			0			0			10.2		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1481	-	-	1496	-	-	571	954			
HCM Lane V/C Ratio	-	0.054	-	-	-	-	-	0.1	0.116			
HCM Control Delay (s)	0	7.6	0	-	0	-	-	12	9.3			
HCM Lane LOS	A	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	0.3	0.4			

HCM 6th TWSC

4: Driveway A & Proposed Site Access

02/07/2023

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	0	53	0	0	0	55	14	0	0	54	45
Future Vol, veh/h	43	0	53	0	0	0	55	14	0	0	54	45
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	47	0	58	0	0	0	77	20	0	0	74	62
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	279	279	105	308	310	20	136	0	0	20	0	0
Stage 1	105	105	-	174	174	-	-	-	-	-	-	-
Stage 2	174	174	-	134	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	673	629	949	644	605	1058	1448	-	-	1596	-	-
Stage 1	901	808	-	828	755	-	-	-	-	-	-	-
Stage 2	828	755	-	869	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	645	595	949	580	572	1058	1448	-	-	1596	-	-
Mov Cap-2 Maneuver	645	595	-	580	572	-	-	-	-	-	-	-
Stage 1	852	808	-	783	714	-	-	-	-	-	-	-
Stage 2	783	714	-	816	784	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	10.3		0		6.1		0					
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1448	-	-	784	-	1596	-	-				
HCM Lane V/C Ratio	0.053	-	-	0.133	-	-	-	-				
HCM Control Delay (s)	7.6	0	-	10.3	0	0	-	-				
HCM Lane LOS	A	A	-	B	A	A	-	-				
HCM 95th %tile Q(veh)	0.2	-	-	0.5	-	0	-	-				

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↕	↱	↰	↕
Traffic Volume (veh/h)	169	50	1740	126	45	1390
Future Volume (veh/h)	169	50	1740	126	45	1390
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	201	60	1851	134	49	1511
Peak Hour Factor	0.84	0.84	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	232	206	3822	276	203	4015
Arrive On Green	0.13	0.13	0.79	0.79	1.00	1.00
Sat Flow, veh/h	1781	1585	5029	351	218	5274
Grp Volume(v), veh/h	201	60	1295	690	49	1511
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1807	218	1702
Q Serve(g_s), s	13.3	4.1	15.7	15.8	6.3	0.0
Cycle Q Clear(g_c), s	13.3	4.1	15.7	15.8	22.2	0.0
Prop In Lane	1.00	1.00		0.19	1.00	
Lane Grp Cap(c), veh/h	232	206	2677	1421	203	4015
V/C Ratio(X)	0.87	0.29	0.48	0.49	0.24	0.38
Avail Cap(c_a), veh/h	520	462	2677	1421	203	4015
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	0.91	0.91
Uniform Delay (d), s/veh	51.2	47.2	4.4	4.4	1.9	0.0
Incr Delay (d2), s/veh	3.8	0.3	0.6	1.2	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	6.2	1.6	4.2	4.7	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.9	47.5	5.0	5.6	4.4	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	261		1985			1560
Approach Delay, s/veh	53.2		5.2			0.4
Approach LOS	D		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			99.4		20.6	99.4
Change Period (Y+Rc), s			5.0		5.0	5.0
Max Green Setting (Gmax), s			75.0		35.0	75.0
Max Q Clear Time (g_c+I1), s			17.8		15.3	24.2
Green Ext Time (p_c), s			35.0		0.4	26.5
Intersection Summary						
HCM 6th Ctrl Delay			6.5			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

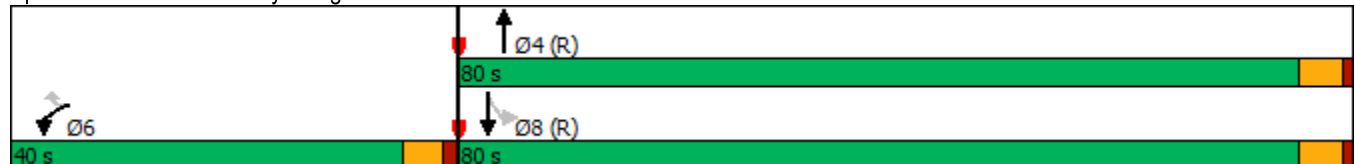
02/07/2023

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↗	↗	↑↑↑	↗	↑↑↑
Traffic Volume (vph)	169	50	1740	45	1390
Future Volume (vph)	169	50	1740	45	1390
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	40.0	40.0	80.0	80.0	80.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 31.2 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	1	208	0	137	0	1572	219	73	1221	2
Future Volume (vph)	3	0	1	208	0	137	0	1572	219	73	1221	2
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		0.963				0.850			0.850			
Flt Protected		0.965		0.950						0.950		
Satd. Flow (prot)	0	1731	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.965		0.750						0.098		
Satd. Flow (perm)	0	1731	0	1397	0	1583	0	5085	1583	183	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				116			123			
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	0.38	0.38	0.38	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	8	0	3	221	0	146	0	1638	228	79	1327	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	221	0	146	0	1638	228	79	1329	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20		20		100	20	20	100	
Trailing Detector (ft)	0	0		0		0		0	0	0	0	
Detector 1 Position(ft)	0	0		0		0		0	0	0	0	
Detector 1 Size(ft)	20	6		20		20		6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	36.0	36.0		36.0		36.0		69.6	69.6	14.4		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	30.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		23.1		23.1		23.1		68.6	68.6	83.9	87.4	
Actuated g/C Ratio		0.19		0.19		0.19		0.57	0.57	0.70	0.73	
v/c Ratio		0.03		0.82		0.37		0.56	0.24	0.25	0.36	
Control Delay		0.2		69.9		13.3		17.9	8.0	7.8	6.8	
Queue Delay		0.0		0.0		0.0		0.4	0.0	0.0	0.0	
Total Delay		0.2		69.9		13.3		18.3	8.0	7.8	6.8	
LOS		A		E		B		B	A	A	A	
Approach Delay		0.3			47.4			17.0			6.9	
Approach LOS		A			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: 70												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.82												
Intersection Signal Delay: 16.1				Intersection LOS: B								
Intersection Capacity Utilization 59.7%				ICU Level of Service B								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔		↔		↔
Traffic Vol, veh/h	60	115	0	0	132	28	13	0	16	98	0	92
Future Vol, veh/h	60	115	0	0	132	28	13	0	16	98	0	92
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	25	25	25	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	139	0	0	167	35	52	0	64	103	0	97
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	139	0	0	516	485	139	500	-	185
Stage 1	-	-	-	-	-	-	283	283	-	185	-	-
Stage 2	-	-	-	-	-	-	233	202	-	315	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1370	-	-	1445	-	-	470	482	909	481	0	857
Stage 1	-	-	-	-	-	-	724	677	-	817	0	-
Stage 2	-	-	-	-	-	-	770	734	-	696	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1370	-	-	1445	-	-	399	455	909	428	-	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	399	455	-	428	-	-
Stage 1	-	-	-	-	-	-	683	638	-	770	-	-
Stage 2	-	-	-	-	-	-	683	734	-	610	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.7			0			12.8			13		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	578	1370	-	-	1445	-	-	428	857			
HCM Lane V/C Ratio	0.201	0.053	-	-	-	-	-	0.241	0.113			
HCM Control Delay (s)	12.8	7.8	0	-	0	-	-	16.1	9.7			
HCM Lane LOS	B	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0	-	-	0.9	0.4			

HCM 6th TWSC
4: Driveway A & Proposed Site Access

02/07/2023

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	0	25	0	0	0	25	63	0	0	165	20
Future Vol, veh/h	20	0	25	0	0	0	25	63	0	0	165	20
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	22	0	27	0	0	0	28	72	0	0	181	22
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	320	320	192	334	331	72	203	0	0	72	0	0
Stage 1	192	192	-	128	128	-	-	-	-	-	-	-
Stage 2	128	128	-	206	203	-	-	-	-	-	-	-
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	633	597	850	620	588	990	1369	-	-	1528	-	-
Stage 1	810	742	-	876	790	-	-	-	-	-	-	-
Stage 2	876	790	-	796	733	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	623	584	850	591	576	990	1369	-	-	1528	-	-
Mov Cap-2 Maneuver	623	584	-	591	576	-	-	-	-	-	-	-
Stage 1	793	742	-	858	773	-	-	-	-	-	-	-
Stage 2	858	773	-	771	733	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	10.3		0		2.2		0					
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1369	-	-	732	-	1528	-	-				
HCM Lane V/C Ratio	0.021	-	-	0.067	-	-	-	-				
HCM Control Delay (s)	7.7	0	-	10.3	0	0	-	-				
HCM Lane LOS	A	A	-	B	A	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	0	-	-				

2034 ANALYSIS YEAR

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↰	↰↰↰		↰	↰↰↰
Traffic Volume (veh/h)	113	54	1241	94	25	1272
Future Volume (veh/h)	113	54	1241	94	25	1272
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	133	64	1513	115	30	1551
Peak Hour Factor	0.85	0.85	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	166	148	3948	300	292	4165
Arrive On Green	0.09	0.09	0.82	0.82	1.00	1.00
Sat Flow, veh/h	1781	1585	5009	368	309	5274
Grp Volume(v), veh/h	133	64	1064	564	30	1551
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1804	309	1702
Q Serve(g_s), s	8.0	4.2	9.2	9.2	1.2	0.0
Cycle Q Clear(g_c), s	8.0	4.2	9.2	9.2	10.5	0.0
Prop In Lane	1.00	1.00		0.20	1.00	
Lane Grp Cap(c), veh/h	166	148	2777	1472	292	4165
V/C Ratio(X)	0.80	0.43	0.38	0.38	0.10	0.37
Avail Cap(c_a), veh/h	453	403	2777	1472	292	4165
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	48.8	47.1	2.7	2.7	0.5	0.0
Incr Delay (d2), s/veh	3.3	0.7	0.4	0.8	0.7	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	3.7	1.7	1.9	2.2	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.2	47.8	3.1	3.5	1.2	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	197		1628			1581
Approach Delay, s/veh	50.8		3.2			0.3
Approach LOS	D		A			A
Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			94.7		15.3	94.7
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			11.2		10.0	12.5
Green Ext Time (p_c), s			26.4		0.3	27.1
Intersection Summary						
HCM 6th Ctrl Delay			4.6			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023

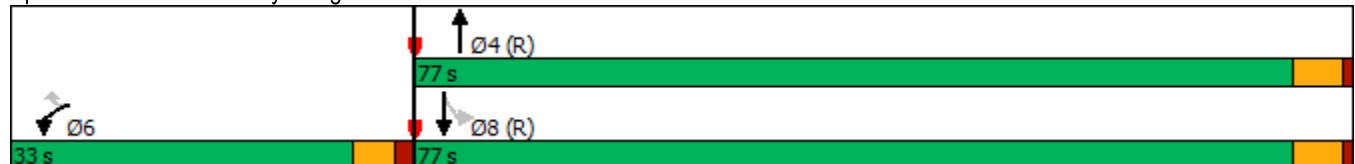


Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↰	↑↑↑	↰	↑↑↑
Traffic Volume (vph)	113	54	1241	25	1272
Future Volume (vph)	113	54	1241	25	1272
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	33.0	33.0	77.0	77.0	77.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 28.6 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	66	0	64	0	1218	76	56	1195	1
Future Volume (vph)	1	0	0	66	0	64	0	1218	76	56	1195	1
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						0.950		
Satd. Flow (prot)	0	1770	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.950		0.755						0.140		
Satd. Flow (perm)	0	1770	0	1406	0	1583	0	5085	1583	261	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						82			64			
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	0.78	0.78	0.78	0.84	0.84	0.84	0.82	0.82	0.82
Adj. Flow (vph)	4	0	0	85	0	82	0	1450	90	68	1457	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	85	0	82	0	1450	90	68	1458	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20		20		100	20	20		100
Trailing Detector (ft)	0	0		0		0		0	0	0		0
Detector 1 Position(ft)	0	0		0		0		0	0	0		0
Detector 1 Size(ft)	20	6		20		20		6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94						94				94
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt		NA
Protected Phases		4						2		1		1 2
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	33.0	33.0		33.0		33.0		63.8	63.8	13.2		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	27.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		11.5		11.5		11.5		68.3	68.3	85.5	89.0	
Actuated g/C Ratio		0.10		0.10		0.10		0.62	0.62	0.78	0.81	
v/c Ratio		0.02		0.58		0.34		0.46	0.09	0.16	0.35	
Control Delay		42.0		62.0		13.5		12.1	4.4	3.5	3.3	
Queue Delay		0.0		0.0		0.0		0.3	0.0	0.0	0.0	
Total Delay		42.0		62.0		13.5		12.4	4.4	3.5	3.3	
LOS		D		E		B		B	A	A	A	
Approach Delay		42.0			38.2			11.9			3.3	
Approach LOS		D			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: 0.58												
Intersection Signal Delay: 9.2				Intersection LOS: A								
Intersection Capacity Utilization 51.0%				ICU Level of Service A								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔		↔		↔
Traffic Vol, veh/h	56	74	0	0	88	15	0	0	0	40	0	73
Future Vol, veh/h	56	74	0	0	88	15	0	0	0	40	0	73
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	86	86	86	25	25	25	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	81	107	0	0	102	17	0	0	0	63	0	116
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	119	0	0	107	0	0	438	388	107	380	-	111
Stage 1	-	-	-	-	-	-	269	269	-	111	-	-
Stage 2	-	-	-	-	-	-	169	119	-	269	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1469	-	-	1484	-	-	529	547	947	578	0	942
Stage 1	-	-	-	-	-	-	737	687	-	894	0	-
Stage 2	-	-	-	-	-	-	833	797	-	737	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1469	-	-	1484	-	-	443	515	947	552	-	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	443	515	-	552	-	-
Stage 1	-	-	-	-	-	-	694	646	-	841	-	-
Stage 2	-	-	-	-	-	-	731	797	-	694	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.3			0			0			10.5		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	1469	-	-	1484	-	-	552	942			
HCM Lane V/C Ratio	-	0.055	-	-	-	-	-	0.115	0.123			
HCM Control Delay (s)	0	7.6	0	-	0	-	-	12.4	9.4			
HCM Lane LOS	A	A	A	-	A	-	-	B	A			
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	0.4	0.4			

HCM 6th TWSC
4: Driveway A & Proposed Site Access

02/07/2023

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	0	53	0	0	0	55	16	0	0	59	45
Future Vol, veh/h	43	0	53	0	0	0	55	16	0	0	59	45
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	47	0	58	0	0	0	77	23	0	0	81	62
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	289	289	112	318	320	23	143	0	0	23	0	0
Stage 1	112	112	-	177	177	-	-	-	-	-	-	-
Stage 2	177	177	-	141	143	-	-	-	-	-	-	-
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	663	621	941	635	597	1054	1440	-	-	1592	-	-
Stage 1	893	803	-	825	753	-	-	-	-	-	-	-
Stage 2	825	753	-	862	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	636	587	941	572	565	1054	1440	-	-	1592	-	-
Mov Cap-2 Maneuver	636	587	-	572	565	-	-	-	-	-	-	-
Stage 1	845	803	-	780	712	-	-	-	-	-	-	-
Stage 2	780	712	-	809	779	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10.4		0			5.9			0			
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1440	-	-	775	-	1592	-	-				
HCM Lane V/C Ratio	0.054	-	-	0.135	-	-	-	-				
HCM Control Delay (s)	7.6	0	-	10.4	0	0	-	-				
HCM Lane LOS	A	A	-	B	A	A	-	-				
HCM 95th %tile Q(veh)	0.2	-	-	0.5	-	0	-	-				

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd & Northeastern Blvd

02/07/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	183	55	1921	134	50	1534
Future Volume (veh/h)	183	55	1921	134	50	1534
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	218	65	2044	143	54	1667
Peak Hour Factor	0.84	0.84	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	221	3788	263	170	3968
Arrive On Green	0.14	0.14	0.78	0.78	1.00	1.00
Sat Flow, veh/h	1781	1585	5043	339	179	5274
Grp Volume(v), veh/h	218	65	1424	763	54	1667
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1809	179	1702
Q Serve(g_s), s	14.4	4.4	19.2	19.5	12.4	0.0
Cycle Q Clear(g_c), s	14.4	4.4	19.2	19.5	31.9	0.0
Prop In Lane	1.00	1.00		0.19	1.00	
Lane Grp Cap(c), veh/h	249	221	2645	1406	170	3968
V/C Ratio(X)	0.88	0.29	0.54	0.54	0.32	0.42
Avail Cap(c_a), veh/h	445	396	2645	1406	170	3968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.88	0.88
Uniform Delay (d), s/veh	50.6	46.3	5.1	5.2	3.3	0.0
Incr Delay (d2), s/veh	3.9	0.3	0.8	1.5	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	1.8	5.3	6.0	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.5	46.6	5.9	6.7	7.6	0.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	283		2187			1721
Approach Delay, s/veh	52.7		6.2			0.5
Approach LOS	D		A			A
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				98.2	21.8	98.2
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				80.0	30.0	80.0
Max Q Clear Time (g_c+l1), s				21.5	16.4	33.9
Green Ext Time (p_c), s				40.6	0.4	29.2
Intersection Summary						
HCM 6th Ctrl Delay			7.0			
HCM 6th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

Timings

1: Wyoming Blvd & Northeastern Blvd

02/07/2023

	↖	↗	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑↑↑	↘	↑↑↑
Traffic Volume (vph)	183	55	1921	50	1534
Future Volume (vph)	183	55	1921	50	1534
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	18.0	18.0	18.0
Minimum Split (s)	34.0	34.0	23.0	23.0	23.0
Total Split (s)	35.0	35.0	85.0	85.0	85.0
Total Split (%)	29.2%	29.2%	70.8%	70.8%	70.8%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120

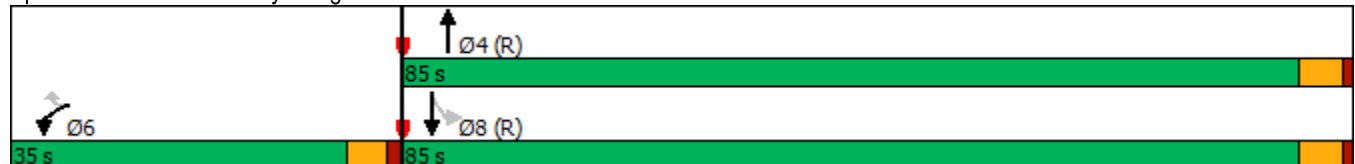
Actuated Cycle Length: 120

Offset: 31.2 (26%), Referenced to phase 4:NBT and 8:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

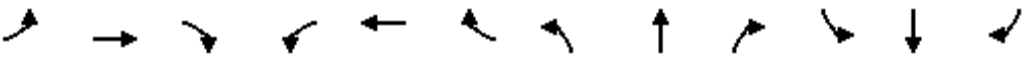
Splits and Phases: 1: Wyoming Blvd & Northeastern Blvd



Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔		↔		↑↑↑	↔	↔	↑↑↑	
Traffic Volume (vph)	3	0	1	229	0	147	0	1736	241	76	1348	2
Future Volume (vph)	3	0	1	229	0	147	0	1736	241	76	1348	2
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		0.963				0.850			0.850			
Flt Protected		0.965		0.950						0.950		
Satd. Flow (prot)	0	1731	0	1770	0	1583	0	5085	1583	1770	5085	0
Flt Permitted		0.965		0.750						0.072		
Satd. Flow (perm)	0	1731	0	1397	0	1583	0	5085	1583	134	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				113			123			
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	0.38	0.38	0.38	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	8	0	3	244	0	156	0	1808	251	83	1465	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	244	0	156	0	1808	251	83	1467	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	1	2		1		1		2	1	1		2
Detector Template	Left	Thru		Left		Right		Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20		20		100	20	20	100	
Trailing Detector (ft)	0	0		0		0		0	0	0	0	
Detector 1 Position(ft)	0	0		0		0		0	0	0	0	
Detector 1 Size(ft)	20	6		20		20		6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
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	Perm	NA		D.Pm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	1 2	
Permitted Phases	4			4		4			2	1 2		

Lanes, Volumes, Timings

2: Wyoming Blvd & Driveway B

02/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4		4		2	2	1	1	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		8.0		18.0	18.0	3.0		
Minimum Split (s)	36.0	36.0		36.0		36.0		23.0	23.0	8.0		
Total Split (s)	36.0	36.0		36.0		36.0		69.6	69.6	14.4		
Total Split (%)	30.0%	30.0%		30.0%		30.0%		58.0%	58.0%	12.0%		
Maximum Green (s)	30.0	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	4.0	3.0		
All-Red Time (s)	2.0	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		2.0		4.0	4.0	1.5		
Recall Mode	None	None		None		None		C-Max	C-Max	None		
Walk Time (s)	7.0	7.0		7.0		7.0		7.0	7.0			
Flash Dont Walk (s)	23.0	23.0		23.0		23.0		10.0	10.0			
Pedestrian Calls (#/hr)	0	0		0		0		0	0			
Act Effct Green (s)		24.6		24.6		24.6		67.0	67.0	82.4	85.9	
Actuated g/C Ratio		0.20		0.20		0.20		0.56	0.56	0.69	0.72	
v/c Ratio		0.03		0.86		0.38		0.64	0.27	0.30	0.40	
Control Delay		0.2		71.9		14.9		22.6	11.3	11.3	7.7	
Queue Delay		0.0		0.0		0.0		2.0	0.5	0.0	0.0	
Total Delay		0.2		71.9		14.9		24.6	11.8	11.3	7.7	
LOS		A		E		B		C	B	B	A	
Approach Delay		0.3			49.7			23.1			7.9	
Approach LOS		A			D			C			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: 0.86												
Intersection Signal Delay: 19.8				Intersection LOS: B								
Intersection Capacity Utilization 64.1%				ICU Level of Service C								
Analysis Period (min) 15												

Splits and Phases: 2: Wyoming Blvd & Driveway B



HCM 6th TWSC
3: Driveway A & Northeastern Blvd

02/07/2023

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔		↔		↔
Traffic Vol, veh/h	62	127	0	0	146	31	15	0	18	108	0	98
Future Vol, veh/h	62	127	0	0	146	31	15	0	18	108	0	98
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	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	25	25	25	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	153	0	0	185	39	60	0	72	114	0	103
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	224	0	0	153	0	0	559	527	153	544	-	205
Stage 1	-	-	-	-	-	-	303	303	-	205	-	-
Stage 2	-	-	-	-	-	-	256	224	-	339	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1345	-	-	1428	-	-	440	456	893	450	0	836
Stage 1	-	-	-	-	-	-	706	664	-	797	0	-
Stage 2	-	-	-	-	-	-	749	718	-	676	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1345	-	-	1428	-	-	368	428	893	395	-	836
Mov Cap-2 Maneuver	-	-	-	-	-	-	368	428	-	395	-	-
Stage 1	-	-	-	-	-	-	663	623	-	748	-	-
Stage 2	-	-	-	-	-	-	657	718	-	584	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.6			0			13.8			14		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	542	1345	-	-	1428	-	-	395	836			
HCM Lane V/C Ratio	0.244	0.056	-	-	-	-	-	0.288	0.123			
HCM Control Delay (s)	13.8	7.8	0	-	0	-	-	17.8	9.9			
HCM Lane LOS	B	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.9	0.2	-	-	0	-	-	1.2	0.4			

HCM 6th TWSC
4: Driveway A & Proposed Site Access

02/07/2023

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	25	0	0	0	25	67	0	0	180	20
Future Vol, veh/h	20	0	25	0	0	0	25	67	0	0	180	20
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	22	0	27	0	0	0	28	76	0	0	198	22
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	341	341	209	355	352	76	220	0	0	76	0	0
Stage 1	209	209	-	132	132	-	-	-	-	-	-	-
Stage 2	132	132	-	223	220	-	-	-	-	-	-	-
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	613	581	831	600	573	985	1349	-	-	1523	-	-
Stage 1	793	729	-	871	787	-	-	-	-	-	-	-
Stage 2	871	787	-	780	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	603	568	831	571	560	985	1349	-	-	1523	-	-
Mov Cap-2 Maneuver	603	568	-	571	560	-	-	-	-	-	-	-
Stage 1	776	729	-	852	770	-	-	-	-	-	-	-
Stage 2	852	770	-	754	721	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	10.4		0		2.1		0					
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1349	-	-	711	-	1523	-	-				
HCM Lane V/C Ratio	0.021	-	-	0.069	-	-	-	-				
HCM Control Delay (s)	7.7	0	-	10.4	0	0	-	-				
HCM Lane LOS	A	A	-	B	A	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	0	-	-				

APPENDIX J

NMDOT CRASH DATA

FID	Shape *	UCRumbeCrashDate	Year	Month	MilitaryYr	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Route	GIS_MilepcCrashDir	DirectionF	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	Nonmotori	
92398	Point	7.1E+08	12/24/2016	2016	December	22:27 10 p.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	NORTHAS							N	0	0	0	0	0	0	1	1	1	0	
100191	Point	7.1E+08	4/25/2020	2020	April	6:04 6 a.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						N	0	0	0	0	0	1	1	1	1	0	
102409	Point	7.1E+08	4/4/2020	2020	February	21:01 9 p.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						N	0	0	0	0	0	1	1	1	1	0	
78719	Point	7.1E+08	2/7/2016	2016	February	4:33 4 a.m.	Sunday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						S	0	0	0	0	0	3	3	1	3	0	
67804	Point	7.1E+08	9/6/2017	2017	September	16:09 4 p.m.	Wednesday	ALBUQUER BERNALLILLALBUQUER	2030 WYO 2030 WYO							S	0	0	0	0	0	1	1	1	1	0	
72462	Point	23433588	2/16/2016	2016	February	16:09 4 p.m.	Tuesday	STATION RIBERNALLILLALBUQUER	NORTHAS	NEAR WYO						O	0	0	0	0	0	2	2	2	2	0	
47185	Point	23422137	10/11/2017	2017	October	14:40 2 p.m.	Wednesday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTH EAS						O	0	0	0	0	0	2	2	2	2	0	
47540	Point	23433955	3/15/2017	2017	March	12:30 12 p.m.	Wednesday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	4	4	2	4	0	
50427	Point	23449589	4/15/2017	2017	April	15:15 3 p.m.	Saturday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
24452	Point	2347894	6/21/2018	2018	June	Left Blank	Thursday	STATION RIBERNALLILLALBUQUER	WYOMING							O	0	0	0	0	0	2	2	2	2	0	
24459	Point	23438273	8/3/2018	2018	August	21:00 9 p.m.	Friday	STATION RIBERNALLILLALBUQUER	WYOMING							O	0	0	0	0	0	2	2	2	2	0	
24664	Point	23444340	7/14/2018	2018	March	15:00 3 p.m.	Thursday	STATION RIBERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	2	2	2	2	0	
24913	Point	23450297	3/22/2018	2018	March	12:00 12 p.m.	Thursday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
26853	Point	23473330	3/22/2018	2018	March	16:00 4 p.m.	Thursday	STATION RIBERNALLILLALBUQUER	WYOMING							O	0	0	0	0	0	2	2	2	2	0	
27159	Point	23475690	5/31/2018	2018	May	4:30 4 a.m.	Thursday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	1	1	2	2	2	0	
27667	Point	23483454	12/3/2018	2018	December	Left Blank	Monday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTH EAS						O	0	0	0	0	0	2	2	2	2	0	
1961	Point	23466992	6/26/2019	2019	June	10:45 10 a.m.	Wednesday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
4779	Point	23483856	3/4/2019	2019	March	15:05 3 p.m.	Monday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
4835	Point	23483970	7/22/2019	2019	July	14:25 2 p.m.	Monday	STATION RIBERNALLILLALBUQUER	NOR EASTE	WYOMING						O	0	0	0	0	0	2	2	2	2	0	
94013	Point	30261815	2/16/2020	2020	February	13:00 1 p.m.	Thursday	STATION RIBERNALLILLALBUQUER	NORTH EAS	WYOMING						O	0	0	0	0	0	2	2	2	2	0	
106374	Point	7.1E+08	8/17/2020	2020	August	12:46 12 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	2	2	2	2	0	
108643	Point	7.1E+08	9/21/2020	2020	September	16:06 4 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	2	2	2	2	0	
79965	Point	7.1E+08	3/4/2016	2016	March	14:09 2 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	3	3	2	3	0	
36607	Point	7.1E+08	3/22/2018	2018	March	20:35 8 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
37371	Point	7.1E+08	4/12/2018	2018	April	13:04 1 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	3	4	0	
40840	Point	7.1E+08	7/22/2018	2018	July	12:55 12 p.m.	Sunday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	3	4	0	
12407	Point	7.1E+08	10/4/2019	2019	October	23:49 11 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	2	2	0	
102337	Point	7.1E+08	3/26/2020	2020	March	13:14 1 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	2	2	0	
72839	Point	23456619	9/8/2016	2016	September	15:10 3 p.m.	Thursday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
73852	Point	23491949	10/14/2016	2016	October	8:45 8 a.m.	Friday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
94743	Point	30263030	3/7/2020	2020	March	15:00 3 p.m.	Friday	STATION RIBERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
95987	Point	30279885	8/19/2020	2020	August	10:00 10 a.m.	Wednesday	STATION RIBERNALLILLALBUQUER	WYOMING	1 LIGHT SO						O	0	0	0	0	0	2	2	2	2	0	
83427	Point	7.1E+08	5/24/2016	2016	May	21:30 9 p.m.	Tuesday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	NONE						O	0	0	0	0	0	3	3	2	3	0	
5209	Point	30144571	12/3/2016	2016	December	12:40 12 p.m.	Tuesday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
80121	Point	7.1E+08	2/27/2016	2016	February	7:50 7 a.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	3	2	0	
55503	Point	7.1E+08	10/28/2017	2017	October	11:57 11 a.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
67950	Point	7.1E+08	11/27/2017	2017	November	14:05 2 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	2	3	0	
38841	Point	7.1E+08	8/6/2018	2018	August	13:00 1 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	0	4	2	0	
38841	Point	7.1E+08	8/6/2018	2018	August	13:00 1 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	0	4	2	0	
16973	Point	7.1E+08	7/10/2019	2019	July	16:42 4 p.m.	Wednesday	ALBUQUER BERNALLILLALBUQUER	WYOMING	IN FRONT C						O	0	0	0	0	0	0	0	5	3	0	
33609	Point	7.1E+08	6/21/2018	2018	June	12:00 12 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	0	5	3	0	
80989	Point	7.1E+08	3/7/2016	2016	March	14:36 2 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	0	5	3	0	
67312	Point	7.1E+08	11/29/2017	2017	November	21:20 9 p.m.	Wednesday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	0	1	1	0	
10082	Point	7.1E+08	4/5/2019	2019	April	22:20 10 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
100730	Point	7.1E+08	3/7/2020	2020	March	16:19 4 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
106719	Point	7.1E+08	6/12/2020	2020	June	14:02 2 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
39189	Point	7.1E+08	3/29/2018	2018	March	20:14 8 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	3	3	2	3	0	
39205	Point	7.1E+08	5/19/2018	2018	May	13:25 1 p.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	4	4	4	4	0	
39642	Point	7.1E+08	5/10/2018	2018	May	12:50 12 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	1	1	2	2	0	
101197	Point	7.1E+08	12/3/2018	2018	December	9:47 9 a.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
44511	Point	7.1E+08	1/4/2018	2018	January	14:53 2 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	0	5	5	2	5	0
36501	Point	7.1E+08	10/7/2016	2016	October	18:31 6 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	0	2	2	2	2	0
80097	Point	7.1E+08	10/7/2016	2016	October	18:31 6 p.m.	Thursday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	0	2	2	2	2	0
83525	Point	7.1E+08	3/14/2016	2016	March	17:18 5 p.m.	Monday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	0	2	2	2	2	0
84352	Point	7.1E+08	5/28/2016	2016	May	11:46 11 a.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	0	2	2	2	2	0
89917	Point	7.1E+08	12/31/2016	2016	December	11:10 11 a.m.	Saturday	ALBUQUER BERNALLILLALBUQUER	NORTHAS	WYOMING						O	0	0	0	0	0	0	2	2	2	2	0
58756	Point	7.1E+08	4/12/2017	2017	April	14:58 2 p.m.	Wednesday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
60724	Point	7.1E+08	1/17/2017	2017	January	11:32 11 a.m.	Tuesday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	2	2	0	
61361	Point	7.1E+08	12/22/2017	2017	January	17:33 5 p.m.	Sunday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	1	1	2	2	0	
61706	Point	7.1E+08	7/16/2017	2017	July	14:24 2 p.m.	Sunday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O	0	0	0	0	0	2	2	2	2	0	
62353	Point	7.1E+08	10/6/2017	2017	October	20:12 8 p.m.	Friday	ALBUQUER BERNALLILLALBUQUER	WYOMING	NORTHAS						O											

TopFacc	CrashOccur	ModelInv	TFCComb	HighRisk	HighRisk2	MERGE_SR	MaxLanes	Ped_Kil	Ped_Inj	Bike_Kil	Bike_Inj
Alcohol/Dr/On	Roadw	Vehicle Inv	Alcohol Dn			MRCOG_2C	6	0	0	0	0
						2020_Crash					
						2020_Crash					
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	Off Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Missing Da	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Missing Da	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Speed Too	On Roadw	Vehicle Inv	Excessive S	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Missing Da	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Missing Da	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Improper Lon	Roadw	Vehicle Inv	Improper L			MRCOG_2C	6	0	0	0	0
Other - No	On Roadw	Vehicle Inv	Other			2020_Crash	6	0	0	0	0
						2020_Crash	6	0	0	0	0
						2020_Crash	6	0	0	0	0
Passed Sto	On Roadw	Vehicle Inv	Passed Sto	Yes		MRCOG_2C	6	0	0	0	0
Improper Lon	Roadw	Vehicle Inv	Improper L			MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Improper Lon	Roadw	Vehicle Inv	Improper L			MRCOG_2C	6	0	0	0	0
						2020_Crash	6	0	0	0	0
Excessive S	On Roadw	Vehicle Inv	Excessive S	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
						2020_Crash	6	0	0	0	0
						2020_Crash	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
None	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Following Ton	Roadw	Vehicle Inv	Following Ton			MRCOG_2C	6	0	0	0	0
Avoid No C	On Roadw	Vehicle Inv	Avoid Cont			MRCOG_2C	6	0	0	0	0
Excessive S	On Roadw	Vehicle Inv	Excessive S	Yes		MRCOG_2C	6	0	0	0	0
						2020_Crash	6	0	0	0	0
						2020_Crash	6	0	0	0	0
Alcohol/Dr/On	Roadw	Vehicle Inv	Alcohol Dn			MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Following Ton	Roadw	Vehicle Inv	Following Ton			2020_Crash	6	0	0	0	0
Improper Lon	Roadw	Vehicle Inv	Improper L			MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
None	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Failed to Yt	On Roadw	Vehicle Inv	Failed to Yt	Yes		MRCOG_2C	6	0	0	0	0
Disregard	On Roadw	Vehicle Inv	Disregard	Yes		MRCOG_2C	6	0	0	0	0
Driver Inatt	On Roadw	Vehicle Inv	Driver Inatt	Yes		2020_Crash	6	0	0	0	0
Pedestrian	On Roadw	Pedestrian	Pedestrian			MRCOG_2C	6	0	0	0	0
Alcohol/Dr/On	Roadw	Pedestrian	Alcohol Dn			MRCOG_2C	6	0	2	0	0
Avoid No C	Off Roadw	Pedestrian	Avoid Cont			MRCOG_2C	6	0	1	0	0
Driver Inatt	On Roadw	Pedestrian	Driver Inatt	Yes		MRCOG_2C	6	0	1	0	0
Driver Inatt	On Roadw	Pedestrian	Driver Inatt	Yes		MRCOG_2C	6	0	1	0	0
None	On Roadw	Vehicle Inv	None Ident			MRCOG_2C	6	0	0	0	0